

Week - Health

BREATHE UNEASY

Children are the worst hit and pollutants take a large share of the blame

By Gunjan Sharma

Poets and storytellers may wax eloquent about winter. Yes, the season brings relief from the scorching summer sun. But winter is not everyone's favourite season. Ritu Verma finds the cold months a trying time. Her sons Saksham, 7, and Sarthak, 5, have moderate asthma. In winter, they are more susceptible to respiratory illnesses. "Any irritation in their respiratory system aggravates the asthma," she says.

Acute Respiratory Infections (ARI) are the most common group of illnesses in children all over the

world; the low temperature and the high level of moisture in the air during winter increase the discomfort. Over 50 per cent children in the country suffer from respiratory ailments such as wheezing, cough and asthma. Rising pollution levels have only worsened the condition.

A study at the Lakeside Medical Centre and Hospital, Bangalore, found that asthma and other respiratory ailments account for 50 per cent of emergency cases among children. A study by the Centre for Environmental Studies, Kolkata, found that 70 per cent children in Kolkata and 65 per cent in Delhi have respiratory problems. The study also made a comparative analysis

of children in the Sunderbans, where the vehicular traffic is almost nil, and found that the ratio of respiratory diseases in the cities and the Sunderbans is 5:2. "Vehicular pollution is one of the most common causes of respiratory problems. Sulphur dioxide, the main component of suspended particles from vehicular emissions, causes inflammation of the lungs," says Dr Nitin Verma, senior consultant, paediatrics, Max Hospital, Delhi.

Many factors trigger respiratory problems. If it is vehicular pollution in the metros, it can be pollen in greener areas and pesticides and insecticides in agricultural belts. "In Chandi-

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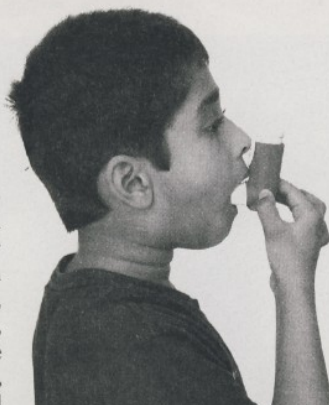
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respiratory diseases

garh, most children aged up to 5 have mild to moderate asthma and the most common trigger is the high density of pollen in the area," says Dr Sunil Agarwal, paediatrician and neonatologist, Fortis Hospital, Mohali. In the case of Saksham and Sarthak, the triggers are fog, dust and cold baths.

Dust mites on soft toys, pillows and mattresses and dust accumulated in carpets and curtains cause or aggravate a range of respiratory problems. "When a child with symptoms of asthma comes to us, our first question is whether he/she sleeps with soft toys. These toys host a variety of bacteria that can cause severe asthma," says Dr Anjali Mathur, paediatrician, Moolchand Medcity, Delhi. Carpets and curtains, when removed for washing, can trigger an asthmatic attack in a vulnerable child.

Infections of the upper and lower respiratory systems are either bacterial or viral. Viruses mostly thrive in cold climates. Which explains the increase in cases of cough, cold and fever during winter and monsoon. "We have seen a huge increase in bacterial infections also. It is mainly because of the injudicious use of antibiotics, which is making bacteria resistant to these medicines," says Khusrav Bajan, consultant, internal medicine, P.D. Hinduja Hospital, Mumbai. "We are seeing a 10 per cent increase in patients with respiratory problems every year. Earlier, people used to suffer from these problems seasonally, except for those with genetic predisposition, but



Little gasps for breath

- ◆ Many children from 0 to 5 years suffer from wheezing or asthma because their bronchial pipes are narrow. Even small dust particles can obstruct them. The problem is resolved with age
- ◆ Children display sudden bouts of respiratory problems, both genetic and infectious, when they start going to school; that is when they are exposed to environmental factors for the first time
- ◆ If your child is asthmatic, carry medicines wherever you go. Keep the school authorities informed. Ensure they keep the required medicines
- ◆ Avoid taking your child to overcrowded, dusty places if he is prone to respiratory problems
- ◆ Clean carpets, curtains, mattresses and pillows regularly with the vacuum cleaner. Keep the area dust-free
- ◆ Air mattresses and pillows in the sunlight every fifteen days. Sunlight kills dust mites
- ◆ Consult your doctor about flu vaccine

now we get a lot of people every day through the year."

Mild to moderate respiratory problems are managed using nebulisers (a device which provides a fine spray of medication which is inhaled). In some cases, doctors also prescribe mild doses of steroids for a short duration. Antibiotics are used to treat bacterial infections; viral problems in milder forms generally subside on their own. "In its severe form or in kids with associated illnesses and in infants, we need rigorous treatment with anti-viral drugs," says Verma.

Since it is better to prevent an infection, kids with genetic asthma should be kept away from triggers. Infants and smaller kids should be protected from dust and pollutants to prevent wheezing and asthma.

Following simpler rules like washing hands before meals and after travelling, using a handkerchief while sneezing and coughing and avoiding over-crowded places, especially during the flu season, can help prevent infection. Will vaccines help? "HIB vaccine has brought down the incidence of haemophilus influenzae type B infections," says Mathur. "But opinion is divided on the use of other vaccines. Though flu vaccine can be given to a kid with chronic asthma, vaccine for pneumococcal infections provide only 50 per cent protection. And they are very costly."

Saksham and Sarthak use nebulisers. Their mother takes extra care to keep the home dust-free. If asthma aggravates, they are put on low-dose steroids. ●