No. 20A87

In the

Supreme Court of the United States

THE ROMAN CATHOLIC DIOCESE OF BROOKLYN, NEW YORK,

Applicant,

v.

GOVERNOR ANDREW M. CUOMO, in his official capacity,

Respondent.

APPENDIX FOR RESPONDENT – VOLUME I OF II, PAGES 1-173

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November 18, 2020

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UNITED STATES DISTRICT COURT
EASTERN DISTRICT OF NEW YORK

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THE ROMAN CATHOLIC DIOCESE OF BROOKLYN, NEW YORK,

Plaintiff,

vs.

GOVERNOR ANDREW M. CUOMO in his official capacity,

Defendant.

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Case No. 20 CV 4844

COMPLAINT

JURY TRIAL DEMANDED

Plaintiff The Roman Catholic Diocese of Brooklyn, New York (the "Diocese" or "Plaintiff"), by and through its attorneys, Gibson, Dunn & Crutcher LLP, for its Complaint against Defendant Governor Andrew M. Cuomo, in his official capacity, alleges as follows:

NATURE OF THE CASE

1. This case concerns the government's wholesale infringement of a fundamental First Amendment right—the free exercise of religion—that, if allowed to stand, will prevent parishioners in Brooklyn and Queens from being able to attend mass even though the executive order at issue is not even remotely tailored to the compelling interest required to justify interference with that fundamental right. Injunctive relief is therefore necessary to protect and preserve Plaintiff's and its parishioners' constitutional rights in the face of this government overreach.

2. On October 6, 2020, New York Governor Andrew Cuomo announced a new series of overbroad COVID-19 restrictions directed at "Houses of Worship" in certain neighborhoods that will effectively force over two dozen churches within the Diocese of Brooklyn to close their doors, even though those churches have been reopened for months in

strict adherence to all medical and governmental guidance, without any COVID-related incidents whatsoever. The Governor now proposes to limit in-person attendance at ***all*** "Houses of Worship" to ***the lesser of*** 10 people or 25% of church capacity in certain designated geographical areas, and to ***the lesser of*** 25 people or 33% of church capacity in others. As applied to the Diocese, whose impacted churches overwhelmingly seat upwards of 500 to 1,000 parishioners, the percentage caps (which track existing attendance restrictions) are rendered wholly illusory, and thus the churches will be placed in the untenable position of limiting attendance at Sunday mass and other foundational Catholic services such as baptisms, weddings, and funerals, to just 10 worshippers in designated "red" zones or just 25 worshippers in designated "orange" zones. Meanwhile, all other essential businesses can remain open without any capacity limitations whatsoever, and in the orange zones, even most non-essential businesses can remain open without any capacity limitations. This express targeting of religious practice for unwarranted, disparate treatment—including the very "physical acts that constitute the free exercise of religion," such as "'assembling with others for a worship service [and] participating in sacramental use of bread and wine," *Cent. Rabbinical Cong. of U.S. & Canada v. N.Y.C. Dep't of Health & Mental Hygiene*, 763 F.3d 183, 193 (2d Cir. 2014) (quoting *Employment Div. v. Smith*, 294 U.S. 872, 877 (1990))—violates Plaintiff's core First Amendment rights and cannot stand, especially as applied to the Diocese's churches, which have operated safely for months now, strictly adhering to existing government guidelines and unquestionably protecting their parishioners from any spread of COVID-19. The Diocese therefore now files suit to enjoin the application of the 10- and 25-person capacity limitations on its churches within these "red' and "orange" zones. To be clear, the Diocese does not challenge—and, indeed, has supported and will continue to adhere to—the percentage capacity caps, consistent with how its churches have

been operating safely for months. But the Governor's new restrictions go way too far, infringe way too much, and have no legitimate basis, as applied to the Diocese's churches.

3. At his press conference announcing the new restrictions, the Governor openly ***admitted*** that the rules "are most impactful on houses of worship." But it is well-settled that "official action that targets religious conduct for distinctive treatment" is subject to the most "rigorous of scrutiny." *Church of Lukumi Babalu Aye, Inc. v. City of Hialeah*, 508 U.S. 520, 534 (1993). The Governor's action here cannot come close to satisfying this strict scrutiny, especially as-applied to the Diocese, which has at all times gone above and beyond in implementing health and safety precautions in response to the pandemic, and has seen no spike or outbreak of COVID-19 relating to church attendance. At his press conference, the Governor alluded to COVID spread among ***other*** communities that are alleged to have flouted prior guidance. But this purported basis for the new rules belies any contention that the restraints on Plaintiff's religious liberty are narrowly tailored: To the extent the Governor is aware of or suspects that certain communities or congregations are not adhering to public health regulations, the proper, more narrowly tailored solution is to enforce ***existing*** law as to those alleged violators, or to tailor any new restrictions (assuming new restrictions are necessary, an issue on which Plaintiff takes no position) to the specific alleged violations, ***not*** to impose categorical restrictions on the free exercise of religion of all citizens across entire zip codes, including those—like Plaintiff—who have voluntarily exceeded State public health requirements to great success.

4. When the COVID-19 pandemic hit United States soil, the Diocese of Brooklyn wasted no time implementing voluntary, proactive safety countermeasures to combat it, even when that meant altering centuries-old religious traditions sacred to the Catholic Church. As

early as January 2020, when news of the coronavirus began to dominate United States airwaves, albeit largely from thousands of miles away, Plaintiff suspended the receiving of the Precious Blood by its parishioners and strongly encouraged that Holy Communion be taken by hand. And when the pandemic began to ravage the streets of New York City, Plaintiff only increased its countermeasures, culminating in the Diocese ordering the closure of all of its churches and parishes effective March 16—***before*** New York State officially went on "pause." When the State issued its lockdown measures shortly thereafter, Plaintiff faithfully abided by both the government- and self-imposed restrictions, shuttering its churches for months on end.

5. Reopening church doors was achieved only through countless hours spent meticulously crafting protocols that would permit parishioners to safely return to worship. The Diocese assembled an internal committee, chaired by Joseph Esposito, the former Commissioner of New York City Emergency Management and Chief of Department of the New York City Police Department, to study and implement COVID-19 safety measures. When the church doors reopened, all churches within the Diocese operated under the strict protocols put in place by the committee to ensure that worship was conducted in the safest manner possible: Parishioners were required to wear masks; every other pew was left empty; occupied pews were spaced to accord with social distancing protocols; traffic flow was managed to avoid parishioners passing one another; and sacred church practices, including Holy Communion, were either reformed or altogether suspended to preserve the health of the congregation. At every turn, the Diocese, through the work of the committee, went consistently above and beyond what the government mandated.

6. But it has worked. Parishioners have successfully returned to worship, albeit in smaller numbers and with heightened diligence. None of the Catholic churches in the Diocese

(or elsewhere in New York City) has experienced any new outbreak or spread of COVID-19. And yet this delicate balance between religious liberty and public health and safety has now been upended by the Governor's broad-brush response to combatting apparent pockets of COVID-19 spikes in some faith communities by imposing on all faith communities in the affected areas disparate treatment—whether or not those communities have been compliant with the preexisting rules and operating safely, as the Diocese's churches have. This blunt instrument—which was announced by press release rather than by executive order and was thus shielded from public comment—effectively orders the Diocese's churches within the "red" and "orange" zones to once again shut their doors. That process, albeit excruciatingly painful to a community that flourishes through in-person worship, may have been necessary in March, when the pandemic raged unabated and neither the church nor the State was in position to combat it effectively. But it is altogether unnecessary now, when the Diocese has already proven that its rigorous countermeasures are effective and has not experienced even a single COVID-19 outbreak since reopening church doors.

7. The Supreme Court has long recognized that although there exists "an acknowledged power of a local community to protect itself against an epidemic threatening the safety of all," such restrictions may be exercised "in such an arbitrary, unreasonable manner, or might go so far beyond what was reasonably required for the safety of the public, as to authorize or compel the courts to interfere for the protection of such persons." *Jacobsen v. Commonwealth of Massachusetts*, 197 U.S. 11, 28 (1905). That is this case. Given the substantial burdens on religious practice the Governor's capacity limitations would impose, the lack of any evidence whatsoever that their application to the Diocese is tailored to any public health interest, and the heavy burden on the government to justify restrictions expressly and directly targeted at

constitutionally protected religious activity, the restrictions at issue here cannot withstand First Amendment scrutiny as-applied to Plaintiff.

8. This Court should accordingly follow the lead of courts throughout the country and conclude that broad-brush restrictions on religious exercise, such as the Governor's latest executive order, as applied here to these Roman Catholic churches, should be enjoined. *See, e.g.*, *Roberts v. Neace*, 958 F.3d 409 (6th Cir. 2020); *Maryville Baptist Church, Inc. v. Beshear*, 957 F.3d 610 (6th Cir. 2020); *Soos v. Cuomo*, 2020 WL 3488742 (N.D.N.Y. June 26, 2020); *Berean Baptist Church v. Cooper*, 2020 WL 2514313 (E.D.N.C. May 16, 2020); *Tabernacle Baptist Church, Inc. of Nicholasville v. Beshear*, 2020 WL 2305307 (E.D. Ky. May 8, 2020) (all enjoining government actions attempting to restrict the free exercise of religion on COVID-related public health grounds). The COVID-19 pandemic has now been raging in this country for over six months and, unfortunately, looks to have many more months ahead of it. The Diocese takes the pandemic—and the threat it poses to its parishioners—extremely seriously. But it cannot be that the pandemic alone justifies restrictions that, in another time, would plainly contravene the Constitution. "[R]estrictions inexplicably applied to one group and exempted from another do little to further [public safety] goals and do much to burden religious freedom." *Roberts*, 958 F.3d at 414-15. And "[w]hile the law may take periodic naps during a pandemic, [courts] will not let it sleep through one." *Id.* at 415. This Court should therefore enjoin the Governor from enforcing the 10- and 25-person maximum attendance restrictions as applied to Roman Catholic churches in the designated geographic "red" and "orange" zones in Brooklyn and Queen.

PARTIES

9. Plaintiff The Roman Catholic Diocese of Brooklyn, New York is a division of the Roman Catholic Church. The Diocese was founded in 1853 and heads 186 Catholic parishes and

210 Catholic churches in the Brooklyn and Queens regions of New York. The Diocese is headquartered at 310 Prospect Park West in Brooklyn, New York. The Diocese brings this action for itself and on behalf of its churches and parishes and their member-parishioners.

10. Defendant Andrew Cuomo is the Governor of the State of New York. On October 6, 2020, Governor Cuomo announced an initiative that, *inter alia*, slashes the capacity limits for houses of worship in certain areas identified by zip code, including those in Brooklyn and Queens where the Diocese operates.

JURISDICTION AND VENUE

11. This Court has subject matter jurisdiction over Plaintiff's constitutional claim pursuant to 28 U.S.C. § 1331.

12. Venue is proper in this Court under 28 U.S.C. § 1391(b)(2) because a substantial part of the events or omissions giving rise to the claim occurred in this district.

STATEMENT OF THE CASE

I. The Diocese Provides A Place Of Worship To Catholics In Brooklyn And Queens For Over 165 Years.

13. The Diocese of Brooklyn was founded in 1853. During that time, more than five million tired and poor Irish Catholic immigrants arrived at the port of New York in search of a better life. In addition to shelter and opportunity, these immigrants sought the opportunity to freely practice their religion and openly follow the tenets of the Roman Catholic faith. The Diocese sought to address that need for all those immigrants who settled in Brooklyn and Queens.

14. Today, the combined population of Brooklyn and Queens stands at more than 4.9 million, of whom 1.5 million identify as Catholics. The Diocese of Brooklyn serves this community in various ways. Due to the multicultural and diverse populations of the two

boroughs, masses are regularly held in 33 different languages across the Diocese, throughout 186 parishes with 210 churches. Through 26 ethnic ministries, the Diocese promotes cultural events and provides an opportunity for immigrants to belong to the larger community while preserving and sharing their uniqueness and traditions. In the year 2019 alone, the Diocese celebrated 15,885 Baptisms, 11,957 First Communions, 9,549 Confirmations and 1,951 Marriages, and had an average weekly attendance of almost 230,000 spread across over 1,000 weekly Sunday Masses in Brooklyn and Queens.

15. Throughout its 165-plus year existence, the Diocese has provided irreplaceable gifts to its parishioners and the surrounding community. Its parishes have enriched the lives of the people of its community by providing spiritual leadership, a place to worship freely, and a moral compass through New York's greatest triumphs as well as its darkest moments.

II. The Diocese Proactively Shutters To Combat The Spreading Pandemic.

16. In early 2020, the COVID-19 pandemic descended on New York City and the United States at large. The Diocese acted swiftly in response, implementing drastic countermeasures even before required to do so by government mandate, even when those measures cut to the heart of the Catholic Church's time-honored religious rituals.

17. The Diocese began rolling out COVID-19 safety measures as early as January 31, 2020, with the Office of the Vicar General issuing a strong recommendation to Diocesan pastors and administrators that Holy Communion—the most sacred and time-honored ritual of the Catholic Church—be received only by hand, a shift from the general practice detailed below.

18. In a memo issued to pastors and administrators on March 4, 2020, the Most Reverend Raymond Chappetto further emphasized that recommendation, writing, "It is VERY STRONGLY suggested that Holy Communion be received in the hand as long as this [coronavirus] threat continues." The memo also suspended the distribution of the Precious

Blood—the drinking of wine from a chalice as part of Holy Communion—and required that the clergy disinfect their hands before distributing Holy Communion.

19. According to Catholic belief, upon consecration, the substance of the bread offered during Holy Communion becomes the Body of Christ, and the substance of the wine offered during Holy Communion becomes the Blood of Christ. Ordinarily, parishioners are provided a wafer either in their hand or on their tongue, and at many churches those parishioners are also provided with the option of receiving wine. However, in response to the pandemic, the Diocese instructed that Holy Communion no longer be taken on the tongue, and that wine no longer be distributed during Communion at all.

20. The March 4 memo implemented a number of other safety measures, which scaled back, or eliminated altogether, other religious rituals important to Catholic worship. The memo, for example, suspended the Sign of Peace as traditionally marked with a handshake and ordered that Holy Water fonts be emptied.

21. On March 11, 2020, as COVID-19 continued to spread throughout New York City, the Office of the Vicar General issued a letter that again "strongly recommended" that Holy Communion be received by hand and that rehashed the other safety measures implemented by the Diocese, including the suspension of the Precious Blood and the Sign of Peace by a handshake.

22. Just four days later, in response to rapidly changing conditions in the City, and in advance of any governmental shutdown orders, the Diocese announced that it would be canceling all public masses effective the next day. That difficult decision followed on the heels of guidance issued by the Most Reverend Nicholas DiMarzio, the Bishop of Brooklyn, dispensing parishioners from their obligation to attend Mass.

23. On March 19, the Diocese, at the direction of Bishop DiMarzio, ordered all of its parishes and churches altogether shuttered.

24. In the days and weeks that followed, Governor Cuomo issued a series of regulations restricting public gatherings and other non-essential activities in response to the COVID-19 pandemic. Most notably, on March 20, Governor Cuomo issued the "New York State on PAUSE" order, which required all non-essential businesses across the State to shut down in-person operations entirely. Pursuant to that order, on March 23, Governor Cuomo implemented a total ban on non-essential gatherings of any size, held for any reason.

25. The Diocese of Brooklyn and its over 200 churches immediately and strictly complied with this ban. Indeed, the Diocese voluntarily closed its doors in the interest of public health and safety ***prior*** to Governor Cuomo's "PAUSE" order, emphasizing that it would "comply with" any of "the State's regulations," and "urged" parishioners "to take the necessary precautions, including remaining at a safe distance from others."

26. Governor Cuomo's pandemic-related orders remained in effect throughout the spring and into the summer. New York City, one of the epicenters of the pandemic, was among the last places in the State to begin the process of reopening. It was not until late May that houses of worship were permitted to open for private worship and small gatherings of 10 people or less, not until June 8 that the City officially began phase one of its reopening efforts, and not until June 22 that houses of worship could officially open their doors to congregants at a 25% capacity as part of the second phase of the City's reopening. Phase four of the City's reopening efforts, which permitted houses of worship to operate at 33% capacity, did not commence until July 20 (though, as discussed below, the Diocese has voluntarily refrained from admitting that additional capacity).

27. The Diocese of Brooklyn remained closed even as the City began to reopen, faithfully abiding by its own safety measures and exceeding those implemented by the State. Although the State permitted houses of worship to open their doors at 25% capacity on June 22, churches within the Diocese, following guidance from Diocesan leadership, did not conduct in-person weekday services until June 29, and did not reopen for weekend public mass until the July 4 weekend. During that opening and at all times thereafter, the Diocese and its member churches strictly complied with the 25% capacity requirement, and as discussed in more detail below, directed and implemented numerous other significant safety protocols, procedures, and monitoring.

28. During the period of total closure, numerous weddings, funerals, and baptisms were canceled. As the government-imposed restrictions eased in May and June, some of these ceremonies were allowed to take place, but were strictly capped at 10 people. All mass services were similarly cancelled during the period of closure, and parishioners across Brooklyn and Queens were instructed to pray and worship from the safety of their homes.

29. This period of closure was extremely painful for the Diocese of Brooklyn and its faith community. In addition to the physical and emotional toll that the pandemic took on the community, parishioners were denied the ability to attend in-person mass, which is of critical spiritual importance in the Catholic faith. Likewise, the cancellations or severe curtailments of baptisms, weddings, funerals, and other ceremonies of enormous religious and personal significance were difficult for many members of the Catholic faith. Nevertheless, the Diocese abided by the State's severe restrictions—and imposed its own exacting restrictions on its various parishes, even in advance of the State mandate to shutter—because doing so was in the best interest of the health and welfare of Diocese's community.

III. The Diocese Successfully Responds To the COVID-19 Pandemic And Safely Reopens Its Doors.

30. Even as churches throughout Brooklyn and Queens remained shuttered, the Diocesan leadership worked steadily behind the scenes to ensure that, when the time came, the Diocese would be able to offer congregants a safe space for religious expression and worship. To that end, the Diocese established a commission to craft procedures that would address the ongoing COVID-19 pandemic while simultaneously ensuring that their parishioners' spiritual needs would be met.

31. The commission was chaired by Joseph Esposito, the former Commissioner of New York City Emergency Management and former Chief of Department of the New York City Police Department. There were eleven other members of the commission, including priests and laypeople, which was designed to capture input from various stakeholders in the community. Members of the commission consulted closely with medical professionals, as well as several of Mr. Esposito's prior colleagues in Emergency Management and the Police Department.

32. The commission met numerous times over the course of May and June, meticulously studying the COVID-19 guidelines that Governor Cuomo and New York City Mayor Bill de Blasio had published, as well as all applicable federal, State, and City ordinances and directives related to the pandemic, in order to provide appropriate instruction and guidance to church leadership. Each Friday, the commission provided proposed protocols to Bishop Chappetto. These protocols were then sent to each parish in the Diocese by means of weekly memoranda, as well as posted to the Diocese's public website and further transmitted to the public via social media. To ensure that these protocols reached as wide an audience as possible, the Diocese engaged a media company to assist with the distribution.

33. Starting in late May 2020, the Diocese's churches opened in a staged approach that has been conducted in accordance with the iterative regulations promulgated by New York State and New York City. In doing so, all Catholic Churches within the Diocese of Brooklyn adopted the recommendations of the Diocese's COVID-19 commission on how to institute procedures to safely accommodate congregants' constitutional and spiritual right to worship and engage in Catholic religious practices. During this initial period of reopening, churches within the Diocese did not offer mass and limited all church visitors and attendance at ceremonies such as funerals to 10 people.

34. By late June, churches within the Diocese could officially reopen at 25% capacity under applicable City and State guidelines. However, upon the recommendation of the Diocese's COVID-19 commission, the Diocese waited until June 29 to reopen for in-person weekday services at the 25% capacity limit, and did not reopen for weekend mass until July 4 (again, operating at only 25% capacity). This choice to proceed cautiously and gradually was made to ensure that all proper safety protocols had been implemented by each parish within the Diocese, and because church leadership believed that reopening for weekend services over July 4 would allow for a particularly "soft" reopening given the expectation that many parishioners would be out of town for the holiday weekend.

35. In the lead-up to the 25% capacity reopenings, church leadership assisted various parishes in obtaining all the supplies that they would need to safely open their doors. The Diocese identified the types of supplies churches would need to have on hand to reopen, and published guidance about where parishes could obtain essential items such masks, disinfectants, fogging machines, and hand sanitizer. Church leadership further instructed that any parish that was unable to secure the necessary supplies or implement the relevant protocols in advance of

the July 4 soft reopening date delay their reopening until they could do so and thus guarantee the safety of their parishioners.

36. Prior to reopening, all churches were thoroughly sanitized, either by outside companies or with equipment recommended by Rocklyn Assets Corp., the property office for the Diocese. Rocklyn Assets Corp. prepared a comprehensive instructional video for those parishes that chose to sanitize their churches without outside assistance, in order to demonstrate the proper techniques for sanitizing large spaces.

37. Additionally, prior to reopening, all parishes were advised to report any instances of COVID-19 directly to Bishop Chappetto. This instruction complemented a system that had been in place since March, whereby priests were encouraged to raise any COVID-related questions or concerns directly with Bishop Chappetto.

38. Since reopening in early July, each church within the Diocese has had to adhere to strict protocols regarding church practices and services. Iterative rounds of written protocols and a PowerPoint deck provided to parishes before and after reopening outlined these procedures in detail. Among other requirements, churches within the Dioceses must:

- Ensure that parishioners wear a mask at all times, except for a brief moment when they receive a socially distanced Holy Communion;
- Block off every other pew so congregants cannot sit immediately in front of or behind one another;
- Mark off seats with tape six feet apart within each open pew to ensure appropriate social distancing;
- Provide hand sanitizer stations throughout the church;
- Remove all hymnals, missalettes, and other worship aids from pews;
- Only open for abridged hours both on weekdays and for weekend masses;

- Keep multiple doors open for various points of entry and exit, and direct traffic in and out of the church, to ensure that worshipers enter and exit in a socially distant manner; and

- Retain additional ushers and security guards to enforce compliance with all of the required procedures and protocols.

39. The Diocese has also continued to abide by the changes to fundamental church practices instituted at the outset of the pandemic. Most notably, the Diocese has retained the changes to the giving and receiving of the sacrament of Holy Communion, requiring that Communion be taken by hand and dispensing with the distribution of wine.

40. These preventative measures have proven immensely successful. In the three months since Catholic churches in Brooklyn and Queens have reopened, there have not been any reported outbreaks of COVID-19. As a result, in recent weeks, the Diocese had finally begun work on plans to safely increase the capacity of its churches to 33%, as would have been permitted under the then-applicable government regulations.

IV. The State Implements New, Overbroad, And Unduly Burdensome Restrictions Directed At Houses of Worship And Applicable to Catholic Churches In Brooklyn And Queens.

41. On October 6, in response to upticks of COVID-19 cases localized in certain non-Catholic communities in New York, including in certain Brooklyn and Queens neighborhoods, Governor Cuomo announced a "New Cluster Action Initiative" (the "Initiative"). Governor Cuomo announced his Initiative by press release instead of by Executive Order, thereby depriving the public an opportunity to review and comment on the Initiative prior to its implementation.

42. The Initiative identifies certain purported at-risk areas, by zip code, and divides those areas into "red," "orange," and "yellow" zones, with red zones representing the highest

density of new COVID-19 cases, orange zones representing a warning area, and yellow zones representing a precautionary area.

43. As is relevant here, the Initiative targets certain areas in Brooklyn that are divided into red, orange, and yellow zones, and certain areas in Queens, each also divided into the three zones. The Diocese operates numerous churches and parishes falling within these purportedly at-risk areas, including 13 churches and parishes falling within the severely restricted red zones and 11 falling within the orange zones.

44. The Initiative drastically inhibits the operation of, and in fact effectively shutters, all Catholic churches in red and orange zones, requiring that they operate with a 10-person maximum in red zones, or 25-person maximum in orange zones. While the Initiative also provides for a 25% capacity limit in red zones and a 33% capacity limit in orange zones, these percentage caps are illusory, as the Initiative limits operations to the lesser of the fixed 10- or 25-person limits or the percentage capacity limits.

45. The restrictions do not account for, or make any distinction based on, the size of a church. Take, for example, a church which typically houses 1,000 parishioners, safely operating at a 25% capacity as a countermeasure to COVID-19. The Governor's Initiative requires that church to reduce its already COVID-19-reduced capacity from 250 parishioners to 10 (if located within a red zone) or 25 (if located within an orange zone).

46. All of the Diocese's 13 churches in the red zone, and all but one of the Diocese's 11 churches in the orange zone can accommodate 500 or more people, with the remaining church seating 200. Indeed, 12 of these churches—including four in the red zone—can accommodate 750 or more people, and two churches in the orange zone seat over 1,000. The Initiative thus

forces even the very smallest of these churches, operating safely at 25% capacity, to cut its occupancy by 80% (from 50 parishioners to 10, if within the red zone).

47. The Initiative also entirely shutters any schools falling within red or orange zones, including those Catholic schools operated by the Diocese, thereby depriving students of an in-person Catholic education, despite no evidence of COVID-19 outbreaks at those facilities.

48. And while the Initiative shutters non-essential businesses located in red zones and restricts dining to takeout only, all "essential" businesses—a broad category that includes everything from grocery stores to banks to pet shops—remain open without capacity limitations. In orange zones, commercial businesses remain largely unaffected, with almost all essential and non-essential businesses remaining open without capacity limitations of any kind. In the orange zones, only high risk, non-essential businesses, like gyms, are subject to closure, and restaurants are limited to outdoor dining with a four-person maximum per table (but no overarching capacity limit).

49. During a press conference announcing the Initiative, Governor Cuomo recognized that his order will disproportionately impact houses of worship, noting, "Obviously these rules, the new rules are most impactful on houses of worship." The Governor further claimed that "[t]his virus is not coming from non-essential businesses," but rather "[t]his is about mass gatherings" and "one of the prime places of mass gatherings are houses of worship."

50. In the course of explaining his action on this "sensitive topic," Governor Cuomo referenced his "love for the Orthodox [Jewish] community" and how, in his view, "[t]he Torah speaks about how certain religious obligations can be excused if you are going to save a life." It appears the Governor may have been responding to certain press reports documenting COVID-

19 outbreaks within the Orthodox Jewish community.[1] The Governor also claimed that "we've seen one church infect people," an apparent reference to a headline from a press clipping that simultaneously appeared on the screen at the press conference. This article, however, was a report on an outbreak at an upstate Slavic Pentecostal Church at which masks were treated as optional and video evidence suggested that almost everyone was unmasked.

51. Despite his focus on COVID-19 outbreaks in certain geographically concentrated, socially insular religious communities located within the targeted areas (and his vague allusion to an outbreak at an upstate facility with insufficient COVID-19 protocols), the Governor has made no attempt to ameliorate the disproportionate hardship the Initiative will effect on other communities, like the Diocese's faith community, that have successfully implemented COVID-19 countermeasures and that have experienced no COVID-19 outbreaks to date.

V. The New Restrictions Effectively Shutter The Diocese, Despite Its Proven Success At Combating The Pandemic.

52. Since reopening, churches across the Diocese have seen a steady increase in the number of people seeking to attend mass or visit a church to pray. Indeed, certain parishes have had to rely on overflow rooms for parishioners (which the Diocese subjects to the same capacity limitations) to ensure that the 25% capacity limit could be honored, while still providing a space for congregants to worship in person. This return to in-person worship has been a lifeline to many in the religious community, and heartening for those in church leadership who were pained by the months of (admittedly necessary) closure during the peak of the pandemic. Effectively closing the doors of the church again now would be devastating to the community, and would

[1] *See, e.g.*, Gina Bellafante, "When Covid Flared Again in Orthodox Jewish New York," N.Y. Times (Oct. 5, 2020); Kristina Sgueglia & Melanie Schuman, "New York sees startling uptick in Covid-19 cases in Orthodox Jewish neighborhoods," CNN (Sept. 30, 2020).

grossly infringe on the First Amendment rights of Catholics in the affected areas of Brooklyn and Queens.

53. Assembly in the church is at the core of Catholic faith. By gathering in person, Catholics show support for each other and their fellow congregants. Additionally, the sacrament of Holy Communion, a central component of the spiritual lives of Catholics, may only be received in person. As emphasized by Bishop Chappetto, the Order's effective prohibition on in-person assembly and worship would be "devastating and spiritually harmful."

54. The Order would also infringe upon other critical religious ceremonies, such as baptisms, weddings, and funerals. In-person assembly for these and similar services is essential to the Catholic community. By causing the cancellation or severe curtailment of such services, the Order would impose irreparable harm on the Diocese of Brooklyn and those it serves.

55. Nor is it any relief to the Diocese and those it serves that the Order allows for gatherings of 10 or 25 people in the red and orange zones, respectively. As emphasized above, such caps—when considered against the number of people that would otherwise be (safely) served by the affected churches, even after honoring a 25% capacity limit—would eviscerate the congregation, including because it would render it effectively impossible to conduct public mass. And these caps would require priests to perform the impossible task of choosing a small minority of parishioners to participate in worship in person, while leaving the remaining would-be worshipers out on the street. In addition, the opportunity to conduct lifecycle events such as weddings, funerals, and baptisms inside the church among a broad (but controlled) compliment of family, friends, and clergy is spiritually significant.

CLAIM FOR RELIEF
Free Exercise – First Amendment; 42 U.S.C. § 1983

56. Plaintiff repeats and realleges the allegations set forth above as though fully set forth herein.

57. The First Amendment's Free Exercise Clause provides that "Congress shall make no law respecting an establishment of religion, or prohibiting the free exercise thereof." U.S. Const. amend I. Where, as here, a law targets religious practice for disparate treatment and is neither neutral nor generally applicable, that law is assessed under the Supreme Court's strict scrutiny rubric.

58. The Governor, acting under color of State law, has deprived and will continue to deprive Plaintiff of its First Amendment rights.

59. Specifically, the Governor has instituted an Initiative that plainly and unconstitutionally targets religious practice for at least three reasons. *First*, its text limits "Houses of Worship" located in red zones to 25% capacity with a 10-person maximum and "Houses of Worship" in the orange zone to 33% capacity with a 25-person maximum. Similar restrictions do not apply to secular businesses like grocery stories and pet food shops. *Second*, the way the order operates in practice, including the numerous exceptions to the capacity limitations that apply to secular businesses, make clear that the order targets religious practice. Even in the most restrictive "Cluster" in the order—the red zone—where only "essential" secular businesses are permitted to remain open, the capacity limitations the Governor's order imposes on Houses of Worship simply do not apply to non-religious institutions. *Third*, the Governor's own words conceding that "the new rules[] are most impactful on houses of worship" make clear that his order targets religious practice for disparate treatment and is neither neutral nor generally applicable. The Initiative's burdens on religious practice also are not slight: The Initiative will

force the closure of numerous Churches and effectively forbid essential in-person religious practice—practice that the Church is able to undertake (and has undertaken) in a safe way. Because the Initiative specifically targets the practice of religion, strict scrutiny applies.

60. The Initiative's red and orange zone caps of 10 and 25 people, respectively, do not survive strict scrutiny because those caps are not narrowly tailored to the government's interest in promoting public health and safety, particularly as applied to the Diocese. Defendant can offer no evidence that COVID-19 infections have arisen at any Church in the Diocese but rather has identified COVID-19 infections that he claims arose from the practices of entirely distinct religious communities—including one as far away as Rochester. To the extent the Governor is concerned with COVID-related compliance issues in those other communities, there is clearly a less restrictive means of combatting that issue: Enforce the existing rules in those communities. The Initiative also fails to take into account the significant investments of time, money, and effort the Church has undertaken to ensure its worship is fully consistent with and even exceeds the State's public safety standards, including its altering of fundamental Catholic practices to ensure the safety of parishioners and the community at large. The capacity caps in particular also ignore the distinction between sizes of houses of worship—a particular problem as applied to churches in the Diocese, all but two of which seat more than 500 people and some more than 1,000. Finally, the Initiative is clearly untailored as applied to the Diocese given the starkly different consequences the order imposes on secular business, allowing, for instance, hundreds of people to shop at a grocery store but limiting worship in a 1,200 seat church to a mere 10 parishioners (nine including clergy).

PRAYER FOR RELIEF

WHEREFORE, Plaintiff prays for relief and judgment against Defendants as follows:

A. A declaration that application of the Initiative's 10- and 25-person maximum attendance restrictions to Plaintiff and its member Roman Catholic parishes/churches in the designated "red" and "orange" zones, respectively, violates the First Amendment;

B. A temporary restraining order and preliminary and permanent injunctions enjoining Governor Cuomo from enforcing the 10- and 25-person maximum attendance restrictions in designated "red" and "orange" zones, respectively, as applied to Plaintiff and its member Roman Catholic churches in those zones;

C. An award of fees, costs, expenses, and disbursements, including attorneys' fees and costs to which Plaintiffs are entitled pursuant to 42 U.S.C. § 1988; and

D. Such other and further relief as the Court may deem just and proper.

DEMAND FOR JURY TRIAL

Pursuant to Federal Rule of Civil Procedure 38, Plaintiff demands a trial by jury in this action of all issues so triable.

Dated: New York, New York
October 8, 2020

GIBSON, DUNN & CRUTCHER LLP

By: Randy M. Mastro
Randy M. Mastro
Akiva Shapiro
William J. Moccia
Lee R. Crain

200 Park Avenue
New York, New York 10166
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AShapiro@gibsondunn.com

Attorneys for Plaintiff

JS 44 (Rev. 10/20)

CIVIL COVER SHEET

20 CV 4844

The JS 44 civil cover sheet and the information contained herein neither replace nor supplement the filing and service of pleadings or other papers as required by law, except as provided by local rules of court. This form, approved by the Judicial Conference of the United States in September 1974, is required for the use of the Clerk of Court for the purpose of initiating the civil docket sheet. *(SEE INSTRUCTIONS ON NEXT PAGE OF THIS FORM.)*

I. (a) PLAINTIFFS

Roman Catholic Diocese of Brooklyn, New York

(b) County of Residence of First Listed Plaintiff _____
(EXCEPT IN U.S. PLAINTIFF CASES)

(c) Attorneys *(Firm Name, Address, and Telephone Number)*

Gibson Dunn & Crutcher LLP
200 Park Ave, 48th Floor

DEFENDANTS

Governor Andrew M. Cuomo in his official capacity

County of Residence of First Listed Defendant _____
(IN U.S. PLAINTIFF CASES ONLY)

NOTE: IN LAND CONDEMNATION CASES, USE THE LOCATION OF THE TRACT OF LAND INVOLVED.

Attorneys *(If Known)*

II. BASIS OF JURISDICTION *(Place an "X" in One Box Only)*

- ☐ 1 U.S. Government Plaintiff
- ☒ 3 Federal Question *(U.S. Government Not a Party)*
- ☐ 2 U.S. Government Defendant
- ☐ 4 Diversity *(Indicate Citizenship of Parties in Item III)*

III. CITIZENSHIP OF PRINCIPAL PARTIES *(Place an "X" in One Box for Plaintiff and One Box for Defendant)*

(For Diversity Cases Only)

	PTF	DEF		PTF	DEF
Citizen of This State	☐ 1	☐ 1	Incorporated *or* Principal Place of Business In This State	☐ 4	☐ 4
Citizen of Another State	☐ 2	☐ 2	Incorporated *and* Principal Place of Business In Another State	☐ 5	☐ 5
Citizen or Subject of a Foreign Country	☐ 3	☐ 3	Foreign Nation	☐ 6	☐ 6

IV. NATURE OF SUIT *(Place an "X" in One Box Only)*

Click here for: Nature of Suit Code Descriptions.

CONTRACT
- ☐ 110 Insurance
- ☐ 120 Marine
- ☐ 130 Miller Act
- ☐ 140 Negotiable Instrument
- ☐ 150 Recovery of Overpayment & Enforcement of Judgment
- ☐ 151 Medicare Act
- ☐ 152 Recovery of Defaulted Student Loans (Excludes Veterans)
- ☐ 153 Recovery of Overpayment of Veteran's Benefits
- ☐ 160 Stockholders' Suits
- ☐ 190 Other Contract
- ☐ 195 Contract Product Liability
- ☐ 196 Franchise

TORTS

PERSONAL INJURY
- ☐ 310 Airplane
- ☐ 315 Airplane Product Liability
- ☐ 320 Assault, Libel & Slander
- ☐ 330 Federal Employers' Liability
- ☐ 340 Marine
- ☐ 345 Marine Product Liability
- ☐ 350 Motor Vehicle
- ☐ 355 Motor Vehicle Product Liability
- ☐ 360 Other Personal Injury
- ☐ 362 Personal Injury - Medical Malpractice

PERSONAL INJURY
- ☐ 365 Personal Injury - Product Liability
- ☐ 367 Health Care/ Pharmaceutical Personal Injury Product Liability
- ☐ 368 Asbestos Personal Injury Product Liability

PERSONAL PROPERTY
- ☐ 370 Other Fraud
- ☐ 371 Truth in Lending
- ☐ 380 Other Personal Property Damage
- ☐ 385 Property Damage Product Liability

FORFEITURE/PENALTY
- ☐ 625 Drug Related Seizure of Property 21 USC 881
- ☐ 690 Other

LABOR
- ☐ 710 Fair Labor Standards Act
- ☐ 720 Labor/Management Relations
- ☐ 740 Railway Labor Act
- ☐ 751 Family and Medical Leave Act
- ☐ 790 Other Labor Litigation
- ☐ 791 Employee Retirement Income Security Act

IMMIGRATION
- ☐ 462 Naturalization Application
- ☐ 465 Other Immigration Actions

BANKRUPTCY
- ☐ 422 Appeal 28 USC 158
- ☐ 423 Withdrawal 28 USC 157

PROPERTY RIGHTS
- ☐ 820 Copyrights
- ☐ 830 Patent
- ☐ 835 Patent - Abbreviated New Drug Application
- ☐ 840 Trademark
- ☐ 880 Defend Trade Secrets Act of 2016

SOCIAL SECURITY
- ☐ 861 HIA (1395ff)
- ☐ 862 Black Lung (923)
- ☐ 863 DIWC/DIWW (405(g))
- ☐ 864 SSID Title XVI
- ☐ 865 RSI (405(g))

FEDERAL TAX SUITS
- ☐ 870 Taxes (U.S. Plaintiff or Defendant)
- ☐ 871 IRS—Third Party 26 USC 7609

OTHER STATUTES
- ☐ 375 False Claims Act
- ☐ 376 Qui Tam (31 USC 3729(a))
- ☐ 400 State Reapportionment
- ☐ 410 Antitrust
- ☐ 430 Banks and Banking
- ☐ 450 Commerce
- ☐ 460 Deportation
- ☐ 470 Racketeer Influenced and Corrupt Organizations
- ☐ 480 Consumer Credit (15 USC 1681 or 1692)
- ☐ 485 Telephone Consumer Protection Act
- ☐ 490 Cable/Sat TV
- ☐ 850 Securities/Commodities/ Exchange
- ☐ 890 Other Statutory Actions
- ☐ 891 Agricultural Acts
- ☐ 893 Environmental Matters
- ☐ 895 Freedom of Information Act
- ☐ 896 Arbitration
- ☐ 899 Administrative Procedure Act/Review or Appeal of Agency Decision
- ☐ 950 Constitutionality of State Statutes

REAL PROPERTY
- ☐ 210 Land Condemnation
- ☐ 220 Foreclosure
- ☐ 230 Rent Lease & Ejectment
- ☐ 240 Torts to Land
- ☐ 245 Tort Product Liability
- ☐ 290 All Other Real Property

CIVIL RIGHTS
- ☒ 440 Other Civil Rights
- ☐ 441 Voting
- ☐ 442 Employment
- ☐ 443 Housing/ Accommodations
- ☐ 445 Amer. w/Disabilities - Employment
- ☐ 446 Amer. w/Disabilities - Other
- ☐ 448 Education

PRISONER PETITIONS

Habeas Corpus:
- ☐ 463 Alien Detainee
- ☐ 510 Motions to Vacate Sentence
- ☐ 530 General
- ☐ 535 Death Penalty

Other:
- ☐ 540 Mandamus & Other
- ☐ 550 Civil Rights
- ☐ 555 Prison Condition
- ☐ 560 Civil Detainee - Conditions of Confinement

V. ORIGIN *(Place an "X" in One Box Only)*

☒ 1 Original Proceeding ☐ 2 Removed from State Court ☐ 3 Remanded from Appellate Court ☐ 4 Reinstated or Reopened ☐ 5 Transferred from Another District *(specify)* ☐ 6 Multidistrict Litigation - Transfer ☐ 8 Multidistrict Litigation - Direct File

VI. CAUSE OF ACTION

Cite the U.S. Civil Statute under which you are filing ***(Do not cite jurisdictional statutes unless diversity)***:
42 U.S.C. 1983

Brief description of cause:
Violation of Free Exercise Clause

VII. REQUESTED IN COMPLAINT:

☐ CHECK IF THIS IS A **CLASS ACTION** UNDER RULE 23, F.R.Cv.P.

DEMAND $

CHECK YES only if demanded in complaint:
JURY DEMAND: ☒ Yes ☐ No

VIII. RELATED CASE(S) IF ANY

(See instructions): JUDGE _____ DOCKET NUMBER _____

DATE
10/8/2020

SIGNATURE OF ATTORNEY OF RECORD
/s Randy M. Mastro

FOR OFFICE USE ONLY

RECEIPT # _____ AMOUNT _____ APPLYING IFP _____ JUDGE _____ MAG. JUDGE _____

CERTIFICATION OF ARBITRATION ELIGIBILITY

Local Arbitration Rule 83.7 provides that with certain exceptions, actions seeking money damages only in an amount not in excess of $150,000, exclusive of interest and costs, are eligible for compulsory arbitration. The amount of damages is presumed to be below the threshold amount unless a certification to the contrary is filed.

Case is Eligible for Arbitration ☐

I, _____, counsel for _____, do hereby certify that the above captioned civil action is ineligible for compulsory arbitration for the following reason(s):

☐ monetary damages sought are in excess of $150,000, exclusive of interest and costs,

☐ the complaint seeks injunctive relief,

☐ the matter is otherwise ineligible for the following reason

DISCLOSURE STATEMENT - FEDERAL RULES CIVIL PROCEDURE 7.1

Identify any parent corporation and any publicly held corporation that owns 10% or more or its stocks:

RELATED CASE STATEMENT (Section VIII on the Front of this Form)

Please list all cases that are arguably related pursuant to Division of Business Rule 50.3.1 in Section VIII on the front of this form. Rule 50.3.1 (a) provides that "A civil case is "related" to another civil case for purposes of this guideline when, because of the similarity of facts and legal issues or because the cases arise from the same transactions or events, a substantial saving of judicial resources is likely to result from assigning both cases to the same judge and magistrate judge." Rule 50.3.1 (b) provides that " A civil case shall not be deemed "related" to another civil case merely because the civil case: (A) involves identical legal issues, or (B) involves the same parties." Rule 50.3.1 (c) further provides that "Presumptively, and subject to the power of a judge to determine otherwise pursuant to paragraph (d), civil cases shall not be deemed to be "related" unless both cases are still pending before the court."

NY-E DIVISION OF BUSINESS RULE 50.1(d)(2)

1.) Is the civil action being filed in the Eastern District removed from a New York State Court located in Nassau or Suffolk County? ☐ Yes ☑ No

2.) If you answered "no" above:

a) Did the events or omissions giving rise to the claim or claims, or a substantial part thereof, occur in Nassau or Suffolk County? ☐ Yes ☑ No

b) Did the events or omissions giving rise to the claim or claims, or a substantial part thereof, occur in the Eastern District? ☑ Yes ☐ No

c) If this is a Fair Debt Collection Practice Act case, specify the County in which the offending communication was received: .

If your answer to question 2 (b) is "No," does the defendant (or a majority of the defendants, if there is more than one) reside in Nassau or Suffolk County, or, in an interpleader action, does the claimant (or a majority of the claimants, if there is more than one) reside in Nassau or Suffolk County? ☐ Yes ☐ No

(Note: A corporation shall be considered a resident of the County in which it has the most significant contacts).

BAR ADMISSION

I am currently admitted in the Eastern District of New York and currently a member in good standing of the bar of this court.

☑ Yes ☐ No

Are you currently the subject of any disciplinary action (s) in this or any other state or federal court?

☐ Yes (If yes, please explain ☑ No

I certify the accuracy of all information provided above.

Signature: /s Randy M. Mastro

Last Modified: 11/27/2017

AO 440 (Rev. 06/12) Summons in a Civil Action

UNITED STATES DISTRICT COURT

for the

Eastern District of New York

ROMAN CATHOLIC DIOCESE OF BROOKLYN, NEW YORK

Plaintiff(s)

v.

STATE OF NEW YORK and GOVERNOR ANDREW M. CUOMO in his official capacity,

Defendant(s)

Civil Action No. 1:20-CV-4844

SUMMONS IN A CIVIL ACTION

To: *(Defendant's name and address)* Andrew M. Cuomo
Governor of the State of New York
NYS Capitol Building
Albany, NY 12224

A lawsuit has been filed against you.

Within 21 days after service of this summons on you (not counting the day you received it) — or 60 days if you are the United States or a United States agency, or an officer or employee of the United States described in Fed. R. Civ. P. 12 (a)(2) or (3) — you must serve on the plaintiff an answer to the attached complaint or a motion under Rule 12 of the Federal Rules of Civil Procedure. The answer or motion must be served on the plaintiff or plaintiff's attorney, whose name and address are: Randy Mastro
Gibson, Dunn & Crutcher LLP
200 Park Ave
New York, N.Y. 10166-0193

If you fail to respond, judgment by default will be entered against you for the relief demanded in the complaint. You also must file your answer or motion with the court.

CLERK OF COURT

Date: _____

_____
Signature of Clerk or Deputy Clerk

Civil Action No. 1:20-CV-4844

PROOF OF SERVICE

(This section should not be filed with the court unless required by Fed. R. Civ. P. 4 (l))

This summons for *(name of individual and title, if any)* _____
was received by me on *(date)* _____ .

❒ I personally served the summons on the individual at *(place)* _____
_____ on *(date)* _____ ; or

❒ I left the summons at the individual's residence or usual place of abode with *(name)* _____
_____ , a person of suitable age and discretion who resides there,
on *(date)* _____ , and mailed a copy to the individual's last known address; or

❒ I served the summons on *(name of individual)* _____ , who is
designated by law to accept service of process on behalf of *(name of organization)* _____
_____ on *(date)* _____ ; or

❒ I returned the summons unexecuted because _____ ; or

❒ Other *(specify):*

My fees are $ _____ for travel and $ _____ for services, for a total of $ 0.00 .

I declare under penalty of perjury that this information is true.

Date: _____

_____
Server's signature

_____
Printed name and title

_____
Server's address

Additional information regarding attempted service, etc:

UNITED STATES DISTRICT COURT
EASTERN DISTRICT OF NEW YORK

THE ROMAN CATHOLIC DIOCESE OF BROOKLYN, NEW YORK,

Plaintiff,

v.

GOVERNOR ANDREW M. CUOMO in his official capacity,

Defendant.

No. 1:20-cv-4844

[PROPOSED] ORDER TO SHOW CAUSE FOR A PRELIMINARY INJUNCTION AND TEMPORARY RESTRAINING ORDER

Upon the accompanying Plaintiff's Memorandum of Law in Support of its Application for a Temporary Restraining Order and Preliminary Injunction dated October 8, 2020; the Declaration of Bishop Raymond F. Chappetto, sworn to on the 8th day of October, 2020, together with the exhibit(s) annexed thereto; the Declaration of Joseph J. Esposito, sworn to on the 8th day of October, 2020, together with the exhibit(s) annexed thereto; the Declaration of Randy M. Mastro, sworn to on the 8th day of October, 2020, together with the exhibit(s) annexed thereto; and upon all the pleadings and other papers filed in this action; and the Court, having reviewed the Memorandum of Law, supporting Declarations and exhibits submitted therewith, and having found sufficient reason being alleged and good cause appearing therefore, it is hereby:

ORDERED that Defendant Governor Andrew M. Cuomo, through his attorneys, show cause before this Court, at Room ___, 225 Cadman Plaza East, in the City and County of Brooklyn and State of New York, on the ___ day of _____, 2020, at _____ o'clock in the _____ thereof, or as soon thereafter as counsel may be heard, why an order should not be issued, pursuant to Rule 65 of the Federal Rules of Civil Procedure, preliminarily enjoining

Defendant, his representatives and agents, and all persons acting in concert or in participation with him, or having notice, from enforcing the 10- and 25-person maximum attendance restrictions in designated "red" and "orange" zones, respectively, imposed by the Governor's recent executive order, as applied to Catholic churches in those zones, until such time as the Court resolves Plaintiff's application for relief in this case; and it is further

ORDERED that, pending the Court's resolution of Plaintiff's motion for a preliminary injunction, Defendant, his representatives and agents, and all persons acting in concert or in participation with him, or having notice, shall be temporarily restrained and enjoined from enforcing the 10- and 25-person maximum attendance restrictions in designated "red" and "orange" zones, respectively, imposed by the Governor's recent executive order, as applied to Catholic churches in those zones; and it is further

ORDERED that sufficient cause having been shown, service of this Order and all of the papers submitted in support thereof shall be made on Defendant's counsel and deemed effective if it is completed by electronic mail on or before the ____ of October, 2020; and it is further

ORDERED that Defendant's answering papers on the motion for a preliminary injunction, if any, shall be filed with the Clerk of this Court and served upon the attorneys for Plaintiff via ECF, by no later than _____, and that any reply by Plaintiff to be filed and served by ECF by _____.

IT IS SO ORDERED

Dated: _____

Brooklyn, New York

_____

United States District Judge, Nicholas G. Garaufis

EXHIBIT 2

ABOUT THE DIOCESE OF BROOKLYN

ABOUT THE DIOCESE OF BROOKLYN

"The interaction of disparate cultures, the vehemence of the ideals that led the immigrants here, the opportunity offered by a new life, all gave America a flavor and a character that make it as unmistakable and as remarkable to people today as it was to Alexis de Tocqueville in the early part of the nineteenth century."

– *John F. Kennedy, A Nation of Immigrants*

This quote aptly captures the history and essence of the Roman Catholic Diocese of Brooklyn. Founded in 1853, the Diocese of Brooklyn sought to address the needs of the more than five million Irish Catholic immigrants who, tired and poor, arrived at the port of New York in search of a better life, many of whom settled in Brooklyn and Queens. Today, the Diocese of Brooklyn continues its vibrant and diverse history, home again to an immigrant population, this time driven by Hispanics.

The Roman Catholic Diocese of Brooklyn serves the boroughs of Brooklyn and Queens. It is presided by the seventh and current Bishop of Brooklyn, His Excellency, the Most Reverend Nicholas DiMarzio, a champion of immigrant rights.

The boroughs' combined population stands at more than 4.9 million, of which 1.5 million identify themselves as Catholics. The diocesan cathedral is the Cathedral Basilica of St. James in downtown Brooklyn. The Co-Cathedral of St. Joseph in Prospect Heights was elevated in February 2013 by Pope Emeritus Benedict XVI, and was dedicated on May 13, 2014, by Bishop DiMarzio. The faces of the people in the pews of St. Joseph's reflect the diversity of the many cultures that call the Diocese of Brooklyn home. It is also among the largest churches in Brooklyn and Queens.

Due to its multicultural and diverse populations, Masses are regularly held in 33 different languages across the Diocese, throughout 186 parishes with 210 churches. Its 26 ethnic ministries promote cultural events and provide an opportunity for immigrants to belong to the larger community while preserving and sharing their uniqueness and traditions.

Within its borders is the seventh largest Catholic school network in the United States, with 85 elementary schools and academies that educate more than 27,000 students.

Last year, the Diocese celebrated 15,885 Baptisms, 11,957 First Communions, 9,549 Confirmations and 1,951 Marriages, and had an average weekly attendance of almost 230,000 of the faithful at over 1,000 weekly Sunday Mass said in Brooklyn and Queens.

UNITED STATES DISTRICT COURT
EASTERN DISTRICT OF NEW YORK

THE ROMAN CATHOLIC DIOCESE OF BROOKLYN, NEW YORK,

Plaintiff,

vs.

GOVERNOR ANDREW M. CUOMO, in his official capacity,

Defendant.

DECLARATION

Civil No. 20-cv-4844

Debra S. Blog, M.D., MPH, on the date noted below and pursuant to § 1746 of title 28 of the United States Code, declares the following to be true and correct under penalty of perjury under the laws of the United States of America:

1) I am the Director of the Division of Epidemiology ("Division"), New York State Department of Health ("Department"). I have been the Director since January 2012 and employed by the Department since 2002. The Division's mission is to use sound scientific practices and principles to protect the health of all New Yorkers. Through disease surveillance, expert technical assistance, collaborations with local health departments and health care professionals, and by sharing expertise, epidemiologic information, and knowledge the division confronts a variety of new and emerging communicable diseases found in the state. The Division is composed of four bureaus and a Statistical Unit. The bureaus include Communicable Disease Control, Tuberculosis Control, Immunization, and Healthcare Associated Infections. Prior to joining the Division, I worked in the Bureau of Immunization ("Bureau") for seven years as the Medical Director,

becoming the Bureau Director in 2009. The Bureau's mission is to reduce morbidity and mortality from vaccine preventable diseases ("VPD"s), in people of all ages, through strategies that prevent VPDs and reduce transmission. The Bureau works to achieve a vision to eliminate vaccine preventable diseases through a diverse set of initiatives that are administered by five program areas. The Bureau also works with a vast network of both public and private contacts to provide statewide leadership to improve vaccine delivery and increase immunization rates. As such, I provide medical and clinical subject matter expertise and coordinate the Department's efforts to prevent the spread of communicable diseases, improve vaccination and prevent vaccine preventable diseases among New Yorkers, prevent and track healthcare associated infections, and respond to emerging infectious disease outbreaks.

2) I received my medical degree from the Albert Einstein College of Medicine, graduated in 1988. I completed a pediatric residency at North Shore University Hospital in Manhasset, NY, then a Cornell affiliate, in 1991. I worked as a general pediatrician for 10 years in Denver, Colorado and Chicago.

3) I also completed a residency in preventive medicine and an MPH in 2002. The residency is affiliated with the State University at Albany School of Public Health and the New York State Department of Health.

4) My responsibilities as they relate to COVID-19 include coordinating and engaging with the overall COVID-19 response team, research and evaluation efforts, overseeing the CDC-funded NYS COVID-19 Surveillance for Emerging Threats Network for mothers and babies ("SET-NET"), overseeing the CDC-funded NYS Emerging Infections Program's ("EIP") COVID-Net surveillance for COVID-19 associated hospitalizations, serving as a subject matter expert for

COVID-19 response efforts, and supporting schools' reopening efforts. I am involved with overseeing the COVID-19 vaccine planning response. I am familiar with the facts set forth herein based upon personal knowledge, discussions with Department staff, and Department records. This declaration has also been informed by other declarations I and my colleagues have drafted to oppose challenges to State regulations and guidance issued to respond to the COVID-19 pandemic. See Exhs. JJ and KK.

5) I make this declaration in support of Defendant's Opposition to Plaintiff's Motion for a Preliminary Injunction.

COVID-19

6) On January 7, 2020, following an outbreak of pneumonia of unknown etiology in China's Wuhan Province, Chinese authorities identified a novel coronavirus—COVID-19. Its spread around the world has been well documented. Exh. A.

7) COVID-19 is a highly infectious and potentially deadly respiratory disease caused by a novel coronavirus that spreads easily from person-to-person. Exh. B.

8) Because there is no pre-existing immunity against this new virus, it has spread worldwide in an exceptionally short period of time, posing a "serious public health risk." Id.

9) On January 31, 2020, the World Health Organization ("WHO") declared a "public health emergency of international concern." Exh. C.

10) Less than two months later, on March 11, 2020, the World Health Organization declared COVID-19 a global pandemic. Exh. D

11) On March 13, 2020, the President of the United States declared a national emergency. Exh. E.

12) "Transmission of SARS-CoV-2 can occur through direct, indirect, or close contact with infected people through infected secretions such as saliva and respiratory secretions or their respiratory droplets, which are expelled when an infected person coughs, sneezes, talks or sings." Exh. F. "WHO, together with the scientific community, has been actively discussing and evaluating whether SARS-CoV-2 may also spread through aerosols in the absence of aerosol generating procedures, particularly in indoor settings with poor ventilation." Id. "Current evidence suggests that SARS-CoV-2 may remain viable for hours to days on surfaces made from a variety of materials." Exh. G.

13) COVID-19 has an incubation period of up to fourteen days. Exh. F. Many individuals infected with the COVID-19 virus are asymptomatic. Id. Social distancing is one of the most effective means of limiting transmission of COVID-19. Id.

14) The CDC has thus issued guidance recommending that people comply with social distancing measures in order to prevent the spread of COVID-19. According to the CDC, "[l]imiting face-to-face contact with others is the best way to reduce the spread" of COVID-19. Exh. H.

15) In order to limit exposure to COVID-19 and slow its spread, the CDC recommends keeping "at least six feet away from other people" and limiting "close contact with others outside your household in indoor and outdoor spaces" including avoiding groups and crowded places. Id. Social distancing "is one of the best tools we have to avoid being exposed to this virus and slowing its spread locally and across the country and world" because it "helps limit contact with infected people and contaminated surfaces." Id.

16) The rapid spread of COVID-19 in New York, in the United States, and worldwide,

presented and continues to present a grave threat to New Yorkers and to New York's health care system. However, by taking strong action to ensure social distancing as well as other important measures, New York has mitigated that threat. To avoid a devastating resurgence of COVID-19, responsible parties, business owners, and the public must continue to adhere to the Executive Orders and guidance.

17) At the end of September, we crossed the grim milestone of more than 1,000,000 deaths worldwide. As of October 8, 2020, 1,082,201 people have died worldwide[1]; 214,108 people have died of COVID-19 in the United States of COVID-19[2]; and 25,587 have died in the State of New York of COVID-19[3].

COVID-19 Surges in New York

18) New York recorded its first cases of COVID-19 on March 1, 2020, in New York City and on March 2, 2020, in Westchester County.

19) On March 7, 2020, Governor Cuomo declared a State of Emergency. See Executive Order 202, Exh. I[4], available at https://www.governor.ny.gov/news/no-202-declaring-disaster-emergency-state-new-york. As of March 7, 2020, 60 people had tested positive for COVID-19 in the State of New York. See Fn. 3. Cases in the United States totaled 275. See Fn. 2. Cases worldwide totaled 179,111, with 7,426 deaths reported. See Fn. 1.

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[1] Johns Hopkins Coronavirus Resource Center COVID-19 Dashboard: https://coronavirus.jhu.edu/map.html; see also WHO Coronavirus Disease (COVID-19) Dashboard found at https://covid19.who.int/ (last viewed October 13, 2020).
[2] CDC Covid Tracker found at https://www.cdc.gov/covid-data-tracker/index.html#cases (last viewed October 13, 2020).
[3] NYSDOH COVID-19 Tracker found at https://covid19tracker.health.ny.gov/views/NYS-COVID19-Tracker/NYSDOHCOVID-19Tracker-DailyTracker?%3Aembed=yes&%3Atoolbar=no&%3Atabs=n#/views (last viewed October 13, 2020).
[4] All of Governor Cuomo's Executive Orders can be found at https://www.governor.ny.gov/executiveorders.

20) By March 20, 2020, the number of individuals testing positive for COVID-19 in New York approached 10,000, and deaths exceeded 150. See Fn. 3.

21) By April 20, 2020, over 267,000 individuals had tested positive for COVID-19, and over 13,000 people had died from COVID-19 in New York State. See Fn. 3. See also, https://www.syracuse.com/coronavirus/2020/06/where-is-coronavirus-in-ny-see-map-charts-of-covid-19-cases-deaths-hospitalizations-sunday-june-14.html (includes similar charts with trends over time).

22) These events placed significant strain on New York State's healthcare system. For example, as the virus spread, New York faced a shortage of hospital beds, ventilators, and personal protective equipment such as masks and gloves.

23) As a result, alternate care sites were set up, including at the Javits Center in New York City. The United States Navy sent the U.S.N.S. Comfort, a Mercy-class hospital ship, to New York to assist with medical care.

24) Funeral homes were also overwhelmed, resulting in the use of mass graves to bury the dead.

25) At the worst stage of the pandemic, New York State had more coronavirus cases than any single country in the world.

26) Among other measures aimed at flattening the curve, slowing the spread of COVID-19, and preventing the health care system from becoming overburdened, Governor Cuomo issued multiple Executive Orders restricting gatherings.

27) On March 16, 2020, gatherings in excess of 50 people were prohibited. On-premises service of food and beverages in all bars and restaurants were indefinitely suspended and

gambling establishments, gyms, and movie theaters were indefinitely closed. Exh. J, Executive Order 202.3. All non-essential state and local workers to stay home, "except for those personnel essential to the . . . response to the COVID-19 emergency." Exh. K, Executive Order 202.4. All schools were closed. Id.

28) On March 18, 2020, all malls and places of public amusement closed. Exh. L, Executive Order 202.5.

New York State on PAUSE

29) On March 20, 2020, the governor announced the New York State on PAUSE initiative.

30) The 10-point New York State on PAUSE plan is as follows:

- All non-essential businesses statewide closed, effective March 22, 2020, at 8pm;
- Non-essential gatherings of individuals of any size for any reason (e.g., parties, celebrations or other social events) are canceled or postponed at this time;
- Any concentration of individuals outside their home must be limited to workers providing essential services and social distancing should be practiced;
- When in public, individuals must practice social distancing of at least six feet from others;
- Businesses and entities that provide other essential services must implement rules that help facilitate social distancing of at least six feet;
- Individuals should limit outdoor recreational activities to non-contact and avoid activities where they come in close contact with other people;
- Individuals should limit use of public transportation to when absolutely necessary and should limit potential exposure by spacing out at least six feet from other riders;

- Sick individuals should not leave their home unless to receive medical care and only after a telehealth visit to determine if leaving the home is in the best interest of their health;
- Young people should also practice social distancing and avoid contact with vulnerable populations; and
- Use precautionary sanitizer practices such as using isopropyl alcohol wipes.

31) Among the more important measures the Governor adopted as part of the New York on PAUSE initiative were restrictions on non-essential gatherings.

32) On March 23, 2020, the Governor issued Executive Order 202.10, which banned "[n]on-essential gatherings of any size for any reason." Exh. M. From the beginning, all gatherings were viewed as non-essential, which is why, initially, all gatherings were prohibited. The idea was to slowly reopen and permit individuals to gather based on the data showing a decline in transmission. As stated previously, given the potential for airborne spread of the virus, reducing density and maintaining distance is critical to reducing the risk of transmission of COVID-19. See supra, ¶¶ 12 and 13.

33) That restriction remained in place until May 21, 2020, when the Governor issued Executive Order 202.32 to permit non-essential outdoor gatherings of up to ten individuals for religious services or Memorial Day service or commemoration, provided the participants follow the social distancing and cleaning and disinfection protocols established by the Department. Exh. N.

34) The following day, May 22, 2020, the Governor issued Executive Order 202.33, which further modified the ban to permit non-essential outdoor gatherings of up to ten individuals for any lawful purpose or reason, provided the participants follow the social

distancing and cleaning and disinfection protocols established by the Department. Exh. O.

35) On June 15, 2020, the Governor issued Executive Order 202.42, which extended Executive Order 202.33 until July 15, 2020, and further modified the restriction to permit non-essential outdoor gatherings of up to twenty-five individuals for any purpose or reason, provided the gathering was in a region that had reached Phase Three of the re-opening plan and the participants follow the social distancing and cleaning and disinfection protocols established by the Department. Exh. P.

36) On June 15, 2020, the Governor issued Executive Order 202.45, which permits non-essential gatherings of up to 50 individuals for any purpose or reason, provided the gathering was in a region that had reached fourth phase of the re-opening plan, and the participants follow the social distancing and cleaning and disinfection protocols established by the Department. Exh. Q.

APRIL, MAY, and JUNE 2020—New York Appears to Flatten the Curve

37) Before the New York State on PAUSE initiative, the daily increase in the number of positive COVID-19 tests had been rising quickly. On March 19, the number of positive tests increased nearly 70%, from, 1,769 to 2,950. For the remainder of March and early April, the number of positive tests increased at an average rate of approximately 20% per day. On April 9, 2020, alone, over 10,000 people tested positive for COVID-19. Since April 9, 2020, the number of positive tests per day has declined steadily. On May 28, 2020, over 1,551 people tested positive for COVID-19. On June 29, 2020, 46,428 people were tested and only 319 tested positive—a

positivity rate below .7 %.[5]

New York Forward

38) When New York transitioned from New York State on PAUSE to New York Forward, four phases were created to guide non-essential businesses and offices, as well as the essential businesses that remained open, on how to reopen. See https://forward.ny.gov/ny-forward.

39) Due to the success of the people of the State of New York at flattening the curve, all regions are in Phase Four. See https://forward.ny.gov/.

40) Providing transmission and infection rates remain stable, restrictions can be relaxed allowing for larger gatherings.

41) By following the guidelines and requirements, such as social distancing and wearing masks, New York has successfully reduced the spread of the virus. As testing throughout the state has increased, the number of positive cases has decreased. See https://forward.ny.gov/percentage-positive-results-region-dashboard. On August 2, 2020, the downward trend of positive cases continued as 51,839 individuals were tested and 545 of those tested positive. Id.

42) The transmission rate, also known as the reproduction rate—which measures the number of individuals infected on average by an infected individual—was at 3.59 on February 24, 2020. The rate was as low as .67 on April 17, 2020. The rate remained consistent between .67 and .73 until May when the NY Forward transition began. Since reopening the rate has remained low

[5] Found at https://covid19tracker.health.ny.gov/views/NYS-COVID19-Tracker/NYSDOHCOVID-19Tracker-DailyTracker?%3Aembed=yes&%3Atoolbar=no&%3Atabs=n (last viewed October 8, 2020).

but has begun inching up as the state progresses through the phases of reopening. On October 13. 2020, the transmission rate was 1.03%, slightly above the critical 1.0, which warrants close monitoring. See https://rt.live/.

The Pandemic Continues to Present a Grave Threat to the Health and Safety of the People of the State of New York

43) Despite the gains that New York has made, the pandemic is not over as numbers have continued to increase. On July 29, 2020, WHO reported 16,558,289 individuals confirmed positive for COVID-19, and 656,093 confirmed COVID 19 deaths worldwide.[6] On July 29, 2020, the CDC reported that 4,339,997 individuals in the United States had tested positive for COVID-19, and 148,866 had died of COVID-19.[7]

44) Indeed, during the week of July 18 through July 24, the United States reported the highest seven-day average of new COVID-19 cases with the highest number of new cases reported in a single day on July 24, 2020 – 74,818. Id.

45) COVID-19 cases and deaths continue to grow globally. On October 13, 2020, Johns Hopkins reported a total 37,894,452 individuals confirmed positive for COVID-19, and 1,082,201 confirmed COVID-19 deaths worldwide. See Fn. 1.

46) A second wave of the COVID-19 pandemic is currently sweeping United States. On October 13, 2020, the CDC reported that 7,740,934 individuals in the United States had tested positive for COVID-19, and 214,108 had died of COVID-19. See Fn. 8.

47) In an effort to sustain the gains attributable to the PAUSE initiative, the Governor,

[6] Found at https://covid19.who.int/ (last viewed October 13, 2020).
[7] Found at https://www.cdc.gov/covid-data-tracker/index.html#trends (last viewed October 13, 2020).

on June 24, issued Executive Order 205, "Quarantine Restrictions on Travelers Arriving in New York." Exh. R. The Order requires all travelers entering New York from a state with a positive test rate higher than 10 per 100,000 residents, or higher than a 10% test positivity rate, over a seven-day rolling average, to quarantine for a period of 14 days consistent with Department of Health regulations for quarantine. See also https://coronavirus.health.ny.gov/covid-19-travel-advisory.

48) As of October 6, 2020, 33 states and two territories had a positivity rate of over 10%, or positive test rate higher than 10 per 100,000 residents, over a seven-day rolling average, including Alabama, Alaska, Arkansas, Colorado, Delaware, Florida, Georgia, Guam, Idaho, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Minnesota, Mississippi, Missouri, Montana, Nebraska, Nevada, New Mexico, North Carolina, North Dakota, Oklahoma, South Carolina, South Dakota, Tennessee, Texas, Utah, West Virginia, Wisconsin, and Wyoming. See id., COVID-19 Travel Advisory, available at https://coronavirus.health.ny.gov/covid-19-travel-advisory.

49) Executive Order 205 gives discretion to the Commissioner of the Department of Health to issue additional protocols for essential workers, or for other extraordinary circumstances, when a quarantine is not possible, provided such measures continue to safeguard the public health. See Exh. R.

50) On June 24, 2020, the Office of the Commissioner for the New York State Department issued the "Interim Guidance for Quarantine Restrictions on Travelers Arriving in New York State Following Out of State Travel." See NYS Interim Guidance for Quarantine Restrictions on Travelers Arriving in New York State Following Out of State Travel, available at https://coronavirus.health.ny.gov/covid-19-travel-advisory.

51) All individuals traveling to New York from any of the restricted states must complete the form upon entering New York. Travelers coming to New York from designated states through means of transport, including trains and cars, must fill out the form online. Id.

Risks for Non-essential Business and Indoor Gatherings

52) Restrictions on the operation of non-essential businesses and indoor gatherings are necessary to ensure sufficient space for proper distancing, thereby reducing potential transmission rates.

53) The four phases were intended to have gradually increasing gathering sizes and decreasing occupancy restrictions, with Phase One having the most restrictions and Phase Four having the least.

54) The phases allowed monitoring for, and to quickly identify, any increase in virus transmission in a particular community that may have occurred as a result of moving to a new, less restrictive phase. This is necessary to ensure that virus transmission in a community is stable before continuing on to the next phase.

55) Providing transmission rates remained stable during each transition, restrictions on less risky activities were relaxed allowing for larger gatherings in each subsequent phase. This can be seen with respect to guidance for restaurants. For a region in Phase One, restaurants are permitted to be open for takeout and delivery service only, with no indoor or outdoor dining allowed. For a region in Phase Two, restaurants are permitted to expand their services to include outdoor dining only, limited to a maximum of ten individuals per table. For a region in Phase Three, restaurants added indoor dining with capacity limited to no more than 50% of the maximum occupancy.

56) The directive in Executive Order 202.48, which modified the directive contained in Executive Order 202.41, that prohibited indoor food services and dining as part of Phase Three in New York City, has been modified by EO 202.61 to allow indoor food services and dining in New York City beginning September 30, 2020, so long as the Department's, and any other applicable State-issued guidance, is strictly adhered to. Exh. S.

57) The restrictions in the Executive Orders and guidance are developed in consultation and cooperation with medical staff in the Department with the goal of reducing the opportunity for the virus to spread.

58) The limits and restrictions lessen and evolve as the curve continues to flatten through the continuing practice of these social distancing and hygiene and disinfecting guidelines. The numbers of new infections, hospitalizations, and deaths continue to decline in areas where these guidelines are followed, which shows why adherence to these practices is so crucial to safeguarding public health.

59) Conversely, the limits and restrictions will increase, similar to the earlier phases, if a review of the data indicates a trend of increasing COVID-19 cases or spikes of cases in cluster areas.

60) The Governor and the Department of Health are constantly monitoring transmission and infection rates. See COVID-19 Early Warning Monitoring System Dashboard[8].

61) Again, large gatherings present the greatest risk for rapid and widespread transmission of the virus in a community given the nature of having many people in a single

[8] Found at https://forward.ny.gov/early-warning-monitoring-dashboard (last viewed October 13, 2020).

enclosed space. For this reason, non-essential outdoor gatherings, excluding religious activity, were limited to a maximum of 50 people for regions in Phase Four.

Large and Super-Spreader Gatherings

62) Gatherings, both indoor and outdoor, pose a significant risk of becoming super-spreader events. For example, "[a]s scientists have learned more about COVID-19, it has become clear that so-called superspreader incidents—in which one person infects a disproportionate number of other individuals—have played an oversized role in the transmission of the virus that causes the disease." Exh T.

63) "The more individuals you pile into one place, the greater the opportunity for the coronavirus to infect many people at once.... If you max out at five people, it will be very hard to have a superspreading event.... But as a group's size increases, so does the risk of transmitting the virus to a wider cluster. A large group size also increases the chance that someone present will be infectious." Id.

64) It is critically important to control the size of gatherings, both indoor and outdoor, since "as a group's size increases, so does the risk of transmitting the virus to a wider cluster. A large group size also increases the chance that someone present will be infectious." Id.

65) A CDC report of a church event that took place in Arkansas during the month of March demonstrates how easily and rapidly SARS-CoV-2, the virus that causes COVID-19, transmission can occur. Exh. U. (CDC MMWR).

66) At this church, two asymptomatic individuals, a husband and wife, attended events at the church on March 6-8. They both developed symptoms a few days after the events. Id.

67) Of the 92 attendees, 35 (38%) had confirmed COVID-19 cases and there were three deaths. In the community, at least 26 COVID-19 cases were confirmed and there was one death. Id.

68) This outbreak highlights the potential for widespread transmission of the virus that causes COVID-19, both at group gatherings during church events and within the broader community and the findings highlight the importance for organizations, including faith-based organizations, to prevent COVID-19 by following available guidance. Id.

69) A research team "found that superspreading events tended to happen in indoor spaces, with people in close proximity. Social occasions led to more clusters than exposure in the workplace or home – mass transmissions occurred at weddings, temples, bars and karaoke parties, for instance. The risk seems to be higher if people are raising their voices in some way, such as singing or shouting." Exh. V.

70) The Department tracks clusters throughout the State and data indicates that social gatherings followed by restaurants/bars present the highest levels of clusters – 48 and 30 from New York State, excluding New York City, respectively from June 16, 2020 to October 12, 2020. Within each separate cluster are many individual cases of COVID-19. The data indicates there are currently 13 clusters tied to religious gatherings, outside of New York City.

71) As CDC stated in guidance released on June 12, 2020: The *more people* an individual interacts with at a gathering and the longer that interaction lasts, the higher the potential

risk of becoming infected with COVID-19 and COVID-19 spreading. Exh. W.

72) Medium and large indoor gatherings are the most difficult to manage as compared to virtual or small outdoor gatherings. Medium sized gatherings are a higher risk because, the space must be individuals must remain spaced at least 6 feet apart. Id.

73) Large gatherings present the highest risk because as the number of attendees increases, the more difficult it becomes for individuals to remain spaced at least 6 feet apart. Id. In addition, the risk for exposure to an asymptomatic case increases as the number of attendees is greater.

74) For both sizes of gatherings, attendees that travel from outside the local area increase the risk of transmission. Id

75) Gatherings provide an ideal platform for the efficient transmission of COVID-19 to multiple people at once. Those individuals who contract COVID-19 at a gathering may themselves become super-spreaders if they attend further gatherings while they are asymptomatic. Exh X.

76) A super-spreader, usually identified in retrospect, has a greater than average propensity to infect a larger number of people and it is thought that "10% of the [COVID-19] cases may be responsible for 80% of the transmission". Id.

77) "[A]ny large gathering or movement of groups or individuals can constitute super-spreading." Id.

78) The idea of "super-spreaders" or super-spreading events is not new to COVID-19. "[S]uper-spreading was thought to be a driver of MERS, SARS and, to a lesser extent, Ebola." Id.

79) Large social gatherings were not permitted and only 10 or fewer people were in permitted to be in attendance during Phase One, 25 or fewer people attending during Phases Two and Three, and now if 50 or fewer people attend a social gathering during Phase Four. See https://coronavirus.health.ny.gov/travel-large-gatherings-and-quarantines. During a large social gathering, "[i]ndividuals must wear face coverings when they are in a public and are: within six feet of distance from other individuals; or in a situation or setting where they are unable to maintain six feet of distance from other individuals…." Id.

80) The WHO provides advice to faith-based organizations ("FBO") and faith leaders for keeping their members safe and reducing the risk of illness. Exh. Y. "FBOs are advised to conduct faith activities remotely, rather than in-person, using available technology to maintain community and continue worship." Id.

81) While attending a service, "[a] distance of at least 6 ft. must be maintained amongst all individuals at all times, unless safety or the core activity requires a shorter distance (e.g. pallbearing) or the individuals are members of the same household. However, any singing activity must provide for a distance between individuals of 12 ft., subject to additional protective measures." Exh. Z.

82) Attendees are prohibited from "holding or shaking hands of members in different households during services or prayers." Id.

83) Attendees must also "[l]imit activities involving singing (e.g. choir, soloist, cantor, musical ensemble), unless 12 ft. of separation can be provided between individuals or additional distancing or physical barriers can reduce transmission of respiratory droplets." Id.

84) In April, various leaders of different faiths opined that the safest way for their

congregations to worship was at home. Exh. AA. While they all agreed that gathering together and building relationships was a vital part of their religious practice, they also agreed that keeping people safe was important and to consider "responsibility over recklessness", which was safe distancing. Id.

85) The CDC provides recommendations "to help communities of faith discern how best to practice their beliefs while keeping their staff and congregations safe." Exh. BB.

86) It is important for these communities to promote social distancing and "[t]ake steps to limit the size of gatherings **in accordance with the guidance and directives of state and local authorities** and subject to the protections of the First Amendment and any other applicable federal law." Id. [Emphasis added.]

87) A religious event, a wedding in Maine, became one of the larger super-spreader events in the United States when it was linked to more than 170 people contracting the virus and at least eight deaths[9]. Exh. CC. "None of those who died actually attended the wedding and reception." Id.

88) One individual sickened around 130 others attending an indoor-outdoor religious service in India. Exh. DD. Vox. Additionally, we can see "from studying events, like the infamous March church choir practice in Skagit County, Washington, during which one person infected an estimated 52 of 61 people (two of whom died), loud talking and singing 'can spread more virus than talking at a normal volume.'" Id.

[9] The Exhibit article is dates September 17, 2020, and references seven deaths, while an updated article on the event references "at least eight deaths" and is dated October 1, 2020. The October 1 article can be found at (https://people.com/health/pastor-maine-superspreader-wedding-will-have-to-wear-mask-sons-nuptials/), last viewed October 13, 2020.

89) It is important to consider the intention behind the guidance and the activities that take place during normal business operations. Here, restaurants are not appropriate comparators to religious services and therefore they should be treated differently. For example, when going to a restaurant for a meal, the expectation during normal business operations is that small parties (a maximum of 10 individuals per table) are there to eat their meal and leave, not to mix and mingle with other patrons at the restaurant for hours. Patrons generally arrive with their group and do not coordinate arrivals for the same time.

90) In a religious service or ceremony, the idea is a group of people coming together as a community to interact and pray together, e.g., ¶¶ 6, 54 of the Complaint. Generally, the congregants are arriving and leaving at the same time and are together over an extended period of time. This type of close interaction, while having deep meaning for the congregants, poses a higher risk of transmission of the virus.

New Spikes and Clusters

91) Since the beginning of September, the Department has seen the number of clusters spike in a few areas around the state:

- Broome County (One Area, Yellow)
- Brooklyn (One Area, Red, Orange and Yellow)
- Orange County (One Area, Red and Yellow)
- Queens (Two Areas, Red, Orange and Yellow)
- Rockland County (One Area, Red and Yellow)

Exh. Z. See also Fn. 9 and Fn. 3.

92) The data and report from the New York City Department of Health indicated that immediate action was required to contain the virus and prevent a super-spreader event. A status report submitted in the Soos case clearly summarizes the urgency in each of the cluster areas as positivity rates spiked. Exh. EE. For example, while most of New York City has a rate of

positive tests around 1%, the red zone area had a positivity rate of approximately 8% which is alarming. Id.

93) According to the CDC, "A high percent positivity means that SARS-CoV-2, the virus that causes COVID-19, transmission is elevated in the jurisdiction and community mitigation measures are warranted to reduce transmission. A high percent positivity means there is a high rate of SARS-CoV-2 infections due to extensive transmission of the virus in the geographic area." Exh. FF.

94) The CDC also provides guidance for community mitigation when there is a high positivity rate in an area. Exh. GG. "The goal of community mitigation in areas with local COVID-19 transmission is to slow its spread and to protect all individuals, especially those at increased risk for severe illness, while minimizing the negative impacts of these strategies." Id.

95) The CDC describes layers of mitigation and levels of mitigation needed based on the levels of transmission, which is what is being done through the creation of the three zones described below. See id., Table 1.

96) On October 6, 2020, the Governor announced a new Cluster Action Initiative to deal with the hotspots found in Brooklyn and Queens, as well as Broome, Orange, and Rockland Counties.[10] The purpose is to "develop[ ] a science-based approach to attack these clusters and stop any further spread of the virus, including new rules and restrictions directly targeted to areas with the highest concentration of COVID cases and the surrounding communities. The new rules

[10] Cluster Action Initiative found at https://www.governor.ny.gov/news/governor-cuomo-announces-new-cluster-action-initiative (last visited October 8, 2020).

will be in effect for a minimum of 14 days." Exh HH.

97) EO 202.68 was issued to address these hotspots and created three zones with the level of restriction thee highest in red, and lower in yellow. Exh. II.

98) In the most severely impacted area, the "red zone",

> Non-essential gatherings of any size shall be postponed or cancelled; all non-essential businesses, as determined by the Empire State Development Corporation based upon published guidance, shall reduce in-person workforce by 100%; houses of worship shall be subject to a capacity limit of 25% of maximum occupancy or 10 people, whichever is fewer; any restaurant or tavern shall cease serving patrons food or beverage on-premises and may be open for takeout or delivery only; and the local Department of Health shall direct closure of all schools for in-person instruction, except as otherwise provided in Executive Order.

Id.

99) The "orange zone" is a moderately severe location and

> Non-essential gatherings shall be limited to 10 people; certain non-essential businesses, for which there is a higher risk associated with the transmission of the COVID-19 virus, including gyms, fitness centers or classes, barbers, hair salons, spas, tattoo or piercing parlors, nail technicians and nail salons, cosmetologists, estheticians, the provision of laser hair removal and electrolysis, and all other personal care services shall reduce in-person workforce by 100%; houses of worship shall be subject to a maximum capacity limit of the lesser of 33% of maximum occupancy or 25 people, whichever is fewer; any restaurant or tavern shall cease serving patrons food or beverage inside on-premises but may provide outdoor service, and may be open for takeout or delivery, provided however, any one seated group or party shall not exceed 4 people; and the local Department of Health shall direct closure of all schools for in-person instruction, except as otherwise provided in Executive Order.

Id.

100) The precautionary or "yellow zone" requires that

> Non-essential gatherings shall be limited to no more than 25 people;

> houses of worship shall be subject to a capacity limit of 50% of its maximum occupancy and shall adhere to Department of Health guidance; any restaurant or tavern must limit any one seated group or party size to 4 people; and the Department of Health shall issue guidance by October 9, 2020 regarding mandatory testing of students and school personnel, and schools shall adhere to such guidance.

Id.

101) Again, one of the most effective ways to mitigate the risk of infection and reduce transmission is to reduce density.

102) The purpose behind the initiative is to "take dramatic action within the cluster" while also taking action in the surrounding area in order to contain and prevent spread of the virus. See Exh. HH. Precautionary actions are taken in the outlying communities. Id.

103) Each zone allows for a different maximum number of people allowed to gather. In the red zone, only essential businesses are permitted to be open, dining is take-out only, schools are closed and remote learning only, and all mass gatherings are prohibited, with the exception houses of worship are allowed a maximum of 10 people – similar to regressing to Phase One. Id.

104) In the warning or orange zone, high risk non-essential businesses are closed, such as gyms and personal care, only outdoor dining with four people maximum per table is permitted, schools are still remote only, and mass gatherings allow a maximum of 10 people indoor and outdoor, while an exception is made for houses of worship where it is 33% capacity with a 25 person maximum. Id.

105) The precautionary yellow zone businesses are open, indoor and outdoor dining are permitted with a maximum of four people per table, schools are open with mandatory testing

each week of students, teachers, and staff, and a maximum of 25 people are allowed at a mass gathering either indoor or outdoor, with the exception of houses of worship, which are allowed 50% capacity. Id.

106) The percentages in the orange and yellow zones are 33% and 50% are different from Phase Four since the zones are capped at a maximum of 25 or 50 people, depending on the zone. The percentages capture smaller spaces where 25 or 50 people might be crowded and the cap reduces density to mitigate the risk of spread.

107) The zones are representative of the prior reopening phases, but now on a smaller scale to target hotspots and clusters.

Responsible Parties

108) For industries where people may gather, guidelines are directed at a responsible party – the individual who will ensure that the guidelines and EOs are being adhered to at the gatherings. See https://forward.ny.gov/statewide-guidelines. It is the responsible party for any gathering who must ensure that masks are worn, soap and water and/or hand sanitizer are available, proper distances are maintained, and any necessary markings are made on the floor or ground to show proper distancing.

109) It is important for responsible parties to follow State and local guidance to prevent transmission of COVID-19.

110) True and accurate copies of the following documents are attached hereto:

Exhibit A: WHO Situation Report 1.

Exhibit B: WHO Situation Report 3.

Exhibit C: A true and accurate copy of the Statement on the Second Meeting of

the International Health Regulations (2005) Emergency Committee Regarding the Outbreak of Novel Coronavirus (2019-nCoV) (Jan 30, 2020).

Exhibit D: WHO Declares Global Pandemic.

Exhibit E: A true and accurate copy of the National Emergency Declaration signed by President Trump on March 13, 2020.

Exhibit F: WHO Article: Transmission of SARS-CoV-2: implications for infection prevention precautions

Exhibit G: CDC: Cleaning and Disinfection for Households.

Exhibit H: CDC: Social Distancing.

Exhibit I: Governor Cuomo's Executive Order 202.

Exhibit J: Governor Cuomo's Executive Order 202.3.

Exhibit K: Governor Cuomo's Executive Order 202.4.

Exhibit L: Governor Cuomo's Executive Order 202.5.

Exhibit M: Governor Cuomo's Executive Order 202.10.

Exhibit N: Governor Cuomo's Executive Order 202.32.

Exhibit O: Governor Cuomo's Executive Order 202.33.

Exhibit P: Governor Cuomo's Executive Order 202.42.

Exhibit Q: Governor Cuomo's Executive Order 202.45.

Exhibit R: Governor Cuomo's Executive Order 205.

Exhibit S: Governor Cuomo's Executive Order 202.61.

Exhibit T: Scientific American Article.

Exhibit U: CDC Morbidity and Mortality Weekly Report.

Exhibit V: New Scientist Article.

Exhibit W: CDC Large Event Considerations.

Exhibit X: NIH, COVID-19 Super-spreaders: Definitional Quandaries and Implications

Exhibit Y: WHO Faith-based organizations and faith leaders

Exhibit Z: Governor Cuomo's Executive Order 202.6.

Exhibit AA: PEOPLE Article.

Exhibit BB: CDC Considerations for Communities of Faith.

Exhibit CC: Guardian Article: Maine 'superspreader' wedding linked to 170 Covid cases and seven deaths

Exhibit DD: Article: How superspreading is fueling the pandemic

Exhibit EE: New York City Status Report in Soos, et al. v. Cuomo, et al., 1:20-CV-651 (GLS)(DJS).

Exhibit FF: CDC Frequently Asked Questions: Calculating Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2) RT-PCR Laboratory Test Percent Positivity.

Exhibit GG: CDC Implementation of Mitigation Strategies for Communities.

Exhibit HH: Governor Cuomo's Announcement of Cluster Initiative.

Exhibit II: Governor Cuomo's Executive Order 202.68.

Exhibit JJ: Affidavit of Elizabeth M. Dufort, M.D., FAAP, sworn to September 14, 2020 in Sportsmen's Tavern LLC v. N.Y. State Liquor Auth., Index No. 809297 (Sup. Ct., Erie Cnty.) (without exhibits)

Exhibit KK: Declaration of Howard Zucker, M.D., J.D, dated August 11, 2020. in DiMartile et al v. Cuomo, et al., 20-cv-859 (N.D.N.Y.) (without exhibits).

Dated: October 13, 2020
Albany, New York

Debra S. Blog, M.D., MPH

World Health Organization

Novel Coronavirus (2019-nCoV)

SITUATION REPORT - 1

21 JANUARY 2020

Data as reported by: 20 January 2020

SUMMARY

Event highlights from 31 December 2019 to 20 January 2020:

- On 31 December 2019, the WHO China Country Office was informed of cases of pneumonia unknown etiology (unknown cause) detected in Wuhan City, Hubei Province of China. From 31 December 2019 through 3 January 2020, a total of 44 case-patients with pneumonia of unknown etiology were reported to WHO by the national authorities in China. During this reported period, the causal agent was not identified.
- On 11 and 12 January 2020, WHO received further detailed information from the National Health Commission China that the outbreak is associated with exposures in one seafood market in Wuhan City.
- The Chinese authorities identified a new type of coronavirus, which was isolated on 7 January 2020.
- On 12 January 2020, China shared the genetic sequence of the novel coronavirus for countries to use in developing specific diagnostic kits.
- On 13 January 2020, the Ministry of Public Health, Thailand reported the first imported case of lab-confirmed novel coronavirus (2019-nCoV) from Wuhan, Hubei Province, China.
- On 15 January 2020, the Ministry of Health, Labour and Welfare, Japan (MHLW) reported an imported case of laboratory-confirmed 2019-novel coronavirus (2019-nCoV) from Wuhan, Hubei Province, China.
- On 20 January 2020, National IHR Focal Point (NFP) for Republic of Korea reported the first case of novel coronavirus in the Republic of Korea.

Situation update:

- As of 20 January 2020, 282 confirmed cases of 2019-nCoV have been reported from four countries including China (278 cases), Thailand (2 cases), Japan (1 case) and the Republic of Korea (1 case);
- Cases in Thailand, Japan and Republic of Korea were exported from Wuhan City, China;
- Among the 278 cases confirmed in China, 258 cases were reported from Hubei Province, 14 from Guangdong Province, five from Beijing Municipality and one from Shanghai Municipality;

- Of the 278 confirmed cases, 51 cases are severely ill[1], 12 are in critical condition[2];
- Six deaths have been reported from Wuhan City.

I. SURVEILLANCE

Reported incidence of confirmed 2019-nCoV cases

Table 1. Countries, territories or areas with reported confirmed cases of 2019-nCoV, 20 January 2020

WHO Regional Office	Country, territory, area	Total number of confirmed cases
WPRO	China – Hubei Province	258
	China – Guangdong	14
	China – Beijing Municipality	5
	China – Shanghai Municipality	1
	Japan	1
	Republic of Korea	1
SEARO	Thailand	2
Total confirmed cases		282

Details of cases reported on 20 January 2020:

- Wuhan City:
  - 60 new confirmed cases including three deaths.

- Guangdong Province:
  - Fourteen confirmed cases (one case was confirmed on 19 January) including four severe cases, two critical cases, no deaths;
  - Of the 14 confirmed cases, 12 had travel history to Wuhan and two cases had contact history with cases;
  - Nine were male and fives were female.

- Beijing Municipality:
  - Five confirmed cases (two cases were confirmed on 19 January);
  - Of the three new confirmed cases on 20 Jan, two were male and one was a female;
  - All five cases had a travel history to Wuhan and are currently asymptomatic.

- Shanghai Municipality:
  - One confirmed case in a female;
  - Travelled to Shanghai from Wuhan on 12 January;

[1] Severe illness: According to any of the following criteria:
(1) dyspnea; (2) respiratory rate more than 30 bpm; (3) hypoxemia; (4) chest X-ray with multi-lobar infiltrates or pulmonary infiltration progressed more than 50% within 24 - 48 hours.

[2] Critical condition: According to any of the following criteria:
(1) respiratory failure; (2) septic shock; (3) other organ failure which requires Intensive Care Unit (ICU) admission.

- Two contacts have been identified for follow up.

II. PREPAREDNESS AND RESPONSE:

WHO:

- WHO has been in regular and direct contact with Chinese as well as Japanese, Korean and Thai authorities since the reporting of these cases. The three countries have shared information with WHO under the International Health Regulations. WHO is also informing other countries about the situation and providing support as requested;
- On 2 January, the incident management system was activated across the three levels of WHO (country office, regional office and headquarters);
- Developed the surveillance case definitions for human infection with 2019-nCoV and is updating it as per the new information becomes available;
- Developed interim guidance for laboratory diagnosis, clinical management, infection prevention and control in health care settings, home care for mild patients, risk communication and community engagement;
- Prepared disease commodity package for supplies necessary in identification and management of confirmed patients;
- Provided recommendations to reduce risk of transmission from animals to humans;
- Updated the travel advice for international travel in health in relation to the outbreak of pneumonia caused by a new coronavirus in China;
- Utilizing global expert networks and partnerships for laboratory, infection prevention and control, clinical management and mathematical modelling;
- Activation of R&D blueprint to accelerate diagnostics, vaccines, and therapeutics;
- WHO is working with our networks of researchers and other experts to coordinate global work on surveillance, epidemiology, modelling, diagnostics, clinical care and treatment, and other ways to identify, manage the disease and limit onward transmission. WHO has issued interim guidance for countries, updated to take into account the current situation.

III. COUNTRY RESPONSE:

China:

- National authorities are conducting active case finding in all provinces;
- Since 14 January 2020, 35 infrared thermometers have been installed in airports, railway stations, long-distance bus stations, and ferry terminals;
- Search expanded for additional cases within and outside of Wuhan City;
- Active / retroactive case finding in medical institutions in Wuhan City;
- The Huanan Seafood Wholesale Market in Wuhan city was closed on 1 January 2020 for environmental sanitation and disinfection. Market inspection in expansion to other markets;
- Public education on disease prevention and environmental hygiene further strengthened in public places across the city, farmers' markets in particular.

Thailand:

- The Department of Disease Control has been implementing its surveillance protocol by fever screening of travellers from all direct flights from Wuhan, China to the Suvarnabhumi, Don Mueang, Chiang Mai, Phuket and Krabi airports, with the screening protocol starting at Krabi Airport started on 17 January 2020;
- From 3 to 20 January 2020, among 116 flights, 18,383 passengers and aircrew members were screened for respiratory symptoms and febrile illness;
- As of 20 January 2020, the Department of Disease Control, Ministry of Public Health, Thailand has scaled up the Emergency Operations Center to Level 2 to closely monitor the ongoing situation both at the national and international levels;
- Risk communication guidance has been shared with the public and a hotline has been established by the Department of Disease Control for people returning from the affected area in China with related symptoms.

Japan:

- Contact tracing and other epidemiological investigations are underway by the local health authorities in Japan;
- As of 20 January 2020, 41 contacts have been followed. Of the 41 contacts, 37 have not shown any symptoms, three have left the country and efforts have been made to reach one contact;
- The Japanese Government has scaled up a whole-of-government coordination mechanism on the 16 January;
- The MHLW has strengthened surveillance for undiagnosed severe acute respiratory illnesses since the report of undiagnosed pneumonia in Wuhan, China;
- From 6 January, MHLW requested local health governments to be aware of the respiratory illnesses in Wuhan by using the existing surveillance system for serious infectious illness with unknown etiology;
- NIID is supporting local authorities on epidemiologic investigations including contact tracing;
- Quarantine and screening measures have been enhanced for travelers from Wuhan city at the point of entries since 7 January;
- NIID established an in-house PCR assay for nCoV on 16 January;
- Revision of the risk assessment by NIID is being conducted, including case definition of close contacts;
- The public risk communication has been enhanced;
- A hotline has been established among the different ministries in the government;
- The MHLW is working closely with WHO and other related Member States to foster mutual investigations and information sharing.

Republic of Korea:

- Contact tracing and other epidemiological investigation are underway;
- The government of the Republic of Korea has scaled up the national alert level from Blue (Level 1) to Yellow (Level 2 out of 4-level national crisis management system);

- The Republic of Korea health authority has strengthened surveillance for pneumonia cases in health facilities nationwide since 3 January 2020;
- Quarantine and screening measures have been enhanced for travelers from Wuhan at the point of entries (PoE) since 3 January 2020;
- Public risk communication has been enhanced.

Resources:

- Technical interim guidance for novel coronavirus, WHO: https://www.who.int/health-topics/coronavirus
- WHO travel advice for international travel and trade in relation to the outbreak of pneumonia caused by a new coronavirus in China: https://www.who.int/ith/2020-0901_outbreak_of_Pneumonia_caused_by_a_new_coronavirus_in_C/en/
- Press statement by KCDC (in Korean): https://www.cdc.go.kr/board/board.es?mid=a20501000000&bid=0015&list_no=365794&act=view#
- Second Press statement by KCDC (in Korean): https://www.cdc.go.kr/board/board.es?mid=a20501000000&bid=0015&list_no=365805&act=view#
- Wuhan Municipal Health Commission's briefing on the pneumonia epidemic situation, (in Chinese): http://wjw.wuhan.gov.cn/front/web/list2nd/no/710
- Disease outbreak news, Novel Coronavirus: https://www.who.int/csr/don/en/
- Thailand Ministry of Public Health situation update on novel coronavirus (in Thai): https://ddc.moph.go.th/viralpneumonia/index.html
- Press statement by Ministry of Health, Labour and Welfare, Japan on 16 January 2020 (in Japanese): https://www.mhlw.go.jp/stf/newpage_08906.html
- Press statement by Ministry of Health, Labour and Welfare, Japan on 6 January 2020 (in Japanese): https://www.mhlw.go.jp/stf/newpage_08767.html
- Notice sent out from Health and Food Safety Planning Division, Quarantine Station Operation Management Office (in Japanese): https://www.mhlw.go.jp/content/10900000/000582967.pdf

World Health Organization

Novel Coronavirus (2019-nCoV)
SITUATION REPORT - 3
23 JANUARY 2020

Data as reported by: 23 January 2020[1]

SUMMARY

Situation update:

- A total of 581 confirmed cases have been reported for novel coronavirus (2019-nCoV) globally;
- Of the 581 cases reported, 571 cases were reported from China;
- Cases have been reported in Thailand, Japan, Hong Kong Special Administrative Region, Taipei Municipality, China, Macau Special Administrative Region, United States of America and the Republic of Korea; All had travel history to Wuhan;
- Of the 571 confirmed cases in China, 375 cases were confirmed from Hubei Province;
- Of the 571 cases, 95 cases are severely ill[2] ;
- Seventeen deaths have been reported (all from Hubei Province);

On 23 January2020, the number of reported confirmed cases of 2019-nCoV has increased by 267 cases since the last situation report published on 22 January 2020. As of 23 January, China reported cases in 25 provinces (autonomous regions and municipalities). Twenty five percent of confirmed cases reported by China have been classified by Chinese health authorities as seriously ill (from Wubei Province: (16% severely ill, 5% critically ill, and 4% having died).

Currently, cases infected in China have been exported to the US, Thailand, Japan and Republic of Korea. It is expected that more cases will be exported to other countries, and that further transmission may occur.

The initial source of 2019-nCoV still remains unknown. However, it is clear the growing outbreak is no longer due to ongoing exposures at the Huanan seafood market in Wuhan; as in the last one week, less than 15% of new cases reported having visited Huanan market. There is now more evidence that 2019-nCoV spreads from human- to- human and also across generations of cases. Moreover, family clusters involving persons with no reported travel to Wuhan have been

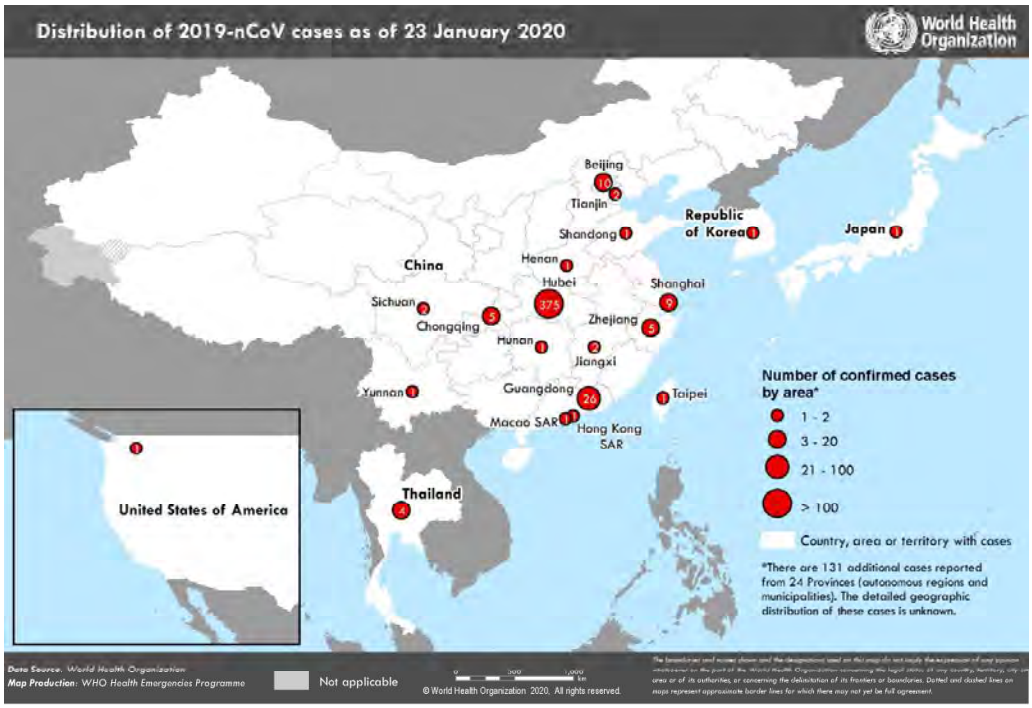
[1] The situation report includes information reported to WHO Geneva by 10 AM CET

[2] Severe illness: According to any of the following criteria:
(1) dyspnea; (2) respiratory rate more than 30 bpm; (3) hypoxemia; (4) chest X-ray with multi-lobar infiltrates or pulmonary infiltration progressed more than 50% within 24 - 48 hours.

reported from Guangdong Province. There have been very few reports of hospital outbreaks or infections of health care workers, which is a prominent feature of MERS and SARS.

WHO assesses the risk of this event to be very high in China, high at the regional level and high at the global level.[3]

Figure 1. Countries, territories or areas with reported confirmed cases of 2019-nCoV, 23 January 2020



[3] Note: Error in situation reports published on 23,24 and 25 January as originally published, which incorrectly summarized the risk for global level to be moderate.

I. SURVEILLANCE

Reported incidence of confirmed 2019-nCoV cases

Table 1. Countries, territories or areas with reported confirmed cases of 2019-nCoV, 23 January 2020

WHO Regional Office	Country/Territory/Area		Confirmed Cases
WHO WPRO Region	**China**	**Total**	**571***
		Hubei Province	375
		Unspecified[4]	131
		Guangdong Province	26
		Beijing Municipality	10
		Shanghai Municipality	9
		Chongqing Municipality	5
		Zhejiang Province	5
		Jiangxi Province	2
		Sichuan Province	2
		Tianjin Municipality	2
		Henan Province	1
		Hunan Province	1
		Shandong Province	1
		Yunnan Province	1
		Taipei Municipality	1
		Hong Kong Special Administrative Region	1
		Macau Special Administrative Region	1
	Japan		1
	Republic of Korea		1
WHO SEARO Region	Thailand		4
WHO AMRO Region	United States of America		1
Total Confirmed cases	Total		581

[4] These unspecified cases are reported from 24 Provinces (autonomous regions and municipalities). The distribution of these cases as per Provinces is not known.

II. PREPAREDNESS AND RESPONSE:

WHO:

- WHO has been in regular and direct contact with Chinese as well as Japanese, Korean and Thai authorities since the reporting of these cases. The three countries have shared information with WHO under the International Health Regulations. WHO is also informing other countries about the situation and providing support as requested;
- On 2 January, the incident management system was activated across the three levels of WHO (country office, regional office and headquarters);
- Developed the surveillance case definitions for human infection with 2019-nCoV and is updating it as per the new information becomes available;
- Developed interim guidance for laboratory diagnosis, clinical management, infection prevention and control in health care settings, home care for mild patients, risk communication and community engagement;
- Prepared disease commodity package for supplies necessary in identification and management of confirmed patients;
- Provided recommendations to reduce risk of transmission from animals to humans;
- Updated the travel advice for international travel in health in relation to the outbreak of pneumonia caused by a new coronavirus in China;
- Utilizing global expert networks and partnerships for laboratory, infection prevention and control, clinical management and mathematical modelling;
- Activation of R&D blueprint to accelerate diagnostics, vaccines, and therapeutics;
- WHO is working with our networks of researchers and other experts to coordinate global work on surveillance, epidemiology, modelling, diagnostics, clinical care and treatment, and other ways to identify, manage the disease and limit onward transmission. WHO has issued interim guidance for countries, updated to take into account the current situation.

III. COUNTRY RESPONSE:

China:

- National authorities are conducting active case finding in all provinces;
- Search expanded for additional cases within and outside of Wuhan City;
- Active / retroactive case finding in medical institutions in Wuhan City;
- The Huanan Seafood Wholesale Market in Wuhan city was closed on 1 January 2020 for environmental sanitation and disinfection. Market inspection in expansion to other markets;
- Public education on disease prevention and environmental hygiene further strengthened in public places across the city, farmers' markets in particular.

Thailand:

- The Department of Disease Control has been implementing its surveillance protocol by fever screening of travellers from all direct flights from Wuhan to the Suvarnabhumi, Don Mueang, Chiang Mai, Phuket and Krabi airports, with the screening protocol starting at Krabi Airport started on 17 January 2020;
- From 3 to 21 January 2020, among 123 flights, 19,480 passengers and aircrew members were screened for respiratory symptoms and febrile illness;
- As of 22 January 2020, the Department of Disease Control, Ministry of Public Health, Thailand has scaled up the Emergency Operations Center to Level 3 to closely monitor the ongoing situation both at the national and international levels;
- Risk communication guidance has been shared with the public and a hotline has been established by the Department of Disease Control for people returning from the affected area in China with related symptoms.

Japan:

- From 6 January, the Ministry requested local health governments to be aware of the respiratory illnesses in Wuhan by using the existing surveillance system for serious infectious illness with unknown etiology;
- Quarantine and screening measures have been enhanced for travelers from Wuhan at the point of entries since 7 January;
- National Institute of Infectious Disease (NIID) established an in-house PCR assay for nCoV on 16 January;
- The Japanese Government scaled up a whole-of-government coordination mechanism on the 16 January;
- As of 21 January, National Institute of Infectious Disease (NIID) announced it will conduct active epidemiological investigations for confirmed cases and close contacts;
- The Ministry of Health has strengthened surveillance for undiagnosed severe acute respiratory illnesses since the report of undiagnosed pneumonia in Wuhan;
- Revision of the risk assessment by NIID is being conducted, including case definition of close contacts;
- The public risk communication has been enhanced;
- A hotline has been established among the different ministries in the government;
- The MHLW is working closely with WHO and other related Member States to foster mutual investigations and information sharing.

Republic of Korea:

- Contact tracing and other epidemiological investigation are underway;
- The government has scaled up the national alert level from Blue (Level 1) to Yellow (Level 2 out of 4-level national crisis management system);
- The health authority strengthened surveillance for pneumonia cases in health facilities nationwide since 3 January 2020;
- Quarantine and screening measures have been enhanced for travelers from Wuhan at the point of entries (PoE) since 3 January 2020;
- Public risk communication has been enhanced.

United States of America:

- On 7 January 2020, the US CDC established a 2019-nCoV Incident Management Structure. On 21 January 2020, US CDC activated its Emergency Response System to better provide ongoing support to the 2019-nCoV response. On 21 January 2020, US CDC again updated its interim travel health notice for persons traveling to Wuhan city, China. The travel notice was raised from Level 1; Practice Usual Precautions, to a Level 2: Practice Enhanced Precautions advising travellers that preliminary information suggests that older adults with underlying health conditions may be at increased risk for severe disease.
- CDC began entry screening of passengers on direct and connecting flights from Wuhan China to the 3 main ports of entry in the United States on 17 January 2020 and will expand the screening to Atlanta and Chicago in the coming days.
- CDC issued an updated interim Health Alert Notice (HAN) Advisory to inform state and local health departments and health care providers about this outbreak on 17 January 2020.
- A CDC team has deployed a team to support the ongoing investigation in the state of Washington in response to the first reported case of 2019-nCoV in the United States, including potentially tracing close contacts to determine if anyone else has become ill.
- CDC has developed a rRT-PCR test that can diagnose 2019-nCoV.

IV. Statistical Modelling

WHO is working with a number of mathematical model groups to better understand the epidemiology and transmission dynamics of this event.

- Phylogenetic analysis suggests based on 23 full genome sequences submitted to GISAID, that the sequences exhibit little genetic variation, which is indicative of a recent origin of the sampled and sequenced viruses. The sequenced genomes show no evidence of additional introductions of the virus from a non-human animal reservoir, although the numbers of sequences are limited at present. (Andrew Rambaut, University of Edinburgh, UK)
- Updated estimated number of cases in Wuhan based on baseline assumptions and alternative scenarios: a total of 4000 cases of 2019-nCoV in Wuhan City (uncertainty range: 1,000 – 9,700) had onset of symptoms by 18th January 2020 (Imai et al, https://www.imperial.ac.uk/mrc-global-infectious-disease-analysis/news--wuhan-coronavirus/)
- The median size of the Wuhan outbreak is estimated to be 4, 050 infections (95% CI: 1.700-7, 950) by using an estimate of 10 days from exposure to detection and an effective population of 20 million people in Wuhan catchment as of January 20 (Matteo Chinazzi et al https://www.mobs-lab.org/uploads/6/7/8/7/6787877/wuhan_novel_coronavirus_jan21.pdf)

Resources:

- Technical interim guidance for novel coronavirus, WHO: https://www.who.int/health-topics/coronavirus
- WHO travel advice for international travel and trade in relation to the outbreak of pneumonia caused by a new coronavirus in China:
- https://www.who.int/ith/2020-0901_outbreak_of_Pneumonia_caused_by_a_new_coronavirus_in_C/en/Press statement by KCDC (in Korean): https://www.cdc.go.kr/board/board.es?mid=a20501000000&bid=0015&list_no=365794&act=view#
- Second Press statement by KCDC (in Korean): https://www.cdc.go.kr/board/board.es?mid=a20501000000&bid=0015&list_no=365805&act=view#
- Wuhan Municipal Health Commission's briefing on the pneumonia epidemic situation, (in Chinese): http://wjw.wuhan.gov.cn/front/web/list2nd/no/710
- Disease outbreak news, Novel Coronavirus: https://www.who.int/csr/don/en/
- Thailand Ministry of Public Health situation update on novel coronavirus (in Thai): https://ddc.moph.go.th/viralpneumonia/index.html
- Press statement by Ministry of Health, Labour and Welfare, Japan on 16 January 2020 (in Japanese): https://www.mhlw.go.jp/stf/newpage_08906.html
- Press statement by Ministry of Health, Labour and Welfare, Japan on 6 January 2020 (in Japanese): https://www.mhlw.go.jp/stf/newpage_08767.html
- Notice sent out from Health and Food Safety Planning Division, Quarantine Station Operation Management Office (in Japanese): https://www.mhlw.go.jp/content/10900000/000582967.pdf
- Situation report by WHO on Novel Coronavirus (2019-nCoV) https://www.who.int/emergencies/diseases/novel-coronavirus-2019

World Health Organization

Statement on the second meeting of the International Health Regulations (2005) Emergency Committee regarding the outbreak of novel coronavirus (2019-nCoV)

30 January 2020 | Statement | Geneva, Switzerland

The second meeting of the Emergency Committee convened by the WHO Director-General under the International Health Regulations (IHR) (2005) regarding the outbreak of novel coronavirus 2019 in the People's Republic of China, with exportations to other countries, took place on Thursday, 30 January 2020, from 13:30 to 18:35 Geneva time (CEST). The Committee's role is to give advice to the Director-General, who makes the final decision on the determination of a Public Health Emergency of International Concern (PHEIC). The Committee also provides public health advice or suggests formal Temporary Recommendations as appropriate.

Proceedings of the meeting

Members and advisors of the Emergency Committee were convened by teleconference

The Director-General welcomed the Committee and thanked them for their support. He turned the meeting over to the Chair, Professor Didier Houssin.

Professor Houssin also welcomed the Committee and gave the floor to the Secretariat.

A representative of the department of compliance, risk management, and ethics briefed the Committee members on their roles and responsibilities.

Committee members were reminded of their duty of confidentiality and their responsibility to disclose personal, financial, or professional connections that might be seen to constitute a conflict of interest. Each member who was present was surveyed and no conflicts of interest were judged to be relevant to the meeting. There were no changes since the previous meeting.

The Chair then reviewed the agenda for the meeting and introduced the presenters.

Representatives of the Ministry of Health of the People's Republic of China reported on the current situation and the public health measures being taken. There are now 7711 confirmed and 12167 suspected cases throughout the country. Of the confirmed cases, 1370 are severe and 170 people have died. 124 people have recovered and been discharged from hospital.

The WHO Secretariat provided an overview of the situation in other countries. There are now 83 cases in 18 countries. Of these, only 7 had no history of travel in China. There has been human-to-human transmission in 3 countries outside China. One of these cases is severe and there have been no deaths.

At its first meeting, the Committee expressed divergent views on whether this event constitutes a PHEIC or not. At that time, the advice was that the event did not constitute a PHEIC, but theCommittee members agreed on the urgency of the situation and suggested that the Committee should continue its meeting on the next day, when it reached the same conclusion.

This second meeting takes place in view of significant increases in numbers of cases and additional countries reporting confirmed cases.

Conclusions and advice

The Committee welcomed the leadership and political commitment of the very highest levels of Chinese government, their commitment to transparency, and the efforts made to investigate and contain the current outbreak. China quickly identified the virus and shared its sequence, so that other countries could diagnose it quickly and protect themselves, which has resulted in the rapid development of diagnostic tools.

The very strong measures the country has taken include daily contact with WHO and comprehensive multi-sectoral approaches to prevent further spread. It has also taken public health measures in other cities and provinces; is conducting studies on the severity and transmissibility of the virus, and sharing data and biological material. The country has also agreed to work with other countries who need their support. The measures China has taken are good not only for that country but also for the rest of the world.

The Committee acknowledged the leading role of WHO and its partners.

The Committee also acknowledged that there are still many unknowns, cases have now been reported in five WHO regions in one month, and human-to-human transmission has occurred outside Wuhan and outside China.

The Committee believes that it is still possible to interrupt virus spread, provided that countries put in place strong measures to detect disease early, isolate and treat cases, trace contacts, and promote social distancing measures commensurate with the risk. It is important to note that as the situation continues to evolve, so will the strategic goals and measures to prevent and reduce spread of the infection. The Committee agreed that the outbreak now meets the criteria for a Public Health Emergency of International Concern and proposed the following advice to be issued as Temporary Recommendations.

The Committee emphasized that the declaration of a PHEIC should be seen in the spirit of support and appreciation for China, its people, and the actions China has taken on the frontlines of this outbreak, with transparency, and, it is to be hoped, with success. In line with the need for global solidarity, the Committee felt that a global coordinated effort is needed to enhance preparedness in other regions of the world that may need additional support for that.

Advice to WHO

The Committee welcomed a forthcoming WHO multidisciplinary technical mission to China, including national and local experts. The mission should review and support efforts to investigate the animal source of the outbreak, the clinical spectrum of the disease and its severity, the extent of human-to-human transmission in the community and in healthcare facilities, and efforts to control the outbreak. This mission will provide information to the international community to aid in understanding the situation and its impact and enable sharing of experience and successful measures.

The Committee wished to re-emphasize the importance of studying the possible source, to rule out hidden transmission and to inform risk management measures

The Committee also emphasized the need for enhanced surveillance in regions outside Hubei, including pathogen genomic sequencing, to understand whether local cycles of transmission are occurring.

WHO should continue to use its networks of technical experts to assess how best this outbreak can be contained globally.

WHO should provide intensified support for preparation and response, especially in vulnerable countries and regions.

Measures to ensure rapid development and access to potential vaccines, diagnostics, antiviral medicines and other therapeutics for low- and middle-income countries should be developed.

WHO should continue to provide all necessary technical and operational support to respond to this outbreak, including with its extensive networks of partners and collaborating institutions, to implement a comprehensive risk communication strategy, and to allow for the advancement of research and scientific developments in relation to this novel coronavirus.

WHO should continue to explore the advisability of creating an intermediate level of alert between the binary possibilities of PHEIC or no PHEIC, in a way that does not require reopening negotiations on the text of the IHR (2005).

WHO should timely review the situation with transparency and update its evidence-based recommendations.

The Committee does not recommend any travel or trade restriction based on the current information available.

The Director-General declared that the outbreak of 2019-nCoV constitutes a PHEIC and accepted the Committee's advice and issued this advice as Temporary Recommendations under the IHR.

To the People's Republic of China

Continue to:

• Implement a comprehensive risk communication strategy to regularly inform the population on the evolution of the outbreak, the prevention and protection measures for the population, and the response measures taken for its containment.

• Enhance public health measures for containment of the current outbreak.

• Ensure the resilience of the health system and protect the health workforce.

• Enhance surveillance and active case finding across China.

• Collaborate with WHO and partners to conduct investigations to understand the epidemiology and the evolution of this outbreak and measures to contain it.

• Share relevant data on human cases.

• Continue to identify the zoonotic source of the outbreak, and particularly the potential for circulation with WHO as soon as it becomes available.

• Conduct exit screening at international airports and ports, with the aim of early detection of symptomatic travelers for further evaluation and treatment, while minimizing interference with international traffic.

To all countries

It is expected that further international exportation of cases may appear in any country. Thus, all countries should be prepared for containment, including active surveillance, early detection, isolation and case management, contact tracing and prevention of onward spread of 2019-nCoVinfection, and to share full data with WHO. Technical advice is available on the WHO website.

Countries are reminded that they are legally required to share information with WHO under the IHR.

Any detection of 2019-nCoV in an animal (including information about the species, diagnostic tests, and relevant epidemiological information) should be reported to the World Organization for Animal Health (OIE) as an emerging disease.

Countries should place particular emphasis on reducing human infection, prevention of secondary transmission and international spread, and contributing to the international response though multi-sectoral communication and collaboration and active participation in increasing knowledge on the virus and the disease, as well as advancing research.

The Committee does not recommend any travel or trade restriction based on the current information available.

Countries must inform WHO about travel measures taken, as required by the IHR. Countries are cautioned against actions that promote stigma or discrimination, in line with the principles of Article 3 of the IHR.

The Committee asked the Director-General to provide further advice on these matters and, if necessary, to make new case-by-case recommendations, in view of this rapidly evolving situation.

To the global community

As this is a new coronavirus, and it has been previously shown that similar coronaviruses required substantial efforts to enable regular information sharing and research, the global community should continue to demonstrate solidarity and cooperation, in compliance with Article 44 of the IHR (2005), in supporting each other on the identification of the source of this new virus, its full potential for human-to-human transmission, preparedness for potential importation of cases, and research for developing necessary treatment.

Provide support to low- and middle-income countries to enable their response to this event, as well as to facilitate access to diagnostics, potential vaccines and therapeutics.

Under Article 43 of the IHR, States Parties implementing additional health measures that significantly interfere with international traffic (refusal of entry or departure of international travellers, baggage, cargo, containers, conveyances, goods, and the like, or their delay, for more than 24 hours) are obliged to send to WHO the public health rationale and justification within 48 hours of their implementation. WHO will review the justification and may request countries to reconsider their measures. WHO is required to share with other States Parties the information about measures and the justification received.

The Emergency Committee will be reconvened within three months or earlier, at the discretion of the Director-General.

The Director-General thanked the Committee for its work.

World Health Organization

WHO Director-General's opening remarks at the media briefing on COVID-19 - 11 March 2020

11 March 2020

Good afternoon.

In the past two weeks, the number of cases of COVID-19 outside China has increased 13-fold, and the number of affected countries has tripled.

There are now more than 118,000 cases in 114 countries, and 4,291 people have lost their lives.

Thousands more are fighting for their lives in hospitals.

In the days and weeks ahead, we expect to see the number of cases, the number of deaths, and the number of affected countries climb even higher.

WHO has been assessing this outbreak around the clock and we are deeply concerned both by the alarming levels of spread and severity, and by the alarming levels of inaction.

We have therefore made the assessment that COVID-19 can be characterized as a pandemic.

Pandemic is not a word to use lightly or carelessly. It is a word that, if misused, can cause unreasonable fear, or unjustified acceptance that the fight is over, leading to unnecessary suffering and death.

Describing the situation as a pandemic does not change WHO's assessment of the threat posed by this virus. It doesn't change what WHO is doing, and it doesn't change what countries should do.

We have never before seen a pandemic sparked by a coronavirus. This is the first pandemic caused by a coronavirus.

And we have never before seen a pandemic that can be controlled, at the same time.

WHO has been in full response mode since we were notified of the first cases.

And we have called every day for countries to take urgent and aggressive action.

We have rung the alarm bell loud and clear.

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As I said on Monday, just looking at the number of cases and the number of countries affected does not tell the full story.

Of the 118,000 cases reported globally in 114 countries, more than 90 percent of cases are in just four countries, and two of those – China and the Republic of Korea - have significantly declining epidemics.

81 countries have not reported any cases, and 57 countries have reported 10 cases or less.

We cannot say this loudly enough, or clearly enough, or often enough: all countries can still change the course of this pandemic.

If countries detect, test, treat, isolate, trace, and mobilize their people in the response, those with a handful of cases can prevent those cases becoming clusters, and those clusters becoming community transmission.

Even those countries with community transmission or large clusters can turn the tide on this virus.

Several countries have demonstrated that this virus can be suppressed and controlled.

The challenge for many countries who are now dealing with large clusters or community transmission is not whether they **can** do the same – it's whether they **will**.

Some countries are struggling with a lack of capacity.

Some countries are struggling with a lack of resources.

Some countries are struggling with a lack of resolve.

We are grateful for the measures being taken in Iran, Italy and the Republic of Korea to slow the virus and control their epidemics.

We know that these measures are taking a heavy toll on societies and economies, just as they did in China.

All countries must strike a fine balance between protecting health, minimizing economic and social disruption, and respecting human rights.

WHO's mandate is public health. But we're working with many partners across all sectors to mitigate the social and economic consequences of this pandemic.

This is not just a public health crisis, it is a crisis that will touch every sector – so every sector and every individual must be involved in the fight.

I have said from the beginning that countries must take a whole-of-government, whole-of-society approach, built around a comprehensive strategy to prevent infections, save lives and minimize impact.

Let me summarize it in four key areas.

First, prepare and be ready.

Second, detect, protect and treat.

Third, reduce transmission.

Fourth, innovate and learn.

I remind all countries that we are calling on you to activate and scale up your emergency response mechanisms;

Communicate with your people about the risks and how they can protect themselves – this is everybody's business;

Find, isolate, test and treat every case and trace every contact;

Ready your hospitals;

Protect and train your health workers.

And let's all look out for each other, because we need each other.

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There's been so much attention on one word.

Let me give you some other words that matter much more, and that are much more actionable.

Prevention.

Preparedness.

Public health.

Political leadership.

And most of all, people.

We're in this together, to do the right things with calm and protect the citizens of the world. It's doable.

I thank you.

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PROCLAMATIONS

Proclamation on Declaring a National Emergency Concerning the Novel Coronavirus Disease (COVID-19) Outbreak

Issued on: **March 13, 2020**

★ ★ ★

In December 2019, a novel (new) coronavirus known as SARS-CoV-2 ("the virus") was first detected in Wuhan, Hubei Province, People's Republic of China, causing outbreaks of the coronavirus disease COVID-19 that has now spread globally. The Secretary of Health and Human Services (HHS) declared a public health emergency on January 31, 2020, under section 319 of the Public Health Service Act (42 U.S.C. 247d), in response to COVID-19. I have taken sweeping action to control the spread of the virus in the United States, including by suspending entry of foreign nationals seeking entry who had been physically present within the prior 14 days in certain jurisdictions where COVID-19 outbreaks have occurred, including the People's Republic of China, the Islamic Republic of Iran, and the Schengen Area of Europe. The Federal Government, along with State and local governments, has taken preventive and proactive measures to slow the spread of the virus and treat those affected, including by instituting Federal quarantines for individuals evacuated from foreign nations, issuing a declaration pursuant to section 319F-3 of the Public Health Service Act (42 U.S.C. 247d-6d), and releasing policies to accelerate the acquisition of personal protective equipment and streamline bringing new diagnostic capabilities to laboratories. On March 11, 2020, the World Health Organization announced that the COVID-19 outbreak can be characterized as a pandemic, as the rates of infection continue to rise in many locations around the world and across the United States.

The spread of COVID-19 within our Nation's communities threatens to strain our Nation's healthcare systems. As of March 12, 2020, 1,645 people from 47 States have been infected with the virus that

causes COVID-19. It is incumbent on hospitals and medical facilities throughout the country to assess their preparedness posture and be prepared to surge capacity and capability. Additional measures, however, are needed to successfully contain and combat the virus in the United States.

NOW, THEREFORE, I, DONALD J. TRUMP, President of the United States, by the authority vested in me by the Constitution and the laws of the United States of America, including sections 201 and 301 of the National Emergencies Act (50 U.S.C. 1601 *et seq*.) and consistent with section 1135 of the Social Security Act (SSA), as amended (42 U.S.C. 1320b-5), do hereby find and proclaim that the COVID-19 outbreak in the United States constitutes a national emergency, beginning March 1, 2020. Pursuant to this declaration, I direct as follows:

Section 1. Emergency Authority. The Secretary of HHS may exercise the authority under section 1135 of the SSA to temporarily waive or modify certain requirements of the Medicare, Medicaid, and State Children's Health Insurance programs and of the Health Insurance Portability and Accountability Act Privacy Rule throughout the duration of the public health emergency declared in response to the COVID-19 outbreak.

Sec. 2. Certification and Notice. In exercising this authority, the Secretary of HHS shall provide certification and advance written notice to the Congress as required by section 1135(d) of the SSA (42 U.S.C. 1320b-5(d)).

Sec. 3. General Provisions. (a) Nothing in this proclamation shall be construed to impair or otherwise affect:

(i) the authority granted by law to an executive department or agency, or the head thereof; or

(ii) the functions of the Director of the Office of Management and Budget relating to budgetary, administrative, or legislative proposals.

(b) This proclamation shall be implemented consistent with applicable law and subject to the availability of appropriations.

(c) This proclamation is not intended to, and does not, create any right or benefit, substantive or procedural, enforceable at law or in equity by any party against the United States, its departments, agencies, or entities, its officers, employees, or agents, or any other person.

IN WITNESS WHEREOF, I have hereunto set my hand this thirteenth day of March, in the year of our Lord two thousand twenty, and of the Independence of the United States of America the two hundred and forty-fourth.

DONALD J. TRUMP

World Health Organization

Transmission of SARS-CoV-2: implications for infection prevention precautions

Scientific Brief

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This document is an update to the scientific brief published on 29 March 2020 entitled “Modes of transmission of virus causing COVID-19: implications for infection prevention and control (IPC) precaution recommendations” and includes new scientific evidence available on transmission of SARS-CoV-2, the virus that causes COVID-19.

Overview

This scientific brief provides an overview of the modes of transmission of SARS-CoV-2, what is known about when infected people transmit the virus, and the implications for infection prevention and control precautions within and outside health facilities. This scientific brief is not a systematic review. Rather, it reflects the consolidation of rapid reviews of publications in peer-reviewed journals and of non-peer-reviewed manuscripts on pre-print servers, undertaken by WHO and partners. Preprint findings should be interpreted with caution in the absence of peer review. This brief is also informed by several discussions via teleconferences with the WHO Health Emergencies Programme ad hoc Experts Advisory Panel for IPC Preparedness, Readiness and Response to COVID-19, the WHO ad hoc COVID-19 IPC Guidance Development Group (COVID-19 IPC GDG), and by review of external experts with relevant technical backgrounds.

The overarching aim of the global Strategic Preparedness and Response Plan for COVID-19 *(1)* is to control COVID-19 by suppressing transmission of the virus and preventing associated illness and death. Current evidence suggests that SARS-CoV-2, the virus that causes COVID-19, is predominantly spread from person-to-person. Understanding how, when and in what types of settings SARS-CoV-2 spreads is critical to develop effective public health and infection prevention and control measures to break chains of transmission.

Modes of transmission

This section briefly describes possible modes of transmission for SARS-CoV-2, including contact, droplet, airborne, fomite, fecal-oral, bloodborne, mother-to-child, and animal-to-human transmission. Infection with SARS-CoV-2 primarily causes respiratory illness ranging from mild disease to severe disease and death, and some people infected with the virus never develop symptoms.

Contact and droplet transmission

Transmission of SARS-CoV-2 can occur through direct, indirect, or close contact with infected people through infected secretions such as saliva and respiratory secretions or their respiratory droplets, which are expelled when an infected person coughs, sneezes, talks or sings.*(2-10)* Respiratory droplets are >5-10 μm in diameter whereas droplets ≤5μm in diameter are referred to as droplet nuclei or aerosols.*(11)* Respiratory droplet transmission can occur when a person is in close contact (within 1 metre) with an infected person who has respiratory symptoms (e.g. coughing or sneezing) or who is talking or singing; in these circumstances, respiratory droplets that include virus can reach the mouth, nose or eyes of a susceptible person and can result in infection. Indirect contact transmission involving contact of a susceptible host with a contaminated object or surface (fomite transmission) may also be possible (see below).

Airborne transmission

Airborne transmission is defined as the spread of an infectious agent caused by the dissemination of droplet nuclei (aerosols) that remain infectious when suspended in air over long distances and time. *(11)* Airborne transmission of SARS-CoV-2 can occur during medical procedures that generate aerosols ("aerosol generating procedures").*(12)* WHO, together with the scientific community, has been actively discussing and evaluating whether SARS-CoV-2 may also spread through aerosols in the absence of aerosol generating procedures, particularly in indoor settings with poor ventilation.

The physics of exhaled air and flow physics have generated hypotheses about possible mechanisms of SARS-CoV-2 transmission through aerosols.*(13-16)* These theories suggest that 1) a number of respiratory droplets generate microscopic aerosols (<5 μm) by evaporating, and 2) normal breathing and talking results in exhaled aerosols. Thus, a susceptible person could inhale aerosols, and could become infected if the aerosols contain the virus in sufficient quantity to cause infection within the recipient. However, the proportion of exhaled droplet nuclei or of respiratory droplets that evaporate to generate aerosols, and the infectious dose of viable SARS-CoV-2 required to cause infection in another person are not known, but it has been studied for other respiratory viruses.*(17)*

One experimental study quantified the amount of droplets of various sizes that remain airborne during normal speech. However, the authors acknowledge that this relies on the independent action hypothesis, which has not been validated for humans and SARS-CoV-2.*(18)* Another recent experimental model found that healthy individuals can produce aerosols through coughing and talking *(19)*, and another model suggested high variability between individuals in terms of particle emission rates during speech, with increased rates correlated with increased amplitude of vocalization.*(20)* To date, transmission of SARS-CoV-2 by this type of aerosol route has not been demonstrated; much more research is needed given the possible implications of such route of transmission.

Experimental studies have generated aerosols of infectious samples using high-powered jet nebulizers under controlled laboratory conditions. These studies found SARS-CoV-2 virus RNA in air samples within aerosols for up to 3 hours in one study *(21)* and 16 hours in another, which also found viable replication-competent virus.*(22)* These findings were from experimentally induced aerosols that do not reflect normal human cough conditions.

Some studies conducted in health care settings where symptomatic COVID-19 patients were cared for, but where aerosol generating procedures were not performed, reported the presence of SARS-CoV-2 RNA in air samples *(23-28)*, while other similar investigations in both health care and non-health care settings found no presence of SARS-CoV-2 RNA; no studies have found viable virus in air samples.*(29-36)* Within samples where SARS-CoV-2 RNA was found, the quantity of RNA detected was in extremely low numbers in large volumes of air and one study that found SARS-CoV-2 RNA in air samples reported inability to identify viable virus. *(25)* The detection of RNA using reverse transcription polymerase chain reaction (RT-PCR)-based assays is not necessarily indicative of replication- and infection-competent (viable) virus that could be transmissible and capable of causing infection.*(37)*

Recent clinical reports of health workers exposed to COVID-19 index cases, not in the presence of aerosol-generating procedures, found no nosocomial transmission when contact and droplet precautions were appropriately used, including the wearing of medical masks as a component of the

personal protective equipment (PPE). *(38, 39)* These observations suggest that aerosol transmission did not occur in this context. Further studies are needed to determine whether it is possible to detect viable SARS-CoV-2 in air samples from settings where no procedures that generate aerosols are performed and what role aerosols might play in transmission.

Outside of medical facilities, some outbreak reports related to indoor crowded spaces *(40)* have suggested the possibility of aerosol transmission, combined with droplet transmission, for example, during choir practice *(7)*, in restaurants *(41)* or in fitness classes.*(42)* In these events, short-range aerosol transmission, particularly in specific indoor locations, such as crowded and inadequately ventilated spaces over a prolonged period of time with infected persons cannot be ruled out. However, the detailed investigations of these clusters suggest that droplet and fomite transmission could also explain human-to-human transmission within these clusters. Further, the close contact environments of these clusters may have facilitated transmission from a small number of cases to many other people (e.g., superspreading event), especially if hand hygiene was not performed and masks were not used when physical distancing was not maintained.*(43)*

Fomite transmission

Respiratory secretions or droplets expelled by infected individuals can contaminate surfaces and objects, creating fomites (contaminated surfaces). Viable SARS-CoV-2 virus and/or RNA detected by RT-PCR can be found on those surfaces for periods ranging from hours to days, depending on the ambient environment (including temperature and humidity) and the type of surface, in particular at high concentration in health care facilities where COVID-19 patients were being treated.*(21, 23, 24, 26, 28, 31-33, 36, 44, 45)* Therefore, transmission may also occur indirectly through touching surfaces in the immediate environment or objects contaminated with virus from an infected person (e.g. stethoscope or thermometer), followed by touching the mouth, nose, or eyes.

Despite consistent evidence as to SARS-CoV-2 contamination of surfaces and the survival of the virus on certain surfaces, there are no specific reports which have directly demonstrated fomite transmission. People who come into contact with potentially infectious surfaces often also have close contact with the infectious person, making the distinction between respiratory droplet and fomite transmission difficult to discern. However, fomite transmission is considered a likely mode of transmission for SARS-CoV-2, given consistent findings about environmental contamination in the vicinity of infected cases and the fact that other coronaviruses and respiratory viruses can transmit this way.

Other modes of transmission

SARS-CoV-2 RNA has also been detected in other biological samples, including the urine and feces of some patients.*(46-50)*One study found viable SARS-CoV-2 in the urine of one patient.*(51)*Three studies have cultured SARS-CoV-2 from stool specimens. *(48, 52, 53)* To date, however, there have been no published reports of transmission of SARS-CoV-2 through feces or urine.

Some studies have reported detection of SARS-CoV-2 RNA, in either plasma or serum, and the virus can replicate in blood cells. However, the role of bloodborne transmission remains uncertain; and low viral titers in plasma and serum suggest that the risk of transmission through this route may be low. *(48, 54)* Currently, there is no evidence for intrauterine transmission of SARS-CoV-2 from infected pregnant women to their fetuses, although data remain limited. WHO has recently published a scientific brief on breastfeeding and COVID-19.*(55)* This brief explains that viral RNA fragments have been found by RT-PCR testing in a few breast milk samples of mothers infected with SARS-CoV-2, but studies investigating whether the virus could be isolated, have found no viable virus. Transmission of SARS-CoV-2 from mother to child would necessitate replicative and infectious virus in breast milk being able to reach target sites in the infant and also to overcome infant defense systems. WHO recommends that mothers with suspected or confirmed COVID-19 should be encouraged to initiate or continue to breastfeed.*(55)*

Evidence to date shows that SARS-CoV-2 is most closely related to known betacoronaviruses in bats; the role of an intermediate host in facilitating transmission in the earliest known human cases remains unclear.*(56, 57)* In addition to investigations on the possible intermediate host(s) of SARS-CoV-2, there are also a number of studies underway to better understand susceptibility of SARS-CoV-2 in different animal species. Current evidence suggests that humans infected with SARS-CoV-2 can infect other mammals, including dogs*(58)*, cats*(59)*, and farmed mink.*(60)* However, it remains unclear if these infected mammals pose a significant risk for transmission to humans.

When do people infected with SARS-CoV-2 infect others?

Knowing when an infected person can spread SARS-CoV-2 is just as important as how the virus spreads (described above). WHO has recently published a scientific brief outlining what is known about when a person may be able to spread, based on the severity of their illness.*(61)*

In brief, evidence suggests that SARS-CoV-2 RNA can be detected in people 1-3 days before their symptom onset, with the highest viral loads, as measured by RT-PCR, observed around the day of symptom onset, followed by a gradual decline over time.*(47, 62-65)* The duration of RT-PCR positivity generally appears to be 1-2 weeks for asymptomatic persons, and up to 3 weeks or more for patients with mild to moderate disease.*(62, 65-68)* In patients with severe COVID-19 disease, it can be much longer.*(47)*

Detection of viral RNA does not necessarily mean that a person is infectious and able to transmit the virus to another person. Studies using viral culture of patient samples to assess the presence of infectious SARS-CoV-2 are currently limited. *(61)* Briefly, viable virus has been isolated from an asymptomatic case,*(69)* from patients with mild to moderate disease up to 8-9 days after symptom onset, and for longer from severely ill patients.*(61)* Full details about the duration of viral shedding can be found in the WHO guidance document on "Criteria for releasing COVID-19 patients from isolation". *(61)* Additional studies are needed to determine the duration of viable virus shedding among infected patients.

SARS-CoV-2 infected persons who have symptoms can infect others primarily through droplets and close contact

SARS-CoV-2 transmission appears to mainly be spread via droplets and close contact with infected symptomatic cases. In an analysis of 75,465 COVID-19 cases in China, 78-85% of clusters occurred within household settings, suggesting that transmission occurs during close and prolonged contact. *(6)* A study of the first patients in the Republic of Korea showed that 9 of 13 secondary cases occurred among household contacts.*(70)* Outside of the household setting, those who had close physical contact, shared meals, or were in enclosed spaces for approximately one hour or more with symptomatic cases, such as in places of worship, gyms, or the workplace, were also at increased risk of infection.*(7, 42, 71, 72)* Other reports have supported this with similar findings of secondary transmission within families in other countries.*(73, 74)*

SARS-CoV-2 infected persons without symptoms can also infect others

Early data from China suggested that people without symptoms could infect others.*(6)* To better understand the role of transmission from infected people without symptoms, it is important to distinguish between transmission from people who are infected who never develop symptoms*(75)*

(asymptomatic transmission) and transmission from people who are infected but have not developed symptoms yet (pre-symptomatic transmission). This distinction is important when developing public health strategies to control transmission.

The extent of truly asymptomatic infection in the community remains unknown. The proportion of people whose infection is asymptomatic likely varies with age due to the increasing prevalence of underlying conditions in older age groups (and thus increasing risk of developing severe disease with increasing age), and studies that show that children are less likely to show clinical symptoms compared to adults.*(76)* Early studies from the United States *(77)* and China *(78)* reported that many cases were asymptomatic, based on the lack of symptoms at the time of testing; however, 75-100% of these people later developed symptoms. A recent systematic review estimated that the proportion of truly asymptomatic cases ranges from 6% to 41%, with a pooled estimate of 16% (12%–20%).*(79)* However, all studies included in this systematic review have important limitations.*(79)* For example, some studies did not clearly describe how they followed up with persons who were asymptomatic at the time of testing to ascertain if they ever developed symptoms, and others defined “asymptomatic” very narrowly as persons who never developed fever or respiratory symptoms, rather than as those who did not develop any symptoms at all.*(76, 80)* A recent study from China that clearly and appropriately defined asymptomatic infections suggests that the proportion of infected people who never developed symptoms was 23%.*(81)*

Multiple studies have shown that people infect others before they themselves became ill, *(10, 42, 69, 82, 83)* which is supported by available viral shedding data (see above). One study of transmission in Singapore reported that 6.4% of secondary cases resulted from pre-symptomatic transmission.*(73)* One modelling study, that inferred the date of transmission based on the estimated serial interval and incubation period, estimated that up to 44% (25-69%) of transmission may have occurred just before symptoms appeared.*(62)* It remains unclear why the magnitude of estimates from modelling studies differs from available empirical data.

Transmission from infected people without symptoms is difficult to study. However, information can be gathered from detailed contact tracing efforts, as well as epidemiologic investigations among cases and contacts. Information from contact tracing efforts reported to WHO by Member States, available transmission studies and a recent pre-print systematic reviews suggests that individuals without symptoms are less likely to transmit the virus than those who develop symptoms.*(10, 81, 84, 85)* Four individual studies from Brunei, Guangzhou China, Taiwan China and the Republic of Korea found that between 0% and 2.2% of people with asymptomatic infection infected anyone else, compared to 0.8%-15.4% of people with symptoms.*(10, 72, 86, 87)*

Remaining questions related to transmission

Many unanswered questions about transmission of SARS-CoV-2 remain, and research seeking to answer those questions is ongoing and is encouraged. Current evidence suggests that SARS-CoV-2 is primarily transmitted between people via respiratory droplets and contact routes – although aerosolization in medical settings where aerosol generating procedures are used is also another possible mode of transmission - and that transmission of COVID-19 is occurring from people who are pre-symptomatic or symptomatic to others in close contact (direct physical or face-to-face contact with a probable or confirmed case within one meter and for prolonged periods of time), when not wearing appropriate PPE. Transmission can also occur from people who are infected and remain asymptomatic, but the extent to which this occurs is not fully understood and requires further research as an urgent priority. The role and extent of airborne transmission outside of health care facilities, and in particular in close settings with poor ventilation, also requires further study.

As research continues, we expect to gain a better understanding about the relative importance of different transmission routes, including through droplets, physical contact and fomites; the role of airborne transmission in the absence of aerosol generating procedures; the dose of virus required for transmission to occur, the characteristics of people and situations that facilitate superspreading events such as those observed in various closed settings, the proportion of infected people who remain asymptomatic throughout the course of their infection; the proportion of truly asymptomatic persons who transmit the virus to others; the specific factors that drive asymptomatic and pre-symptomatic transmission; and the proportion of all infections that are transmitted from asymptomatic and pre-symptomatic individuals.

Implications for preventing transmission

Understanding how, when and in which settings infected people transmit the virus is important for developing and implementing control measures to break chains of transmission. While there is a great deal of scientific studies becoming available, all studies that investigate transmission should be interpreted bearing in mind the context and settings in which they took place, including the infection prevention interventions in place, the rigor of the methods used in the investigation and the limitations and biases of the study designs.

It is clear from available evidence and experience, that limiting close contact between infected people and others is central to breaking chains of transmission of the virus causing COVID-19. The prevention of transmission is best achieved by identifying suspect cases as quickly as possible, testing, and isolating infectious cases. *(88, 89)* In addition, it is critical to identify all close contacts of infected people *(88)* so that they can be quarantined *(90)* to limit onward spread and break chains of

transmission. By quarantining close contacts, potential secondary cases will already be separated from others before they develop symptoms or they start shedding virus if they are infected, thus preventing the opportunity for further onward spread. The incubation period of COVID-19, which is the time between exposure to the virus and symptom onset, is on average 5-6 days, but can be as long as 14 days. *(82, 91)* Thus, quarantine should be in place for 14 days from the last exposure to a confirmed case. If it is not possible for a contact to quarantine in a separate living space, self-quarantine for 14 days at home is required; those in self-quarantine may require support during the use of physical distancing measures to prevent the spread of the virus.

Given that infected people without symptoms can transmit the virus, it is also prudent to encourage the use of fabric face masks in public places where there is community transmission[1] and where other prevention measures, such as physical distancing, are not possible.*(12)* Fabric masks, if made and worn properly, can serve as a barrier to droplets expelled from the wearer into the air and environment.*(12)* However, masks must be used as part of a comprehensive package of preventive measures, which includes frequent hand hygiene, physical distancing when possible, respiratory etiquette, environmental cleaning and disinfection. Recommended precautions also include avoiding indoor crowded gatherings as much as possible, in particular when physical distancing is not feasible, and ensuring good environmental ventilation in any closed setting. *(92, 93)*

Within health care facilities, including long term care facilities, based on the evidence and the advice by the COVID-19 IPC GDG, WHO continues to recommend droplet and contact precautions when caring for COVID-19 patients and airborne precautions when and where aerosol generating procedures are performed. WHO also recommends standard or transmission-based precautions for other patients using an approach guided by risk assessment.*(94)* These recommendations are consistent with other national and international guidelines, including those developed by the European Society of Intensive Care Medicine and Society of Critical Care Medicine *(95)* and by the Infectious Diseases Society of America. *(96)*

Furthermore, in areas with COVID-19 community transmission, WHO advises that health workers and caregivers working in clinical areas should continuously wear a medical mask during all routine activities throughout the entire shift.*(12)* In settings where aerosol-generating procedures are performed, they should wear an N95, FFP2 or FFP3 respirator. Other countries and organizations, including the United States Centers for Diseases Control and Prevention *(97)* and the European Centre for Disease Prevention and Control *(98)* recommend airborne precautions for any situation involving the care of COVID-19 patients. However, they also consider the use of medical masks as an acceptable option in case of shortages of respirators.

WHO guidance also emphasizes the importance of administrative and engineering controls in health care settings, as well as rational and appropriate use of all PPE *(99)* and training for staff on these recommendations (IPC for Novel Coronavirus [COVID-19] Course. Geneva; World Health Organization 2020, available at (https://openwho.org/courses/COVID-19-IPC-EN). WHO has also provided guidance on safe workplaces. *(92)*

Key points of the brief

Main findings

- **Understanding how, when and in what types of settings SARS-CoV-2 spreads between people is critical to develop effective public health and infection prevention measures to break chains of transmission.**
- **Current evidence suggests that transmission of SARS-CoV-2 occurs primarily between people through direct, indirect, or close contact with infected people through infected secretions such as saliva and respiratory secretions, or through their respiratory droplets, which are expelled when an infected person coughs, sneezes, talks or sings.**
- **Airborne transmission of the virus can occur in health care settings where specific medical procedures, called aerosol generating procedures, generate very small droplets called aerosols. Some outbreak reports related to indoor crowded spaces have suggested the possibility of aerosol transmission, combined with droplet transmission, for example, during choir practice, in restaurants or in fitness classes.**
- **Respiratory droplets from infected individuals can also land on objects, creating fomites (contaminated surfaces). As environmental contamination has been documented by many reports, it is likely that people can also be infected by touching these surfaces and touching their eyes, nose or mouth before cleaning their hands.**
- **Based on what we currently know, transmission of COVID-19 is primarily occurring from people when they have symptoms, and can also occur just before they develop symptoms, when they are in close proximity to others for prolonged periods of time. While someone who never develops symptoms can also pass the virus to others, it is still not clear to what extent this occurs and more research is needed in this area.**
- **Urgent high-quality research is needed to elucidate the relative importance of different transmission routes; the role of airborne transmission in the absence of aerosol generating procedures; the dose of virus required for transmission to occur; the settings and risk factors for superspreading events; and the extent of asymptomatic and pre-symptomatic transmission.**

How to prevent transmission

The overarching aim of the Strategic Preparedness and Response Plan for COVID-19 *(1)* is to control COVID-19 by suppressing transmission of the virus and preventing associated illness and death. To the best of our understanding, the virus is primarily spread through contact and respiratory droplets. Under some circumstances airborne transmission may occur (such as when aerosol generating

procedures are conducted in health care settings or potentially, in indoor crowded poorly ventilated settings elsewhere). More studies are urgently needed to investigate such instances and assess their actual significance for transmission of COVID-19.

To prevent transmission, WHO recommends a comprehensive set of measures including:

- **Identify suspect cases as quickly as possible, test, and isolate all cases (infected people) in appropriate facilities;**
- **Identify and quarantine all close contacts of infected people and test those who develop symptoms so that they can be isolated if they are infected and require care;**
- **Use fabric masks in specific situations, for example, in public places where there is community transmission and where other prevention measures, such as physical distancing, are not possible;**
- **Use of contact and droplet precautions by health workers caring for suspected and confirmed COVID-19 patients, and use of airborne precautions when aerosol generating procedures are performed;**
- **Continuous use of a medical mask by health workers and caregivers working in all clinical areas, during all routine activities throughout the entire shift;**
- **At all times, practice frequent hand hygiene, physical distancing from others when possible, and respiratory etiquette; avoid crowded places, close-contact settings and confined and enclosed spaces with poor ventilation; wear fabric masks when in closed, overcrowded spaces to protect others; and ensure good environmental ventilation in all closed settings and appropriate environmental cleaning and disinfection.**

WHO carefully monitors the emerging evidence about this critical topic and will update this scientific brief as more information becomes available.

[1]Defined by WHO as “experiencing larger outbreaks of local transmission defined through an assessment of factors including, but not limited to: large numbers of cases not linkable to transmission chains; large numbers of cases from sentinel surveillance; and/or multiple unrelated clusters in several areas of the country/territory/area” (https://www.who.int/publications-detail/global-surveillance-for-covid-19-caused-by-human-infection-with-covid-19-virus-interim-guidance)

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WHO continues to monitor the situation closely for any changes that may affect this scientific brief. Should any factors change, WHO will issue a further update. Otherwise, this scientific brief document will expire 2 years after the date of publication.

Centers for Disease Control and Prevention

Coronavirus Disease 2019 (COVID-19)

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Cleaning and Disinfection for Households
Detailed Disinfection Guidance

Interim Recommendations for U.S. Households with Suspected or Confirmed Coronavirus Disease 2019 (COVID-19)

Updated July 10, 2020 Print

Summary of Recent Changes

Revisions were made on 3/26/2020 to reflect the following:

- Updated links to EPA-registered disinfectant list
- Added guidance for disinfection of electronics
- Updated core disinfection/cleaning guidance

Background

There is much to learn about the novel coronavirus (SARS-CoV-2) that causes coronavirus disease 2019 (COVID-19). Based on what is currently known about COVID-19, spread from person-to-person of this virus happens most frequently among close contacts (within about 6 feet). This type of transmission occurs via respiratory droplets. On the other hand, transmission of novel coronavirus to persons from surfaces contaminated with the virus has not been documented. Recent studies indicate that people who are infected but do not have symptoms likely also play a role in the spread of COVID-19. Transmission of coronavirus occurs much more commonly through respiratory droplets than through objects and surfaces, like doorknobs, countertops, keyboards, toys, etc. Current evidence suggests that SARS-CoV-2 may remain viable for hours to days on surfaces made from a variety of materials. Cleaning of visibly dirty surfaces followed by disinfection is a best practice measure for prevention of COVID-19 and other viral respiratory illnesses in households and community settings.

It is unknown how long the air inside a room occupied by someone with confirmed COVID-19 remains potentially infectious. Facilities will need to consider factors such as the size of the room and the ventilation system design (including flowrate [air changes per hour] and location of supply and exhaust vents) when deciding how long to close off rooms or areas used by ill persons before beginning disinfection. Taking measures to improve ventilation in an area or room where someone was ill or suspected to be ill with COVID-19 will help shorten the time it takes respiratory droplets to be removed from the air.

Purpose

This guidance provides recommendations on the cleaning and disinfection of households where persons under investigation (PUI) or those with confirmed COVID-19 reside or may be in self- isolation. It is aimed at limiting the survival of the virus in the environments. These recommendations will be updated if additional information becomes available.

These guidelines are focused on household settings and are meant for the general public.

- **Cleaning** refers to the removal of germs, dirt, and impurities from surfaces. It does not kill germs, but by removing them, it lowers their numbers and the risk of spreading infection.
- **Disinfecting** refers to using chemicals, for example, EPA-registered disinfectants, to kill germs on surfaces. This process does not necessarily clean dirty surfaces or remove germs, but by killing germs on a surface *after* cleaning, it can further lower the risk of spreading infection.

General recommendations for routine cleaning and disinfection of households

- Community members can practice routine cleaning of frequently touched surfaces (for example: tables, doorknobs, light switches, handles, desks, toilets, faucets, sinks, and electronics (see below for special electronics cleaning and disinfection instructions)) with household cleaners and EPA-registered disinfectants that are appropriate for the surface, following label instructions. Labels contain instructions for safe and effective use of the cleaning product including precautions you should take when applying the product, such as wearing gloves and making sure you have good ventilation during use of the product.
  - For electronics follow the manufacturer's instructions for all cleaning and disinfection products. Consider use of wipeable covers for electronics. If no manufacturer guidance is available, consider the use of alcohol-based wipes or spray containing at least 70% alcohol to disinfect touch screens. Dry surfaces thoroughly to avoid pooling of liquids.

General recommendations for cleaning and disinfection of households with people isolated in home care (e.g. suspected/confirmed to have COVID-19)

- Household members should educate themselves about COVID-19 symptoms and preventing the spread of COVID-19 in homes.
- **Clean and disinfect high-touch surfaces daily in household common areas (e.g. tables, hard-backed chairs, doorknobs, light switches, phones, tablets, touch screens, remote controls, keyboards, handles, desks, toilets, sinks)**
  - In the bedroom/bathroom dedicated for an ill person: consider reducing cleaning frequency to **as-needed** (e.g., soiled items and surfaces) to avoid unnecessary contact with the ill person.
- As much as possible, an ill person should stay in a specific room and away from other people in their home, following home care guidance.
- The caregiver can provide personal cleaning supplies for an ill person's room and bathroom, unless the room is occupied by child or another person for whom such supplies would not be appropriate. These supplies include tissues, paper towels, cleaners and EPA-registered disinfectants (see examples).
- If a separate bathroom is not available, the bathroom should be cleaned and disinfected after each use by an ill person. If this is not possible, the caregiver should wait as long as practical after use by an ill person to clean and disinfect the high-touch surfaces.
- Household members should follow home care guidance when interacting with persons with suspected/confirmed COVID-19 and their isolation rooms/bathrooms.

How to clean and disinfect

Hard (Non-porous) Surfaces

- Wear disposable gloves when cleaning and disinfecting surfaces. Gloves should be discarded after each cleaning. If reusable gloves are used, those gloves should be dedicated for cleaning and disinfection of surfaces for COVID-19 and should not be used for other purposes. Consult the manufacturer's instructions for cleaning and disinfection products used. Clean hands immediately after gloves are removed.
- If surfaces are dirty, they should be cleaned using a detergent or soap and water prior to disinfection.
- For disinfection, most common EPA-registered household disinfectants should be effective.
  - A list of products that are EPA-approved for use against the virus that causes COVID-19 is available here . Follow manufacturer's instructions for all cleaning and disinfection products for (concentration, application method and contact time, etc.)

Always read and follow the directions on the label to ensure safe and effective use.

- Wear skin protection and consider eye protection for potential splash hazards

- Ensure adequate ventilation
- Use no more than the amount recommended on the label
- Use water at room temperature for dilution (unless stated otherwise on the label)
- Avoid mixing chemical products
- Label diluted cleaning solutions
- Store and use chemicals out of the reach of children and pets

You should never eat, drink, breathe or inject these products into your body or apply directly to your skin as they can cause serious harm. Do not wipe or bathe pets with these products or any other products that are not approved for animal use.

See EPA's 6 steps for Safe and Effective Disinfectant Use

Special considerations should be made for people with asthma and they should not be present when cleaning and disinfecting is happening as this can trigger asthma exacerbations. To learn more about reducing asthma triggers: https://www.cdc.gov/asthma/reduce_triggers.html

    - Additionally, diluted household bleach solutions (at least 1000ppm sodium hypochlorite, or concentration of 5%–6%) can be used if appropriate for the surface. Follow manufacturer's instructions for application, ensuring a contact time of at least 1 minute, and allowing proper ventilation during and after application. Check to ensure the product is not past its expiration date. Never mix household bleach with ammonia or any other cleanser. Unexpired household bleach will be effective against coronaviruses when properly diluted.
- Prepare a bleach solution by mixing:
    - 5 tablespoons (1/3rd cup) bleach per gallon of room temperature water or
    - 4 teaspoons bleach per quart of room temperature water
- Bleach solutions will be effective for disinfection up to 24 hours.

Soft (Porous) Surfaces

- For soft (porous) surfaces such as carpeted floor, rugs, and drapes, remove visible contamination if present and clean with appropriate cleaners indicated for use on these surfaces. After cleaning:
    - Launder items as appropriate in accordance with the manufacturer's instructions. If possible, launder items using the warmest appropriate water setting for the items and dry items completely.
        - Otherwise, use products that are EPA-approved for use against the virus that causes COVID-19 and that are suitable for porous surfaces.

Electronics

- For electronics such as cell phones, tablets, touch screens, remote controls, and keyboards, remove visible contamination if present.
    - Follow the manufacturer's instructions for all cleaning and disinfection products.
    - Consider use of wipeable covers for electronics.
    - If no manufacturer guidance is available, consider the use of alcohol-based wipes or sprays containing at least 70% alcohol to disinfect touch screens. Dry surfaces thoroughly to avoid pooling of liquids.

Linens, clothing, and other items that go in the laundry

- Wear disposable gloves when handling dirty laundry from an ill person and then discard after each use. If using reusable gloves, those gloves should be dedicated for cleaning and disinfection of surfaces for COVID-19 and should not be used for other household purposes. Clean hands immediately after gloves are removed.
    - If no gloves are used when handling dirty laundry, be sure to wash hands afterwards.
    - If possible, do not shake dirty laundry. This will minimize the possibility of dispersing virus through the air.
    - Launder items as appropriate in accordance with the manufacturer's instructions. If possible, launder items using the warmest appropriate water setting for the items and dry items completely. Dirty laundry from an ill person can be washed with other people's items

be washed with other people's items.

- Clean and disinfect clothes hampers according to guidance above for surfaces. If possible, consider placing a bag liner that is either disposable (can be thrown away) or can be laundered.

Hand hygiene and other preventive measures

- Household members should clean hands often, including immediately after removing gloves and after contact with an ill person, by washing hands with soap and water for 20 seconds. If soap and water are not available and hands are not visibly dirty, an alcohol-based hand sanitizer that contains at least 60% alcohol may be used. However, if hands are visibly dirty, always wash hands with soap and water.

Always read and follow the directions on the label to ensure safe and effective use.

- Keep hand sanitizers away from fire or flame
- For children under six years of age, hand sanitizer should be used with adult supervision
- Always store hand sanitizer out of reach of children and pets

See FDA's Tips for Safe Sanitizer Use and CDC's Hand Sanitizer Use Considerations

- Household members should follow normal preventive actions while at work and home including recommended hand hygiene and avoiding touching eyes, nose, or mouth with unwashed hands.
  - Additional key times to clean hands include:
    - After blowing one's nose, coughing, or sneezing
    - After using the restroom
    - Before eating or preparing food
    - After contact with animals or pets
    - Before and after providing routine care for another person who needs assistance (e.g. a child)

Other considerations

- The ill person should eat/be fed in their room if possible. Non-disposable food service items used should be handled with gloves and washed with hot water or in a dishwasher. Clean hands after handling used food service items.
- If possible, dedicate a lined trash can for the ill person. Use gloves when removing garbage bags, handling, and disposing of trash. Wash hands after handling or disposing of trash.
- Consider consulting with your local health department about trash disposal guidance if available.

More Information

OSHA COVID-19 Website

CDC Home Care Guidance

CDC Home Care Guidance for People with Pets

Last Updated July 10, 2020

Centers for Disease Control and Prevention

Coronavirus Disease 2019 (COVID-19)

MENU >

Social Distancing
Social Distancing

Keep a Safe Distance to Slow the Spread.

Updated July 15, 2020 Print

Limiting close face-to-face contact with others is the best way to reduce the spread of coronavirus disease 2019 (COVID-19).

What is social distancing?

Social distancing, also called "physical distancing," means keeping a safe space between yourself and other people who are not from your household.

To practice social or physical distancing, stay at least 6 feet (about 2 arms' length) from other people who are not from your household in both indoor and outdoor spaces.

Social distancing should be practiced in combination with other everyday preventive actions to reduce the spread of COVID-19, including wearing cloth face coverings, avoiding touching your face with unwashed hands, and frequently washing your hands with soap and water for at least 20 seconds.

Why practice social distancing?

COVID-19 spreads mainly among people who are in close contact (within about 6 feet) for a prolonged period. Spread happens when an infected person coughs, sneezes, or talks, and droplets from their mouth or nose are launched into the air and land in the mouths or noses of people nearby. The droplets can also be inhaled into the lungs. Recent studies indicate that people who are infected but do not have symptoms likely also play a role in the spread of COVID-19. Since people can spread the virus before they know they are sick, it is important to stay at least 6 feet away from others when possible, even if you—or they—do not have any symptoms. Social distancing is especially important for people who are at higher risk for severe illness from COVID-19.

If you are sick with COVID-19, have symptoms consistent with COVID-19, or have been in close contact with someone who has COVID-19, it is important to stay home and away from other people until it is safe to be around others.

COVID-19 can live for hours or days on a surface, depending on factors such as sunlight, humidity, and the type of surface. It may be possible that a person can get COVID-19 by touching a surface or object that has the virus on it and then touching their own mouth, nose, or eyes. However, this is not thought to be the main way the virus spreads. Social distancing helps limit opportunities to come in contact with contaminated surfaces and infected people outside the home.

Although the risk of severe illness may be different for everyone, anyone can get and spread COVID-19. Everyone has a role to play in slowing the spread and protecting themselves, their family, and their community. In addition to practicing everyday steps to prevent COVID-19, keeping space between you and others is one of the best tools we have to avoid being exposed to this virus and slowing its spread in communities.

Tips for Social Distancing

When going out in public, it is important to stay at least 6 feet away from other people and wear a cloth face covering to slow the spread of COVID-19. Consider the following tips for practicing social distancing when you decide to go out.

- **Know Before You Go:** Before going out, know and follow the guidance from local public health authorities where you live.

- **Prepare for Transportation:** Consider social distancing options to travel safely when running errands or commuting to and from work, whether walking, bicycling, wheelchair rolling, or using public transit, rideshares, or taxis. When using public transit, try to keep at least 6 feet from other passengers or transit operators – for example, when you are waiting at a bus station or selecting seats on a bus or train. When using rideshares or taxis, avoid pooled rides where multiple passengers are picked up, and sit in the back seat in larger vehicles so you can remain at least 6 feet away from the driver. Follow these additional tips to protect yourself while using transportation.
- **Limit Contact When Running Errands:** Only visit stores selling household essentials in person when you absolutely need to, and stay at least 6 feet away from others who are not from your household while shopping and in lines. If possible, use drive-thru, curbside pick-up, or delivery services to limit face-to-face contact with others. Maintain physical distance between yourself and delivery service providers during exchanges and wear a cloth face covering.
- **Choose Safe Social Activities:**It is possible to stay socially connected with friends and family who don't live in your home by calling, using video chat, or staying connected through social media. If meeting others in person (e.g., at small outdoor gatherings, yard or driveway gathering with a small group of friends or family members), stay at least 6 feet from others who are not from your household. Follow these steps to stay safe if you will be participating in personal and social activities outside of your home.
- **Keep Distance at Events and Gatherings**: It is safest to avoid crowded places and gatherings where it may be difficult to stay at least 6 feet away from others who are not from your household. If you are in a crowded space, try to keep 6 feet of space between yourself and others at all times, and wear a cloth face covering. Cloth face coverings are especially important in times when physical distancing is difficult. Pay attention to any physical guides, such as tape markings on floors or signs on walls, directing attendees to remain at least 6 feet apart from each other in lines or at other times. Allow other people 6 feet of space when you pass by them in both indoor and outdoor settings.
- **Stay Distanced While Being Active**: Consider going for a walk, bike ride, or wheelchair roll in your neighborhood or in another safe location where you can maintain at least 6 feet of distance between yourself and other pedestrians and cyclists. If you decide to visit a nearby park, trail, or recreational facility, first check for closures or restrictions. If open, consider how many other people might be there and choose a location where it will be possible to keep at least 6 feet of space between yourself and other people who are not from your household.

Many people have personal circumstances or situations that present challenges with practicing social distancing to prevent the spread of COVID-19. Please see the following guidance for additional recommendations and considerations:

- Households Living in Close Quarters: How to Protect Those Who Are Most Vulnerable
- Living in Shared Housing
- People with Disabilities
- People Experiencing Homelessness

More Information

How to Protect Yourself

Cleaning and Disinfecting Your Home

Gatherings and Community Events

Last Updated July 15, 2020

State of New York

Executive Chamber

No. 202

EXECUTIVE ORDER

Declaring a Disaster Emergency in the State of New York

WHEREAS, on January 30, 2020, the World Health Organization designated the novel coronavirus, COVID-19, outbreak as a Public Health Emergency of International Concern;

WHEREAS, on January 31, 2020, United States Health and Human Services Secretary Alex M. Azar II declared a public health emergency for the entire United States to aid the nation's healthcare community in responding to COVID-19;

WHEREAS, both travel-related cases and community contact transmission of COVID-19 have been documented in New York State and more are expected to continue; and

WHEREAS, New York State is addressing the threat that COVID-19 poses to the health and welfare of its residents and visitors.

NOW, THEREFORE, I, Andrew M. Cuomo, Governor of the State of New York, by virtue of the authority vested in me by the Constitution and the Laws of the State of New York, hereby find, pursuant to Section 28 of Article 2-B of the Executive Law, that a disaster is impending in New York State, for which the affected local governments are unable to respond adequately, and I do hereby declare a State disaster emergency for the entire State of New York. This Executive Order shall be in effect until September 7, 2020; and

IN ADDITION, this declaration satisfies the requirements of 49 C.F.R. 390.23(a)(1)(A), which provides relief from Parts 390 through 399 of the Federal Motor Carrier Safety Regulations (FMCSR). Such relief from the FMCSR is necessary to ensure that crews are available as needed.

FURTHER, pursuant to Section 29 of Article 2-B of the Executive Law, I direct the implementation of the State Comprehensive Emergency Management Plan and authorize all necessary State agencies to take appropriate action to assist local governments and individuals in containing, preparing for, responding to and recovering from this state disaster emergency, to protect state and local property, and to provide such other assistance as is necessary to protect public health, welfare, and safety.

IN ADDITION, by virtue of the authority vested in me by Section 29-a of Article 2-B of the Executive Law to temporarily suspend or modify any statute, local law, ordinance, order, rule, or regulation, or parts thereof, of any agency during a State disaster emergency, if compliance with such statute, local law, ordinance, order, rule, or regulation would prevent, hinder, or delay action necessary to cope with the disaster emergency or if necessary to assist or aid in coping with such disaster, I hereby temporarily suspend or modify, for the period from the date of this Executive Order through April 6, 2020 the following:

Section 112 of the State Finance Law, to the extent consistent with Article V, Section 1 of the State Constitution, and to the extent necessary to add additional work, sites, and time to State contracts or to award emergency contracts, including but not limited to emergency contracts or leases for relocation and support of State operations under Section 3 of the Public Buildings Law; or emergency contracts under Section 9 of the Public Buildings Law; or emergency contracts for professional services under Section 136-a of the State Finance Law; or emergency contracts for commodities, services, and technology under Section 163 of the State Finance Law; or design-build or best value contracts under and Part F of Chapter 60 of the Laws of 2015 and Part RRR of Chapter 59 of the Laws of 2017; or emergency contracts for purchases of commodities, services, and technology through any federal GSA schedules, federal 1122 programs, or other state, regional, local, multi-jurisdictional, or cooperative contract vehicles;

Section 163 of the State Finance Law and Article 4-C of the Economic Development Law, to the extent necessary to allow the purchase of necessary commodities, services, technology, and materials without following the standard notice and procurement processes;

Section 97-G of the State Finance Law, to the extent necessary to purchase food, supplies, services, and equipment or furnish or provide various centralized services, including but not limited to, building design and construction services to assist affected local governments, individuals, and other non-State entities in responding to and recovering from the disaster emergency;

Section 359-a, Section 2879, and 2879-a of the Public Authorities Law to the extent necessary to purchase necessary goods and services without following the standard procurement processes;

Sections 375, 385 and 401 of the Vehicle and Traffic Law to the extent that exemption for vehicles validly registered in other jurisdictions from vehicle registration, equipment and dimension requirements is necessary to assist in preparedness and response to the COVID-19 outbreak;

Sections 6521 and 6902 of the Education Law, to the extent necessary to permit unlicensed individuals, upon completion of training deemed adequate by the Commissioner of Health, to collect throat or nasopharyngeal swab specimens from individuals suspected of being infected by COVID-19, for purposes of testing; and to the extent necessary to permit non-nursing staff, upon completion of training deemed adequate by the Commissioner of Health, to perform tasks, under the supervision of a nurse, otherwise limited to the scope of practice of a licensed or registered nurse;

Subdivision 6 of section 2510 and section 2511 of the Public Health Law, to the extent necessary to waive or revise eligibility criteria, documentation requirements, or premium contributions; modify covered health care services or the scope and level of such services set forth in contracts; increase subsidy payments to approved organizations, including the maximum dollar amount set forth in contracts; or provide extensions for required reports due by approved organizations in accordance with contracts;

Section 224-b and subdivision 4 of section 225 of the Public Health Law, to the extent necessary to permit the Commissioner of Health to promulgate emergency regulations and to amend the State Sanitary Code;

Subdivision 2 of section 2803 of the Public Health Law, to the extent necessary to permit the Commissioner to promulgate emergency regulations concerning the facilities licensed pursuant to Article 28 of the Public Health Law, including but not limited to the operation of general hospitals;

Subdivision 3 of section 273 of the Public Health Law and subdivisions 25 and 25-a of section 364-j of the Social Services Law, to the extent necessary to allow patients to receive prescribed drugs without delay;

Section 400.9 and paragraph 7 of subdivision f of section 405.9 of Title 10 of the NYCRR, to the extent necessary to permit general hospitals and nursing homes licensed pursuant to Article 28 of the Public Health Law ("Article 28 facilities") that are treating patients during the disaster emergency to rapidly discharge, transfer, or receive such patients, as authorized by the Commissioner of Health, provided such facilities take all reasonable measures to protect the health and safety of such patients and residents, including safe transfer and discharge practices, and to comply with the Emergency Medical Treatment and Active Labor Act (42 U.S.C. section 1395dd) and any associated regulations;

Section 400.11 of Title 10 of the NYCRR, to the extent necessary to permit Article 28 facilities receiving patients as a result of the disaster emergency to complete patient review instruments as soon as practicable;

Section 405 of Title 10 of the NYCRR, to the extent necessary to maintain the public health with respect to treatment or containment of individuals with or suspected to have COVID-19;

Subdivision d and u of section 800.3 of Title 10 of the NYCRR, to the extent necessary to permit emergency medical service personnel to provide community paramedicine, transportation to destinations other than hospitals or health care facilities, telemedicine to facilitate treatment of patients in place, and such other services as may be approved by the Commissioner of Health;

Paragraph 3 of subdivision f of section 505.14 of Title 18 of the NYCRR, to the extent necessary to permit nursing supervision visits for personal care services provided to individuals affected by the disaster emergency be made as soon as practicable;

Sections 8602 and 8603 of the Education Law, and section 58-1.5 of Title 10 of the NYCRR, to the extent necessary to permit individuals who meet the federal requirements for high complexity testing to perform testing for the detection of SARS-CoV-2 in specimens collected from individuals suspected of suffering from a COVID-19 infection;

Subdivision 4 of section 6909 of the Public Health Law, subdivision 6 of section 6527 of the Education Law, and section 64.7 of Title 8 of the NYCRR, to the extent necessary to permit physicians and certified nurse practitioners to issue a non-patient specific regimen to nurses or any such other persons authorized by law or by this executive order to collect throat or nasopharyngeal swab specimens from individuals suspected of suffering from a COVID-19 infection, for purposes of testing, or to perform such other tasks as may be necessary to provide care for individuals diagnosed or suspected of suffering from a COVID-19 infection;

Section 596 of Title 14 of the NYCRR to the extent necessary to allow for rapid approval of the use of the telemental health services, including the requirements for in-person initial assessment prior to the delivery of telemental health services, limitations on who can deliver telemental health services, requirements for who must be present while telemental health services are delivered, and a recipient's right to refuse telemental health services;

Section 409-i of the Education Law, section 163-b of the State Finance Law with associated OGS guidance, and Executive Order No. 2 are suspended to the extent necessary to allow elementary and secondary schools to procure and use cleaning and maintenance products in schools; and sections 103 and 104-b of the General Municipal Law are suspended to the extent necessary to allow schools to do so without the usual advertising for bids and offers and compliance with existing procurement policies and procedures;

Article 7 of the Public Officers Law, section 41 of the General Construction Law, and section 3002 of the Public Health Law, to the extent necessary to permit the Public Health and Health Planning Council and the State Emergency Medical Services Council to meet and take such actions as authorized by law, as may be necessary to respond to the COVID-19 outbreak, without meeting quorum requirements or permitting the public in-person access to meetings, provided that any such meetings must be webcast and means for effective public comment must be made available; and

FURTHER, I hereby temporarily modify, for the period from the date of this Executive Order through April 6, 2020, the following laws:

Section 24 of the Executive Law; Sections 104 and 346 of the Highway Law; Sections 1602, 1630, 1640, 1650, and 1660 of the Vehicle and Traffic Law; Section 14(16) of the Transportation Law; Sections 6-602 and 17-1706 of the Village Law; Section 20(32) of the General City Law; Section 91 of Second Class Cities Law; Section 19-107(ii) of the New York City Administrative Code; and Section 107.1 of Title 21 of the New York Codes, Rules and Regulations, to the extent necessary to provide the Governor with the authority to regulate traffic and the movement of vehicles on roads, highways, and streets.

GIVEN under my hand and the Privy Seal of the State in the City of Albany this seventh day of March in the year two thousand twenty.

BY THE GOVERNOR

Secretary to the Governor

State of New York

Executive Chamber

No. 202.3

EXECUTIVE ORDER

CONTINUING TEMPORARY SUSPENSION AND MODIFICATION OF LAWS RELATING TO THE DISASTER EMERGENCY

WHEREAS, on March 7, 2020, I issued Executive Order Number 202, declaring a State disaster emergency for the entire State of New York;

WHEREAS, both travel-related cases and community contact transmission of COVID-19 have been documented in New York State and are expected to be continue;

WHEREAS, one state acting alone cannot control the continued spread of this disease and it requires coordination and cooperation amongst the states; and

NOW, THEREFORE, I, Governor Andrew M. Cuomo, by virtue of the authority vested in me by Section 29-a of Article 2-B of the Executive Law to temporarily suspend or modify any statute, local law, ordinance, order, rule, or regulation, or parts thereof, of any agency during a State disaster emergency, if compliance with such statute, local law, ordinance, order, rule, or regulation would prevent, hinder, or delay action necessary to cope with the disaster emergency or if necessary to assist or aid in coping with such disaster, or to issue any directive during a disaster emergency necessary to cope with the disaster, I hereby issue the following directives and suspensions and modifications for the period from the date of this Executive Order 202.3 through April 15, 2020:

- The directive requiring large gatherings and events to be cancelled or postponed if they had anticipated attendance in excess of 500 people by virtue of Executive Order 202.1 dated March 12, 2020, is hereby amended and modified to require that any large gathering or event (concert, conference, worship service, performance before a large audience, etc.) shall be cancelled or postponed if more than fifty persons are expected in attendance, at any location in New York State until further notice.

- Any restaurant or bar in the state of New York shall cease serving patrons food or beverage on-premises effective at 8 pm on March 16, 2020, and until further notice shall only serve food or beverage for off-premises consumption. Notwithstanding any provision of the alcohol and beverage control law, a retail on-premises licensee shall be authorized for the duration of this Executive Order to sell alcohol for off-premises consumption, which shall include either take-out or delivery, subject to reasonable limitations set by the State Liquor Authority.

- Any facility authorized to conduct video lottery gaming, or casino gaming shall cease operation effective at 8 pm on March 16, 2020, and until further notice. For a Class III

Tribal Gaming enterprise or Class II Tribal Gaming enterprise, any facility should also close to the public until further notice.

- Any gym, fitness centers or classes, and movie theaters shall also cease operation effective at 8 pm on March 16, 2020 until further notice.
- No local government or political subdivision shall issue any local emergency order or declaration of emergency or disaster inconsistent with, conflicting with or superseding the foregoing directives, or any other executive order issued under Section 24 of the Executive Law and any local emergency order or any local administrative codes, charters, laws, rules or regulations, are hereby suspended with respect to any such order issued under such authority different or in conflict with Executive directives.

GIVEN under my hand and the Privy Seal of the State in the City of Albany this sixteenth day of March in the year two thousand twenty.

BY THE GOVERNOR

Secretary to the Governor

State of New York

Executive Chamber

No. 202.4

EXECUTIVE ORDER

Continuing Temporary Suspension and Modification of Laws Relating to the Disaster Emergency

WHEREAS, on March 7, 2020, I issued Executive Order Number 202, declaring a State disaster emergency for the entire State of New York;

WHEREAS, both travel-related cases and community contact transmission of COVID-19 have been documented in New York State and are expected to be continue; and

NOW, THEREFORE, by virtue of the authority vested in me by Section 29-a of Article 2-B of the Executive Law to issue any directive during a disaster emergency necessary to cope with the disaster, I hereby issue the following directives for the period from the date of Executive Order through April 15, 2020:

- Any local government or political subdivision shall, effective March 17, 2020, allow non-essential personnel as determined by the local government, to be able to work from home or take leave without charging accruals, except for those personnel essential to the locality's response to the COVID-19 emergency. Such non-essential personnel shall total no less than fifty-percent (50%) of the total number of employees across the entire workforce of such local government or political subdivision.

- Restrictions on reporting to work for any state worker whose service is non-essential, or not required to support the COVID-19 response, are expanded to all counties in the State of New York.

- Notwithstanding any prior directives, every school in the state of New York is hereby directed to close no later than Wednesday, March 18, 2020, for a period of two weeks, ending April 1, 2020. The state shall reassess at that time whether to extend such closure beyond this date and may continue to suspend the 180 day instructional requirement. The 180 day suspension will be adjusted to the state's allowed closure directive. Schools that exceed the period will not be exempted from the 180-day rule. School districts shall develop a plan for alternative instructional options, distribution and availability of meals, and child care, with an emphasis on serving children of parents in the health care profession or first responders who are critical to the response effort. Such plans shall be submitted to the State Education Department and may be amended or modified by the State Education Department, in consultation with the Department of Health and Office of Children and Family Services at any time. School districts in Nassau County, Suffolk County and Westchester County and the City of New York must submit such plans for approval no later than midnight, March 17, 2020 to the State.

- Any village election to be held March 17, 2020 shall be postponed and any elected official holding such position shall remain in office until such time as a new election is held.

GIVEN under my hand and the Privy Seal of the State in the City of Albany the sixteenth day of March in the year two thousand twenty.

BY THE GOVERNOR

Secretary to the Governor

State of New York

Executive Chamber

No. 202.5

EXECUTIVE ORDER

Continuing Temporary Suspension and Modification of Laws Relating to the Disaster Emergency

WHEREAS, on March 7, 2020, I issued Executive Order Number 202, declaring a State disaster emergency for the entire State of New York;

WHEREAS, both travel-related cases and community contact transmission of COVID-19 have been documented in New York State and are expected to be continue;

WHEREAS, in order to facilitate the most timely and effective response to the COVID 19 emergency disaster, it is critical for New York State to be able to act quickly to gather, coordinate, and deploy goods, services, professionals, and volunteers of all kinds; and

NOW, THEREFORE, I, Andrew M. Cuomo, Governor of the State of New York, by virtue of the authority vested in me by Section 29-a of Article 2-B of the Executive Law to temporarily suspend or modify any statute, local law, ordinance, order, rule, or regulation, or parts thereof, of any agency during a State disaster emergency, if compliance with such statute, local law, ordinance, order, rule, or regulation would prevent, hinder, or delay action necessary to cope with the disaster emergency or if necessary to assist or aid in coping with such disaster, I hereby temporarily suspend or modify, for the period from the date of this Executive Order through April 17, 2020 the following:

- Sections 6512 through 6516, and 6524 of the Education Law and Part 6o of Title 8 of the NYCRR, to the extent necessary to allow physicians licensed and in current good standing in any state in the United States to practice medicine in New York State without civil or criminal penalty related to lack of licensure;
- Section 6502 of the Education Law and Part 59.8 of Title 8 of the NYCRR, to the extent necessary to allow physicians licensed and in current good standing in New York State but not registered in New York State to practice in New York State without civil or criminal penalty related to lack of registration;
- Sections 6512 through 6516, and 6905, 6906 and 6910 of the Education Law and Part 64 of Title 8 of the NYCRR, to the extent necessary to allow registered nurses, licensed practical nurses, and nurse practitioners licensed and in current good standing in any state in the United States to practice in New York State without civil or criminal penalty related to lack of licensure;
- Sections 6512 through 6516, and 6541 of the Education Law and Part 6o.8 of Title 8 of the NYCRR 8 NYCRR, to the extent necessary to allow physician assistants licensed and in current good standing in any state in the United States to practice in New York State without civil or criminal penalty related to lack of licensure;
- Section 400.12 of Title 10 of the NYCRR, to the extent necessary to allow patients affected by the disaster emergency to be transferred to receiving Article 28 facilities as authorized by the Commissioner of Health;
- Section 415.11 of Title 10 of the NYCRR, to the extent necessary to permit nursing homes receiving individuals affected by the disaster emergency to perform comprehensive assessments of those residents temporarily evacuated to such nursing homes as soon as practicable following admission or to forego such assessments for individuals returned to facilities from which they were evacuated;
- Subdivision b of section 415.15 of Title 10 of the NYCRR, to the extent necessary to permit nursing homes receiving individuals affected by the disaster emergency to obtain physician approvals for admission as soon as practicable following admission or to forego such approval for individuals returned to facilities from which they were evacuated;

- Subdivision i of section 415.26 of Title 10 of the NYCRR, to the extent necessary to permit nursing homes receiving individuals affected by the disaster emergency to comply with admission procedures as soon as practicable following admission or to forego such procedures for individuals returned to facilities from which they were evacuated;

- Paragraph 2 of subdivision g of section 763.4; paragraphs 7 and 8 of subdivision h of section 763.4; paragraph 2 of subdivision a of section 766.5; and paragraph 1 of subdivision d of section 766.5 of Title 10 of the NYCRR, to the extent necessary to permit certified home health agencies, long term home health care programs, AIDS home care programs, and licensed home care services agencies serving individuals affected by the disaster emergency to conduct in-home supervision of home health aides and personal care aides as soon as practicable after the initial service visit, or to permit in-person and in-home supervision to be conducted through indirect means, including by telephone or video communication;

- Subdivision a of section 763.5 of Title 10 of the NYCRR, to the extent necessary to permit initial patient visits for certified home health agencies, long term home health care programs and AIDS home care programs serving individuals affected by the disaster emergency to be made within 48 hours of receipt and acceptance of a community referral or return home from institutional placement;

- Sections 403.3 and 403.5 if Title 10 of the NYCRR, to extend the time in which home care services entities must submit information to the Home Care Worker Registry;

- Sections 358-4.3, 358-5.12 and 358-5.13 of Title 18 of the NYCRR, to the extent necessary to allow or require appearance by any parties to a fair hearing by written, telephonic, video or other electronic means;

- Sections 2999-h and 2999-j of the Public Health Law, to the extent necessary to provide reimbursement to Medical Indemnity Fund enrollees, in primary residences where a resident has had COVID-19 or was exposed to COVID-19, for costs related to cleaning and disinfection of such primary residences, at the discretion of the Commissioner of Health;

- Section 2805-k of the Public Health Law and sections 405.4, 405.5, 405.9, 405.14, 405.19, and 405.22 of Title 10 of the NYCRR, to the extent necessary to allow staff with the necessary professional competency and who are privileged and credentialed to work in a facility in compliance with such section of the Public Health Law and such sections of the NYCRR, or who are privileged and credentialed to work in a facility in another state in compliance with the applicable laws and regulations of that other state, to practice in a facility in New York State;

- Part 405 of Title 10 of the NYCRR, to the extent necessary to adopt existing policies and procedures in a general hospital at a new, temporary facility created for the purpose of treating patients during the COVID-19 outbreak;

- Any code related to construction, energy conservation, or other building code, and all state and local laws, ordinances, and regulations relating to administration and enforcement of the foregoing, to the extent necessary to allow, upon approval by the Commissioner of Health or the Commissioner of OPWDD, as applicable, the temporary changes to physical plant, bed capacities, and services provided; the construction of temporary hospital locations and extensions; the increase in and/or exceeding of certified capacity limits; and the establishment of temporary hospital locations and extensions;

- Part 425 of Title 10 of the NYCRR and section 461-k of the Social Services Law, to the extent necessary to prevent transportation to and attendance at adult day care programs, until authorized by the Commissioner of Health;

- Section 16.17 of the Mental Hygiene Law to the extent necessary to permit the Office of People with Developmental Disabilities to take emergency action to suspend or limit a provider's operating certificate;

- Sections 633.12 and 636-1 of Title 14 of the NYCRR, to the extent necessary to temporarily deviate from an individual's service plan, which would otherwise outline participation in day programming and other community based served, and to the extent necessary to temporarily relocate individuals, in order to maintain the health and safety of that individual during this emergency period and to the extent necessary;

- Sections 33.02 and 33.05 of the Mental Hygiene law and sections 633.4, 636-1.4 and 633.16 of Title 14 of the NYCRR, to the extent necessary to restrict visitors to facilities certified pursuant Article 16 of the Mental Hygiene law and to permit restrictions on community outings for residents of such facilities to reduce the spread of COVID-19;

- Sections 633.8 and 633.14 of Title 14 of the NYCRR to the extent necessary to permit abbreviated training of direct support professionals employed in programs and facilities certified pursuant to Article 16 of the Mental Hygiene Law that are experiencing staff shortages;

- Section 633.17 of Title 14 of the NYCRR, to the extent necessary to permit abbreviated medication administration training of direct support professionals employed in programs or facilities certified pursuant to Article 16 of the Mental Hygiene Law;

- Section 390-b of the Social Services Law and regulations at sections 413.4 and 415.15 of Title 18 of the NYCRR insofar as that statute and those regulations establish background check requirements for child day care;

- Section 390 of the Social Services Law insofar as that section of law exempts school age child care programs operated by a school or entity with experience providing child care and located in a school providing elementary or secondary education from having to comply with the regulations of the office of children and family services;

- Subdivision 7 of section 590 and subdivision 2 of section 607 of the Labor Law, so far as they relate to waiting periods for unemployment insurance claimants whose claims for unemployment insurance arise due to closure of an employer for a reason related to COVID-19 or due to a mandatory order of a government entity duly authorized to issue such order to close such employer, as of March 12, 2020;

- Subdivision b of section 708 of the Business Corporation Law to the extent necessary to permit business corporations to take any action otherwise permitted under that section with the electronic consent of the members of the board or committee, when such consent is submitted via electronic mail along with information from which it can reasonably be determined that the transmission was authorized by such member;

- Sections 65(13)(b) and 66(12)(f) of the Public Service Law to the extent of having in-person public hearings, provided that such hearings are held by conference call or similar electronic means, which are recorded and later transcribed;

- Section 165(1) of the Public Service Law ("PSL") to the extent of holding public statement hearings, provided that the public may file written comments in any case subject to PSL Article 10 until issuance of a final order; and

- Section 123(1) of the Public Service Law ("PSL") to the extent of holding a public hearing, provided that the public may file written comments in any case subject to PSL Article VII until issuance of a final order.

IN ADDITION, by virtue of the authority vested in me by Section 29-a of Article 2-B of the Executive Law to issue any directive during a disaster emergency necessary to cope with the disaster, I hereby issue the following directives for the period from the date of Executive Order through April 17, 2020:

- Any village election set to be held March 18, 2020 shall be postponed and any elected official holding such position shall remain in office until such time as a new election is held.

- Effective at 8 p.m. March 19, 2020, all indoor common portions of retail shopping malls with in excess of 100,000 square feet of retail space available for lease shall close and cease access to the public. Any stores located within shopping malls, which have their own external entrances open to the public, separate from the general mall entrance, may remain open, subject to the requirements of Executive Order 202.3 that any restaurant shall limit itself to take out or delivery food services, and that any interior entrances to common areas of the mall remain closed and locked.

- Additionally, all places of public amusement, whether indoors or outdoors, including but not limited to, locations with amusement rides, carnivals, amusement parks, water parks, aquariums, zoos, arcades, fairs, children's play centers, funplexes, theme parks, bowling alleys, family and children's attractions shall likewise be closed to the public at 8 p.m. on March 19. This directive shall not apply to public parks and open recreation areas.

- Notwithstanding section 24 of the Executive Law, no locality or political subdivision shall issue any local emergency order or executive order with respect to response of COVID-19 without the approval of the State Department of Health.

GIVEN under my hand and the Privy Seal of the State in the City of Albany the eighteenth day of March in the year two thousand twenty.

BY THE GOVERNOR

Secretary to the Governor

State of New York

Executive Chamber

No. 202.10

EXECUTIVE ORDER

Continuing Temporary Suspension and Modification of Laws Relating to the Disaster Emergency

WHEREAS, on March 7, 2020, I issued Executive Order Number 202, declaring a State disaster emergency for the entire State of New York;

WHEREAS, both travel-related cases and community contact transmission of COVID-19 have been documented in New York State and are expected to be continue;

WHEREAS, ensuring the State of New York has adequate bed capacity, supplies, and providers to treat patients affected with COVID-19, as well as patients afflicted with other maladies, is of critical importance; and

WHEREAS, eliminating any obstacle to the provision of supplies and medical treatment is necessary to ensure the New York healthcare system has adequate capacity to provide care to all who need it;

NOW, THEREFORE, I, Andrew M. Cuomo, Governor of the State of New York, by virtue of the authority vested in me by Section 29-a of Article 2-B of the Executive Law to temporarily suspend or modify any statute, local law, ordinance, order, rule, or regulation, or parts thereof, of any agency during a State disaster emergency, if compliance with such statute, local law, ordinance, order, rule, or regulation would prevent, hinder, or delay action necessary to cope with the disaster emergency or if necessary to assist or aid in coping with such disaster, I hereby temporarily suspend or modify, for the period from the date of this Executive Order through April 22, 2020 the following:

- Section 2803 of the Public Health Law, and Parts 400, 401, 405, 409, 710, 711 and 712 of Title 10 of the NYCRR, to the extent necessary to permit and require general hospitals to take all measures necessary to increase the number of beds available to patients, in accordance with the directives set forth in this Executive Order;

- Section 3001, 3005-a, 3008, and 3010 of the Public Health Law to the extent necessary to modify the definition of "emergency medical services" to include emergency, non-emergency and low acuity medical assistance; to eliminate any restrictions on an approved ambulance services or providers operating outside of the primary territory listed on such ambulance service's operating certificate with prior approval by the Department of Health; to permit the Commissioner of Health to issue provisional emergency medical services provider certifications to qualified individuals with modified certification periods as approved; and to allow emergency medical services to transport patients to locations other than healthcare facilities with prior approval by Department of Health;

- Section 3002, 3002-a, 3003, and 3004-a of Public Health Law to the extent necessary to allow any emergency medical treatment protocol development or modification to occur solely with the approval of the Commissioner of Health;

- Sections 405.13 and 755.4 of Title 10 of the NYCRR to the extent necessary to permit an advanced practice registered nurse with a doctorate or master's degree specializing in the administration of anesthesia administering anesthesia in a general hospital or free-standing ambulatory surgery center without the supervision of a qualified physician in these health care settings;

- Paragraph 1 of Section 6542 of the Education Law and Subdivisions (a) and (b) of Section 94.2 of Title 10 of the NYCRR to the extent necessary to permit a physician assistant to provide medical services appropriate to their education, training and experience without oversight from a supervising physician without civil or criminal penalty related to a lack of oversight by a supervising physician;

- Paragraph 1 of Section 6549 of the Education Law and Subdivisions (a) and (b) of Section 94.2 of Title 10 of the NYCRR to the extent necessary to permit a specialist assistant to provide medical services appropriate to their education, training and experience without oversight from a supervising physician without civil or criminal penalty related to a lack of oversight by a supervising physician;

- Subdivision (3) of Section 6902 of Education Law, and any associated regulations, including, but not limited to, Section 64.5 of Title 10 of the NYCRR, to the extent necessary to permit a nurse practitioner to provide medical services appropriate to their education, training and experience, without a written practice agreement, or collaborative relationship with a physician, without civil or criminal penalty related to a lack of written practice agreement, or collaborative relationship, with a physician;

- Subdivision (15) of section 3001, and Sections 800.3, 800.15 and 800.16 of Title 10 of the NYCRR with approval of the department, to the extent necessary to define "medical control" to include emergency and non-emergency direction to all emergency medical services personnel by a regional or state medical control center and to permit emergency medical services personnel to operate under the advice and direction of a nurse practitioner, physician assistant, or paramedic, provided that such medical professional is providing care under the supervision of a physician and pursuant to a plan approved by the Department of Health;

- Subdivision (2) of section 6527, Section 6545, and Subdivision (1) of Section 6909 of the Education Law, to the extent necessary to provide that all physicians, physician assistants, specialist assistants, nurse practitioners, licensed registered professional nurses and licensed practical nurses shall be immune from civil liability for any injury or death alleged to have been sustained directly as a result of an act or omission by such medical professional in the course of providing medical services in support of the State's response to the COVID-19 outbreak, unless it is established that such injury or death was caused by the gross negligence of such medical professional;

- Any healthcare facility is authorized to allow students, in programs to become licensed in New York State to practice as a healthcare professional, to volunteer at the healthcare facility for educational credit as if the student had secured a placement under a clinical affiliation agreement, without entering into any such clinical affiliation agreement;

- Notwithstanding any law or regulation to the contrary, health care providers are relieved of recordkeeping requirements to the extent necessary for health care providers to perform tasks as may be necessary to respond to the COVID-19 outbreak, including, but not limited to, requirements to maintain medical records that accurately reflect the evaluation and treatment of patients, or requirements to assign diagnostic codes or to create or maintain other records for billing purposes. Any person acting reasonably and in good faith under this provision shall be afforded absolute immunity from liability for any failure to comply with any recordkeeping requirement. In order to protect from liability any person acting reasonably and in good faith under this provision, requirements to maintain medical records under Subdivision 32 of Section 6530 of the Education Law, Paragraph (3) of Subdivision (a) of Section 29.2 of Title 8 of the NYCRR, and Sections 58-1.11, 405.10, and 415.22 of Title 10 of the NYCRR, or any other such laws or regulations are suspended or modified to the extent necessary for health care providers to perform tasks as may be necessary to respond to the COVID-19 outbreak;

- Section 405.45 of Title 10 of the NYCRR to the extent necessary to permit the Commissioner of Health to designate a health care facility as a trauma center, or extend or modify the period for which a health care facility may be designated as a trauma center, or modify the review team for assessment of trauma center;

- Sections 800.3, 800.8, 800.9, 800.10, 800.12, 800.17, 800.18, 800.23, 800.24, and 800.26 of Title 10 of the NYCRR to the extent necessary to extend all existing emergency medical services provider certifications for one year; to permit the Commissioner of Health to modify the examination or recertification requirements for emergency medical services provider certifications; to suspend or modify, at the discretion of the Commissioner of Health, any requirements for the recertification of previously certified emergency medical services providers; and, at the discretion of the Commissioner of Health, develop a process determined by the Department of Health, to permit any emergency medical services provider certified or licensed by another State to provide emergency medical services within New York state; at the discretion of the Commissioner of Health, to suspend or modify equipment or vehicle requirements in order to ensure sustainability of EMS operations;

- Paragraph (6) of subdivision (b) of part 405.4 of Title 10 of the NYCRR to the extent necessary to remove limits on working hours for physicians and postgraduate trainees;

- Subparagraph (ii) of paragraph (2) of subdivision (g) of 10 N.Y.C.R.R. section 405.4, to the extent necessary to allow graduates of foreign medical schools having at least one year of graduate medical education to provide patient care in hospitals, is modified so as to allow such graduates without licenses to provide patient care in hospitals if they have completed at least one year of graduate medical education;

- Subdivision (e) of section 405.2 of Title 10 of the NYCRR, to the extent necessary to permit general hospitals affected by the disaster emergency to maintain adequate staffing;

- Subdivision (b) of section 405.3 of Title 10 of the NYCRR, to the extent necessary to allow general hospitals to use qualified volunteers or personnel affiliated with different general hospitals, subject to the terms and conditions established by the Commissioner of Health;

- Section 3507 of the Public Health Law and Part 89 of Title 10 of the NYCRR to the extent necessary to permit radiologic technologists licensed and in current good standing in New York State but not registered in New York State to practice in New York State without civil or criminal penalty related to lack of registration;

- Sections 3502 and 3505 of the Public Health Law and Part 89 of Title 10 of the NYCRR to the extent necessary to permit radiologic technologists licensed and in current good standing in any state in the United State to practice in New York State without civil or criminal penalty related to lack of licensure;

- Sections 8502, 8504, 8504-a, 8505, and 8507 of the Education Law and Subpart 79-4 of Title 8 of the NYCRR, to the extent necessary to allow respiratory therapists licensed and in current good standing in any state in the United States to practice in New York State without civil or criminal penalty related to lack of licensure;

- Section 6502 of the Education Law and 8 NYCRR 59.8, to the extent necessary to allow physician's assistants licensed and in current good standing in New York State but not registered in New York State to practice in New York State without civil or criminal penalty related to lack of registration;

- Section 6502 of the Education Law and 8 NYCRR 59.8, to the extent necessary to allow registered professional nurses, licensed practical nurses and nurse practitioners licensed and in current good standing in New York State but not registered in New York State to practice in New York State without civil or criminal penalty related to lack of registration;

- Subdivision (2-b) of Section 4002 of the Public Health Law to the extent necessary to allow a hospice residence to designate any number of beds within such facility as dually certified inpatient beds;

- Title V of Article 5 of the Public Health Law and subparts 19 and 58 of Title 10 of the NYCRR, to the extent necessary to allow laboratories holding a Clinical Laboratory Improvement Acts (CLIA) certificate and meeting the CLIA quality standards described in 42 CFR Subparts H, J, K and M, to perform testing for the detection of SARS-CoV-2 in specimens collected from individuals suspected of suffering from a COVID-19 infection;

- Article 139 of the Education Law, Section 576-b of the Public Health Law and Section 58-1.7 of Title 10 of the NYCRR, to the extent necessary to permit registered nurses to order the collection of throat or nasopharyngeal swab specimens from individuals suspected of being infected by COVID-19, for purposes of testing; and

- Subdivision (1) of Section 6801 of the Education Law, Section 6832 of the Education Law and Section 29.7(a)(21)(ii)(b)(4) of Title 8 of the NYCRR, to the extent necessary to permit a certified or registered pharmacy technician, under the direct personal supervision of a licensed pharmacist, to assist such licensed pharmacist, as directed, in compounding, preparing, labeling, or dispensing of drugs used to fill valid prescriptions or medication orders for a home infusion provider licensed as a pharmacy in New York, compliant with the United States Pharmacopeia General Chapter 797 standards for Pharmaceutical Compounding – sterile preparations, and providing home infusion services through a home care agency licensed under Article 36 of the Public Health Law.

IN ADDITION, by virtue of the authority vested in me by Section 29-a of Article 2-B of the Executive Law to issue any directive during a disaster emergency necessary to cope with the disaster, I hereby issue the following directives for the period from the date of this Executive Order through April 22, 2020:

- Any healthcare facility is authorized to allow students, in programs to become licensed in New York State to practice a healthcare professional, to volunteer at the healthcare facility for educational credit as if the student had secured a placement under a clinical affiliation agreement. without entering into any such clinical affiliation agreement;

- The Commissioner of Health is authorized to direct, and shall so direct, all general hospitals, ambulatory surgery centers, office-based surgery practices and diagnostic and treatment centers to increase the number of beds available to patients, including by canceling all elective surgeries and procedures, as the Commissioner of Health shall define. General hospitals shall comply with such order by submitting COVID-19 Plans to the New York State Department of Health (NYSDOH), on a schedule to be determined by NYSDOH, to accomplish this purpose;

- The Commissioner of Health is authorized to suspend or revoke the operating certificate of any general hospital should they be unable to meet the requirements of the necessary capacity directives; and notwithstanding any law to the contrary the Commissioner may appoint a receiver to continue the operations on 24 hours' notice to the current operator, in order to preserve the life, health and safety of the people of the State of New York.

- No pharmacist shall dispense hydroxychloroquine or chloroquine except when written as prescribed for an FDA-approved indication; or as part of a state approved clinical trial related to COVID-19 for a patient who has tested positive for COVID-19, with such test result documented as part of the prescription. No other experimental or prophylactic use shall be permitted, and any permitted prescription is limited to one fourteen day prescription with no refills.

- Any licensed health insurance company shall deliver to the Superintendent, no later than March 24, 2020 a list of all persons who have a professional licensure or degree, whether physician's assistant, medical doctor, licensed registered nurse, licensed nurse practitioner or licensed practical nurse, and whether or not the person has a currently valid, or recently (within past five years) expired license in the state of New York. The Department of Financial Services shall poll such individuals to determine whether or not such professionals would serve in the COVID-19 response effort.

- Non-essential gatherings of individuals of any size for any reason (e.g. parties, celebrations or other social events) are canceled or postponed at this time.

GIVEN under my hand and the Privy Seal of the State in the City of Albany this twenty-third day of March in the year two thousand twenty.

BY THE GOVERNOR

Secretary to the Governor

State of New York

Executive Chamber

No. 202.32

EXECUTIVE ORDER

Continuing Temporary Suspension and Modification of Laws Relating to the Disaster Emergency

WHEREAS, on March 7, 2020, I issued Executive Order Number 202, declaring a State disaster emergency for the entire State of New York; and

WHEREAS, both travel-related cases and community contact transmission of COVID-19 have been documented in New York State and are expected to continue;

NOW, THEREFORE, I, Andrew M. Cuomo, Governor of the State of New York, by virtue of the authority vested in me by Section 29-a of Article 2-B of the Executive Law, do hereby continue the suspensions and modifications of law, and any directives, not superseded by a subsequent directive, made by Executive Order 202.23 and each successor Executive Order up to and including Executive Order 202.27, for thirty days until June 20, 2020.

IN ADDITION, I hereby temporarily suspend or modify the following for the period from the date of this Executive Order through June 20, 2020, the following:

- Subdivision (1) of section 576-b of the Public Health Law and section 58-1.7 and 58-1.8 of Title 10 of the NYCRR, to the extent necessary to, in furtherance of Executive Order 202.30 and any extensions thereof, allow clinical laboratories to accept and examine specimens for COVID-19 testing, from personnel of nursing homes and adult care facilities, as such personnel are defined in Executive Order 202.30, without a prescription or order from an authorized ordering source, and to report the results of such tests to the appropriate operators and administrators of the nursing home or adult care facility for which the person for whom the test was performed provides services; provided that, to ensure appropriate follow-up with patients who test positive for COVID-19, the facility administrator shall contact the local health department to ensure all facility personnel who test positive are provided appropriate clinical guidance as well as appropriate isolation orders; and

- Section 6530 of the Education Law, to the extent necessary to allow physicians to order COVID-19 tests, authorized by the U.S. Food and Drug Administration (FDA) for self-collection, without otherwise having an initial physician-patient relationship with the patient.

IN ADDITION, by virtue of the authority vested in me by Section 925-a of the Real Property Tax Law to extend during a State disaster emergency the period for paying property taxes without interest or penalties upon request of the chief executive officer of an affected county, city, town, village or school district, I do hereby extend by twenty-one days the period for paying, without interest or penalty, property taxes that are due in the following localities that have requested such an extension: Village of Antwerp, Jefferson County; Village of Asharoken, Suffolk County; Village of Bainbridge, Chenango County; Village of Bayville, Nassau County; Village of Bronxville, Westchester County; Village of Canastota, Madison County; Village of Cedarhurst, Nassau County; Village of Chester, Orange County; Village of Chittenango, Madison County; City of Corning, Steuben County; Village of Coxsackie, Greene County; Village of Croton-on-Hudson, Westchester County; Village of Delhi, Delaware County; Village of Deposit, Broom-Delaware County; Village of Dexter, Jefferson County; Village of Dryden, Tompkins County; Town/Village of East Rochester, Monroe County; Village of East Rockaway, Nassau County; Village of Flower Hill, Nassau County; Grand-View-on-Hudson, Rockland County; Village of Granville, Washington

County; Village of Great Neck, Nassau County; Village of Great Neck Estates, Nassau County; Village of Haverstraw, Rockland County; Village of Herkimer, Herkimer County; Village of Holland Patent, Oneida County; Village of Holley, Orleans County; Village of Huntington Bay, Suffolk County; Village of Kings Point, Nassau County; Village of Irvington, Westchester County; Village of Lynbrook, Nassau County; Village of Massapequa Park, Nassau County; Village of Massena, St. Lawrence County; Village of Menands, Albany County; Village of Mexico, Oswego County; Village of Mill Neck, Nassau County; Village of Millport, Chemung County; Village of Naples, Ontario County; Village of Nassau, Rensselaer County; Village of New Hartford, Oneida County; Village of New York Mills, Oneida County; Village of Old Westbury, Nassau County; Village of Orchard Park, Erie County; Village of Oyster Bay Cove, Nassau County; Village of Pawling, Dutchess County; Village of Poland, Herkimer County; Village of Pulaski, Oswego County; Village of Quogue, Suffolk County; Village of Roslyn, Nassau County; Village of Roslyn Harbor, Nassau County; Village of Saranac Lake, Franklin-Essex Counties; Village of Saugerties, Ulster County; Village of Scottsville, Monroe County; Village of Sea Cliff, Nassau County; Village of Sidney, Delaware County; Village of Spencerport, Monroe County; Village of Sodus, Wayne County; Village of South Glens Falls, Saratoga County; Village of Trumansburg, Tompkins County; Village of Tuckahoe, Westchester County; Village of Upper Nyack, Rockland County; Village of Warwick, Orange County; Village of Wesley Hills, Rockland County; Village of West Haverstraw, Rockland County; Village of Westbury, Nassau County; Village of Whitehall, Washington County; Village of Whitesboro, Oneida County; Village of Williston Park, Nassau County; Village of Valley Stream, Nassau County; Village of Floral Park, Nassau County; Village of Schoharie, Schoharie County; and the County of Suffolk..

IN ADDITION, by virtue of the authority vested in me by Section 925-a of the Real Property Tax Law, I do hereby retroactively extend by twenty-one days the period for paying without interest or penalty the property taxes that were due by April 1, 2020, in the Village of Head of the Harbor, Suffolk County, and the Village of Russell Gardens, Nassau County.

IN ADDITION, by virtue of the authority vested in me by Section 29-a of Article 2-B of the Executive Law to issue any directive during a disaster emergency necessary to cope with the disaster, I do hereby issue the following directives for the period from the date of this Executive Order through June 20, 2020:

- Any licensee or franchisee of a racetrack in the State is hereby permitted to operate such racetrack as of June 1, 2020, provided such racetrack does not permit any visitor or fan into the facility, and allows on site only essential personnel; and provided further that such licensee or franchisee of a racetrack, and all essential personnel adhere to any directive or guidance issued by the Department of Health and/or by the Gaming Commission.

- Executive Order 202.10 (as later extended by Executive Order 202.18 and Executive Order 202.29) which prohibited all non-essential gatherings of any size for any reason, is hereby modified to permit a gathering of ten or fewer individuals for any religious service or ceremony, or for the purposes of any Memorial Day service or commemoration, provided that social distancing protocols and cleaning and disinfection protocols required by the Department of Health are adhered to, and provided further, that any drive-in or remote religious service may continue in excess of the ten person limit so long as there is no in-person contact between participants. Vehicle caravans are permitted.

- The authority of the Commissioner of Taxation and Finance to abate late filing and payment penalties pursuant to section 1145 of the Tax Law is hereby expanded to authorize abatement of interest and penalties for a period of up to 100 days for taxpayers who were required to file returns and remit sales and use taxes by March 20, 2020, for the sales tax quarterly period that ended February 29, 2020.

IN ADDITION, by virtue of the authority vested in me by Section 29-a of Article 2-B of the Executive Law, I hereby suspend or modify the following provisions included in Executive Order 202.22, for the period from the date of this Executive Order through June 20, 2020, unless an earlier date is specified below:

- Article 5 of the Real Property Tax Law, and analogous provisions of any other general or special laws that require a tentative assessment roll to be filed on or before June 1, 2020, to allow the tentative and final assessment rolls to be filed, at local option, up to 30 days later than otherwise allowable, to allow an assessing unit to set a date for hearing assessment complaints that is at least 21 days after the filing of the tentative roll, to allow notice of the filing of the tentative roll to be published solely online so long as the date for hearing complaints is prominently displayed, to suspend in-person inspection of the tentative roll, and to allow local Boards of Assessment Review to hear complaints remotely by conference call or similar service, provided that complainants can present their complaints through such service and the public has the ability to view or listen to such proceeding;

- Section 1212 of the Real Property Tax Law, to the extent necessary to allow the commissioner of taxation and finance to certify final state equalization rate, class ratios, and class equalization rates, if required, no later than ten days prior to the last date set by law for levy of taxes of any municipal corporation to which such equalization rate, class ratios, and class equalization rates are applicable;

- Section 1512(1) of the Real Property Tax Law and Sections 283.291 and 283.221 of the Laws of Westchester County, are suspended to allow the County Executive to negotiate with any town supervisor or mayor of any city, to accept a lesser percentage of taxes, special ad valorem levies or special assessments which are otherwise due on May 25, provided that in no event shall any town or city be required to pay more than sixty percent. The County Executive is empowered to determine whether or not penalties for late payment or interest are able to be waived dependent on whether or not such town or city applies the County Executive's criteria for determining hardship due to COVID-19;

- Section 283.221 of the Laws of Westchester County is further suspended to the extent necessary to require the supervisor of a town, to waive payment of penalties for late payment of county and county district taxes under section 283.221 up to July 15, 2020, and waive payment of penalties for late payment of town and town district taxes and assessments in the same manner, provided such town applies the County Executive's criteria for the determination of hardship due to COVID-19;

- Section 1512(1) of the Real Property Tax Law and any penalty provision of the tax code of a city within Westchester County is further suspended to the extent necessary to allow the mayor of that City to waive the payment of penalties for late payment of county and county district taxes and to further waive payment of penalties for late payment of city and city district taxes and assessments in the same manner, provided such city applies the County Executive's criteria for the determination of hardship due to COVID-19;

- Section 5-18.0(2) of the Nassau County Administrative Code, to the extent necessary to allow the Nassau County Executive to extend until June 1, 2020, the deadline to pay without interest or penalty the final one-half of school taxes upon real estate in such county.

GIVEN under my hand and the Privy Seal of the State in the City of Albany this twenty-first day of May in the year two thousand twenty.

BY THE GOVERNOR

Secretary to the Governor

State of New York
Executive Chamber

No. 202.33

EXECUTIVE ORDER

Continuing Temporary Suspension and Modification of Laws Relating to the Disaster Emergency

WHEREAS, on March 7, 2020, I issued Executive Order Number 202, declaring a State disaster emergency for the entire State of New York; and

WHEREAS, both travel-related cases and community contact transmission of COVID-19 have been documented in New York State and are expected to continue;

NOW, THEREFORE, I, Andrew M. Cuomo, Governor of the State of New York, by virtue of the authority vested in me by Section 29-a of Article 2-B of the Executive Law to issue any directive during a disaster emergency necessary to cope with the disaster, I do hereby issue the following directives for the period from the date of this Executive Order through June 21, 2020:

- Executive Order 202.10, as later extended by Executive Order 202.18, Executive Order 202.29 and as extended and amended by Executive Order 202.32, which prohibited all non-essential gatherings of any size for any reason, except for any religious service or ceremony, or for the purposes of any Memorial Day service or commemoration, which allowed ten or fewer individuals to gather, provided that social distancing protocols and cleaning and disinfection protocols required by the Department of Health are adhered to is hereby modified to permit any non-essential gathering of ten or fewer individuals, for any lawful purpose or reason, provided that social distancing protocols and cleaning and disinfection protocols required by the Department of Health are adhered to.

GIVEN under my hand and the Privy Seal of the State in the City of Albany this twenty-second day of May in the year two thousand twenty.

BY THE GOVERNOR

Secretary to the Governor

State of New York
Executive Chamber

No. 202.42

EXECUTIVE ORDER

Continuing Temporary Suspension and Modification of Laws Relating to the Disaster Emergency

WHEREAS, on March 7, 2020, I issued Executive Order Number 202, declaring a State disaster emergency for the entire State of New York; and

WHEREAS, both travel-related cases and community contact transmission of COVID-19 have been documented in New York State and are expected to continue;

NOW, THEREFORE, I, Andrew M. Cuomo, Governor of the State of New York, by virtue of the authority vested in me by Section 29-a of Article 2-B of the Executive Law to issue any directive during a disaster emergency necessary to cope with the disaster, I hereby issue the following directives for the period from the date of this Executive Order through July 15, 2020:

- The directive contained in Executive Order 202.35, as extended and as amended by Executive Order 202.38, which amended the directive in Executive Order 202.10 that limited all non-essential gatherings to ten or fewer individuals, is hereby further modified to allow twenty-five (25) or fewer individuals, for any lawful purpose or reason, provided that the location of the gathering is in a region that has reached Phase 3 of the State's reopening, and social distancing protocols and cleaning and disinfection protocols required by the Department of Health are adhered to.

GIVEN under my hand and the Privy Seal of the State in the City of Albany this fifteenth day of June in the year two thousand twenty.

BY THE GOVERNOR

Secretary to the Governor

State of New York

Executive Chamber

No. 202.45

EXECUTIVE ORDER

Continuing Temporary Suspension and Modification of Laws Relating to the Disaster Emergency

WHEREAS, on March 7, 2020, I issued Executive Order Number 202, declaring a State disaster emergency for the entire State of New York; and

WHEREAS, both travel-related cases and community contact transmission of COVID-19 have been documented in New York State and are expected to continue;

NOW, THEREFORE, I, Andrew M. Cuomo, Governor of the State of New York, by virtue of the authority vested in me by Section 29-a of Article 2-B of the Executive Law to temporarily suspend or modify any statute, local law, ordinance, order, rule, or regulation, or parts thereof, of any agency during a State disaster emergency, if compliance with such statute, local law, ordinance, order, rule, or regulation would prevent, hinder, or delay action necessary to cope with the disaster emergency or if necessary to assist or aid in coping with such disaster, I hereby extend any directive contained in Executive Order 202.34 and 202.35, provided such directive has not been superseded by a subsequent directive, and further, I hereby temporarily suspend or modify, for the period from the date of this Executive Order through July 26, 2020 the following:

- Paragraph (e) of subdivision 1 of Section 581 of the Labor Law, to the extent necessary to authorize the Commissioner of Labor to issue a finding related to experience rating charges as permitted by the Families First Coronavirus Response Act and incurred beginning with the benefit week starting March 9, 2020;

- Subdivision 4 of section 1 of chapter 25 of the laws of 2020 is modified to the extent necessary to provide that in addition to any travel to a country for which the Centers for Disease Control and Prevention has a level two or three travel health notice, an employee shall not be eligible for paid sick leave benefits or any other paid benefits pursuant to this chapter if such employee voluntarily travels which commences after June 25, 2020 to a state with a positive test rate higher than 10 per 100,000 residents, or higher than a 10% test positivity rate, over a seven day rolling average, and which the commissioner of the department of health has designated as meeting these conditions as outlined in the advisory issued pursuant to Executive Order 205, and the travel was not taken as part of the employee's employment or at the direction of the employee's employer;

- Section 28-66 of the Charter of the City of Buffalo, to the extent necessary to allow the Mayor to waive the additions prescribed therein on unpaid 2019-2020 city taxes for the months of April, May and June of 2020, and to require payments of 2019-2020 city taxes that are made after June 30, 2020 to be made without additions for the months of April, May and June of 2020;

IN ADDITION, by virtue of the authority vested in me by Section 925-a of the Real Property Tax Law to extend during a State disaster emergency the period for paying property taxes without interest or penalties upon request of the chief executive officer of an affected county, city, town, village or school district, I do hereby extend by twenty-one days the period for paying, without interest or penalty, property taxes that are due in the following localities that have requested such an extension: Village of Ossining, Westchester County; Village of Pomona, Rockland County;

IN ADDITION, by virtue of the authority vested in me by Section 29-a of Article 2-B of the Executive Law to issue any directive during a disaster emergency necessary to cope with the disaster, I hereby issue the following directives for the period from the date of this Executive Order through July 26, 2020:

- The directive contained in Executive Order 202.35, as extended and as amended by Executive Order 202.38 and Executive Order 202.42, which amended the directive in Executive Order 202.10 that limited all non-essential gatherings, is hereby further modified to allow gatherings of fifty (50) or fewer individuals for any lawful purpose or reason, so long as any such gatherings occurring indoors do not exceed 50% of the maximum occupancy for a particular indoor area, and provided that the location of the gathering is in a region that has reached Phase 4 of the State's reopening, and provided further that social distancing, face covering, and cleaning and disinfection protocols required by the Department of Health are adhered to.

- Executive Order 202.41, which extended the provisions of Executive Orders 202.3, 202.4, 202.5, 202.6, 202.7, 202.8, 202.10, 202.11, 202.13, 202.14, 202.28, 202.31, 202.34, and 202.35 which each closed or otherwise restricted public or private businesses or places of public accommodation, is hereby continued until and unless later amended or extended by a future Executive Order, provided, however:
    - That effective on June 26, 2020, the reductions and restrictions on the in-person workforce at non-essential businesses or other entities shall no longer apply to Phase Four industries, as determined by the Department of Health, in eligible regions, including:
        - Higher Education;
        - Film and Music Production;
        - Low-risk indoor arts and entertainment;
        - Low-risk outdoor arts and entertainment; and
        - Professional Sports without fans.
    - Businesses or entities in industries open in Phase Four must be operated in compliance with the guidance promulgated by the Department of Health.
    - As of June 26, 2020 the regions meeting the prescribed public health and safety metrics required for Phase Four reopening are: Finger Lakes, Central New York, Mohawk Valley, Southern Tier, and the North Country. Any additional regions which meet the criteria after such date will be deemed to be incorporated into this Executive Order without further revision and will be permitted to re-open Phase Four industries, subject to the same terms and conditions.
    - Any previous directive that restricted operation of any industry, business, or facility that is permitted to open in Phase One, Phase Two, Phase Three, or Phase Four is hereby superseded, only insofar as it is inconsistent with any Executive Order allowing businesses, industries, and facilities to reopen.

- The directive contained in Executive Order 202.44 regarding elective surgeries is hereby amended to provide that the directive contained in Executive Order 202.10 authorizing the Commissioner of Health to direct all general hospitals, ambulatory surgery centers, office-based surgery practices and diagnostic and treatment centers to increase the number of beds available to patients, including by canceling all elective surgeries and procedures, is hereby modified to authorize general hospitals to perform elective surgeries and procedures so long as the established criteria are met currently, whether or not such criteria were met on the dates set forth in such directive, and as modified by the June 14th Department of Health guidance.

- Executive Order 202.34, which extended the directive contained in Executive Orders 202.28, 202.18, 202.14 and 202.4 as amended by Executive Order 202.11 related to the closure of schools statewide, is hereby continued to provide that all schools shall remain closed to in-person instruction except for the purpose of provision of special education services. School districts must ensure the availability of meals, and child care, with an emphasis on serving children of essential workers. Meals may be provided by an alternative entity, provided that the school district shall be responsible for ensuring that all children have access to free meals. Should the students not have access through an alternative entity, the school district must provide the meals.

GIVEN under my hand and the Privy Seal of the State in the City of Albany this twenty-sixth day of June in the year two thousand twenty.

BY THE GOVERNOR

Secretary to the Governor

State of New York

Executive Chamber

No. 205

EXECUTIVE ORDER

QUARANTINE RESTRICTIONS ON TRAVELERS ARRIVING IN NEW YORK

WHEREAS, the State of New York has successfully slowed the transmission of COVID-19;

WHEREAS, the State of New York has gone from having the highest infection rate to one of the lowest in the country and is one of only a few states reported to be on track to contain COVID-19;

WHEREAS, the Governor has undertaken a cautious, incremental and evidence-based approach to reopening the State of New York;

WHEREAS, other states that may have taken a less cautious approach are experiencing an increased prevalence of COVID-19;

WHEREAS, New York must work in conjunction with its neighboring states of New Jersey and Connecticut, in light of the significant risk posed to the health and welfare of all residents by the further spread of COVID-19 to the tristate area, to protect the progress made;

NOW, THEREFORE, I, Andrew M. Cuomo, Governor of the State of New York, by virtue of the authority vested in me by the Constitution and the Laws of the State of New York, in particular Article IV, section one, I do hereby order and direct as follows:

The commissioner of the Department of Health to issue a travel advisory to be communicated widely at all major points of entry into New York, including on highway message boards and in all New York airports, that:

All travelers entering New York from a state with a positive test rate higher than 10 per 100,000 residents, or higher than a 10% test positivity rate, over a seven day rolling average, will be required to quarantine for a period of 14 days consistent with Department of Health regulations for quarantine.

The Commissioner may issue additional protocols for essential workers, or for other extraordinary circumstances, when a quarantine is not possible, provided such measures continue to safeguard the public health.

The criteria and the protocols will be coordinated with New Jersey and Connecticut Commissioners of Health, in order to ensure that the tristate area is protected from community transmission of COVID-19, while permitting free travel between and among the states.

The Commissioner of Health in New York shall make public the impacted jurisdictions on its website and such travel advisory will be effective at 12:01 a.m. on June 25, 2020, until rescinded by the Commissioner.

Any violation of a quarantine or isolation order issued to an individual pursuant to the Commissioner of the Department of Health's travel advisory by a local department of health or state

department of health may be enforced pursuant to article 21 of the public health law, and non-compliance may additionally be deemed a violation pursuant to section 12 of the public health law subject to a civil penalty of up to $10,000.

GIVEN under my hand and the Privy Seal of the State in the City of Albany this twenty-fourth day of June in the year two thousand twenty.

BY THE GOVERNOR

Secretary to the Governor

State of New York

Executive Chamber

No. 202.61

EXECUTIVE ORDER

Continuing Temporary Suspension and Modification of Laws Relating to the Disaster Emergency

WHEREAS, on March 7, 2020, I issued Executive Order Number 202, declaring a State disaster emergency for the entire State of New York; and

WHEREAS, both travel-related cases and community contact transmission of COVID-19 have been documented in New York State and are expected to continue;

NOW, THEREFORE, I, Andrew M. Cuomo, Governor of the State of New York, by virtue of the authority vested in me by Section 29-a of Article 2-B of the Executive Law to temporarily suspend or modify any statute, local law, ordinance, order, rule, or regulation, or parts thereof, of any agency during a State disaster emergency, if compliance with such statute, local law, ordinance, order, rule, or regulation would prevent, hinder, or delay action necessary to cope with the disaster emergency or if necessary to assist or aid in coping with such disaster, I hereby temporarily suspend or modify, for the period from the date of this Executive Order through October 9, 2020 the following:

- Subdivision 1 of section 579 of the Public Health Law is modified to the extent necessary to require immediate reporting (not more than 3 hours) of results of COVID-19 and influenza testing by additional clinical laboratories, including those operated by a licensed physician, osteopath, dentist, midwife, nurse practitioner or optometrist who is authorized by the Food and Drug Administration (FDA) or Department of Health to administer a point of care COVID-19 test and registered with the Department of Health as a physician office laboratory, in accordance with section 576-c of the Public Health Law and Section 58-1.14 of Title 10 of the NYCRR; provided further as it relates to COVID-19 testing, containing information pertaining to attendance and employment in school as required by the below directives.

IN ADDITION, by virtue of the authority vested in me by Section 29-a of Article 2-B of the Executive Law to issue any directive during a disaster emergency necessary to cope with the disaster, I do hereby issue the following directives through October 9, 2020:

- Every licensed professional authorized by the Department of Health Physician Office Laboratory Evaluation Program to administer a test for COVID-19 or influenza, whether alone or in conjunction with any other test, shall report such results immediately (not more than 3 hours) to the Department of Health through the Electronic Clinical Laboratory Reporting System (ECLRS) when a result is received.
    - Provided further that every professional authorized to administer a test for COVID-19 shall not take such sample or administer such test without inquiring, if such individual attends school, and if so, as to where such individual attends school and to report such data to ECLRS; and as to place of employment, and whether the individual works or volunteers in an elementary, secondary school, or post-secondary school, and if so, to report such data to ECLRS.
    - Additionally, every professional authorized to administer a test for COVID-19 shall not take such sample or administer such test without inquiring as to the individual's local address, if such address differs from the individual's permanent address, and such local address must be reported to ECLRS.

- Every licensed laboratory in the state of New York shall require that, prior to processing any specimen for a COVID-19 test, alone or in conjunction with a test for any other communicable disease, information related to school of attendance, or place of employment or volunteer work for any adult, be transmitted to such laboratory along with such sample. Such information must be reported to the State Department of Health via ECLRS.

- Every local health department in the state of New York shall report to the Department of Health, on a daily basis, in a form and manner to be determined by the Department, all COVID-19 testing and diagnoses for any individual who is a student, teacher, and any other individual who is a school employee or volunteer, for both higher and lower education institutions and districts. Such daily report shall include any other data elements as the Commissioner of Health determines to be appropriate to track outbreaks of COVID-19 within higher and lower education institutions, schools and school districts.

- Every school and school district shall report to the Department of Health, on a daily basis, in a form and manner to be determined by the Department, all COVID-19 testing and diagnoses among students, teaching staff, and any other employees or volunteers. Such daily report shall include any other data elements as the Commissioner of Health determines to be appropriate to track outbreaks of COVID-19 within such schools and school districts.

- Every higher education institution, including but not limited to community and junior colleges, universities, graduate and professional schools, medical schools, and technical schools, shall report to the Department of Health, on a daily basis, in a form and manner to be determined by the Department, all COVID-19 testing and diagnoses among any on-campus students, teaching staff, and any other employees or volunteers. Such daily report shall include any other data elements as the Commissioner of Health determines to be appropriate to track outbreaks of COVID-19 within such higher education institutions, and provided further, that additional notification to the Department of Health is required once an institution reaches 100 positive cases.

- Any directive, modification or suspension heretofore issued to authorize individuals to administer or process any COVID-19 test shall apply to any FDA approved method to test for COVID-19 in conjunction with any other communicable disease.

- All boards of elections shall develop a plan to allow a registered voter to drop off a completed absentee ballot at a board of election, early voting location, or election day voting location, without requiring they wait in line with in-person voters, to help minimize delays during in-person voting and promote contactless voting. Plans must be submitted to the State Board of Elections by September 21, 2020, and made publicly available in the county board of elections office and on their website when submitted.

- For any absentee ballot issued pursuant to Chapter 91 and Chapter 138 of the Laws of 2020 and/or the provisions of Executive Order 202.58 for which a paper application need not be returned by the voter because the voter applied for an absentee ballot by letter, email, facsimile, phone, internet or electronically, the board of elections shall not send such voter a paper absentee ballot application with their ballot, and such voter shall not be required to complete a paper application either prior to or simultaneously to receiving the ballot.

- The directive in Executive Order 202.48, which modified the directive contained in Executive Order 202.41, that prohibited indoor food services and dining as part of Phase Three in New York City, is hereby modified to allow indoor food services and dining in New York City beginning September 30, 2020, so long as Department of Health and any other applicable State-issued guidance is strictly adhered to.

GIVEN under my hand and the Privy Seal of the State in the City of Albany this ninth day of September in the year two thousand twenty.

BY THE GOVERNOR

Secretary to the Governor

PUBLIC HEALTH

How ‘Superspreading’ Events Drive Most COVID-19 Spread

As few as 10 percent of infected people may drive a whopping 80 percent of cases in specific types of situations

By Christie Aschwanden on June 23, 2020

Credit: Getty Images

In late February about 175 executives from around the world came to the biotechnology company Biogen’s leadership conference in Boston. Over two days, attendees shook hands, talked among themselves and shared meals. Also in attendance: the new coronavirus. Several people at the event were unknowingly infected with the microbe that causes COVID-19, and it quickly spread among others there, who then brought it home. At least 99 people ended up sick in Massachusetts alone.

Around the same time, the coronavirus was spreading among more than 100 people who went to a funeral in Albany, Ga. sparking an outbreak that soon led to the surrounding rural county posting one of the nation's highest cumulative incidences of COVID-19. The next month a single individual with the disease infected 52 people during a two-and-a-half-hour choir practice in Washington State. Two people died. In Arkansas, an infected pastor and his wife passed the virus on to more than 30 attendees at church events over the course of a few days, leading to at least three deaths. And these new cases spread to 26 more people, at least one of whom died.

As scientists have learned more about COVID-19, it has become clear that so-called superspreader incidents—in which one person infects a disproportionate number of other individuals—have played an oversized role in the transmission of the virus that causes the disease. The Boston conference and the funeral in Georgia were among several superspreader events that played "a notable role in the early U.S. spread of COVID-19," according to a report by Anne Schuchat, principal deputy director of the Centers for Disease Control and Prevention. In fact, research on actual cases, as well as models of the pandemic, indicate that between 10 and 20 percent of infected people are responsible for 80 percent of the coronavirus's spread.

These numbers mean that preventing superspreader events could go a long way toward stopping COVID-19, says Samuel Scarpino, a network scientist who studies infectious disease at Northeastern University. Scientists have identified factors that catalyze such events, including large crowd sizes, close contact between people and confined spaces with poor ventilation. Current evidence suggests that it is mostly circumstances such as these, rather than the biology of specific individuals, that sets the stage for extreme spreading of the novel coronavirus.

When describing how the SARS-CoV-2 virus spreads, epidemiologists not only use the average number of other people that one individual infects but also employ another key value called the

dispersion factor, or "k." This number describes how much a disease clusters. A small k generally means that a relatively small number of cases are responsible for transmissions, while a larger k indicates that transmissions are more evenly spread. In Hong Kong, researchers calculated that in more than 1,000 COVID-19 cases they examined, the value for k was 0.45. That value was higher than that of SARS or MERS—two previous viral outbreaks that featured superspreading—but much lower than that of the 1918 flu pandemic. In other words, SARS-CoV-2's transmission is not as reliant on superspreading as SARS and MERS were but is far more dependent on it than influenza, Scarpino says.

The novel coronavirus seems to primarily spread via respiratory droplets produced by an infected individual during coughing, sneezing, talking or breathing. The next person becomes infected by inhaling these droplets into his or her lungs or by getting them in the nose or mouth. If people got sick right away after they were infected, they might stay at home in bed, giving them few opportunities to transmit the virus. Instead individuals with COVID-19 are contagious before they have symptoms, says Lauren Ancel Meyers, executive director of the University of Texas at Austin COVID-19 Modeling Consortium. The CDC estimates that about 40 percent of transmissions occur before the infected person has any symptoms and that symptoms take an average of six days to begin. That time gives an infected individual a long window to come into contact with other people—and to perhaps get into a situation ripe for superspreading.

Researchers have identified several factors that make it easier for superspreading to happen. Some of them are environmental. For instance, poorly ventilated indoor areas seem especially conducive to the virus's spread. A preliminary analysis of 110 COVID-19 cases in Japan found that the odds of transmitting the pathogen in a closed environment was more than 18 times greater than in an open-air space. And the authors concluded that confined spaces could promote superspreader events. (The study has not yet been peer-reviewed.) Another preliminary preprint study, by researchers in London, examined clusters of COVID-19 cases and found that nearly all of them were indoor or indoor-outdoor settings. The largest clusters were found in indoor spaces such as nursing homes, churches, food-processing plants, schools, shopping areas, worker dormitories, prisons and ships.

Unsurprisingly, another thing these superspreader venues have in common is that they are places

where large numbers of people congregate. The more individuals you pile into one place, the greater the opportunity for the coronavirus to infect many people at once, Meyers says. “If you max out at five people, it will be very hard to have a superspreading event,” she adds. But as a group’s size increases, so does the risk of transmitting the virus to a wider cluster. A large group size also increases the chance that someone present will be infectious.

Time matters too. The longer a group stays in contact, the greater the likelihood that the virus will spread among them. Exactly how much time someone needs to pick it up remains an unanswered question, says Syra Madad, a special pathogens expert at NYC Health + Hospitals. She adds that the benchmark used for risk assessment in her contact-tracing work is 10 minutes of contact with an infectious person, though the CDC uses 15 minutes as a guideline. Essential workers such as grocery store checkers and nursing home employees interact with large groups by necessity and work in situations primed for superpreading. Meyers says that if we want to contain COVID-19, we will have to find ways to protect them and make their workplaces less favorable to such events.

What people are doing matters, too, because some activities seem to make it easier to spread respiratory gunk. We have all seen droplets go flying when someone coughs or sneezes. But even when you talk, you emit a “tremendous amount” of particles, says University of California, Davis, chemical engineer William Ristenpart. “Nobody thinks about them, but they’re there,” he says. Ristenpart’s team has found that speech emits more particles than normal breathing. And emissions also increase as people speak louder. Singing emits even more particles, which may partially explain the superspreader event at the Washington State choir practice. Breathing hard during exercise might also help the spread of COVID-19. Fitness dance classes held in small rooms with up to 22 students at a time were linked to 65 cases of the disease in South Korea. But yoga classes at one of the same facilities were not linked to any clusters. A study of COVID-19 clusters in Japan found cases connected to exercising in gyms, karaoke parties, cheering at clubs and holding conversations in bars, providing further evidence that these activities may aid

transmission.

Ristenpart and his colleagues have not yet confirmed that the particle-emission changes they saw affect transmission of the novel coronavirus. Their study did not measure SARS-CoV-2 itself. But the airborne particles are presumably important carriers of viral particles. The scientists also have found intriguing evidence that a small subset of people may behave as "speech superemitters"—individuals who consistently broadcast an order of magnitude more respiratory particles than their peers. "It is very difficult to identify who is going to be a superemitter ahead of time," he says. "One of the superemitters was a very petite young woman. And I was a bigger, bulkier guy and was not a superemitter."

The evidence about superspreading activities has led researchers to believe they are responsible for much of the new coronavirus's transmission. "All of the data I'm seeing so far suggest that if you tamp down the superspreader events, the growth rate of the infections stops very, very quickly," Scarpino says. "We saw in Seattle that there were at least a couple of introductions that did not lead to new cases"—implying that the virus can fade out if it is denied circumstances for spreading.

But in the U.S.—where there have been nearly 2.16 million cases and more than 117,000 deaths—those situations may be on the rise. States are reopening businesses and activities, which means more people are coming in contact with one another in larger groups. So minimizing conditions that allow superspreading events to happen will be crucial for keeping COVID-19 in check. In Japan, health officials have advised people to avoid situations with the three C's: closed spaces with poor ventilation, crowded spaces and close-contact settings. A virus's ability to infect is not entirely a property of that pathogen, says Cristopher Moore, a computer scientist at the Santa Fe Institute who models virus-spreading events. "It's a property of how the virus and human society

interact," he notes, and that's something we have the power to change.

Read more about the coronavirus outbreak from Scientific American *here. And read coverage from our international network of magazines here.*

ABOUT THE AUTHOR(S)

Christie Aschwanden

Centers for Disease Control and Prevention

Morbidity and Mortality Weekly Report (*MMWR*)

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View suggested citation

Summary

What is already known about this topic?

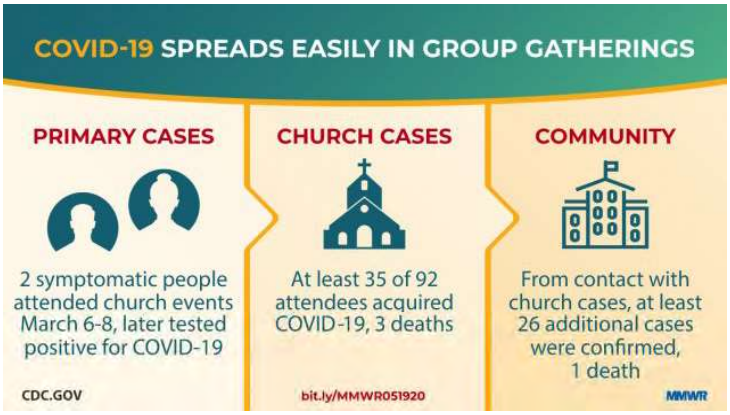
Large gatherings pose a risk for SARS-CoV-2 transmission.

What is added by this report?

Among 92 attendees at a rural Arkansas church during March 6–11, 35 (38%) developed laboratory-confirmed COVID-19, and three persons died. Highest attack rates were in persons aged 19–64 years (59%) and ≥65 years (50%). An additional 26 cases linked to the church occurred in the community, including one death.

What are the implications for public health practice?

Faith-based organizations should work with local health officials to determine how to implement the U.S. Government guidelines for modifying activities during the COVID-19 pandemic to prevent transmission of the virus to their members and their communities.



On March 16, 2020, the day that national social distancing guidelines were released (*1*), the Arkansas Department of Health (ADH) was notified of two cases of coronavirus disease 2019 (COVID-19) from a rural county of approximately 25,000 persons; these cases were the first identified in this county. The two cases occurred in a husband and wife; the husband is the pastor at a local church (church A). The couple (the index cases) attended church-related events during March 6–8, and developed nonspecific respiratory symptoms and fever on March 10 (wife) and 11 (husband). Before his symptoms had developed, the husband attended a Bible study group on March 11. Including the index cases, 35 confirmed COVID-19 cases occurred among 92 (38%) persons who attended events held at church A during March 6–11; three patients died. The age-specific attack rates among persons aged ≤18 years, 19–64 years, and ≥65 years were 6.3%, 59.4%, and 50.0%, respectively. During contact tracing, at least 26 additional persons with confirmed COVID-19 cases were identified among community

members who reported contact with church A attendees and likely were infected by them; one of the additional persons was hospitalized and subsequently died. This outbreak highlights the potential for widespread transmission of SARS-CoV-2, the virus that causes COVID-19, both at group gatherings during church events and within the broader community. These findings underscore the opportunity for faith-based organizations to prevent COVID-19 by following local authorities' guidance and the U.S. Government's Guidelines: Opening Up America Again (*2*) regarding modification of activities to prevent virus transmission during the COVID-19 pandemic.

On March 10 and 11, the wife of the church pastor, aged 56 years, and the pastor, aged 57 years, developed fever and cough. On March 12, the pastor, after becoming aware of similar nonspecific respiratory symptoms among members of their congregation, closed church A indefinitely. Because of fever, cough, and increasing shortness of breath, the couple sought testing for SARS-CoV-2 on March 13; both were notified of positive results by reverse transcription–polymerase chain reaction testing on March 16. The same day, ADH staff members began an investigation to identify how the couple had been exposed and to trace persons with whom they had been in contact. Based on their activities and onset dates, they likely were infected at church A events during March 6–8 and the husband might have then exposed others while presymptomatic during a Bible study event held on March 11.

During March and April 2020, all persons in Arkansas who received testing for SARS-CoV-2 at any laboratory were entered into a database (Research Electronic Data Capture [REDCap]; version 8.8.0; Vanderbilt University) managed by ADH. Using a standardized questionnaire, ADH staff members interviewed persons who had positive test results to ascertain symptoms, onset date, and potential exposure information, including epidemiologic linkages to other COVID-19 patients; this information was stored in the database. Close contacts of patients with laboratory-confirmed cases of COVID-19 were interviewed and enrolled in active symptom monitoring; those who developed symptoms were tested and their information was also entered into the database. Church A–associated cases were defined as those in 1) persons who had laboratory results positive for SARS-CoV-2 who identified contact with church A attendees as a source of exposure and 2) actively monitored contacts of church attendees who had a test result positive for SARS-CoV-2 after becoming symptomatic.

The public health investigation focused on the transmission of SARS-CoV-2 among persons who attended church A events during March 6–11. To facilitate the investigation, the pastor and his wife generated a list of 94 church members and guests who had registered for, or who, based on the couple's recollection, might have attended these events.

During March 6–8, church A hosted a 3-day children's event which consisted of two separate 1.5-hour indoor sessions (one on March 6 and one on March 7) and two, 1-hour indoor sessions during normal church services on March 8. This event was led by two guests from another state. During each session, children participated in competitions to collect offerings by hand from adults, resulting in brief close contact among nearly all children and attending adults. On March 7, food prepared by church members was served buffet-style. A separate Bible study event was held March 11; the pastor reported most attendees sat apart from one another in a large room at this event. Most children and some adults participated in singing during the children's event; no singing occurred during the March 11 Bible study. Among all 94 persons who might have attended any of the events, 19 (20%) attended both the children's event and Bible study.

The husband and wife were the first to be recognized by ADH among the 35 patients with laboratory-confirmed COVID-19 associated with church A attendance identified through April 22; their illnesses represent the index cases. During the investigation, two persons who were symptomatic (not the husband and wife) during March 6–8 were identified; these are considered the primary cases because they likely initiated the chain of transmission among church attendees. Additional cases included those in persons who attended any church A events during March 6–11, but whose symptom onset occurred on or after March 8, which was 2 days after the earliest possible church A exposure. One asymptomatic attendee who sought testing after household members became ill was included among these additional cases.

Consistent with CDC recommendations for laboratory testing at that time (*3*), clinical criteria for testing included cough, fever, or shortness of breath; asymptomatic persons were not routinely tested. To account for this limitation when calculating attack rates, upper and lower boundaries for the attack rates were estimated by dividing the total number of persons with laboratory-confirmed COVID-19 by the number of persons tested for SARS-CoV-2 and by the number of persons who attended church A during March 6–11, respectively. All analyses were performed using R statistical software (version 4.0.0; The R Foundation). Risk ratios were calculated to compare attack rates by age, sex, and attendance dates. Fisher's exact test was used to calculate two-sided p-values; p-values <0.05 were considered statistically significant.

Overall, 94 persons attended church A events during March 6–11 and might have been exposed to the index patients or to another infectious patient at the same event; among these persons, 92 were successfully contacted and are included in the analysis. Similar proportions of church A attendees were aged ≤18 years (35%), 19–64 years (35%), and ≥65 years (30%) (Table

1). However, a higher proportion of adults aged 19–64 years and ≥65 years were tested (72% and 50%, respectively), and received positive test results (59% and 50%), than did younger persons. Forty-five persons were tested for SARS-CoV-2, among whom 35 (77.8%) received positive test results (Table 2).

During the investigation, two church A participants who attended the March 6–8 children's event were found to have had onset of symptoms on March 6 and 7; these represent the primary cases and likely were the source of infection of other church A attendees (Figure). The two out-of-state guests developed respiratory symptoms during March 9–10 and later received diagnoses of laboratory-confirmed COVID-19, suggesting that exposure to the primary cases resulted in their infections. The two primary cases were not linked except through the church; the persons lived locally and reported no travel and had no known contact with a traveler or anyone with confirmed COVID-19. Patient interviews revealed no additional common exposures among church attendees.

The estimated attack rate ranged from 38% (35 cases among all 92 church A event attendees) to 78% (35 cases among 45 church A event attendees who were tested for SARS-CoV-2). When stratified by age, attack rates were significantly lower among persons aged ≤18 years (6.3%–25.0%) than among adults aged 19–64 years (59.4%–82.6%) ($p<0.01$). The risk ratios for persons aged ≤18 years compared with those for persons aged 19–64 years were 0.1–0.3. No severe illnesses occurred in children. Among the 35 persons with laboratory-confirmed COVID-19, seven (20%) were hospitalized; three (9%) patients died.

At least 26 additional confirmed COVID-19 cases were identified among community members who, during contact tracing, reported contact with one or more of the 35 church A members with COVID-19 as an exposure. These persons likely were infected by church A attendees. Among these 26 persons, one was hospitalized and subsequently died. Thus, as of April 22, 61 confirmed cases (including eight [13%] hospitalizations and four [7%] deaths) had been identified in persons directly and indirectly associated with church A events.

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Discussion

This investigation identified 35 confirmed COVID-19 cases among 92 attendees at church A events during March 6–11; estimated attack rates ranged from 38% to 78%. Despite canceling in-person church activities and closing the church as soon as it was recognized that several members of the congregation had become ill, widespread transmission within church A and within the surrounding community occurred. The primary patients had no known COVID-19 exposures in the 14 days preceding their symptom onset dates, suggesting that local transmission was occurring before case detection.

Children represented 35% of all church A attendees but accounted for only 18% of persons who received testing and 6% of confirmed cases. These findings are consistent with those from other reports suggesting that many children with COVID-19 experience more asymptomatic infections or milder symptoms and have lower hospitalization rates than do adults (*4*,*5*). The role of asymptomatic or mildly symptomatic children in SARS-CoV-2 transmission remains unknown and represents a critical knowledge gap as officials consider reopening public places.

The risk for symptomatic infection among adults aged ≥65 years was not higher than that among adults aged 19–64 years. However, six of the seven hospitalized persons and all three deaths occurred in persons aged ≥65 years, consistent with other U.S. data indicating a higher risk for COVID-19–associated hospitalization and death among persons aged ≥65 years (*6*).

The findings in this report are subject to at least four limitations. First, some infected persons might have been missed because they did not seek testing, were ineligible for testing based on criteria at the time, or were unable to access testing. Second, although no previous cases had been reported from this county, undetected low-level community transmission was likely, and some patients in this cluster might have had exposures outside the church. Third, risk of exposure likely varied among attendees but could not be characterized because data regarding individual behaviors (e.g., shaking hands or hugging) were not collected. Finally, the number of cases beyond the cohort of church attendees likely is undercounted because tracking out-of-state transmission was not possible, and patients might not have identified church members as their source of exposure.

High transmission rates of SARS-CoV-2 have been reported from hospitals (*7*), long-term care facilities (*8*), family gatherings (*9*), a choir practice (*10*), and, in this report, church events. Faith-based organizations that are operating or planning to resume in-person operations, including regular services, funerals, or other events, should be aware of the potential for high rates of transmission of SARS-CoV-2. These organizations should work with local health officials to determine how to implement the U.S. Government's guidelines for modifying activities during the COVID-19 pandemic to prevent transmission of the virus to their members and their communities (*2*).

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Acknowledgments

Members of the congregation of church A, including the pastor and his wife; Arkansas Department of Health; Suzanne Beavers, CDC; Laura Rothfeldt, Arkansas Department of Health; state and local health departments where out-of-state visitors resided.

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All authors have completed and submitted the International Committee of Medical Journal Editors form for disclosure of potential conflicts of interest. No potential conflicts of interest were disclosed.

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TABLE 1. Demographic characteristics, church A event attendance, and SARS-CoV-2 testing status of persons who attended church A events where persons with confirmed COVID-19 (N = 92) also attended — Arkansas, March 2020

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Characteristic	All attendees No. (%)*	No. (%) tested†	p-value§	No. (%) who tested positive†	p-value§
Total	**92 (100)**	**45 (49)**	**—**	**35 (38)**	**—**
Age group (yrs)					
≤18	32 (35)	8 (25)	0.001	2 (6)	0.004
18–64	32 (35)	23 (72)		19 (59)	

Characteristic	All attendees No. (%)*	No. (%) tested†	p-value§	No. (%) who tested positive†	p-value§
≥65	28 (30)	14 (50)		14 (50)	
Sex					
Male	44 (48)	22 (50)	1.0	17 (39)	1.0
Female	48 (52)	23 (48)		18 (38)	
Church A event attendance					
Weekend only (Mar 6–8)	64 (70)	33 (52)	0.28	28 (44)	0.16
Bible study only (Mar 11)	9 (10)	2 (22)		1 (11)	
Both weekend and Bible study	19 (21)	10 (53)		6 (32)	

Abbreviation: COVID-19 = coronavirus disease 2019.
* Includes all persons who were confirmed to have attended church A events during March 6–11; percentages are column percentages.
† Percentage of attendees (row percentages).
§ Calculated with Fisher's exact test.

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TABLE 2. Estimated attack rates of COVID-19 among attendees at church A events — Arkansas, March 6–11, 2020

Return

Characteristic	All Mar 6–11 church A attendees (lower bound)			All tested Mar 6–11 church A attendees (upper bound)		
	No. of cases/no. exposed (%)	Risk ratio (95% CI)	p-value	No. of cases/no. tested (%)	Risk ratio (95% CI)	p-value
Overall	35/92 (38.0)	—	—	35/45 (77.8)	—	—
Age group (yrs)						
≤18	2/32 (6.3)	0.1 (0.03–0.4)	<0.001	2/8 (25.0)	0.3 (0.1–1.0)	0.003
19–64	19/32 (59.4)	Referent	—	19/23 (82.6)	Referent	—
≥65	14/28 (50.0)	0.8 (0.5–1.3)	0.47	14/14 (100.0)	1.2 (1.0–1.5)	0.10
Sex						
Male	17/44 (38.6)	1.0 (0.6–1.7)	0.91	17/22 (77.3)	1.0 (0.7–1.3)	0.94
Female	18/48 (37.5)	Referent	—	18/23 (78.3)	Referent	—
Church A event attendance						
Weekend only (Mar 6–8)	28/64 (43.8)	1.4 (0.7–2.8)	0.3	28/33 (84.8)	1.4 (0.8–2.4)	0.09

Characteristic	All Mar 6–11 church A attendees (lower bound)			All tested Mar 6–11 church A attendees (upper bound)		
	No. of cases/no. exposed (%)	Risk ratio (95% CI)	p-value	No. of cases/no. tested (%)	Risk ratio (95% CI)	p-value
Bible study only (Mar 11)	1/9 (11.1)	0.4 (0.05–2.5)	0.25	1/2 (50.0)	1.7 (0.4–6.8)	0.21
Both weekend and Bible study	6/19 (31.6)	Referent	—	6/10 (60.0)	Referent	—

Abbreviations: CI = confidence interval; COVID-19 = coronavirus disease 2019.

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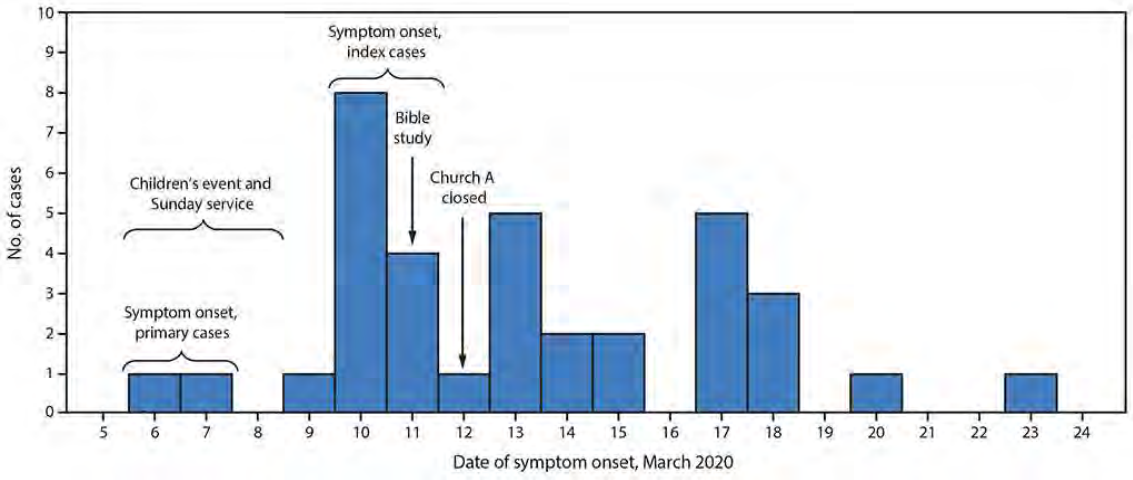
FIGURE. Date of symptom onset* among persons with laboratory-confirmed cases of COVID-19 (N = 35) who attended March 6–11 church A events — Arkansas, March 6–23, 2020



Abbreviation: COVID-19 = coronavirus disease 2019.

* One asymptomatic person who had a positive test result is included on the date of specimen collection (March 18).

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Page last reviewed: May 21, 2020

Finding coronavirus superspreaders may be key to halting a second wave

HEALTH 30 July 2020

By Clare Wilson

Indoor bars are thought to be a particular risk for superspreading events
ViewApart/Getty Images

A skiing trip, a wedding, a choir practice: what these events have in common is that they were all occasions of coronavirus "superspreading". This is when someone passes the virus on to an especially high number of people.

While there is no universally agreed definition of a superspreading event, it is sometimes taken to be an incident in which someone passes on the virus to six or more other people. Getting to the bottom of why these puzzling clusters occur could be key to gaining control of the covid-19 pandemic and stopping a second wave of cases.

For months, we have been hearing that the R number, or reproduction number, is what is needed to gauge the spread of covid-19. This is the average number of people that each infected person passes the virus on to. Before lockdown in the UK, the R number for coronavirus was estimated at somewhere between 2 and 3.

It is now more appreciated that there is great variability in the number of new cases that each infected person generates. This can be described by the epidemic's "K number" – the dispersion parameter – with a lower value of K signifying more variability. You need to know both R and K for a good picture of how the virus is spreading through a community.

According to an analysis of how covid-19 had spread to other countries from China by the end of February, the K number was 0.1, an extremely low value. The researchers estimated that 80 per cent of cases were caused by about 10 per cent of infected people. Those 10 per cent could trigger a cluster of infections, while most other people would pass on coronavirus to no one else and a few would give it to just one other person.

In other words, superspreading is integral to the pandemic, says Quentin Leclerc at the London School of Hygiene and Tropical Medicine.

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In one well-studied example, at a choir practice with 61 attendees that took place one evening in March, in Skagit County, Washington State, one person infected an estimated 52 others. Doctors followed up with the close contacts of every secondary case, about three or four each, and could find only 10 further infections, says Lea Hamner, a public health official in Skagit County. It is as if something qualitatively different were going on that night.

What might that be? Transmission clusters have been seen with other diseases, including HIV, TB and typhoid, with a famous superspreader being a New York cook in the early 20th century who came to be known as Typhoid Mary. In these cases, it seemed there was something biological that made the person more likely to pass on their germs, probably a heavy microbe burden.

With coronavirus, virus burden may well play a role, but this hasn't been investigated and we have no easy way to start doing so, says Benjamin Cowling at the University of Hong Kong in China. "If we measure viral load in saliva, that's not the same as how much virus they're breathing out. You would have to do some kind of air sampling."

But as well as biology, the circumstances of the spreading event also seems to be important, and some common themes have emerged. Cowling's group carried out contact tracing of the first 1037 coronavirus cases in Hong Kong. They found a somewhat larger K value than the previous estimate, of 0.45, but that still means just 20 per cent of infected individuals caused 80 per cent of locally acquired cases.

The team found that superspreading events tended to happen in indoor spaces, with people in close proximity. Social occasions led to more clusters than exposure in the workplace or home – mass transmissions occurred at weddings, temples, bars and karaoke parties, for instance. The risk seems to be higher if people are raising their voices in some way, such as singing or shouting. "It's the volume of air that comes out of your lungs," says Cowling.

Read more: Coronavirus vaccine hope rises after a flurry of positive results

Understanding superspreading is becoming even more important now that coronavirus cases are declining in many countries, says Adam Kleczkowski at the University of Strathclyde in the UK. When case numbers are rising exponentially, superspreading events are arguably less important, he says, as there are many clusters that spread and merge.

But avoiding these transmission clusters is key early in an epidemic before case numbers have risen sharply, or later on, when cases are falling and a second wave must be avoided. "When you have very few cases, it's these [superspreading] events you need to watch out for," says Leclerc.

How can we reduce the chances of further superspreading events? "Our guiding principles right now are outdoors is safer than inside, fewer people are safer than more people," says Hamner. She sees indoor bars as a particular risk. "A drunk person is well known for talking louder and louder the drunker they get."

These aren't new ideas – but making people aware of how important superspreading is could reinforce the need to avoid or at least mitigate these types of risky situations. It could also help inform how countries ease lockdown restrictions, says Leclerc, whose team has created a database of superspreading events around the world. For instance, only eight of the 201 clusters they identified took place within schools, which at the start of the pandemic were seen as a potential hotbed of infections.

Identifying clusters in real time is also key for contact-tracing work, says Leclerc. "If you manage to detect [superspreading events] and find the people infected, you can stop the spread before it goes on."

Reference: *Research Square*, DOI: 10.21203/rs.3.rs-29548/v1

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Considerations for Events and Gatherings
Considerations for Events & Gatherings

Updated July 7, 2020 Print

As some communities in the United States begin to plan and hold events and gatherings, the CDC offers the following considerations for enhancing protection of individuals and communities and preventing spread of coronavirus disease 2019 (COVID-19). Event planners and officials can determine, in collaboration with state and local health officials, whether and how to implement these considerations, making adjustments to meet the unique needs and circumstances of the local community. Because COVID-19 virus circulation varies in communities, these considerations are meant to supplement—**not replace**—any state, local, territorial, or tribal health and safety laws, rules, and regulations with which gatherings must comply. Organizers should continue to assess, based on current conditions, whether to postpone, cancel, or significantly reduce the number of attendees for gatherings.

After reviewing the considerations listed on this page, event planners and administrators can use CDC's Events and Gatherings Readiness and Planning Tool [9 pages] to protect staff, volunteers, and attendees.

Guiding Principles

- A gathering refers to a planned or spontaneous event, indoors or outdoors, with a small number of people participating or a large number of people in attendance such as a community event or gathering, concert, festival, conference, parade, wedding, or sporting event.
- The *more people* an individual interacts with at a gathering and the longer that interaction lasts, the higher the potential risk of becoming infected with COVID-19 and COVID-19 spreading.
- The *higher the level of community transmission* in the area that the gathering is being held, the higher the risk of COVID-19 spreading during a gathering.
- The size of an event or gathering should be determined based on state, local, territorial or tribal safety laws and regulations.

The risk of COVID-19 spreading at events and gatherings increases as follows:

Lowest risk: Virtual-only activities, events, and gatherings.

More risk: Smaller outdoor and in-person gatherings in which individuals from different households remain spaced at least 6 feet apart, wear cloth face coverings, do not share objects, and come from the same local area (e.g., community, town, city, or county).

Higher risk: Medium-sized in-person gatherings that are adapted to allow individuals to remain spaced at least 6 feet apart and with attendees coming from outside the local area.

Highest risk: Large in-person gatherings where it is difficult for individuals to remain spaced at least 6 feet apart and attendees travel from outside the local area.

Targeting COVID-19's spread

SARS-CoV-2, the virus that causes COVID-19, is thought to be mostly spread by respiratory droplets released when people talk, cough, or sneeze. It is thought that the virus may also spread to hands from a contaminated surface and then to the nose, mouth or eyes, causing infection. Therefore, personal prevention practices (such as handwashing, staying home when sick, maintaining 6 feet of distance, and wearing a cloth face covering) and environmental prevention practices (such as cleaning and disinfection) are important ways to prevent the virus's spread.

These prevention principles are covered in this document. They provide event planners and individuals with actions to help lower the risk of COVID-19 exposure and spread during gatherings and events.

Promoting Healthy Behaviors that Reduce Spread

Event planners should consider implementing strategies to encourage behaviors that reduce the spread of COVID-19 among staff and attendees.

- **Staying Home when Appropriate**
  - Educate staff and attendees about when they should stay home.
    - Advise employees and attendees to stay home if they have tested positive for COVID-19 or are showing COVID-19 symptoms.
    - Advise employees and attendees to stay home and monitor their health if they have had a close contact with a person who has symptoms of COVID-19 within the past 14 days.
    - Develop policies that encourage sick employees to stay at home without fear of reprisal, and ensure employees are aware of these policies.
    - CDC's criteria can help inform when employees should return to work:
      - If they have been sick with COVID-19
      - If they tested positive for COVID-19 but had no symptoms
      - If they have recently had a close contact with a person with COVID-19
    - Consider developing flexible refund policies for attendees for events that involve a participation fee.

- **Hand Hygiene and Respiratory Etiquette**
  - Require frequent employee handwashing (e.g., before, during, and after taking tickets; after touching garbage) with soap and water for at least 20 seconds and increase monitoring to ensure adherence.
  - If soap and water are not readily available, employees can use hand sanitizer that contains at least 60% alcohol and rub their hands until dry.
  - Encourage staff to cover the mouth and nose with a tissue when coughing and sneezing. Used tissues should be thrown in the trash and hands washed immediately with soap and water for at least 20 seconds.
  - Encourage attendees to wash hands often and cover coughs and sneezes.
  - Attendees often exchange handshakes, fist bumps, and high-fives at meetings and sporting events. Display signs (physical and/or electronic) that discourage these actions during the event.

- **Cloth Face Coverings**
  - Require the use of cloth face coverings among staff. Cloth face coverings are **most** essential in times when physical distancing is difficult (e.g., when moving within a crowd or audience).
  - Provide all staff with information on proper use, removal, and washing of cloth face coverings.
  - Advise staff that cloth face coverings should **not** be placed on:
    - Babies or children younger than 2 years old
    - Anyone who has trouble breathing
    - Anyone who is unconscious, incapacitated, or otherwise unable to remove the cloth face covering without assistance

- Encourage attendees ahead of the event to bring and use cloth face coverings at the event.
- Cloth face coverings are meant to protect other people in case the wearer is unknowingly infected but does not have symptoms. Cloth face coverings are not surgical masks or respirators. They are not personal protective equipment.
- Cloth face coverings are strongly encouraged in settings where individuals might raise their voice (e.g., shouting, chanting, singing).

- **Adequate Supplies**
  - Ensure adequate supplies to support healthy hygiene behaviors. Supplies include soap, water, hand sanitizer containing at least 60 percent alcohol, paper towels, tissues, disinfectant wipes, cloth face coverings (as feasible), and no-touch trash cans.

- **Signs and Messages**
  - Post signs in highly visible locations (e.g., at entrances, in restrooms) that promote everyday protective measures and describe how to stop the spread of germs by properly washing handsand properly wearing a cloth face covering .
  - Broadcast regular announcements on reducing the spread of COVID-19 on public address systems.
  - Include messages (for example, videos) about behaviors that prevent spread of COVID-19 when communicating with staff, vendors, and attendees (such as on the event website and through event social media accounts).
  - Consider developing signs and messages in alternative formats (e.g., large print, braille, American Sign Language) for people who have limited vision or are blind or people who are deaf or hard of hearing.
  - Find freely available CDC print and digital resources about COVID-19 on CDC's communications resources main page.

Maintaining Healthy Environments

Event planners should consider implementing several strategies to maintain healthy environments.

- **Cleaning and Disinfection**
  - Clean and disinfect frequently touched surfaces within the venue at least daily or between uses as much as possible—for example, door handles, sink handles, drinking fountains, grab bars, hand railings, and cash registers.
  - Clean and disinfect shared objects between uses—for example, payment terminals, tables, countertops, bars, and condiment holders.
  - Consider closing areas such as drinking fountains that cannot be adequately cleaned and disinfected during an event.
  - Develop a schedule for increased, routine cleaning and disinfection.
  - Plan for and enact these cleaning routines when renting event space and ensure that other groups who may use your facilities follow these routines.
  - If transport vehicles like buses are used by the event staff, drivers should practice all safety actions and protocols as indicated for other staff—for example, washing hands often and wearing cloth face coverings and maintaining social distance of bus riders. To clean and disinfect event buses, vans, or other vehicles see guidance for bus transit operators and drivers for hire, and adapt as needed.
  - Ensure safe and correct use and storage of cleaners and disinfectants to avoid harm to employees and other individuals. Always read and follow label instructions for each product, and store products securely away from children.
  - Use EPA-approved disinfectants against COVID-19 .
  - Cleaning products should not be used near children. Staff should ensure that there is adequate ventilation when using these products to prevent attendees or themselves from inhaling toxic vapors.
  - Use disposable gloves when removing garbage bags or handling and disposing of trash.
    - After using disposable gloves, throw them out in a lined trash can.
    - Do not disinfect or reuse the gloves.
    - Wash hands after removing gloves.

- **Restrooms**

- Consider limiting the number of people who occupy the restroom at one time to allow for social distancing.
- Do not allow lines or crowds to form near the restroom without maintaining a distance of at least 6 feet from other people. It may be helpful to post signs or markers to help attendees maintain the appropriate social distance of at least 6 feet.
- Ensure that open restrooms are:
  - Operational with functional toilets.
  - Cleaned and disinfected regularly, particularly high-touch surfaces such as faucets, toilets, stall doors, doorknobs, countertops, diaper changing tables, and light switches.
    - Clean and disinfect restrooms daily or more often, if possible, with EPA-approved disinfectants against COVID-19.
    - Ensure safe and correct application of disinfectants and keep products away from children.
  - Adequately stocked with supplies for handwashing, including soap and water or hand sanitizer with at least 60% alcohol (for staff and older children who can safely use hand sanitizer), paper towels, tissues, and no-touch trash cans.
    - If you are providing portable toilets, also provide portable handwashing stations and ensure that they remain stocked throughout the duration of the event. If possible, provide hand sanitizer stations that are touch-free.

- **Ventilation**
  - Ensure ventilation systems operate properly and increase circulation of outdoor air as much as possible, for example, by opening windows and doors. Do not open windows and doors if doing so poses a safety or health risk to staff or attendees (e.g., risk of falling or triggering asthma symptoms).
  - If portable ventilation equipment like fans are used, take steps to minimize air from them blowing from one person directly at another person to reduce the potential spread of any airborne or aerosolized viruses.

- **Water Systems**
  - To minimize the risk of Legionnaires' disease and other diseases associated with water, take steps to ensure that all water systems and features (e.g., sink faucets, drinking fountains, decorative fountains) are safe to use after a prolonged facility shutdown. Drinking fountains should be cleaned and sanitized, but encourage staff and attendees to bring their own water, as feasible, to minimize touching and use of water fountains.

- **Modified Layouts**
  - Limit attendance or seating capacity to allow for social distancing, or host smaller events in larger rooms.
  - Use multiple entrances and exits and discourage crowded waiting areas.
  - Block off rows or sections of seating in order to space people at least 6 feet apart.
  - Eliminate lines or queues if possible or encourage people to stay at least 6 feet apart by providing signs or other visual cues such as tape or chalk marks.
  - Prioritize outdoor activities where social distancing can be maintained as much as possible.
  - Offer online attendance options in addition to in-person attendance to help reduce the number of attendees.

- **Physical Barriers and Guides**
  - Provide physical guides, such as tape on floors or sidewalks and signs on walls, to ensure that individuals remain at least 6 feet apart in lines and at other times (e.g., guides for creating one-way routes).
  - Install physical barriers, such as sneeze guards and partitions, in areas where it is difficult for individuals to remain at least 6 feet apart. Barriers can be useful at cash registers and other areas where maintaining physical distance of 6 feet is difficult.
  - Change seating layout or availability of seating so that people can remain least 6 feet apart.

- **Communal Spaces**
  - Stagger use of shared indoor spaces such as dining halls, game rooms, and lounges as much as possible and clean and disinfect them between uses.
  - Add physical barriers, such as plastic flexible screens, between bathroom sinks and beds, especially when they cannot be at least 6 feet apart.

- Clean and disinfect bathrooms regularly (e.g., in the morning and evening or after times of heavy use) using EPA-registered disinfectants .
- For more information on communal spaces in event housing (e.g., laundry rooms, shared bathrooms, and recreation areas) follow CDC's guidance for Shared or Congregate Housing.

- **Food Service**
  - There is no evidence that COVID-19 is spread by food. However, people sharing utensils and congregating around food service areas can pose a risk.
  - If the event includes food service, refer to CDC's COVID-19 considerations for restaurants and bars.
  - Use touchless payment options as much as possible, if available.
  - Ask customers and employees to exchange cash or card payments by placing them on a receipt tray or on the counter rather than by hand to avoid direct hand-to-hand contact.
  - Clean and disinfect frequently touched surfaces such as pens, counters, or hard surfaces between use and encourage patrons to use their own pens.
  - Provide physical guides, such as tape on floors or sidewalks and signs on walls, to ensure that individuals remain at least 6 feet apart when waiting in line to order or pick up.
  - If a cafeteria or group dining room is used, serve individually plated meals or grab-and-go options, and hold activities in separate areas.
  - Use disposable food service items including utensils and dishes. If disposable items are not feasible or desirable, ensure that all non-disposable food service items are handled with gloves and washed with dish soap and hot water or in a dishwasher.
  - Individuals should wash their hands after removing their gloves or after directly handling used food service items.
  - Avoid offering any self-serve food or drink options, such as buffets, salad bars, and drink stations. Consider having pre-packaged boxes or bags for each attendee.

- **Shared Objects**
  - Discourage people from sharing items that are difficult to clean, sanitize, or disinfect.
  - Limit any sharing of food, tools, equipment, or supplies by staff members.
  - Ensure adequate supplies to minimize sharing of high-touch materials to the extent possible; otherwise, limit use of supplies and equipment to one group of staff members or attendees at a time, and clean and disinfect them between use.

Maintaining Healthy Operations

Event organizers and staff may consider implementing several strategies to maintain healthy operations.

- **Regulatory Awareness**
  - Be aware of local or state regulatory agency policies related to group gatherings to determine if events can be held.

- **Protections for Staff and Attendees who are at Higher Risk of Severe Illness from COVID-19**
  - Offer options for staff at higher risk for severe illness (including older adults and people of any age with underlying medical conditions) that limit their exposure risk. For example:
    - Offer telework and modified job responsibilities for staff, such as setting up for the event rather than working at the registration desk.
    - Replace in-person meetings with video- or tele-conference calls whenever possible.
  - As feasible, offer options for attendees at higher risk for severe illness that limit their exposure risk (e.g., virtual attendance).
  - Consider limiting event attendance to staff and guests who live in the local area (e.g., community, city, town, or county) to reduce risk of spreading the virus from areas with higher levels of COVID-19. If attendance is open to staff and guests from other communities, cities, town or counties, provide information to attendees so they can make an informed decision about participation.
  - Put policies in place to protect the privacy of people at higher risk for severe illness regarding their underlying medical conditions.

- **Limited, Staggered, or Rotated Shifts and Attendance Times**
  - Consider ways to significantly reduce the number of attendees.
  - Use flexible worksites (e.g., telework) and flexible work hours (e.g., staggered shifts) to help establish policies and practices for social distancing of 6 feet between employees, volunteers, and others.
  - Rotate or stagger shifts and arrival times to limit the number of employees in a venue at the same time.
  - Stagger and limit attendance times to minimize the number of guests at the venue.

- **Travel & Transit**
  - Encourage employees to use transportation options that minimize close contact with others (e.g., walking or biking, driving or riding by car – alone or with household members only). Consider offering the following support:
    - Ask employees to follow the CDC guidance on how to Protect Yourself When Using Transportation, including public transit.
    - Allow employees to shift their hours so they can commute during less busy times.
    - Ask employees to wash their hands as soon as possible after their trip.
  - Reconfigure parking lots to limit congregation points and ensure proper separation of employees (e.g., closing every other parking space).
  - Encourage rideshare drivers to clean and disinfect frequently touched surfaces in the vehicle and avoid providing pooled rides or picking up multiple passengers who would not otherwise be riding together on the same route.

- **Designated COVID-19 Point of Contact**
  - Designate an administrator or office to be responsible for responding to COVID-19 concerns. All staff and attendees should know who this person or office is and how to contact them.

- **Communication Systems**
  - Put systems in place to:
    - Encourage staff and attendees to self-report to event officials or a COVID-19 point of contact if they have symptoms of COVID-19, a positive test for COVID-19, or were exposed to someone with COVID-19 within the last 14 days, in accordance with health information sharing regulations for COVID-19 (e.g., see "Notify Health Officials and Close Contacts" in the **Preparing for When Someone Gets Sick section below**), and other applicable privacy and confidentiality laws and regulations.
    - Advise attendees prior to the event or gathering that they should not attend if they have symptoms of, a positive test for, or were recently exposed (within 14 days) to COVID-19.
    - Notify staff, attendees, and the public of cancellations and restrictions in place to limit people's exposure to COVID-19 (e.g., limited hours of operation).
    - Identify and address potential language, cultural, and disability barriers associated with communicating COVID-19 information to event staff and participants. Tailor information so that it is easily understood by various audiences and is available in alternative formats and languages.
    - Learn more about reaching people of diverse languages and cultures by visiting: Know Your Audience. You also can learn more about communicating to staff in a crisis at: Crisis Communications Plan.

- **Leave (Time Off) Policies**
  - Implement flexible sick leave policies and practices that are not punitive and enable employees to stay home when they are sick, have been exposed, are caring for someone who is sick, or who must stay home with children if schools or child care centers are closed.
  - Examine and revise policies for leave, telework, and employee compensation as needed.
  - Ensure that any relevant policies are communicated to staff.

- **Back-Up Staffing Plan**
  - Monitor absenteeism of employees, cross-train staff, and create a roster of trained back-up staff.
  - Develop policies for return-to-work and event facilities after an employee has COVID-19. CDC's criteria to discontinue home isolation and quarantine can inform these policies.

- **Staff Training**

- Train staff on all safety protocols. Consider using CDC's Interim Guidance for Businesses and Employers as a guide.
- Conduct training virtually to ensure that social distancing is maintained during training.
- If training needs to be done in person, maintain social distancing. Virtual training is clearly better for infection control when feasible.

- **Recognize Signs and Symptoms**
  - If feasible, conduct daily health checks (e.g., temperature screening and/or symptom checking) of staff and attendees safely and respectfully, and in accordance with any applicable privacy laws and regulations.
  - Event administrators may consider using examples of screening methods in CDC's General Business FAQs as a guide.

- **Sharing Facilities**
  - Encourage any organizations that share or use the same venue to also follow these considerations and limit shared use, if possible.

- **Support Coping and Resilience**
  - Promote employees' ability to eat healthy foods, exercise, get enough sleep, and find time to unwind.
  - Encourage employees to talk with people they trust about their concerns and how they are feeling.
  - Consider posting signs for the national distress hotline: 1-800-985-5990, or text TalkWithUsto 66746; The National Domestic Violence Hotline: 1-800-799-7233 and TTY 1-800-787-3224; and The National Suicide Prevention Lifeline: 1-800-273-TALK (8255).

- **Lessons Learned After the Event**
  - Meet with the emergency operations coordinator or planning team for your venue to discuss and note lessons learned.
  - Determine ways to improve planning and implementation processes if the event will happen again.
  - Update your plans regularly according to the state and local situation and orders.

Preparing for When Someone Gets Sick

Event planners should consider several strategies to implement when someone gets sick.

- **Advise Sick Individuals of Home Isolation Criteria**
  - Communicate to sick staff members that they should not return to work until they have met CDC's criteria to discontinue home isolation.

- **Isolate and Transport Those Who are Sick**
  - Make sure that staff and attendees know that they should not come to the event and that they should notify event planners (e.g., the designated COVID-19 point of contact) if they become sick with COVID-19 symptoms, test positive for COVID-19, or have been exposed to someone with symptoms or a suspected or confirmed case.
  - Immediately separate staff and attendees with COVID-19 symptoms (e.g., fever, cough, shortness of breath) at the event. Individuals who are sick should go home or to a healthcare facility, depending on how severe their symptoms are, and follow CDC guidance for caring for themselves.
  - Individuals who have had close contact with a person who has symptoms should be separated, sent home, and advised to follow CDC guidance for community-related exposure (see "Notify Health Officials and Close Contacts" below). If symptoms develop, individuals should follow CDC guidance for caring for themselves.
  - Planners may follow CDC's Guidance for Shared or Congregate Housing for any staff who live in event housing.
  - Work with venue administrators, local officials, and healthcare providers to identify an isolation area to separate anyone who has COVID-like symptoms or who has tested positive but does not have symptoms. Event healthcare providers should use Standard and Transmission-Based Precautions when caring for sick people. See: What Healthcare Personnel Should Know About Caring for Patients with Confirmed or Possible COVID-19 Infection.
  - Establish procedures for safely transporting anyone sick to their home or to a healthcare facility. If you are calling an ambulance or bringing someone to the hospital, call first to alert them that the person may have COVID-19.

- **Clean and Disinfect**

- Close off areas used by a sick person and do not use these areas until after cleaning and disinfecting them (for outdoor areas, this includes surfaces or shared objects in the area, if applicable).
- Wait at least 24 hours before cleaning and disinfecting. If 24 hours is not feasible, wait as long as possible. Ensure safe and correct use and storage of cleaning and disinfection products, including storing them securely away from children.

- **Notify Health Officials and Close Contacts**
  - In accordance with state and local laws and regulations, event planners should notify local health officials, staff, and attendees of any case of COVID-19 while maintaining confidentiality in accordance with the Americans with Disabilities Act (ADA) and other applicable laws and regulations.
  - Advise those who have had close contact with a person diagnosed with COVID-19 to stay home, self-monitor for symptoms, and follow CDC guidance if symptoms develop.

After reviewing the considerations listed on this page, event planners and administrators can use CDC's Events and Gatherings Readiness and Planning Tool [9 pages] to protect staff, volunteers, and attendees.

Other Resources

Latest COVID-19 Information

Cleaning and Disinfection

Guidance for Businesses and Employers

Guidance for Schools and Childcare Centers

Guidance for Park Administrators

Shared and Congregate Housing

COVID-19 Prevention

Handwashing Information

Face Coverings

Social Distancing

COVID-19 Frequently Asked Questions:

Persons at Higher Risk

Managing Stress and Coping

HIPAA and COVID-19

CDC communication resources

Community Mitigation

Transportation

Interim Guidance for Communities of Faith

Crisis Communications Plan.

Restaurants and bars

Americans with Disabilities Act (ADA) and other applicable laws and regulations

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PERSPECTIVE

COVID-19 Super-spreaders: Definitional Quandaries and Implications

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Abstract

Uncertainty around the role 'super-spreaders' play in the transmission and escalation of infectious disease is compounded by its broad and vague definition. It is a term that has been much used in relation to COVID-19, particularly in social media. On its widest definition, it refers to a propensity to infect a larger than average number of people. Given the biological, behavioural and environmental variables relevant to infectivity, this might be pertinent to almost any infected individual who is not physically isolated from others. Nor is the term confined to individuals with a propensity to spread infectious disease: it can potentially be used to describe events, policies or settings. This article explores the use of the term and considers circumstances in which the wide definition can be problematic. One problem is that it can lead to undeserved apportionment of moral blame to alleged super-spreaders. Another is that it can detract from scientific investigation of the heterogeneity of COVID-19 transmission. The author calls for a clearer epidemiological definition.

Keywords Confidentiality · Coronavirus · COVID-19 · Privacy · Super-spreader · Super-spreading

Introduction: COVID-19 Super-spreaders

At the time of writing, exit strategies from COVID-19 lockdown are unclear, but de-escalation of physical distancing measures is likely to be gradual. One aspect of shielding the vulnerable is to identify those at risk of developing serious and potentially life-threatening symptoms and distance them from sources of infection. More work is needed to identify such groups, which include people over the age of 65 and those with underlying health conditions. Another is to identify and isolate the infected. This is complicated by uncertainty as to whether efforts to produce a vaccine will succeed and

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how long it will take. It is possible that post-infection immunity may be short-lived (European Centre for Disease Prevention and Control (ECDC) 2020, 9), and even if infection confers immunity, the ECDC estimates that 67% of the population would need to have had the virus in order to prevent ongoing transmission and that 'Some form of physical distancing interventions will therefore need to be in place for at least several months from now' (2020, 18). A second wave (and potentially further waves) of COVID-19 is possible (Xu and Li 2020).

The ECDC (2020, 7) estimates that the reproductive number (R0) of COVID-19 in EU/EEA countries is 3.28. That is, a person contracting the novel virus will pass it on to an average of around 3 people. The R0 is a measure of potential transmissibility that is difficult to establish, particularly if the accuracy of the data is questionable as where, for example, there is under- or mis-reporting. Underlying the R0 is a considerable variation which, early in the outbreak, Mackenzie (2020) postulated may be down to the role of super-spreaders: around 10% of cases could be responsible for up to 80% of transmission. If so, she argued, control of super-spreading would be essential in tackling the outbreak.

The situation is complicated by the fact that so-called super-spreaders of COVID-19 cannot always self-identify and take steps to mitigate the risk to others. The virus has been detected 1–3 days before onset of symptoms, and the ECDC sees this as a potential major source of transmission. Some individuals are asymptomatic throughout, though the risk of transmission is probably somewhat lower in such cases. There have also been reports of COVID-19 positive tests during convalescence, following a negative test (Chen et al. 2020). COVID-19 may itself have super-spreading tendencies flowing from the occurrence of atypical symptoms (Wang et al. 2020), which may have led to a failure to identify many mild cases—a phenomenon that has been exacerbated by limited and variable availability of testing, tracing and screening.

In light of the importance of identifying and controlling infection, this article begins by considering the definition of 'super-spreader' and argues that the term is vague and unhelpful. It goes on to demonstrate ways in which it has been applied to impute moral condemnation on individuals accused of spreading COVID-19 and calls for the development of a clearer and widely held scientific definition of super-spread that accommodates the relevance of individual factors in disease transmission without attributing moral blame.

A Term of Art

The term 'super-spreader' has recently entered our consciousness, alongside words such as 'comorbidity', 'furlough' and 'lockdown'. A super-spreader, usually identified in retrospect, has a greater than average propensity to infect a larger number of people. Super-spreading is not a new phenomenon: symptomless 'Typhoid Mary' was exiled for 26 years for apparently infecting many others in the 1800s (Marineli et al. 2013), and super-spreading was thought to be a driver of MERS, SARS (2002–2003) and, to a lesser extent, Ebola (Wong et al. 2015). Stein (2011) observes that observational and modelling studies support a 20/80 rule whereby 20% of individuals are likely to contribute around 80% of the transmission potential in a given infectious disease. Many variables make up this tendency, and this has potential to limit the meaningfulness of the term.

The label 'super-spreader' is a term of art that has been utilised to describe settings, events and individuals. Super-spreading settings include cruise ships and aeroplanes as well as hospitals, care homes and potentially schools, particularly where they utilise ventilation systems. As for events, any large gathering or movement of groups or individuals can constitute super-spreading. So too can policy decisions or indeed any occurrence which in hindsight exacerbated infection rates, such as the lack of control measures when SARS first emerged and single cases were treated as atypical pneumonia and transmitted to others (WHO 2003). As highlighted above, COVID-19 itself has super-spreading tendencies given its potential for atypical symptoms and pre-symptomatic and asymptomatic transmission.

The term is particularly problematic when applied to individual 'super-spreaders', as it can mean different things to different groups. Media interest in super-spreaders focuses on the early stages of the epidemic when efforts are being made to contain, trace and delay. Used in this way, a 'super-spreader' will generally have interacted with a larger than average number of people, making tracing difficult or impossible. At the other end of the spectrum, scientific interest can focus on the heterogeneity of populations in the transmission of infectious disease. Used in this sense, 'super-spreading' is connected to the scientific nature of the virus and the way it manifests in some humans. There is speculation that some people with COVID-19 are especially infectious (Boseley and Belam 2020).

Super-spreading is therefore a product of biological, behavioural and environmental factors. It can be used to describe decisions, policies, events, settings and individuals—in fact, anything that contributes to increased rates of infection can be seen (by some groups) as super-spreading. The wide and varied use of the term 'super-spreader' is problematic for two reasons considered in subsequent sections: it can lead to apportionment of moral blame to alleged super-spreaders and it could detract from scientific investigation into heterogeneity of COVID-19 if misunderstanding leads to diminished public support and trust.

Blaming Super-spreaders

Alleged super-spreaders of COVID-19 have attracted considerable media interest. Patient 31, a member of the Shincheonji church, was thought to have turned the tide in South Korea (Kasulis 2020). As the number of deaths increased, anger was directed at the church, and the founder's apology was broadcast around the world. In India, the state of Punjab quarantined 40,000 people following around 30 deaths linked to a 70-year-old preacher who died of the disease (BBC News 2020). In the UK, a Brighton businessperson was labelled a 'culprit' early in the course of COVID-19 (see Ball 2020 for criticism). Each was labelled by parts of the media a 'super-spreader' whether or not the host was aware of the risks they posed to others or the repercussions their infection could have. These factors were not always reflected in media reports.

There is a public interest in the location and number of cases, and in the early days of the crisis, when cases were few, this may have enabled some to piece together the identity of infected individuals. The Brighton case in England resulted in 'super-spreader' headline claims from newspapers including the Daily Mail, Guardian, Sun and Telegraph. The individual came forward to reveal the steps he had taken on

learning that he had come into contact with a COVID-19-positive person, allegedly due to fears of scapegoating (Duggan et al. 2020). Turn to Twitter and #superspreaders has been employed as a term to signal moral blame, aimed at individuals and groups including political leaders, runners, cyclists and the police.

Opprobrium may rightly follow if a symptomatic individual knowingly puts others at risk in avoidable circumstances, such as the reported cases of people deliberately coughing in the faces of others. However, to attach moral blame to those labelled after the event as super-spreaders is highly problematic, most obviously because carriers of COVID-19 can be asymptomatic, but also because the label can be stigmatising and potentially deter the symptomatic from coming forward if they have recently been in contact with large or vulnerable numbers. Spreading can be exacerbated by poor hygiene or certain social practices such as hand shaking, but infection of others is not evidence alone that guidelines on behaviour have been ignored. Sadly, as the pandemic and resulting fear have escalated, so have examples of the public viewing anyone 'other' as a potential super-spreader (Coates 2020).

Delivering Ethical Research on Heterogeneity of COVID-19 Transmission

Another problem with the term 'super-spreader' is that its wide use has potential to detract from its importance in research on heterogeneity of transmission of COVID-19. If 'super-spreader' is understood in lay terms to attract varying degrees of moral blame, then epidemiological investigation of its incidence may be less likely to gain public support and understanding.

There is a paucity of scientific evidence of the role or even the existence of especially infectious people with COVID-19. On a narrow scientific definition, a super-spreader would have particular biological characteristics that would increase the tendency to infect others. For example, a mouse model study by Gopinath et al. (2014) demonstrated the super-spreading tendencies of a minority of mice infected with Salmonella. If any potential biological super-spreading tendencies of COVID-19 were better understood, then it could aid management and control through, for example, isolation or targeted vaccination if and when it becomes available. Research might usefully focus on the tendency of some individuals to shed high levels of the pathogen, including investigation of co-morbidity, genetics, viral load and infectivity at different stages of presentation. In COVID-19, the relationship between viral load, severity and infectivity is complex and poorly understood. Increased viral load does not necessarily result in more severe symptoms (Geddes 2020), and infection dose is currently uncertain. Clearly, the propensity for biological factors to lead to infection of others is highly dependent on behavioural and environmental factors.

Thus, a broader definition of super-spreading might encompass research on biological and external factors, combining focus on the virus, the host and the environment. Pre-COVID-19, Lloyd-Smith et al. (2005) argued that control measures for infectious disease that focus on individual-specific measures can outperform population-based measures. They proposed a rigorous protocol for defining super-spreading events that would supplement the R0 with information about factors such as distribution and range. Research bringing greater clarity as to the factors that drive variations in infectivity would contribute to targeted control policies that could reduce reliance on widespread lockdown.

However, such research is likely to be reliant upon the public giving up their confidential data or at least cooperating if such data are mandated. Technology offers a potential to track, predict, trace contacts and respond in a more precise manner. There are, for example, several apps in development/use. Some allow users to report symptoms so that more can be learned about how the virus behaves, some give people advice on the basis of reported symptoms and some operate in conjunction with testing to alert individuals with whom an infected person has come into contact, to isolate. These apps offer potential to learn more about heterogeneity and also to implement more targeted control measures in response. In many countries, efficacy will be reliant on the willingness of individuals to sign up to the apps. Those individuals will need assurance that their privacy will be respected and that negative implications will not flow from their identification as a perceived 'super-spreader'.

Some governments are making more extensive use of confidential information that does not rely on patient consent. In the UK, National Health Service (NHS) England and Improvement and NHSX (the unit driving digital transformation of care) have announced the development of a digital platform that will bring together health data, AI and cloud computing (Gould et al. 2020). They are investing in the help of private companies such as Microsoft, Google and Amazon Web services to bring this about. They have provided assurances that the data 'will remain under NHS England and NHS Improvement's control' and that the data will be destroyed or returned when the emergency is over (Gould et al. 2020). The dashboard will give metrics about occupancy levels in hospitals and capacity and will enable decision-makers to 'Understand how the virus is spreading at a local level and identify risks to particularly vulnerable populations'.

On 20 March 2020, the Department of Health and Social Care (DHSC), on behalf of the Secretary of State for Health and Social Care, issued a notice under Regulation 3(4) of the Health Service (Control of Patient Information) Regulations 2002 (COPI). Regulation 3(4) allows the Secretary of State, having had independent advice from the Confidentiality Advisory Group, to give notice to health organisations, general practices and local authorities that confidential information will be *required* (DHSC 2020) for a certain purpose. The purpose in this case is COVID-19 and includes understanding risks and trends including (amongst other things):

> locating, contacting, screening, flagging and monitoring such patients and collecting information about and providing services in relation to testing, diagnosis, self-isolation, fitness to work, treatment, medical and social interventions and recovery from Covid-19. (DHSC 2020, 2)

This widely framed notice mandates the processing and sharing of confidential information, in circumstances where patients have not given informed consent. Together with the proposals to share information with private companies for the production of the Dashboard, it is a high-risk strategy that will have profound implications if public trust is undermined. Whilst efforts will be made to protect the identity of the patients, anonymity is not a binary concept and, as argued above in relation to the Brighton case, media interest in 'super-

spreaders' could lead to 'jigsaw identifiability' and to moral blame, which in turn could impact on trust.

A Change in Terminology?

The term 'super-spreader' makes an exciting headline, but its employment in social media sometimes lacks a scientific basis. Rather it often points to unintended action or is suggestive of negligent actions of an individual and apportions moral blame. And yet, it is essential that we promote a culture of ethical research on the biological, behavioural and environmental influences on transmission.

The argument set out in this article is that the definition is too broad to be helpful and that its (mis)use in some social media has resulted in negative connotations. Consideration of the tendencies of individuals to exacerbate infection rates is a worthy focus of research. As more targeted public health responses are developed to replace widespread physical distancing policies, it is increasingly important that heterogeneity of COVID-19 transmission is explored and factored into responses. To the extent that super-spreading is an aspect of research on heterogeneity, there is a risk that the negative connotations the term has attracted will result in public reticence to give up the private information upon which that research might depend. Greater accuracy of definition would help ensure that debate around the term is not at cross-purposes, help reduce or prevent moral blame of those who unwittingly infect others and could enhance public trust around the use of confidential data.

The aim of this article has been to draw attention to problems in the use of the term 'super-spreader'. Turning briefly to potential solutions, one option would be to avoid use of the term altogether, but it is well accepted in the scientific literature (see for example Lloyd-Smith 2005, Stein 2011, Gopinath 2014), and its abandonment could disrupt important linkage between current and previous research. Another option would be to encourage the use of the terms 'super-spreading' and 'super-spreading events' in epidemiology, in place of 'super-spreader'. This might reduce stigma, but it is unlikely to limit more general (mis)application of the term. Another option would be to encourage the development of a clearer taxonomy of super-spreading so as to take scientific ownership of the term and discourage inappropriate lay adoption, potentially through a classification of behavioural, environmental and biological super-spreading.

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Compliance with Ethical Standards

Conflict of Interest The author declares that she has no conflict of interest.

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World Health Organization

Faith-based organizations and faith leaders

Faith-based organizations (FBOs) and leaders can play a major role in saving lives and reducing illness related to COVID-19. They are a primary source of support and comfort for their members. Often trusted more than governments or health-agencies, faith leaders can share health information to protect their communities that will be more likely to be accepted than from other sources.

By sharing simple steps to prevent COVID-19 faith organizations can promote helpful information, reduce fear and stigma, and provide reassurance to people in their communities. Because faith leaders are integrated into their communities through service and compassionate networks, they are often able to reach the most vulnerable among us with assistance and health information. In short, they are a critical link in the safety net for vulnerable people in their communities.

Advice

FBOs are advised to conduct faith activities remotely, rather than in-person, using available technology to maintain community and continue worship.

Recommendations for faith-based organizations (FBOs) to ensure safe gatherings (where permitted)

Follow local, subnational, and national guidance regarding whether large gatherings, such as services, weddings and funerals are permitted based on the spread of COVID-19.

If permitted to proceed with safe gatherings, FBOs should:

FBOs are also advised to conduct faith activities remotely, rather than in-person, using available

- Gather with a few people, rather than crowded sessions.
- Educate their members/communities on key protection measures against COVID-19.
- Encourage frequent healthy hand and respiratory hygiene among participants at all times.
- Ensure safe distancing at all times – at least 1 meter (3 feet) of distance between community membe including seating or standing of participants in faith services and those entering, attending and departing from worship spaces.
- Prevent touching between people attending faith services and the touching of devotional and communal objects.
- Frequently clean worship spaces, pilgrimage sites, and other buildings with disinfectant.
- Conduct safe ceremonies including safe burial practices.

technology to maintain community and continue worship.

FBOs should strengthen their communities' mental health and resilience by keeping people connected and identifying safe ways that members can help others.

Guidance

Practical considerations and recommendations for religious leaders and faith-based communities in the context of COVID-19

This document and risk assessment tool provides practical guidance and recommendations to support the special role of religious leaders, faith-based organizations, and faith communities in COVID-19 education, preparedness, and response.

- Access the publication

- Access the risk assessment tool

- Access the decision tree

- Acknowledgements

Risk communication and community engagement

Mental health considerations during COVID-19 outbreak

These mental health considerations were developed by the Mental Health Department as support for mental and psychological well-being during COVID-19 outbreak.

- Access the publication

A guide to preventing and addressing social stigma associated with COVID-19

Social stigma in the context of health is the negative association between a person or group of people who share certain characteristics and a specific disease. In an outbreak, this may mean people are labelled, stereotyped, discriminated against, treated separately, and/or experience loss of status because of a perceived link with a disease.

The current COVID-19 outbreak has provoked social stigma and discriminatory behaviours against people of certain ethnic backgrounds as well as anyone perceived to have been in contact with the virus.

- Access the publication

COVID-19 updates from our partners

Faith and caring for each other in the times of the COVID 19 pandemic*

13 March 2020 I World Council of Churches

Statement regarding the Church of the Holy Sepulchre, Jerusalem*

20 March 2020 I Church of the Holy Sepulchre,

COVID-19 Guidelines from Episcopal Conferences in Eastern Africa on Safe Mass Gatherings*

21 March 2020 I AMECEA