December 15, 2023
DOH 420-522

Guidance for Aerosol-Generating Procedures (AGPs) for K-12 Schools

Introduction

In K-12 schools, some students, including those with tracheostomies and those using machines that assist with breathing, may require medical procedures that have a higher likelihood of generating infectious respiratory aerosols than talking, breathing, coughing, or other normal activities. These aerosol-generating procedures are called AGPs. They include procedures like open suctioning of airways and ventilation (both invasive or non-invasive, including BiPAP and CPAP).

When an AGP is performed, it can put school staff, other students, and any other nearby people at risk of exposure to infectious diseases. These guidelines provide support for school staff to help mitigate that risk. This document covers:

- Recommendations for performing AGPs in schools
- Types of suctioning systems
- Considerations for students on ventilators
- Additional considerations for respiratory illness response in K-12 school settings and links to DOH resources

Employers must follow Washington State Department of Labor & Industries (L&I) requirements. Refer to L&I Standard Precautions for Healthcare Activities for additional details.

Performing AGPs in Schools

When performing AGPs in a school:

1. Staff performing AGPs should use standard precautions. Wear a mask, eye protection, gown, and gloves due to the potential for exposure.
2. When possible, perform the AGP in a separate room away from other people. Ideally, this room is designated for AGPs and has optimal ventilation (for example, the room is under negative pressure, or the room has a window that can be opened). After performing the AGP, keep the space well-ventilated but closed for at least two hours so aerosol droplets can dissipate.
    - If the room ventilation rate (room air changes per hour) is known, consult Table B.1. of CDC's Ventilation Recommendations for a specific closure time.
3. When you cannot move the person who needs an AGP to a different room (for example, no separate space is available, or you need to perform suctioning immediately for their safety), use other risk mitigation strategies:

- Consider ways to put as much distance as feasibly possible between the AGP and other people in the room, including moving the person to a different part of the classroom.
- Consider ways to maximize ventilation in the room where the AGP is performed, like running a portable HEPA filtering unit for the duration of the school day or performing the AGP near an open window.

Note: Routine infection control measures should always be followed in classrooms.

Suctioning Systems and Special Circumstances

There are two different types of suctioning systems: open and closed. Open suctioning is considered an AGP while closed suctioning is not.

Open suctioning is performed by placing a sterile suction catheter into the tracheostomy. The patient is usually not on a ventilator. Open suctioning has a higher likelihood of generating infectious respiratory aerosols than normal activities, making it an AGP. It usually provokes coughing, mobilization of mucous from the lower airways, and aerosolization of secretions from the lung and airways. During open suctioning, follow steps 1-3 found above in the Performing AGPs in Schools section.

Closed suctioning systems are often used for people on ventilators. The suction catheter is enclosed in a plastic sheath, and the suctioning is done through the ventilator circuit. The risk of exposure in closed suctioning is very low, so closed suction systems are not considered AGPs.

Some patients need to be orally suctioned with a hard plastic suction device. In general, this is not considered an AGP. However, if the oral suctioning results in strong coughing or gagging, there is an increased risk for aerosol spread. In situations with a strong reaction, follow steps 1-3 found in the Performing AGPs in Schools section, above.

Students on Ventilators

Use of a ventilator with a passive exhalation circuit is considered an AGP. If there is a bacterial-viral filter in the ventilator circuit or a heat and moisture exchanger (HME), then this is no longer an AGP. When respiratory illness is circulating (e.g., COVID-19, influenza, RSV, and colds), use of a bacterial-viral filter should be considered following consultation with the family and the durable medical equipment company.

Note: There are many brands and styles of ventilators and passive circuits. School staff should speak with the individual's caregiver and durable medical equipment company to verify that the passive exhalation circuit has proper filtration.

Additional Considerations

Reference the Washington State Department of Health (DOH)'s Guidance to Prevent and Respond to COVID-19 in K-12 Schools and Child Cares for specific strategies related to COVID-19 prevention. This guidance contains recommendations for COVID-19 outbreaks and times of high absenteeism due to respiratory illness, including masking and improved ventilation. DOH created a COVID-19 decision tree to help the general public make the best choices if they have COVID-19 symptoms or may have been exposed COVID-19 and are not sure what to do next. For more recommendations on ventilation and indoor air quality, see DOH's Guidance Ventilation and Air Quality for Reducing Transmission of Airborne Illnesses.

Special Acknowledgements

Content in this guidance is adapted from the Oregon Department of Education and Oregon Health Authority.

More Resources

To request this document in another format, call 1-800-525-0127.

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