Guidance for Providing Nebulization Treatments

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The COVID-19 pandemic changed the delivery of health care, including the use of nebulizers and peak-flow meters. This guidance offers recommendations to schools and community-based settings like child care centers or Head Start programs to minimize COVID-19 transmission when using these devices.

Prior to COVID-19, school and child care staff could administer a nebulizer treatment in any environment with minimal training. New guidance from the Centers for Disease Control and Prevention (CDC) for children with asthma or other chronic respiratory conditions recommends changes to the way staff provide these treatments. Visit CDC: Guidance for Operating Child Care Programs during COVID-19 (www.cdc.gov/coronavirus/2019-ncov/community/schools-childcare/schools-faq.html).

The purpose of this document is to outline updated guidance for administering nebulization treatments in community-based settings for health care providers who may be unfamiliar. To the extent possible, providers are encouraged to modify plans of care to allow children to use inhalers and spacers instead of nebulizers at school, child care, and other community settings. People who receive these treatments should continue to consult with and follow the advice of their health care providers. Additional guidance for delivering these treatments is found in Recommendations for Infection Prevention and Control Practices for Delivering Direct Student Support Services (www.health.state.mn.us/diseases/coronavirus/schools/directsupport.pdf).

CDC guidance states:

- Symptoms of COVID-19 and asthma may overlap, including cough and shortness of breath. Children who have symptoms of COVID-19 must not attend school until they have an appointment with a health care provider.
- Aerosol-generating procedures increase the risk of COVID-19 transmission and require special precautions and personal protective equipment.
- School and child care staff should treat asthma with an inhaler and spacer over nebulizer treatments whenever possible. Asthma inhalers are not considered an aerosol-generating procedure.
- There is limited data on whether aerosols generated by nebulizer treatments are infectious. Nebulizer treatments should be reserved for children who cannot use or do not have access to an inhaler.
- Based on limited data, a peak-flow meter is not currently considered an aerosol-generating procedure, but using a peak-flow meter can trigger a cough.
School and child care staff administering nebulizer treatments or peak-flow meters should wear medical or surgical mask, eye protection, and gloves.

Staff should provide nebulizer treatments and use peak-flow meters in a room that is separate from other children, as well as staff who are not necessary to provide the treatment.

Staff should clean and disinfect the nebulizer after the procedure.

This CDC guidance brings challenges to administering nebulizer treatments and using peak-flow meters in school and community settings. The challenges include:

- Obtaining personal protective equipment and educating school and child care staff on proper use of masks, gloves, gowns, and eye protection.
- Community shortages of masks, gloves, gowns, eye protection, and other necessary personal protective equipment.
- Identifying separate rooms to administer nebulizer treatments and use peak-flow meters.

Considering the CDC recommendations, the Minnesota Department of Health encourages health care providers to treat children with asthma or other chronic respiratory conditions with an inhaler and a spacer while at school, child care, or other community settings. During the COVID-19 pandemic, schools or child care centers should work with students and families to smoothly transition from nebulizer treatments to using an inhaler and spacer at school or child care.

If you have any additional questions, please email health.schools.covid19@state.mn.us.

Resources

- Managing Asthma in Minnesota Schools (www.health.state.mn.us/diseases/asthma/schools/managing.html)
- 2020 Minnesota Statutes 121A.221 Possession and Use of Asthma Inhalers by Asthmatic Students (www.revisor.mn.gov/statutes/cite/121A.221)
- 2020 Minnesota Statutes 121A.22 Administration of Drugs and Medicine (www.revisor.mn.gov/statutes/cite/121A.22)