

As if schools didn't have enough to think about this year, here's a message for the school nurse: stop using nebulizers.

Dr. Mandie Svatek, a University Hospital pediatrician, associate professor with UT Health San Antonio, and a member of the citywide COVID Enforcement and Education Task Force and the K-12 Schools Coalition Team, told a group of 476 nurses and health assistance at a Region 20 meeting this week that they need to switch to delivering inhaled medicines through metered dose inhalers, or MDIs, with spacers and specialized face masks.

A nebulizer aerosolizes medicine for the lungs to absorb. Students with asthma and special needs children, among others, often take these breathing treatments during the school day at the nurse's office.

The problem is that using a nebulizer increases the risk of aerosolizing other particles – and if a student happens to be positive for COVID-19, that could release the particles into the enclosed air of the school. Most COVID-19 infections have occurred through large droplet exposure, which can to a great extent be prevented through mask wearing, hand hygiene and physical distancing. But aerosolized particles can linger in the air for long periods of time and are not blocked by standard cloth masks.

While adults tend to be more seriously affected by COVID-19 infections, children can spread the virus and many also have become very ill.

Among other pediatric patients, Dr. Svatek said, "we've had a few special needs kids hospitalized because they are COVID-positive." In addition, "a lot of kids with chronic conditions have to get back to school, because that's where their services are."

Switching to MDIs with spacers and face masks with appropriate seals will not interfere with the effectiveness of the treatments, Dr. Svatek said, and they are easy to use.

"Any time we discharge a child younger than 6" who needs breathing treatments, she said, "we give them a mask that attaches to the spacer."

University Hospital stopped using nebulizer treatments on COVID-positive patients early in the pandemic, after evidence emerged that those treatments increased the risk of exposure to health care providers.

<https://www.cdc.gov/mmwr/volumes/69/wr/mm6915e5.htm>

