

Purpose

Following receipt of the COVID Subcommittee Report (attached) via the Office of Polar Programs (OPP) Advisory Committee, a meeting of the COVID Change Control Board¹ was held to discuss each recommendation. The purpose of this document is to articulate the outcome of those discussions and how each recommendation was incorporated into the final COVID Infection Control Plan for fiscal year 2024 deployments.

Specific Clinical and Public Health Recommendations

Recommendation: *Vaccination: Being the most reliable defense against severe COVID disease, we recommend:*

- *mandating that all participants are “up to date” according to the latest CDC recommendations²*
- *establishing a waiver system to allow review of individual cases who cannot comply with the vaccine mandate; and*
- *ensuring on-site vaccine supply is readily available to allow for ongoing compliance with the vaccine mandate.*

Response: OPP has incorporated this recommendation into the final plan with two adjustments. First, as acknowledged during Panel discussions, USAP’s ability to mandate vaccination for military deployers needs to be further assessed in light of the broader military no longer requiring it. OPP will work with the NSF Office of General Counsel and leadership of the Joint Task Force – Support Forces Antarctica (JTF-SFA) to determine an executable path forward. Second, because most USAP deployers will not require boosters during their seasonal deployments, OPP will ensure the ability to transport vaccines to the ice as needed to ensure participants remain current rather than retain a supply on-site. This approach will ensure that vaccines, when needed, will be consistent with the most recent formulation without unnecessarily wasting supply.

Recommendation: *Mandated respirator use periods – During isolation period (isolation defined as removing this person from the population as much as is feasible after a positive COVID test) it is expected for infected individuals to follow the CDC isolation guidelines as closely as possible which suggest strict isolation from days 0-5, with free movement while wearing a respirator in shared indoor public spaces on days 6-10. Given the unique operational considerations and science imperative of work in Antarctica, the panel recommends modification to the CDC recommendations:*

- *NSF should require the use of a NIOSH approved N95 filtering facepiece respirator (N95 respirator) for all staff who must exit isolation through day 10 in place of a mask of lower quality.*
- *In consultation with the responsible clinical and public health personnel, the panel also recommends on a case-by-case basis permitting individuals who are needed for essential work functions before day 6 after a COVID diagnosis may leave isolation for these functions as long as they are wearing an N95 respirator in shared spaces or are able to work solo or outside.*

¹ This board consists of operations and medical professionals in NSF and the Antarctic Support Contractor.

² <https://www.cdc.gov/vaccines/covid-19/clinical-considerations/interimconsiderations-us.html>

Response: OPP will require individuals who have tested positive for COVID-19 at all stations and vessels to isolate from the population for a minimum of 5 days and quarantine for an additional 5 days (the exception is CDC's "test-out" protocol). Because clinics will have access to rapid antigen tests (RATs), the CDC's "test-out" approach will be used to determine when quarantine can end. Specifically, individuals will be allowed to leave quarantine following two negative RATs 48 hours apart, or on Day 11 whichever is earlier.

When individuals who are isolating or quarantining must leave their rooms, they will be required to wear, at minimum, a KN-95 mask. After consulting OSHA guidelines on N95 respirators and considering their use in the USAP population, OPP believes this aspect of the Panel's recommendation is not practically implementable. USAP does not have the ability to conduct respirator fit tests for the entire population, and fit testing individuals after they have tested positive for COVID could lead to additional exposure. In addition, a large proportion of the USAP population has facial hair which would diminish the effectiveness of the respirators. However, N95 respirators will be made available on stations and vessels for individuals who voluntarily choose to use them for additional protection.

The recommendation to allow individuals who are isolating to work at the discretion of the clinic is fully supported by OPP and has been included in the Plan.

Recommendation: *Respirator mandates can be increased by clinical and public health officers as needed and in response to increased rates of local transmission or based on results of environmental testing or other monitoring.*

Response: As noted above, OPP believes the mandatory use of N95 respirators is not implementable but will have them available for deployers who wish to use them for additional protection. The ability of the clinic to mandate broader use of KN-95 masks in response to COVID metrics is fully supported by OPP and included in the Plan.

Recommendation: *NSF should consult with the Occupational Safety and Health Administration (OSHA) to determine the applicability of the Respiratory Protection Standard when requiring the use of respirators for respiratory protection from COVID.*

Response: As noted above, OPP believes the mandatory use of N95 respirators is not implementable but will have them available for deployers who wish to use them for additional protection.

Recommendation: Recommended respirator or barrier face covering (BFC) use periods –

- *in public settings for 5 days prior to deployment,*
- *on all forms of public transportation and transit points on all legs of the journey to gateway cities,*
- *when in shared spaces for the first 5 days after arrival on ice, 5 days prior to deploying to field sites, and 5 days after arrival to field sites.*

Response: OPP agrees with this recommendation and has incorporated it in the Plan with some adjustments. Deployers will be highly encouraged, but not required, to wear a KN-95 mask in public settings for 5 days prior to their deployment, throughout their journey to gateway cities, and after arrival on ice.

KN-95 masks will be mandatory for individuals deploying to field camps for 5 days prior to their put-in. During that time, those individuals will be required to get “take-away” meals from the galley and will not be permitted in social gathering spaces. Once at the field camp, they will be working outdoors and living primarily in single occupancy tents, and so masking at that point will not be required.

KN-95 masks will be mandatory for individuals arriving at South Pole Station for 5 days following their arrival, an approach that worked very well during last season. During that time, those individuals will be required to get “take-away” meals from the galley and will not be permitted in social gathering spaces.

Recommendation: *The panel recommends requiring a NIOSH-approved N95 filtering facepiece respirator for mandatory use periods. The panel recommends offering N95 respirators, KN95 filtering facepiece respirators, or BFCs for recommended use periods outside of mandatory respirator use periods. Alternatives, such as surgical masks are less effective, but their use is left to the discretion of individuals.*

Response: As noted above, OPP believes the mandatory use of N95 respirators is not practical but will have them, as well as KN-95 masks, available for deployers who wish to use them for additional protection.

Recommendation: *We suggest that NSF engage appropriate experts to investigate applicable methods for maximizing indoor air quality in Antarctica.*

Response: We concur, the engagement is ongoing. Improvements will be added to next season’s plan as technically feasible.

Recommendation: *Rapid Antigen Tests (RAT) should be made freely available to all personnel for self-testing when first symptomatic. All symptomatic individuals should seek advice from a clinician. Clinicians should have the ability to provide supervised RAT or PCR testing. Clinicians should have the ability to provide anti-viral and other therapies per current CDC standards. [There should be an] Option to test personnel with Biofire respiratory panel to evaluate for RSV and/or Influenza. Routine testing of asymptomatic persons in Antarctica is not recommended.*

Response: All of these recommendations have been incorporated into the Plan.

Recommendation: *Environmental surveillance should be considered as a complement to other strategies at the discretion of relevant clinical and public health personnel.*

Response: Consideration is ongoing and will be added to next season’s plan as technically feasible.

Recommendation: *Plan must clearly outline individual and organizational duties and responsibilities. Establish culture of transparency, open communication, and shared risk/responsibility.*

Response: A detailed communications plan will be developed to implement this recommendation.

Specific Responses to Key Questions

Recommendation: *The subcommittee endorses the following measures that were proposed by NSF: five-day masking period upon arrival; allowing COVID positive patients with mild symptoms to remain at*

Pole; isolation in single occupancy rooms for positive cases; working arrangements to be considered on a case-by-case basis.

Response: The masking period upon arrival is described above. COVID positive patients at South Pole Station will remain there at the discretion of the Clinic medical staff. Isolation in single occupancy rooms will be implemented to the extent possible; however, if the positive cases rise above our ability to do so, they may be isolating with other COVID positive individuals. This is especially true at Palmer Station and on the vessels, both of which are very constrained on space. Working arrangements will be allowed at the discretion of the Clinic medical team, as noted.

Recommendation: *The Subcommittee suggests that NSF implement masking with N-95 or KN-95 masks for vaccinated South Pole and field camp-bound participants for the 5 days preceding their departure from McMurdo (and for any additional days caused by flight delays).*

Response: KN-95 masks will be mandatory for individuals deploying to field camps for 5 days prior to their put-in. During that time, those individuals will be required to get “take-away” meals from the galley and will not be permitted in social gathering spaces. Once at the field camp, they will be working outdoors and living primarily in single occupancy tents, and so masking at that point will not be required.

KN-95 masks will be mandatory for individuals arriving at South Pole Station for 5 days following their arrival, an approach that worked very well during last season. During that time, those individuals will be required to get “take-away” meals from the galley and will not be permitted in social gathering spaces.

Recommendation: *The Subcommittee recommends that deep field camp personnel who are found to be COVID positive but do not require clinical care can complete the isolation protocols without being extracted back to McMurdo Station as stated in the current draft plan.*

Response: COVID positive patients at deep field camps can remain there at the discretion of the Clinic medical staff. Decisions in this regard will take into account weather forecasts, and a measure of conservatism to lower the risk that an ill patient declines significantly during a period in which we are unable to medically evacuate them.

Recommendation: *The Subcommittee agrees that the elevated physical qualifications for USAP participants moving beyond McMurdo Station for one night or more, especially required current COVID vaccination/booster, are appropriate and likely effective to reduce the risk of negative COVID outcomes among USAP participants.*

Response: As noted above, vaccinations will continue to be required. Also, upon further consideration of the Plan, OPP will be maintaining the elevated physical qualification requirements for all deployers as an appropriate step to increase prevention of serious illness.

Recommendation: *The Subcommittee recommends all USAP deployers be up to date with COVID vaccines, including boosters, according to CDC guidance.*

Response: Concur, as noted above.

Recommendation: *This response is redundant to the existing requirement that all participants mask for the first five days after arrival on station/vessel.*

Response: The plan has been updated.

Recommendation: *Given the immense impact of the November 2022 “shift” as COVID began significantly affecting McMurdo Station—including science and support delays and cancellations, significant declines in morale and some loss of trust in leadership—the Subcommittee recommends drafting more extensive response plans.*

Response: OPP agrees and will develop specific details to further define the metrics and responses in the draft Plan provided to the Panel prior to the season beginning.

Recommendation: *Some members of the Subcommittee question whether routine screening of all gateway personnel is appropriate in the current epidemiologic context.*

Response: While we understand the recommendation, OPP believes that a single RAT is a reasonable and easily achievable measure of prevention that is appropriate to continue at this time.

Recommendation: *The Subcommittee recommends consulting experienced heating, ventilation, and air conditioning (HVAC) professionals to assess what changes to HVAC systems and equipment are appropriate for the USAP settings.*

Response: Consideration is ongoing and will be added to next season’s plan as technically feasible.

Recommendation: *The Subcommittee recommends adding air filtration in key places (for instance, in galleys, bars, lounges, and gyms where crowding is high and mask-wearing is low) is important to investigate because 1) these are crowded stations in cold environments where people spend their leisure time indoors, and 2) air filtration will help control all respiratory illnesses, not just COVID.*

Response: Consideration is ongoing and will be added to next season’s plan as technically feasible.

Recommendation: *The Subcommittee recommends implementing isolation requirements according to CDC Ending Isolation and Precautions for People with COVID-19: Interim Guidance.*

Response: OPP agrees and will be using the RAT “test-out” approach outlined in that guidance.

Recommendation: *The Subcommittee recommends evaluating novel and effective solutions to help isolate people with COVID where dedicated, private, closed rooms are unavailable.*

Response: OPP appreciates this recommendation and will continue to seek solutions that lower risks associated with infectious disease transmission in our unique environment.

Recommendation: *The Subcommittee recommends requiring a NIOSH-approved N95 filtering facepiece respirator as source control when an individual must exit isolation at any point through day 10 and as respiratory protection when supported by early indicators of an impending increase in cases*

Response: After consulting NIOSH guidelines on N95 respirators and considering their use in the USAP population, OPP believes this aspect of the Panel's recommendation is not practically implementable. USAP does not have the ability to conduct respirator fit tests for the entire population, and fit testing individuals after they have tested positive for COVID could lead to additional exposure. In addition, a large proportion of the USAP population has facial hair which would diminish the effectiveness of the respirators. However, N95 respirators will be made available on stations and vessels for individuals who wish to use them for additional protection.

Recommendation: *As much as possible, we recommend using respirators and masks that meet a standard to offer a known level of protection.*

Response: OPP agrees and, when masking is mandatory, will be requiring KN-95 masks. In addition, N95 respirators will be available for those who wish to use them.

Recommendation: *Communicate supportive workplace policies clearly, frequently, tailored to all stakeholders (internal and external to USAP) and via multiple methods*

Response: A detailed communications plan will be developed to implement this recommendation.

Recommendation: *The Subcommittee recommends ensuring that small numbers of COVID-positive (but vaccinated) patients not requiring clinic-level care be allowed to isolate in deep field camps (e.g. WAIS Divide) rather than being extracted back to McMurdo as stated in the current draft plan (see related response to Question 3).*

Response: COVID positive patients at deep field camps can remain there at the discretion of the Clinic medical staff. Decisions in this regard will take into account weather forecasts, and a measure of conservatism to lower the risk that an ill patient declines significantly during a period in which we are unable to medically evacuate them.