

Madeleine Parish Pandemic Plan

Campus Pandemic/Epidemic/Communicable Disease Procedures

This document provides information on The Madeleine Parish's strategic plan of action in controlling emerging infectious diseases that may threaten the health and wellbeing of the parish staff, faculty, students, and parishioners. The plan was originally developed in response to the COVID-19 pandemic (03/2020-MM/YYYY), a SARs-CoV-2 virus principally transmitted through respiratory droplets (including droplet nuclei) and smaller aerosol droplets.¹ These transmission properties of SARs-CoV-2 informed the following strategic plan.

The following objectives apply:

- Provide for the welfare and safety of Madeleine staff, teachers, students, parents, parishioners and visitors.
- Establish a framework for continuing operations in order to consistently provide for the scholastic and spiritual needs of the Madeleine Community.

To devise and implement this strategic plan, The Madeleine School & Parish relied on the following authoritative sources:

- Centers for Disease Control and Prevention (CDC)
- World Health Organization (WHO)
- Oregon Health Authority (OHA)
- Oregon Department of Education (ODE)
- American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE)

A Multi-layered Strategy for Reducing Transmission Risk

In brief, the Madeleine Parish supports a pandemic/epidemic strategy that is scalable to transmission risk, adopting a multi-layered "swiss-cheese" strategy that seeks to minimize or eliminate potential infection pathways.

Figure 1 (below) graphically illustrates the principles behind the swiss-cheese strategy. The personal and shared responsibilities depicted illustrate how a multi-layered pandemic defense works to interrupt the pathways by which a virus might spread.

¹ Transmission through respiratory droplets occurs when an infected person coughs, or sneezes and these droplets find their way into the eyes, nose, or mouth of another person. Droplet nuclei is the residual virus after the droplet fluid evaporates from the virus and evaporation occurs quicker than the droplet falls to the floor, leaving it suspended in the air. These nuclei are much smaller than the droplets themselves and can float and drift through the air. These small aerosol droplets are also generated through loud talking and singing. Another source of transmission is through contact with virus contaminated surfaces. Most COVID-19 cases have been traced to transmission through respiratory and aerosolized droplets.

Figure 1:

THE SWISS-CHEESE MODEL OF RESPIRATORY VIRUS PANDEMIC DEFENSE

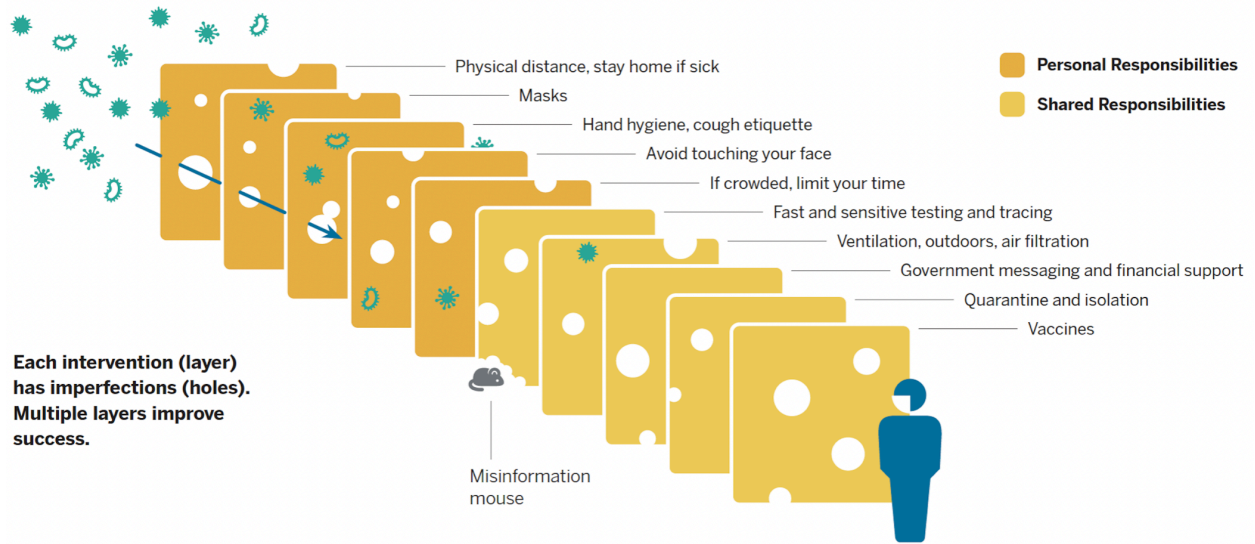


Figure 1 Credit: Mackay, Ian M. (2020): The Swiss Cheese Respiratory Virus Defence.

This strategy aligns well with the sense of community that exists at the Madeleine. Individual and shared responsibilities are critical to the success of the strategy as the community comes together to provide for the health and welfare of the Madeleine Parish and School. Informed communication, in cooperation with public health agencies, is equally important to the Madeleine Community's success in order to effectively address information gaps and misinformation that may provoke fear and concern among parishioners and school staff, parents, and children.

I. Madeleine Health Advisory Key Contacts

	Position	Name	Phone	E-Mail
Primary				
1 st Alternate				
2 nd Alternate				

II. Personal Protective Equipment

Personal protective equipment, cleaning supplies and other items may be available to Madeleine students, parents and parishioners to facilitate health and safety measures.

PPE Item	Expected Weekly Use Rate	Ordering Capacity (Bulk, bundles, etc.)	Suggested Provider(s)
Face Masks			
Face Shields			
Sanitary Wipes			
Cleaning Solution			
Hand Sanitizer			

III. Parish Facility/HVAC Guidelines & Precautions

In the absence of direct guidance from the CDC or other authorities about the transmission pathway of a new communicable disease, it is prudent to assume that airborne transmission may be a pathway for transmission. The following steps were taken at the Madeleine facilities to minimize the risk of airborne transmission.

Ventilation

- Ventilation reduces the risk of airborne transmission by dilution and exhaust of viruses from the occupied space. Over time, ventilation rates in some HVAC units may have been adjusted lower as a troubleshooting measure and never reset to sufficient levels. Verify ventilation rates at least meet code by commissioning a Testing and Balancing Contractor to verify airflow rates. In the absence of testing, or to increase rates above code minimum levels, airflows may be set to 100% outside air as described in the bullet points below.
- Rooms with unit ventilators (most classrooms), when functioning normally, use air dampers that fluctuate between wide-open outside air, or closed and recirculating room air, in order to maintain an even temperature in the room. There is no way of programmatically getting these units to keep these dampers open all the time. In order to reduce airborne transmission, the following steps may be taken:
 - Unit ventilators: the linkage that controls the outside air dampers can be disconnected, leaving them 100% open. Listed airflows for some of the units is included in the appendix. In most classrooms, operating at 100% outside air will provide about double the code-minimum ventilation rate. This is a very high-level of ventilation that will provide enhanced dilution in the building.
 - Need to take care in extreme cold weather to protect the heating coils from freezing by leaving the hot water circulating during unoccupied hours. In the classrooms.

- Note that increasing the outside air quantity will lead to heating capacity issues and cold classrooms in winter. Classroom heating may be supplemented with portable electric heaters.
 - Increasing the outside air quantity by disconnecting the dampers will increase heating costs. In cold weather, heating costs may double or more. To reduce costs, and the greenhouse gas emissions associated with the additional heating, the ventilation system should be reset to pre-outbreak levels when the risk is subsided.
 - o HEPA Filtration: An alternative to increased ventilation in spaces that cannot be mechanically ventilated, or as an alternative to reduce heating costs are portable HEPA filtration units. Portable units with 99+% effective HEPA filtration will provide filtration of most viruses from the space and can provide an equivalent clean air delivery stream to outside air ventilation.
 - Virus particle size should be considered to ensure that HEPA filtration will capture the pathogen of concern.
 - Add-ons such as UV or ionization to portable units may not be necessary and should be evaluated to ensure they do not have adverse side-effects such as ozone or VOC generation.
 - o Ventilation should be engaged 2 hours before occupancy and for 2 hours after occupancy.
 - o Create an isolation space for sick students
 - The isolation space should be independent of other HVAC systems so not to transmit virus particles through the HVAC.
 - The isolation space should have a high air change rate. It is recommended to size the clean air delivery (outside air, or filtered air) to turn over the space air volume every 10 minutes (6 air changes/hour).
- For the assembly spaces used by the kids, which include the Fireside Room for Kindergarten, the St. Catherine Room in the old church, and the parish hall (in case that is needed), the system may be forced to use 100% outside air.
 - The main church is always 100% supplied by outside air, as there are no return air ducts. The system does have a CO2 sensor, which will turn on ventilation if the space is currently at temp and not running, if needed.
 - All areas served by HVAC systems (classrooms, assembly spaces, common areas, etc) are using MERV-13 filters to maximize capture of virus-laden particles. These should be changed every 8-12 weeks.

General Precautions for Cleaning Contaminated Surfaces

- The janitorial service will fog all surfaces with a 70% alcohol mixture overnight.
- Other?

IV. Guidance for Madeleine Administrative Staff

Sub-items?

V. Guidance for Madeleine School Activities

Madeleine School guidance and updates can be found on the following school webpage:

<https://themadeleine.edu/site/school-plans/>

VI. Guidance for Madeleine Church Activities

Madeleine church activities include mass attendance as well as parish social events and other private/public activities occurring on the Madeleine Campus.

Decision-making and Notification Processes

- In general, the Madeleine Parish will follow guidance established by the Oregon Health Authority. For reference, follow the link to the [Sector Risk Level Guidance Chart](#).
 - Full capacity for the Madeleine Church is 600 people. This is the number that will be used for calculating attendance through the risk levels shown below.
 - Precautions greater than what's outlined in Sector Risk Level Guidance may be decided by the pastor/pastoral council and communicated to the parish through established channels.
- As risk levels change, notification will occur in the following manner:
 - Signage strategically placed on campus.
 - Parish emails.
 - Madeleine website.
 - Friday Footnotes.
 - Church bulletin

No Transmission Risk

In the absence of an epidemic/pandemic, the following general precautions will be followed:

- Normal mass schedules will be followed with attendance limited only by capacity limits.
- Parishioners and Liturgical Ministers will observe normal precautions for maintaining individual health and welfare.
- Antiseptic wipes, hand sanitizer may be made available for use by parishioners.
- Eucharistic ministers will sanitize their hands prior to serving communion.
- Parish hall/Old Church may be utilized for parish social activities. The same spaces may be rented for private events.

Low Transmission Risk

- Indoor Capacity: Maximum 75% occupancy
- Outdoor Capacity: 300 people maximum
- Number of masses may be limited.

Moderate Transmission Risk

- Indoor Capacity: Maximum 50% occupancy or 150 people total, whichever is smaller
- Outdoor Capacity: 250 people maximum
- Number of masses may be limited.
- Parishioners will voluntarily seat themselves in every other pew, with individuals/groups maintaining sufficient distance to minimize transmission.
- Masks will be worn at all times.
- Parishioners will be asked to sanitize their pews with the available cleaning supplies prior to leaving the church.
- The number of ministers and altar servers may be limited to meet the needs of the services as a precaution to maintain distancing. This includes lectors, eucharistic ministers, cantors and choir members, and hospitality ministers.
- Streaming video may provide an alternative means for serving mass to parishioners remotely.
- Use of the parish hall/Old Church for social or other activities will be prohibited.

High Transmission Risk

- Indoor Capacity: Maximum 25% occupancy or 150 people total, whichever is smaller
- Outdoor Capacity: 200 people maximum
- Number of masses will be limited.
- Number of parishioners attending mass will be limited according to state/local government guidelines. A sign-up process may be instituted to facilitate attendance.
- A screening process for parishioners as they enter the church may be implemented to ensure highest levels of safety.
- Parishioners will sign in as they enter the church to facilitate contact tracing.
- Masks will be worn at all times.
- Parishioners will be asked to sanitize their pews with the available cleaning supplies prior to leaving the church.
- The number of ministers and altar servers may be limited to meet the needs of the services as a precaution to maintain distancing. This includes lectors, eucharistic ministers, cantors and choir members, and hospitality ministers.
- Streaming video may provide an alternative means for serving mass to parishioners remotely.
- Use of the parish hall/Old Church for social or other activities will be prohibited.

Extreme Transmission Risk

- Indoor Capacity: Maximum 25% occupancy or 100 people total, whichever is smaller.
- Outdoor Capacity: 150 people maximum.
- Recommended: limit services to one hour.
- In-person masses may be suspended as an additional precaution.
- Streaming video may provide an alternative means for serving mass to parishioners remotely; minimal numbers of liturgical ministers will be utilized to conduct the mass.

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Pandemic Plan Appendices

- I. Ventilation & Airflow: Airflows by units (as of 1/4/2021):
- 4th Grade - 1250 CFM unit - in working order
 - 5th Grade - 1250 CFM unit - both actuators replaced, controller replaced, discovered bad valve needs to be replaced
 - 6th Grade - 1000 CFM unit (smaller classroom) - heat valve actuator needs to be replaced
 - Loft - 1000 CFM unit (smaller classroom) - both actuators have been replaced, fan switch only runs on high and needs repair
 - 7th Grade - 1250 CFM unit - both actuators need to be replaced
 - 8th Grade - 1250 CFM unit - heat valve actuator needs to be replaced
 - Library - 1250 CFM unit - actuators replaced, linkage repaired

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