

## CASE STUDY

### It takes a team: Clinical asthma management in the classroom

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While asthma-friendly policies and practices can have widespread benefits, each child with asthma still has unique needs that need to be assessed and addressed. At the very least, each child must have an Asthma Action Plan in place, and staff should be familiar with the child's asthma symptoms and medications. In some cases, a deeper clinical understanding of a child's needs is required, and even more intensive efforts might be needed to manage triggers and symptoms. While this example illustrates the value of a coordinated, clinical asthma management approach, it is an exceptional case requiring an unusually high level of care.

The staff of a Head Start program in an urban Massachusetts area learned through their intake process that a child with severe asthma would be entering their program in the spring of 2015. A note from the child's specialist indicated that the child had been hospitalized multiple times and his asthma symptoms were particularly severe – even life-threatening. The child's asthma needed to be managed both in and out of the Head Start classroom, which would require coordination with the child's health care provider as well as family. The Head Start staff had worked with asthmatic children before and had undergone asthma-related training, but they knew that this was a special case and that they would need to take extra measures to ensure the student's safety.

Head Start staff immediately mobilized and created a team, including the Head Start program's Education Supervisor, Disabilities/Mental Health Coordinator, Nutrition Coordinator, Health Coordinator and other staff, to help coordinate management of the student's asthma. The child's pulmonologist met with this team, and helped to further explain the child's needs and how to coordinate asthma management with the student's family. Together the team identified potential triggers and problems, such as items that harbor dust, traditional, chemical-based cleaners, and poor outdoor air conditions. They then determined how modifications to the environment and improved management strategies could make the child's Head Start experience more asthma-friendly. Because Head Start programs are required to accommodate a variety of individual student needs, existing funds for classroom modifications were used to support this child with asthma.

The Head Start team knew they had even more work to do when the student experienced asthma symptoms on his first day. Typical asthma management measures wouldn't be enough, and further modifications had to be made, including removing or replacing any rugs, replacing curtains with blinds that could be easily and thoroughly cleaned, installing a HEPA air filter in the child's classroom and adjacent classroom, and utilizing a peroxide-based disinfectant for cleaning rather than bleach, a known asthma trigger. Team members took on particular responsibilities. For example, the Head Start teacher vacuumed the classroom every morning with a HEPA vacuum, and the Education Supervisor checked pollen counts every day before school, in order to be on heightened alert if necessary. In addition, a portable nebulizer was made available for field trips, and the classroom was even outfitted with a new sand table that used synthetic sand that didn't create dust.

Staff members worked with teachers on management and monitoring of the child, and teachers were able to work directly with the child's family to further support home-based asthma management. The team

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met regularly every three to four weeks to stay informed and coordinate planning, and Head Start staff stayed in regular contact with the child's health care provider. The young student's asthma symptoms were largely controlled while he was in the classroom, and this intense coordination and communication, particularly between the Head Start staff and the child's health care provider, helped to more effectively address his needs. With the benefit of additional therapies, the child has gone several months free of asthma attacks and continues to flourish in the classroom, interacting with his peers and teachers. Staff continue to maintain the strategies originally put in place to manage the student's asthma and minimize triggers.

While this was a very exceptional student situation, for this Head Start program, it was an opportunity to mobilize in a coordinated and comprehensive way to ensure the health and safety of a child in their care. The value of providing training and support in the coordinated approach was clear in the management of this particular case, as exceptional as it was. The overall effort helped to create a model that could be applied to other health conditions requiring intense management, including students with type 1 diabetes.

### Related resources

#### **AirNow Air Quality Flag Program, Environmental Protection Agency Healthy School Environments, Boston Public Schools**

[https://airnow.gov/index.cfm?action=flag\\_program.index](https://airnow.gov/index.cfm?action=flag_program.index): Provides alerts to schools and other organizations on the local air quality forecast and helps them to take actions to protect people's health, including those with asthma; also available in Spanish.

#### **Strategies for Addressing Asthma within a Coordinated School Health Program, Centers for Disease Control**

<http://www.cdc.gov/healthyschools/asthma/strategies/asthmacsh.htm>: Comprehensive approach to asthma management in the school setting emphasizing coordination among families, health care, and school staff.