

RESUMING WORSHIP IN THE NEXT SEASON OF THE PANDEMIC



BACKGROUND

In early May 2020, WELS Congregational Services published a COVID-19 related e-magazine titled *For Such a Time This*. At that time, most WELS congregations were offering online worship only. Now that restrictions have eased, Congregational Services has received a high volume of questions about how to resume in-person worship. This follow-up document was written to help churches with those questions.

Many individuals were involved in the production of this document. Pastor Jonathan Hein, coordinator of Congregational Services, wrote the initial draft. It was then reviewed and discussed by all members of Congregational Services. An updated version was then sent to a number of WELS members with expertise in the scientific and medical communities. Pastor Hein incorporated their counsel into this final version.

This particular *For Such a Time As This* update will focus exclusively on churches returning to corporate worship. Congregational Services' Commission on Lutheran Schools has been studying health recommendations and has been in communication with principals and other school leaders regarding opening schools in fall. Additional recommendations regarding other types of ministries will be shared if needed.

NEMO RESIDEO: OUR MOTTO MOVING FORWARD

That Latin motto is translated, "Leave no one behind." It's used in some way by every branch of the United States military. I remember watching my youngest son's graduation from the US Air Force basic military training. I was moved as 600 young men and women shouted the Airman's Creed. The last line of that creed states: "I will never falter. I will not fail." The second-to-last promise in that creed: "I will never leave an Airman behind." *Nemo resideo*.

In military training, that concept is drilled into young adults. I had a friend who served as a Navy SEAL. He told me how his unit was divided into training teams. Teammates were rewarded (or disciplined) not by individual performances but according to how *the team* performed. Why? In the military, lives are dependent on a unit functioning as one entity. Everybody matters. You

need to watch the back of the guy next to you. So, it is drilled into you. *Nemo resideo*. Look after your brother in arms. Think of his well-being as your well-being. Leave no one behind. It is what our military expects of every serviceman.

Our Lord Christ expects this in his army too. Listen to your Commanding Officer. **"In humility value others above yourselves"** (Philippians 2:3). **"Honor one another above yourselves"** (Romans 12:10). What is Jesus telling us? He wants us to consider the needs of others ahead of our own needs, so that no one is left behind.

I believe that attitude is going to be vital during this next phase of the pandemic, as restrictions are eased. I promise you, there are vast differences in how your members believe your church should reopen. Satan is aware of those different opinions. He is licking his demonic chops, excited about the potential to pit

member against member, to create dissension. If we are going to avoid that, we need to remember: *nemo resideo*.

Let me give you an example of how to carry out that attitude as we resume worship. Imagine three church members.

- Person A thinks COVID-19 is a big nothing. He believes worship should be conducted exactly as it was before the pandemic.
- Person B thinks COVID-19 is a threat, especially to at-risk individuals. So, while he wants worship to resume, he believes the church should take some precautions: social distancing, extra cleaning between services, etc.
- Person C thinks COVID-19 is extremely dangerous. He has at-risk individuals living in his home. He also wants to return to worship. But he feels that unless people are wearing masks, it is putting God to the test.

Do not focus on who you believe has the proper view of COVID-19. Instead, focus on how the principle of *nemo resideo* would play out if your church were able to offer only one worship service. It's a silly hypothetical, because your church could offer more than one service. But for the sake of the illustration, imagine that you could offer only one service. Whose view should prevail: Person A, B, or C?

If your church catered to Person A, won't Person C be left behind? He could not gather with fellow believers around Word and sacrament. It would cause him to violate his conscience. But if your church catered to Person C, requiring masks in worship, would Person A be left behind? No. He could still worship.

Now, Person A might view the mask as a nuisance. He might initially grouse. If I were a leader in your church, I would ask Person A to meditate on three things: scourge, thorns, and nails. If Jesus was willing to put up with *those* "nuisances" for the eternal benefit of Person A, it seems breathtakingly ungrateful if Person A cannot put up with the "nuisance" of a mask for the benefit of Person C, especially since Person C is someone Jesus loves an awful lot. *Nemo resideo*.

Again, this is only an illustration. A church could offer multiple services, one requiring masks and another

where they were optional. I am not trying to make a point about masks. (We will discuss those later.) I am trying to stress how important it will be for us to exhibit a humble, sacrificial spirit as we reopen: *nemo resideo*. We will leave no one behind. We need to think often about how Christ was willing to suffer any level of pain and die so that we were not left behind in a lake of eternal fire. *Nemo resideo*. As we dwell on Christ's sacrifice for us, his Spirit will then enable us to gladly self-sacrifice for others, putting the needs of others ahead of our own personal preferences. **"May the God who gives endurance and encouragement give you the same attitude of mind toward each other that Christ Jesus had"** (Romans 15:5).

As you plan to reopen your church, remember, *nemo resideo*. Realize that your people are all over the board. Leave none of them behind. If it means you need to continue to offer online worship and private communion, please do so. If it means offering different levels of care in different services, make that effort. If it happens that the service you prefer (e.g., one where masks aren't required) is not offered at your preferred time, don't complain. Be a good soldier.

This side of heaven, we sometimes call it the "Church Militant." We are at war with dark spiritual forces. Let us look after the well-being of our brothers and sisters in arms. Let us love them as perfectly and selflessly as Christ loved us. *Nemo resideo*.



NOTE: The virus under discussion is SARS-CoV-2, a novel (new) strain of coronavirus. In this document, “the coronavirus” will be referring specifically to SARS-CoV-2.

If one is infected with SARS-CoV-2, he may come down with a disease known as COVID-19.

COVID-19: WHAT WE NOW KNOW

One of the documented challenges to operating in this pandemic is that many scientific studies have been released without peer review.¹ Some theories have been presented as fact. Experts, pivoting on new data, have “flipped” on some of their recommendations.

So if you want something to be true about this coronavirus—be it positive (for example, that you can’t pass on the coronavirus if you are asymptomatic) or negative (for example, that there will certainly be a secondary spike in fall)—you can probably find a study to support your view. That doesn’t make it true. The study may have been recalled or repudiated. Science is self-correcting over time as evidence continues to be gathered. While we understand much more about COVID-19 than we did in March, we must also humbly acknowledge that we will know much more in October.²

However, as time goes on, experts have more data. Dr. Jason Paltzer writes, “There are now over 25,000 peer-reviewed studies of SARS-CoV-2 and COVID-19.”³

Therefore, some aspects of this virus have become much clearer. For churches to make plans to reopen in this new season of the pandemic, they must look at what we now know about COVID-19 in an attempt to answer two questions.

1. How dangerous is COVID-19?
2. How does it spread?

¹<https://www.medpagetoday.com/blogs/revolutionandreveldation/86465>

² As this article was drafted during the week of June 21 the daily news was reporting an increasing number of COVID cases. Are these spikes the result of unwise reopening policies or of people not following policies? Whatever the final analysis reveals, it seems that we’re still dealing with much uncertainty about the impact of reopening.

How dangerous is COVID-19?

That’s the first question to consider. If this strain of coronavirus is not that harmful, then there is no reason to ask, “How does it spread?” However, we know COVID-19 is fatal in some cases. So, exactly how dangerous is this coronavirus?

As of this writing, the CDC is reporting over 130,000 deaths to date in the United States. Some have suggested COVID-19 related deaths may be overcounted. However, even if 20% of deaths attributed to COVID-19 were inaccurate, the sheer numbers now indicate that this virus is substantially more dangerous than influenza.

The White House has frequently cited the forecasts from the Institute for Health Metrics and Evaluation out of the University of Washington.⁴ The IHME has consistently forecast the lowest level of deaths compared to other models. The IHME recently updated their forecast to project 200,000 COVID-19 deaths in the United States by October 1.⁵ (They are not saying COVID-19 deaths will end then. They are simply not willing to forecast what will happen beyond October 1.) The new forecast factors in two trends: while the percent of people who contract COVID-19 and subsequently die has been trending down in America, the number of people contracting COVID-19 is trending up in many states as they reopen.⁶

The worst season of influenza in the past decade was 2017-2018, when 61,000 people died. The lowest influenza death rate in the past decade was 2011-2012, when 12,000 people died. The average total annual deaths from influenza is about 35,000.⁷ So, even if coronavirus deaths are somewhat overreported, it is clear that COVID-19 is substantially deadlier than influenza. Dr. Robert Balza writes, “While estimates for the mortality rate of COVID-19 found on the internet vary wildly, the mortality rate for confirmed cases in the

³ June 27, 2020 e-mail from Dr. Jason Paltzer to Pastor Jonathan Hein

⁴ Dr. Paltzer writes, “This institute has great history and credibility.” – June 27, 2020 email from Paltzer to Hein

⁵ <http://www.healthdata.org/covid/updates>

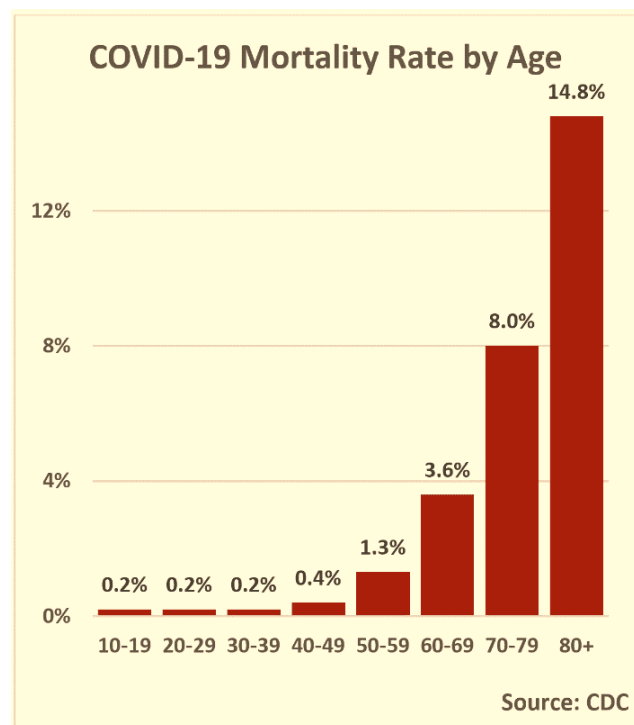
⁶ <https://www.cdc.gov/coronavirus/2019-ncov/covid-data/covidview/index.html>

⁷ <https://www.cdc.gov/flu/about/burden/index.html>

United States currently stands at 4.9%.⁸ The mortality rate for all symptomatic infections is not yet possible to determine accurately due to a lack of testing availability, but a recent estimate puts the number at around 1.3%,⁹ which is approximately ten times more deadly than influenza.”¹⁰

What is also clear is that COVID-19 disproportionately impacts certain demographics. We have three full months of data for the United States. Clearly, COVID-19’s danger increases among the elderly. About 81% of Americans who have died of COVID-19 are over 65.¹¹ A staggering 40% of COVID-19 deaths in America have been residents of nursing homes.¹²

Studies have shown that as many as 25% of individuals infected with SARS-CoV-2 remain asymptomatic. These



asymptomatic individuals are typically younger individuals.¹³ That has led some to describe COVID-19 as being a non-issue for young adults. That would be an overstatement. We simply do not know the long-term impact of COVID-19 on those who have it and survive. Dr. Balza cites a now peer-reviewed study that demonstrated some asymptomatic young people with COVID-19 develop lesions in their lungs.¹⁴ He writes, “The long-term effects of [COVID-19] are not yet understood.”¹⁵ Dr. James Henkel agrees: “While not a large percentage of the mortality is below sixty, there are a number of clinical reports suggesting that [some of those who recover] have serious side effects such as kidney and lung damage. It is not clear how long-term this is so far.”¹⁶

It is also now clear that individuals with underlying medical conditions are hit harder by the virus: people with moderate to severe asthma, people with serious heart conditions, people with diabetes, people who are immunocompromised (such as someone being treated for cancer). Even severe obesity raises one’s risk.¹⁷ This poses a potential threat, because many Americans have underlying health issues without knowing it. Dr. Paltzer writes, “We know that over 30% of people in the US are pre-diabetes.¹⁸ Over 20% of cases of diabetes are undiagnosed.¹⁹ Given this, it is hard to know or ‘see’ who is at an increased risk for severe disease.”

So, let us answer that first question: how dangerous is COVID-19? It depends who you are. The elderly are most at risk. In America, people under the age of 65 count for about 20% of all COVID-19 deaths. People under the age of 55 account for 8% of all COVID-19 deaths. People under 45 account for less than 3% of all COVID-19 deaths. For those deaths of people under 65, the vast majority had underlying medical conditions.²⁰

⁸ <https://coronavirus.jhu.edu/data/mortality>

⁹ https://www.healthaffairs.org/doi/full/10.1377/hlthaff.2020.00455?utm_campaign=covid19fasttrack&utm_medium=pres&utm_content=basu&utm_source=mediaadvisory&

¹⁰ <https://www.cdc.gov/flu/about/burden/2017-2018.htm>

¹¹ <https://www.foxnews.com/politics/coronavirus-deaths-in-u-s>

¹² <https://www.forbes.com/sites/theapothecary/2020/05/26/nursing-homes-assisted-living-facilities-0-6-of-the-u-s-population-43-of-u-s-covid-19-deaths/#4ca67f7274cd>

¹³ <https://www.healthline.com/health-news/50-percent-of-people-with-covid19-not-aware-have-virus>

¹⁴ <https://www.nature.com/articles/s41591-020-0965-6.pdf>

¹⁵ June 26, 2020 email from Dr. Robert Balza to Jonathan Hein

¹⁶ June 27 email from Dr. James Henkel to Jonathan Hein

¹⁷ <https://faq.coronavirus.gov/underlying-conditions/>

¹⁸ <https://www.cdc.gov/diabetes/basics/prediabetes.html#:~:text=Prediabetes%20is%20a%20serious%20health,1%20in%203%E2%80%9494have%20prediabetes.>

¹⁹ <https://www.cdc.gov/diabetes/data/statistics/statistics-report.html>

²⁰ <https://elemental.medium.com/its-not-just-sick-old-people-who-die-from-covid-19-bc9251989bc8>

Let us make this more concrete. See that healthy 39-year-old man two pews ahead of you? If he contracted COVID-19, there may be some long-term health concerns, but there is a 0.2% chance it would be fatal. But if the 80-year-old three pews behind you were to get sick, there is closer to a 14% chance he would die of COVID-19.²¹

(NOTE: In all these examples, the true mortality rate is lower. It is difficult to say how much lower, because it is still not known how many individuals in various demographics contract COVID-19 without it ever being diagnosed. The point simply is that the virus poses a substantially greater threat to the elderly members in our church.)

The bottom line is that COVID-19 is quite dangerous, especially for the elderly and people with underlying health conditions, whether those conditions are diagnosed or not. That fact does not give the Christian any reason to be cavalier about the transmission of COVID-19. “Eh, he got coronavirus and died, but he was really old anyway.” The Fifth Commandment compels the believer to help every neighbor, regardless of age or underlying health issues, with every physical need. If we can prevent the spread of COVID-19, particularly to those for whom it is most dangerous, Christian love compels us to attempt to do so.²²

Which leads to our second question.

How does COVID-19 spread?

Now that time has passed and more data has been gathered and evaluated, there is more certainty about how this virus spreads. One of the most widely circulated and acclaimed articles explaining the spread of COVID-19 was written by Dr. Erin Bromage.²³ Dr. Bromage has a PhD in microbiology and immunology. He teaches and conducts research on infectious diseases at the University of Massachusetts in Dartmouth. It should be noted that Dr. Bromage has

written about COVID-19 from the early stages. His predictions of how this pandemic would play out have been extremely accurate. So, Bromage has earned credibility. His writings on COVID-19 have been cited by many other epidemiologists and virologists. In the article, he writes about what he thinks is the biggest risk of COVID-19 spread—large people gatherings in enclosed spaces. I will attempt to summarize.

Dr. Bromage explains that we now know for certain COVID-19 viral particles are spread almost exclusively through respiratory droplets and aerosols. Any exhalation activity—breathing, talking, singing, coughing—releases moisture from the lungs. Sometimes the moisture droplets are so large they are visible. You have seen “the cloud” when someone sneezes while in a ray of sunlight. Those large droplets have enough mass that they quickly fall to the ground. This is where physical distancing plays in. The droplets of a sneeze are too heavy to travel more than 6 feet.

However, other exhaled droplets are tiny, just a few microns in diameter. These are sometimes called “droplet nuclei” or “aerosol droplets.” These tiny aerosols can float in the air for hours and travel considerable distances.

The number of viral particles within respiratory droplets and aerosols varies, depending on an individual’s viral load. Bromage cites studies that show an individual can contract COVID-19 with as few as 1,000 viral particles. That is low; hence, the reason COVID-19 is so contagious.²⁴

Those studies indicate that an infected individual generally releases the most virus into the environment shortly before becoming symptomatic.²⁵

Dr. Balza writes, “It is incredibly important that our leaders understand this critical point. A review article recently published in the *Annals of Internal Medicine* concludes that 40-45% of those infected are

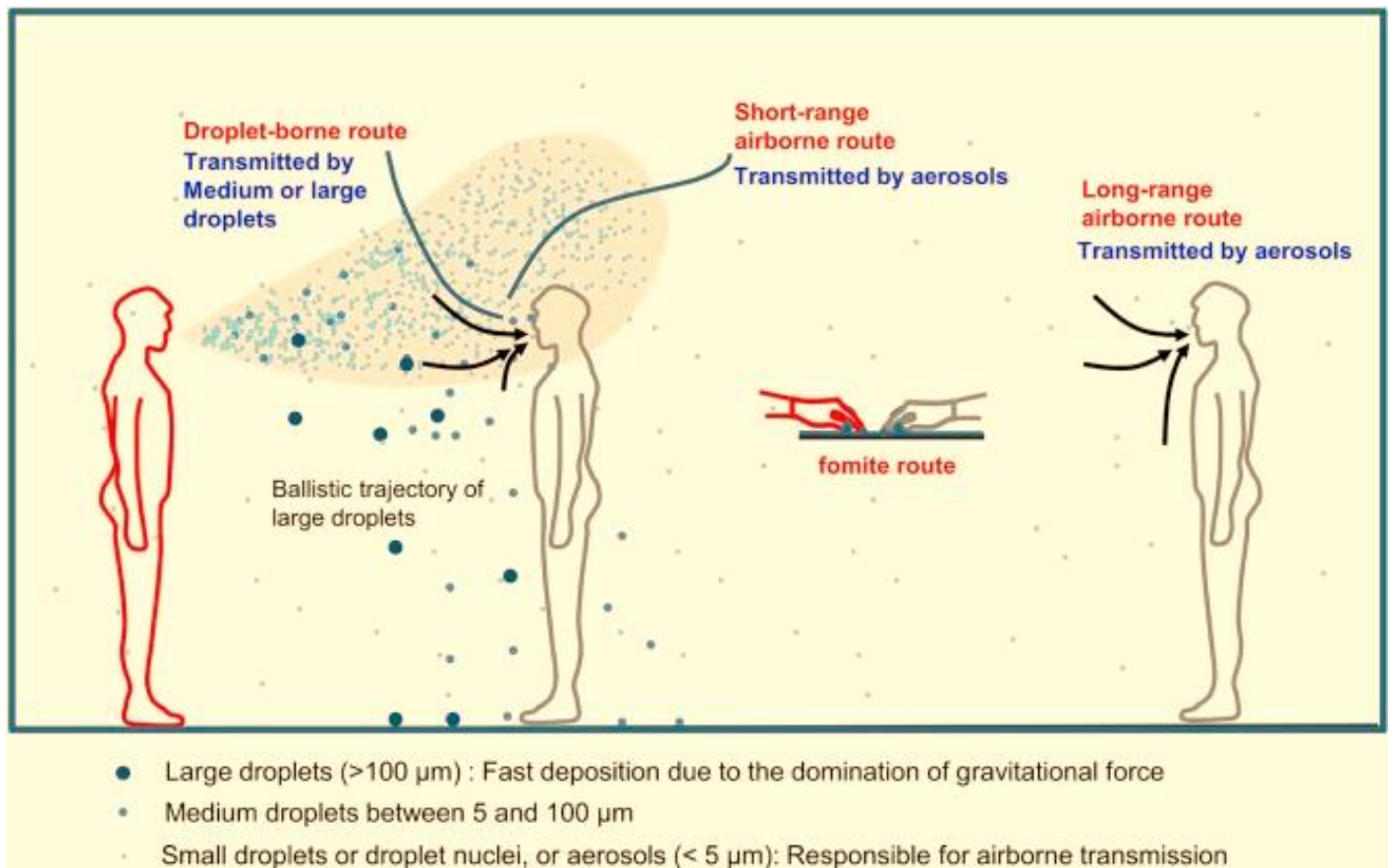
²¹ <https://www.worldometers.info/coronavirus/coronavirus-age-sex-demographics/>

²² Of course, a significant debate has revolved around saving lives and “acceptable risk” that also cares about economic/employment vitality. That is not our concern in this article.

²³ <https://www.erinbromage.com/post/the-risks-know-them-avoid-them>

²⁴ <https://www.sciencemediacentre.org/expert-reaction-to-questions-about-covid-19-and-viral-load/>

²⁵ https://virologie-cm.charite.de/fileadmin/user_upload/microsites/m_cc05/virologie-ccm/dateien_upload/Weitere_Dateien/analysis-of-SARS-CoV-2-viral-load-by-patient-age-v2.pdf



asymptomatic but still able to shed the virus.²⁶ A high profile research article published in the journal *Science* estimates that 46% of new cases result from a presymptomatic index case, 38% from symptomatic, 10% from asymptomatic, and 6% from ‘environmentally mediated transmission.’²⁷ The point: infected individuals spread SARS-CoV-2 without knowing it.

(Note: In early June, a spokesperson for the World Health Organization made a statement implying that WHO believes asymptomatic individuals could not spread the virus. They clarified within 24 hours that their definition of asymptomatic was being interpreted too broadly.²⁸)

The larger the vapor droplet, the more viral particles it can contain. However, even aerosol droplets can contain some viral particles. And the more intense the exhalation event, the more aerosol-sized vapor droplets are released, increasing the risk of transmission and infection.

The diagram above demonstrates the various routes of droplet spread and virus transmission.

Imagine you are in an enclosed room. You are infected, and I am not. You sneeze. A sneeze releases about 30,000 larger vapor droplets. Those 30,000 large droplets may contain as many as two-hundred million viral particles!²⁹ The good news is those droplets are heavy. They (and the viral particles they contain) will fall to the ground fairly quickly. Here is where physical distancing plays in. There is a benefit to me being more than 6 feet from you. I would be out of the range of those large, virus-packed vapor droplets. This also illustrates one way masks can help, drastically cutting down on “ballistic trajectory” or large vapor droplets.

Now consider less intense exhalation activities than sneezing or coughing. Take simple breathing. Bromage cites studies of influenza which indicate that through breathing alone, an infected person, in one minute, exhales enough aerosol-sized vapor droplets to contain

²⁶ <https://www.acpjournals.org/doi/10.7326/M20-3012>

²⁷ https://science.sciencemag.org/content/368/6491/eabb6936?fbclid=IwAR3q88aZdF3C-fxmsuzKHN_wbnF-C9EiwPTYqjbuJfk5pxtbS1KLjqH9-hE

²⁸ <https://www.thecut.com/2020/06/how-many-people-with-the-coronavirus-are-asymptomatic.html>

²⁹ <https://www.livescience.com/3686-gross-science-cough-sneeze.html>

approximately 30 viral particles. We already said it is possible that as few as 1,000 COVID-19 viral particles are enough to infect someone.

So, let us do the math. If we are sitting in an enclosed room, it doesn't matter if we are 6 feet apart, because the tiny aerosol-sized droplets you exhale when breathing float and travel.³⁰ However, if you only exhale 30 viral particles a minute, we would have to be in that enclosed space for over 30 minutes before you exhaled enough viral particles for me to have a chance of becoming infected. (And that would assume I accumulate 100% of your infectious particles, which is unlikely.)

However, let us intensify your exhalation activity. Imagine you are talking. Bromage writes, "Speaking increases the release of respiratory droplets about 10-fold." So, you would be releasing closer to 300 viral particles a minute. Again, it doesn't matter if I am physically distanced from you in that room. Those tiny aerosol droplets can float for hours. Therefore, if you are talking, there would potentially be enough viral particles in the air for me to get sick in four minutes. Thus, the intensity of the exhalation activity plays a major role in calculating risk of infection.

Therefore, Bromage concludes that while physical distancing is not irrelevant, it is not the only factor, nor even the most important factor, in assessing the risk of transmission of COVID-19. For example, if you are out walking and someone is coming toward you on the sidewalk, there is little reason to cross the street. Even if they are infected and you pass them just 3 feet apart, in that short period of time they would not exhale enough viral particles to infect you, even if they greeted you: "Good morning!" Moreover, you are in the open air where any aerosol particles quickly disperse.

Physical distancing is worth emphasizing to avoid the larger vapor droplets that carry massive amounts of viral particles: the droplets emitted when one coughs, the "spittle" that can happen when one is talking loudly, etc. Hand washing helps too. Imagine an infected individual coughs into their hand, so it is now covered

with larger vapor droplets. They touch a doorknob. You touch the doorknob shortly after. You then touch your face. This is called "fomite transmission," when a pathogen is transmitted through shared surface contact. It is possible for COVID-19 to spread this way, but "evidence suggests that only 6% or so of new cases occur through environmental or fomite transmission."³¹

The evidence now suggests that the spread of COVID-19 through exposure to the smaller, lighter aerosol-based droplets is a high risk.³²

Dr. Bromage shares this formula in his article.

Successful Infection = Exposure to Virus X Time

"Exposure to virus" depends on a number of factors:

- Are you outside, where aerosol-sized particles can't remain contained to an area? (There seems to be minimal risk of contracting COVID-19 through aerosols if you are outside.³³ Not only do they disperse, but there is growing evidence that sunlight rapidly inactivates SARS-CoV-2.³⁴) Are you in an enclosed space? If so, how large is it? What is the airflow?
- How many people are in the enclosed space with you? Obviously, the more people, the higher the chances that someone is infected.
- What are the people in the enclosed space doing? Are they simply breathing, which is a low-exhalation activity? Are they talking, which releases 10 times more aerosol-sized vapor droplets than breathing? Are they shouting or singing, which releases 30 times more particles than breathing?
- How long are you in the enclosed space? Did you walk into someone's office for 30 seconds? Or were you sitting in a conference room with ten other people for two hours?

Let us apply this to a worship setting.

³⁰ <https://www.nejm.org/doi/full/10.1056/NEJMc2009324>

³¹ June 26 email from Balza to Hein, where Balza cites https://science.sciencemag.org/content/368/6491/eabb6936?fbclid=IwAR3q88aZdF3C-fxmsuzKHN_wbnF-C9EiwPTYqjbuJfk5pxtbS1KLjgH9-hE

³² <https://onlinelibrary.wiley.com/doi/full/10.1111/risa.13500>

³³ <https://www.nytimes.com/2020/05/15/us/coronavirus-what-to-do-outside.html>

³⁴ <https://academic.oup.com/jid/article/222/2/214/5841129>

APPLYING WHAT WE KNOW TO WORSHIP

What is a typical worship service like? You have a group of people in an enclosed space. There is a fair amount of speaking (high-exhalation activity) and lots of singing (extremely high-exhalation activity). A worship service involves elements likely to increase the risk of transmission.

Imagine 70 people are gathered in the sanctuary, all socially distanced. Imagine 2 of the 70 have COVID-19 but are asymptomatic or presymptomatic; i.e. they don't have symptoms yet are contagious. The worship service is conducted as normal, so it runs 60 minutes. In liturgical responses and prayers and hymns, the congregation sings for about 20 minutes and speaks for about 10 minutes. So, time for more math.

We said, based on studies of influenza, an infected individual releases approximately 30 viral particles a minute simply by breathing.

$$\begin{aligned} & 2 \text{ infected people} \\ X & 30 \text{ viral particles per minute} \\ X & 30 \text{ minutes of sitting quietly in worship} \\ = & 1,800 \text{ viral particles} \end{aligned}$$

Speaking increases vapor exhalation approximately ten-fold; i.e. 300 particles a minute.

$$\begin{aligned} & 2 \text{ infected people} \\ X & 300 \text{ viral particles per minute} \\ X & 10 \text{ minutes of speaking in worship} \\ = & 6,000 \text{ viral particles} \end{aligned}$$

Singing or yelling increases vapor exhalation approximately thirty-fold; i.e. 900 particles a minute.

$$\begin{aligned} & 2 \text{ infected people} \\ X & 900 \text{ viral particles per minute} \\ X & 20 \text{ minutes of singing in worship} \\ = & 36,000 \text{ viral particles} \end{aligned}$$

Hypothetically, at the end of a one-hour service, those two infected individual would put approximately 44,000 viral particles into that enclosed environment.

Remember, aerosol-sized vapor can float and carry viral

particles for hours. It takes as few as 1,000 viral particles to infect someone.

I want to stress this is only an illustration. The point? Corporate worship typically involves activities that have the potential for an infected person to put a high amount of virus into the atmosphere in a form (aerosol-sized vapor) that is not mitigated by physical distancing.

Let us move beyond hypothetical examples to the real-life examples Bromage cites in his article. One extremely relevant case was a choir practice held in Washington. Sixty choir members attended. They did not shake hands or exchange hugs. They all had their own music to avoid sharing surface contact. They socially distanced, rehearsing in a gym. They rehearsed for over two hours. Within a few days, 45 of the 60 were infected with COVID-19. Two eventually died. Bromage writes, "Singing aerosolizes respiratory droplets exceedingly well."³⁵

Dr. Balza writes, "In a separate case study of an outbreak in a rural Arkansas Church, a presymptomatic pastor and his wife appear to have transmitted COVID-19 to 35 out of 92 church attendees during a three-day children's event with singing. Three members of the congregation later died due to COVID-19 complications."³⁶

As we enter the next phase of the pandemic where things reopen, we are not being honest as leaders if we imply that corporate worship is *without* risk. To say "Everything is perfectly safe because we will use extra cleaning measures and socially distance" is not accurate. The evidence now suggests that gathering in a large group and engaging in high-exhalation activities in an enclosed area—like a normal worship service—is actually one of the riskier things one can do, especially if one belongs to an at-risk demographic.

A recent survey of 500 epidemiologists had them rank 20 tasks for risk. Going to a sporting event—with tightly packed seats and people cheering and yelling (high-exhalation activities)—was ranked the riskiest activity. Not wearing a face covering was ranked the second

³⁵ https://www.enidnews.com/opinion/guest-editorial-covid-19-could-mute-church-singing/article_2b1adde8-9fa4-11ea-b342-9be987d16909.html

³⁶ June 26 email from Balza to Hein; <https://www.cdc.gov/mmwr/volumes/69/wr/mm6920e2.htm>

riskiest activity. Attending a religious service was ranked third.³⁷

It may be true that for some of our members, contracting COVID-19 would not be traumatic. However, for other members, the risk is substantially higher. In my opinion, the Eighth Commandment compels us to say so. Therefore, I am simply encouraging thoughtful planning, careful communication, transparency, and respect for differences in opinions.

Leaders can and should think through the ramifications of what we now know to be fact about COVID-19: a) it is extremely dangerous for some individuals and can be fatal, and b) a major source of its spread is larger gatherings in an enclosed area with people engaging in high-exhalation activities.

How do these facts intersect with Christian love as we plan to return to worship in this next phase of the pandemic? That will vary from congregation to congregation, based on membership base, options for distancing, and community trends. Some thoughts for church leaders:

Leaders need to balance trust in God with putting God to the test.

Jesus sits on his throne. He is in absolute control of everything, including COVID-19. King David declared this truth when the Spirit inspired him to write, **“All the days ordained for me were written in your book before one of them came to be”** (Psalm 139:16). Therefore, Jesus himself asks the rhetorical question, **“Who of you by worrying can add a single hour to your life?”** (Luke 12:25). So, on the one hand, God’s Word encourages us to trust in his providence. He protects and sustains life. We must not let COVID-19 concerns drown us in worries and fears.

On the other hand, God does not permit us to use his providence to set aside the God-given gift of human reason when assessing danger. Satan tempted Jesus to jump off the temple tower, trusting in God’s promise of angelic protection. Jesus responded by quoting Deuteronomy. **“It is said: ‘Do not put the Lord your God to the test’”** (Luke 4:12). In other words, while God

can supernaturally intervene to protect us from harm, it is immoral for us to assume he will do so and subsequently engage in behavior that human reason says is reckless. It’s why we look both ways before crossing the street. In faith, we believe that God could supernaturally protect us from an oncoming bus. In that same faith, we understand we don’t have the right to take needless risks with our lives.

It is impossible to remove all risks from life. Moreover, as we see in this pandemic, it is possible to have risk mitigation that creates more problems than the risk itself. So, as church leaders consider how to best serve God’s people, they will use their human reason to weigh known facts and enact reasonable precautions. They will not force God to perform miracles to provide safety when human safety measures could have been taken. However, in all this, they will not act out of panic or fear, but will instead set the example for others of the courage that Christ’s promises provide.

Leaders should avoid making false equivalencies in comparing corporate worship to other activities.

If someone were willing to go to a packed bar where people were talking loudly 12 inches apart . . . if they were willing to go to a packed basketball arena . . . but unwilling to go to church “because it’s too risky,” it is clear the individual is using COVID-19 as an excuse to despise the means of grace. Those are apples-to-apples comparisons: groups of people in an enclosed area engaging in high-exhalation activities.

But consider the well-intentioned pastor who encourages a member, “If it’s safe to go to the grocery store, then it’s safe to go to church.” This is an apples-to-oranges comparison. People typically do not talk or sing when buying groceries. If organized, you can finish your grocery shopping in ten or fifteen minutes. Moreover, the average Walmart is approximately five-million cubic feet of enclosed space. The average chain-type grocery store is about 800,000 cubic feet. A church that seats 200 would consist of less than 50,000 cubic feet.

³⁷

<https://www.nytimes.com/interactive/2020/06/08/upshot/w>

[hen-epidemiologists-will-do-everyday-things-coronavirus.html](https://www.nytimes.com/interactive/2020/06/08/upshot/w-hen-epidemiologists-will-do-everyday-things-coronavirus.html)

“If someone can go to a full park they can go to church.” Again, that’s a false equivalency. In the open air, aerosol-sized vapor particles can disperse. There is little risk of contracting COVID-19 outdoors through aerosol-sized respiratory vapor. (If someone, unmasked, sneezed in your face while outside, that is different.)

Leaders should consider the exhalation activities of the worship service, especially singing.

The data is clear: if someone is infected, cutting the amount of time that a person speaks and sings would drastically reduce the number of viral particles that individual is putting into the air. Think of the hypothetical example. With 20 minutes of singing and 10 minutes of talking, those 2 infected individuals would hypothetically release approximately 44,000 viral particles in the air. Imagine worship was structured so that the people spoke for only two minutes: Lord’s Prayer, Creed, a few “amens.” Imagine the church used a cantor for most of the singing so that the assembly only sang six minutes total. Instead of 44,000 viral particles in the air, there are now more like 11,000. Even with reduced singing, there is still some risk.

It is worth noting that many choral societies have shared warnings about singing during the pandemic. The Center for Congregational Song, for example, discourages corporate singing at this time.³⁸ The Performing Arts Medicine Association has done the same.³⁹

Dr. Balza notes, “a very problematic article . . . has been widely shared in our circles: a blog post by Gene Veith entitled *Singing is Unlikely to Spread COVID-19*.”⁴⁰ Dr. Balza writes that Veith’s blog is based on a German article referencing experiments conducted at the University of Bundeswehr. He concludes, “The article offers no statistical analysis and does not study the movement of respiratory droplets which are thought to transmit SARS-CoV-2.” Dr. Balza recommends suspension of singing by large groups, instead using a

³⁸ <https://congregational song.org/resuming-worship-a-guide/>

³⁹ https://www.enidnews.com/opinion/guest-editorial-covid-19-could-mute-church-singing/article_2b1adde8-9fa4-11ea-b342-9be987d16909.html

⁴⁰

<https://www.patheos.com/blogs/geneveith/2020/05/singing-is-unlikely-to-spread-covid->

soloist for the musical portions of worship, at least 16 feet removed from the congregation and not in the balcony.⁴¹

Dr. Lucinda Halstead, the president of the Performing Arts Medicine Association, writes, “In the absence of a vaccine or 95% effective drug treatment, a return to group singing must include acceptance of risk . . .”⁴² Therefore, leaders should consider the amount of singing, especially when at-risk individuals are present.

Leaders should contemplate the total length of the worship service.

Remember, a successful infection is a product of two things: 1) the amount of virus in the air in an enclosed environment, and 2) the time one is exposed to that environment. You obviously need to be exposed long enough to inhale enough viral particles to get sick. So, church leaders might also consider shortening the length of the service.

If there is less singing, that might happen naturally; e.g., singing 7 stanzas in a service instead of 25. In addition, worship planners might consider having only two lessons read (as was common in Martin Luther’s *German Mass*). The pastor might strive to keep his sermon under 15 minutes.

Leaders should carefully plan how to include Holy Communion.

Some have suggested it might be wise for pastors to continue doing private communion for the time being. Others have pointed out that this option also entails risk. Offering private communion every day throughout the week, hypothetically, might increase the risk of the pastor becoming infected and then spreading the virus to others before he becomes symptomatic or if he remains asymptomatic. Thus, the church guidelines I have read are divided on how to celebrate communion: privately or corporately. There is perfect consensus that if a congregation decides to celebrate communion

[19/?fbclid=IwAR3wdF7wZ9fJNZDmzrRAq7hctKciiNSsCl2y7b1-9-stfhsz_HoLHdRKwHQ](https://www.middleclassartist.com/post/nats-panel-of-experts-lays-out-sobering-future-for-singers-no-vaccine-no-safe-public-singing)

⁴¹ June 26 email from Balza to Hein

⁴² <https://www.middleclassartist.com/post/nats-panel-of-experts-lays-out-sobering-future-for-singers-no-vaccine-no-safe-public-singing>

corporately, precautionary steps should be taken. Some considerations:

Continuous distribution of the Lord's Supper is worth serious consideration. It is a common method of distribution. It is typically used in large assemblies, as it is quicker than distribution by tables. Practicing physical distancing in continuous distribution is easy. Conversely, practicing physical distancing while communing in tables results in a very small number of people in each table, lengthening the total worship time.

The common cup is a wonderful expression of the unity of the Church. However, I have not seen a single expert say the common cup isn't a high risk during this pandemic. Some have argued, "I think it's riskier to use individual cups. The person filling them has to touch all the cups." It seems that the risks with the individual cup can be controlled. The person filling the cups could wear a mask and gloves. He or she could space them out in the tray so that there is no risk of anyone touching multiple cups. The potential risks of the common cup seem harder to control (e.g., a backwashed piece of wafer floating in the wine).

I appreciate the loss of symbolism and deep historical practice with the common cup. I hope (and believe) if churches refrain from its use, it will be temporary. Just as I hope (and believe) handshakes will come back eventually. However, right now, the warnings against common cup seem to have merit.

In summary, based on the recommendations I have read, if I were conducting Holy Communion, I would utilize continuous distribution. Non-family would stay 6 feet apart while approaching the chancel. A cantor would sing the distribution hymn. Everyone involved in distribution would carefully disinfect their hands before distribution and possibly wear gloves. Everyone involved in distribution would be masked. I would dispense the wafer edge down into the palms of the communicants so that my fingers never touch anyone's hand. After receiving the bread, communicants would proceed to a communion assistant, who holds a tray of individual cups spaced apart in the tray.

Leaders should consider a policy involving masks.

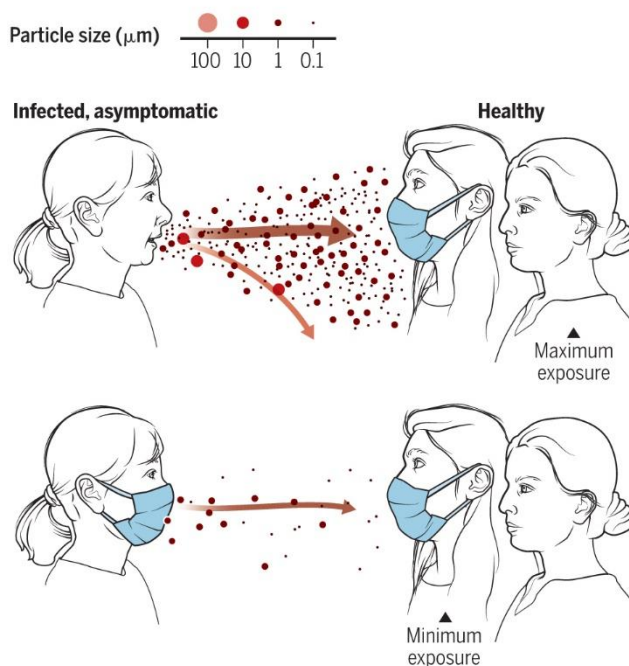
The main reason to wear a mask is not to protect yourself. It is to limit the amount of vapor droplets you release into the atmosphere. If everyone wears masks, it means that the individual who is infected but doesn't know it releases a smaller amount of virus into the air.⁴³

Bromage says that masks catch "virtually 100%" of larger vapor droplets. What about the tiny aerosol-sized droplets? "At a minimum, it is believed a good mask will reduce 50% of emissions from the mask-wearer. Multi-layered mixed fabric masks approach filtering efficiencies as high as 90%."⁴⁴ It depends on the quality of the mask and if an individual wears it properly: tight fit to face, covering the nose, etc.

This graphic illustrates the roles masks play in reducing airborne transmission of aerosol vapor particles.

Masks reduce airborne transmission

Infectious aerosol particles can be released during breathing and speaking by asymptomatic infected individuals. No masking maximizes exposure, whereas universal masking results in the least exposure.



GRAPHIC: V. ALTOUNIAN/SCIENCE

⁴³ <https://www.erinbromage.com/post/what-s-the-deal-with-masks>

⁴⁴ <https://www.erinbromage.com/post/what-s-the-deal-with-masks>

In his analysis of the initial draft of this document, Dr. Balza writes, “Strongly encourage facemask use. It is well-documented that the spread of other respiratory viruses like influenza may be slowed or even stopped by widespread facemask use.⁴⁵ Population-level models for the spread of SARS-CoV-2 indicate that wearing facemasks when asymptomatic may effectively reduce transmission rates.⁴⁶ Recent studies have further supported the effectiveness of mask wearing in slowing or even stopping the spread of COVID-19.”^{47 48}

In the opening devotional portion of this newsletter, I mentioned that if a congregation could only offer one service per week, Christian love would probably compel that church to mandate masks. However, if a church can offer multiple services, it might take a two-pronged approach: one service where masks were mandatory and another where they were strongly encouraged.

Leaders should think about increasing airflow and ventilation.

An interesting case study is a South Korean call center where a COVID-19 outbreak occurred. A call center has multiple people talking—a high-exhalation activity. Interestingly, the people who became infected were located largely on one half of a floor. The authors of the study theorize that this was due to how the ventilation system was routed in that building.⁴⁹

NASA studied HEPA filtration and found a good filter can remove particles as tiny as 0.01 microns.⁵⁰

However, most experts would say air filtration systems should not be the first line of defense. There are other important factors.

Some ventilation systems allow the operator to adjust how much conditioned air is recycled. It is more energy efficient to condition recycled air. However, increasing the flow of exterior fresh air is believed by some experts to be a helpful mitigation tactic.⁵¹ You are replacing interior air, which potentially contains viral particles, with fresh air. Note that this is more than simply

increasing airflow. Simply increasing the circulation of interior air could actually increase exposure.⁵² The goal is to replace interior air with exterior air.

None of this is settled science. However, it is theory that may be incorporated into a larger COVID-19 plan without great inconvenience.

Leaders should consider outdoor services.

For many, this may not be feasible. However, if your congregation has a shady outdoor space where this would be possible, it may be an option for at-risk members. A church could purchase a large canopy and place it in a grassy area. Again, there is broad consensus that the risk of contracting COVID-19 through aerosol-sized vapor is strongly diminished when outside. Worshiping outside would eliminate much of the concern about exhalation activity.

Leaders should have a communication plan.

What needs to be communicated?

First, communicate the gospel message that moves your members to consider that motto: *nemo resideo*. When it comes to worship, members should think little of their freedoms and personal preferences and instead think of their brothers and sisters in Christ, especially those for whom COVID-19 poses a threat.

Second, communicate your mitigation plan. People will want to know three things.

- 1) *What, exactly, will we do?* My belief is that specifics are always better than generalities. Not “We are going to sing a bit less” but “We will limit the congregation to eight or fewer hymn verses. Liturgy will all be spoken.”
- 2) *Why are we doing these things?* Explain the rationale for the policies. (I pray this document helps you somewhat.)
- 3) *For how long will we do these things?* Share benchmarks that signal the easement or

⁴⁵<https://onlinelibrary.wiley.com/doi/full/10.1111/risa.13181>

⁴⁶<https://royalsocietypublishing.org/doi/10.1098/rspa.2020.0376>

⁴⁷<https://www.pnas.org/content/early/2020/06/10/2009637117#F2>

⁴⁸ June 26 email from Balza to Hein

⁴⁹ https://wwwnc.cdc.gov/eid/article/26/8/20-1274_article

⁵⁰<https://ntrs.nasa.gov/archive/nasa/casi.ntrs.nasa.gov/20170005166.pdf>

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<https://www.greenbuildinglawupdate.com/2020/04/articles/environmental/covid-19-and-the-risk-from-recirculated-air-in-buildings/>

⁵² June 28 email from Paltzer to Hein

elimination of mitigation tactics. E.g., “By September 1, if we have not seen any breakouts in churches, we will consider . . .”

- 4) *What will be the response if/when a member is diagnosed with COVID-19 after recently attending a service?* Congregations need to have a tracing protocol in place to let members know of potential exposure to this virus. More on this in a moment.

Third, you might need to communicate with at-risk members. Say, for example, your church took a two-pronged approach. You offer “extra care” services with very limited singing and mandatory masks. You offer other services that are closer to normal: masks optional, social distancing observed. Church leaders may want to personally contact at-risk members and encourage them to attend one of the extra care services.

On an ongoing basis, communicate what is happening in the congregation. Plan what to do when a member contracts COVID-19, especially if it happened during a worship service.

Some leaders suggest that this should be kept private, both due to privacy laws and to avoid starting a panic that might “scare people away from worship.” However, in order to serve the community, churches need to participate in contact tracing. Dr. Paltzer writes, “Effective contact tracing is needed to ensure those exposed by the infected individual are aware and can isolate to stop subsequent transmission. Effective contact tracing is an important aspect of a layered response to serving our members and the community. Find out who your local contact is at the Department of Public Health and create a communication plan with them. Creating a contingency plan and communication strategy will go a long way in keeping the community safe and responding to the media.”⁵³

Certainly, congregations must consider members’ privacy. In general, pastors do not pray for sick members in the Prayer of the Church unless that prayer has been requested or the pastor has asked permission. So, what if a member asks your pastor to pray for a spouse, also a member, who has tested positive for coronavirus? Do you pray for the individual without mentioning COVID-19 to prevent members from once

again avoiding worship? I would advise that, with the permission of members, congregations be completely transparent when members test positive for COVID-19, for two reasons.

Members must be allowed to assess risk for themselves. There could be a member who has started medical treatment that compromises their immune system. There could be a member who is not in an at-risk group personally but who has a job that brings him in contact with those who are at-risk. You probably do not know what is going on in all your members’ lives. Therefore, members need to know if there is any chance that they have been in the presence of people who have tested positive for COVID-19. If someone tests positive, even if the individual wants to remain anonymous, an e-mail could still alert all members: “On July 28 a member tested positive for COVID-19. This individual attended worship at the 8am service on July 26.”

Also, if a member of your congregation contracts COVID-19, the information likely will get out anyway. If people get the sense that leaders knew of an infection but were being secretive, that could potentially be scandalous. It also opens up the church to potential legal liability.

Churches should develop a COVID-19 communication plan. What if a called worker or member gets sick? When and how is that reported? As we reopen, this is likely to be an issue.

Leaders must remain studious and be flexible.

This document could become dated quickly. Updated information about COVID-19 is released regularly. This information needs to be weighed. It can be exhausting, but the Lord will give us strength.

Church policies will evolve as we move through the various phases of this pandemic. Reliable, peer-reviewed data might provide good news, allowing for an easing of precautions. Reliable data might provide bad news, suggesting the need for additional steps. Leaders need to stay on top of what is happening and pivot their COVID-19 plan as necessary.

⁵³ June 26 email from Paltzer to Hein

FINAL THANKS AND THOUGHTS

I would like to thank the individuals who reviewed the initial draft of this article.

- Dr. Robert Balza is the Dean of the College of Health Science at Wisconsin Lutheran College. He received his PhD from the Medical College of Wisconsin in developmental genetics.
- Dr. Jarrod Erbe is the Dean of the College of Arts and Sciences at Wisconsin Lutheran College. He received his PhD from the University of Alabama at Birmingham in biochemistry and molecular genetics and did a postdoctoral fellowship at University of Colorado Health Sciences Center.
- Dr. James Henkel is the assistant professor of biology at Wisconsin Lutheran College. He received his PhD in microbiology and immunology from the Medical College of Wisconsin and did postdoctoral research at Uniformed Services University of Health Sciences in Bethesda, MD.
- Dr. Jason Paltzer is the assistant professor of epidemiology at Baylor University's Robbins College of Health and Human Science. He received his PhD in Population Health Sciences from the University of Wisconsin. He has served as a consultant on some WELS mission endeavors in Africa.
- Dr. John Werner is the associate professor of biology at Wisconsin Lutheran College. He received his PhD from Arizona State University in molecular and cellular biology and has done postdoctoral research at Princeton University.

Their guidance was invaluable. If you have any individuals like this in your congregation, please include them on your COVID-19 planning team. All of these men have expressed a willingness to serve WELS congregations in an advisory capacity. Contact Dr. Balza at Rob.Balza@wlc.edu if you wish to request that assistance.

I would also like to thank my colleagues in WELS Congregational Services for their advice and encouragement. Special thanks to Pastor Bryan Gerlach, the director of WELS Commission on Worship, who

helped with editing as well as bringing his expertise in worship principles.

In this document, I have simply tried a) to assemble some now-verified facts about risks and transmission of this novel coronavirus and b) to provide pastoral thoughts about what this information means as churches resume worship. However, the 1200-plus WELS churches scattered around the country are comprised of different people in different demographics. What a church in Miami is facing right now is different than what a church in rural Montana is facing. (For up-to-date information about the status of COVID-19 in your county, you can go to <https://coronavirus.jhu.edu/us-map>.) During this pandemic, we have seen that one-size-fits-all approaches do not make a lot of sense.

Therefore, it is you—the leaders of God's people in your corner of the world—who will need to decide for yourselves what is the best way to serve the saints at the present time. As you make those decisions, you will strive to honor:

- The Third Commandment, which tells us to be faithful in our use of the means of grace . . . to understand the importance of preaching and gathering around the sacraments with fellow believers.
- The Fourth Commandment, which tells us to respect those God has placed in a position of authority over us, including in the government.
- The Fifth Commandment, which tells us to do anything within our power to safeguard our neighbor's physical well-being.
- The Eight Commandment, which tells us to be open and honest in how we deal with people.

May God give a double portion of his Spirit, that you have the compassion and wisdom necessary to help the saints return to corporate worship.

*Jonathan Hein
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Director, Congregational Counseling*

