

MEDICAL ADVISORY GROUP RECOMMENDATIONS ON SAFETY MEASURES IN THE FACE OF OMICRON January 5, 2022

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SUMMARY

With the critical objective of maintaining in-person learning, all efforts should be directed at making NPS as safe as possible. As the Omicron variant is causing so much infection in the community, it is not likely that all cases in schools can be avoided. But it is vital to limit risk, prevent superspreader events, and ensure that schools are not major sources of community spread.

Vaccination remains the cornerstone of efforts to contain COVID. The uptake of vaccines among the 5 to 11 year old age group in Newton is reassuring. The ongoing goal should be to get staff and students as close to 100% vaccinated as possible and target booster shots for all as soon as eligible. A corollary to increasing vaccination rates is to emphasize that ANYONE WITH POSSIBLE SYMPTOMS OF COVID SHOULD STAY HOME and obtain testing to confirm or exclude that symptoms are due to the virus regardless of vaccination status.

Mitigation measures should continue to emphasize a layered approach. Masking indoors except when eating or drinking, ventilation, physical distancing when feasible especially when not masked, and reducing the size of group events are all important actions particularly when combined.

Testing is also an important component. While rapid tests are less sensitive than PCR, a positive rapid test correlates with infectivity, thus making it a more useful tool in the school setting.

MAG makes the hopeful prediction that the intensity of the Omicron surge will be short-lived and that heightened measures will not be required for possibly longer than the month of January. Recommendations will need to be reviewed in the light of ongoing community case numbers,

hospitalizations, DESE guidance, and new data. MAG believes that every effort should be made to minimize classroom closures since in-person learning has been demonstrated to be so essential to students, and the school environment does not appear to pose unique risks for the spread of COVID compared to the community. Any decisions on closure would need to be individualized; no one factor or metric alone should determine the need for closure.

Specific recommendations and the thinking behind them appear below by category discussed.

MASKS

The best masks are the ones that the individual will wear uninterrupted throughout his or her time indoors and that completely covers the nose and mouth without gaps. That said, N95, KN95 and KF94 masks all filter virus particles more efficiently than other masks as long as the mask is not pulled away from the face periodically to improve breathing. Surgical masks are also a good alternative and are the most frequently used masks in hospitals — again as long as they are on and gaps along the sides are minimized. Double masking with a surgical mask covered by a cloth mask is also a good approach. While there are clear data that masks are an important part of reducing infections in settings like schools, we are not aware of specific data that compare different types of masks in schools. Generally, better fitting and better filtering masks are preferred.

Staff should be able to choose the mask that is most comfortable for them while offering strong protection. Parents are encouraged to test different masks with their children to find the one that the child will keep in place at all required times. The most important part of the recommendation for masking remains that masks that cover the nose and mouth without gaps, and be worn at all times when indoors except when eating or drinking.

LUNCH/MEALS

This is probably the most challenging aspect of holding in-person schooling at the present time. Masks cannot be worn although MAG continues to recommend that children put their masks back on when sitting at the table and not actually eating or drinking. Since eating outdoors is not consistently possible in the winter and scheduling does not make staggered lunches feasible, MAG recommends increasing ventilation as much as possible through opening windows and/or doors and use of portable air purifiers. NPS has a supply of air purifiers, which should be deployed, especially to larger cafeterias and rotated, if needed, to schools that have experienced more COVID cases. We do not recommend creating separate tables for staff or students returning from isolation or quarantine. MAG also recommends as much physical distancing during lunch as possible including the use of ancillary rooms, if available, to decrease the number of students eating together and spacing students around larger tables to create as much distance as possible.

These recommendations are: 1) Increase ventilation through open windows and/or doors, 2) use as many portable air filtration units as are available and obtain additional ones if

possible 3) create as much physical distancing as possible, 4) encourage students to put their masks back on when not actually eating or drinking.

If or when DESE issues guidelines about how to handle lunch periods, these should be reviewed.

TESTING

It is important to emphasize the differences between PCR tests and rapid antigen tests. The former is the most sensitive test available to detect the virus but does not distinguish between recent infection and someone who is currently contagious. The reason for this is that PCR detects non-infectious viral fragments along with viral RNA. By contrast, the rapid antigen tests, including the home testing kits, measure proteins on the virus surface and correlate more closely with infectivity. Some early data suggest that antigen tests may not be positive in the first day or so of an infection with Omicron, when people may still be able to spread the virus. Therefore, people who develop symptoms but test negative on that first day should not assume that they do not have COVID. Beyond that early period, all the evidence suggests that antigen tests work effectively at detecting Omicron and therefore, the mainstay of testing for schools should be rapid antigen testing to try to identify those with symptoms or close exposures who are capable of infecting others.

The pooled testing program that NPS has been running for asymptomatic people in pre-K through 6th grade is a PCR-based testing program. The number of asymptomatic individuals identified through this labor-intensive program has not been high. The age group chosen in the fall were those who were not eligible to receive vaccines. Now that group represents the most recently vaccinated — a group expected to have higher levels of antibody and therefore less likely to have the virus. MAG recommends discontinuing the pooled testing program at this time in favor of prioritizing testing those who develop symptoms in school and known exposures. PCR testing in a highly vaccinated population at this juncture in the pandemic is most useful as a clinical tool (as opposed to a public health tool) and should be used by clinicians for confirming a diagnosis of COVID when that is needed.

The test and stay program to keep close contacts of someone with COVID in school is an important component of the testing program. It is reasonable to review, however, whether daily testing for five days after exposure in the absence of symptoms for those who are unvaccinated has the highest yield or whether a reduced testing schedule might be as effective at preventing spread. In the setting of increased infections, contact tracing will become nearly impossible to perform. As a result, it is reasonable to consider rapid antigen testing for a larger proportion of the school population on a regular basis as well as accepting reported results of home rapid antigen tests.

Currently, however, the test and stay program that NPS uses is under the guidance of DESE. Using the rapid antigen test on vaccinated individuals is not recommended but this or other

aspects of test and stay may be modified as more cases appear and close contact becomes more widespread.

Given all of these considerations, MAG recommends discontinuing the pooled testing program and concentrating efforts on rapid antigen testing for those who develop symptoms in school and those unvaccinated individuals identified as close contacts of a known case.

While not within the scope of the current testing program, MAG supports rapid antigen testing on day 5 before people in isolation or quarantine return to school. A positive antigen test on day 5 should delay the return on day 6 as the individual might still be contagious. With the Delta variant, 10-15% of individuals were still contagious at day 5, clearly a minority, but similar information is not yet available for Omicron. It would be reasonable for NPS to adopt this approach as a target. The short-term lack of widespread availability of antigen tests may make implementing this policy a challenge. Home test results would have to be accepted with reporting of results to the school nurses on the honor system.

MEETING AND ACTIVITIES

Given the primary focus on in-person classroom learning, MAG endorses the NPS decision to temporarily move larger staff meetings to the remote setting, to curtail visitors to school buildings, to ensure that essential visitors are masked at all times, and to postpone field trips or other outside activities for the time being. We expect that these changes will be short-lived.

It is more difficult to decide how to approach extracurricular activities including athletics and musical and theatrical performances. While limiting spectators to parents is one approach, MAG notes that more transmission of COVID has occurred in the setting of athletics including practices than in musical rehearsals or performances including singing and playing wind instruments. MAG does not believe that any one set of higher-risk activities (i.e. sports) should be prioritized over others (i.e. music). There are ways of making all of these activities safer including strongly encouraging that students stay home and refrain from these activities if they have any symptoms consistent with COVID. Further, MAG discussed the possibility of requiring a negative rapid antigen test before an athlete or other performer returned from isolation or quarantine before participating in his or her activity. Consideration might also be given to requiring all athletes and performers to obtain a negative antigen test prior to participation while the Omicron surge is continuing, which will primarily be a problem for January and possibly early February.