

BEAT THE WINTER BUGS

How to prevent cold and flu

MD RAJIB HOSSAIN

The winter months present plenty of opportunities for viruses to spread. Chilly weather keeps more of us indoors at the same time and brings together family members of all ages.

Colds and flu (influenza) can occur anytime, but appear mostly in the winter. Exposure to cold temperatures, whether indoors or outdoors, can cause mild to serious or life-threatening health problems. Infants and the elderly are particularly at risk, but anyone can be affected.

Taking preventive action is the best defense. To keep ourselves and our family safe, we should know how to prevent cold-related health problems and what to do if a cold-weather health emergency arises.

Fight the flu and cold

During the winter months, Respiratory Syncytial Virus (RSV) and influenza (flu) are widespread among people, especially in the children of first two years of age.

For most people, viral respiratory illnesses are usually self-limiting and last only a few days. But along with making millions of us feel lousy every year, colds and flu can also cause serious problems and can even be deadly.

Here are tips to ward off colds and flu to become healthy and happy.

Wash your hands: Both colds and flu can be passed through coughing, sneezing, and touching surfaces such as doorknobs and telephones. So it is wise to make a habit of washing your hands and to teach children to do the same.

This helps you prevent spreading respiratory infections and picking them up from someone else. Touching your nose, mouth, and eyes with contaminated hands makes it easy for cold and flu viruses to enter the body. Others can become ill by just coming in contact with someone who has become infected with a cold or flu virus or who has come in contact with a contaminated area.

Limit exposure to infected people: Sometimes people are infected with a virus and they do not know it because they have not experienced symptoms yet. If possible, avoid people who you know have colds and flu. Keep infants away from crowds for the first few months of life. This is especially important for premature babies who may have underlying abnormalities like lung disease and heart disease.

Practice healthy habits: Eating a balanced diet, getting enough sleep, and exercising can



Common Cold

help the immune system better fight off the germs that cause illness.

Because smoking interferes with the mechanisms that keep bacteria and debris out of the lungs, those who use tobacco or who are exposed to secondhand smoke are more prone to respiratory illnesses and more severe complications than nonsmokers.

Drink up and rest: Fluids such as water, juice, soup, and non-caffeinated beverages can help

loosen mucus, keep you hydrated, and make you feel better, especially if you have a fever.

To help others stay healthy, limit your exposure to them and promptly throw out tissues rather than letting them pile up on your nightstand.

Gargling with salt water can help relieve a sore throat. A cool-mist humidifier, which breaks water into droplets and releases them into the air, may help relieve stuffy noses. Keep the humidifier clean to avoid a

buildup of mold, which could be harmful if inhaled.

Saline nasal drops and suctioning with a bulb syringe advised by a physician can help infants and small children breathe better. But be gentle because aggravating the nasal passages could make swelling worse. Also, dress sick children comfortably. But some parents bundle them up if they have a fever, which can make it worse.

Get the flu vaccine: A vaccine against colds has not been developed because colds can be caused by many types of viruses. But the flu vaccine remains the best way to prevent and control the flu.

The vaccine should not be given to pregnant women, people with a history of asthma or other reactive airway diseases, people age 50 and over, or to children under 5.

Treatment options

Most of the time, colds and flu simply have to run their course. Generally no medicine is needed for colds and flu unless they become complicated.

You usually do not need to consult the doctor at the first signs of cold and flu, but there are times when you should. If you are not getting better after about a week or your symptoms worsen, you should

seek advice from a doctor.

In case of stuffy nose, nasal decongestants may help. Cough suppressants quiet coughs; expectorants loosen mucus so you can cough it up; antihistamines help stop a runny nose and sneezing. Some people rely on vitamin C supplements, zinc lozenges to prevent and treat cold and flu symptoms. These remedies may make some people feel better.

Certain drugs can cause several adverse effects like fever, headaches, and minor aches. Children and teen-agers suffering from flu-like symptoms, chickenpox and other viral illnesses should not take aspirin because of the possibility of Reye syndrome (encephalopathy affecting young children who have had a viral infection).

Some patients may be wrongly treated with antibiotic before their cold or flu symptoms get bad. But antibiotics do not help viral illnesses. Using antibiotics inappropriately only spreads antibiotic-resistant bacteria, making fewer drugs effective for treating disease. So it is strongly recommended that we should consult with physician first before treating children suffering from cold and flu symptoms.

Heart diseases: Risk at old age

DR MD HABIBE MILLAT

Age is the strongest predictor of heart disease. Coronary heart disease increases with age in both men and women. The older we get, the greater our risk of disease. Women usually develop heart disease later than men.

One study published in Circulation showed that more than half of men and nearly 40 percent of women in the United States will develop CVD (Cerebro Vascular Diseases) during their lifetime.

Coronary heart disease is rare in the first two decades of life, becoming more common after the age of 30 and much more marked in men than women below the age of 60 years. Beyond 60 years, heart disease in women approaches that in males.

Most heart attacks happen in men aged over 45 and women aged over 55, so your risk of having a heart attack will increase as you get older. Also, the older a person is, the more likely the heart attack will be fatal. According to the American Heart Association, four out of five people who die of a heart attack are over the age of 65.

The narrowing and hardening of arteries of heart or atherosclerosis takes a long time to develop and people are usually middle-aged or older by the time it is sufficiently advanced to produce symptoms. Meanwhile, the arteries naturally become

less elastic as we age as a result of the degenerative changes of ageing, leading to a greater risk of high blood pressure, which is an independent risk factor for heart disease.

Ageing is a risk factor for heart disease that cannot be controlled. If you are getting older, it simply means you need to be even more careful to reduce any other risk factors for heart disease you may have. Risk factors for heart disease that can be controlled include smoking, high blood pressure, high cholesterol levels, being sedentary, being overweight or obese, and having diabetes.

Men whose risk factors were all optimal at age 50 had a remaining lifetime risk of only 5 percent. Essentially, their risk of heart disease had been abolished. Men who had two or more risk factors had a lifetime risk of 69 percent. Findings were similar for women. Even the presence of a single major risk factor at age 50 substantially raises the lifetime risk for heart disease and markedly shorter survival.

Although you cannot turn back the clock eating a healthy diet and taking other steps to control are risk factors and live a healthier life may help to slow or delay further age-related changes in the arteries. A healthy lifestyle keeps you young at heart!

Dr Md Habibe Millat, FRCS is a Cardiothoracic Surgeon at Cork University Hospital, Republic of Ireland.

Dangers of eating raw or undercooked foods

TAREQ SALAHUDDIN

Eating unwashed produce, such as spinach, lettuce or green onions, or undercooked beef, can increase the risk of infection with Escherichia coli (E. coli) bacteria.

E. coli are a broad group of bacteria that live in the intestinal tract of healthy people and animals. Most of the bacteria are harmless and play an essential role in absorbing certain vitamins. But a few strains of E. coli are responsible for serious food-borne infections.

Some strains can cause severe, bloody diarrhea, kidney failure and even death. Most of them have been traced to undercooked ground meat, but the bacteria can also contaminate raw fruits, particularly melons, and vegetables, such as lettuce, sprouts, tomatoes, spinach and green onions.

Although it is not always possible to prevent food poisoning, knowing how E. coli spreads and how to handle food safely can help you avoid getting sick.

Dissecting the bad bugs

Not all disease-causing E. coli bacteria are created equal. One strain, enterotoxigenic E. coli, is a leading cause of diarrhoea in children. It is also responsible for most cases of traveler's diarrhoea and is an increasing source of food-borne infection.

Enterotoxigenic E. coli bacteria spread in contaminated food — including raw fruits and vegetables, raw seafood, and unpasteurised dairy products —

and in contaminated water. Signs and symptoms, which include watery diarrhoea and abdominal cramping, usually last just a few days. The infection normally clears on its own without treatment, and most adults and children have no lasting ill effects.

Some E. coli produce a toxin that damages the lining of the small intestine, leading to intense abdominal cramps and severe, bloody diarrhoea. You may have 10 or more bowel movements a

day, some consisting almost entirely of blood. The marked loss of fluids and electrolytes causes dehydration and fatigue.

Nevertheless, many people recover completely from the infection in five to 10 days. But others, especially older adults, children under the age of 5 and people with weakened immune systems, may develop a serious complication called hemolytic uremic syndrome. This syndrome damages the lining of the tiny blood vessels



How E. coli spreads

You develop an E. coli infection when you accidentally ingest the bacteria. The most common sources of infection are contaminated food and water, person-to-person contact etc.

Keeping E. coli at bay

It is not always possible to avoid food poisoning, but common-sense precautions can go a long way toward preventing infection with E. coli bacteria.

- Cook all ground meat, roast beef thoroughly. Meat, especially if grilled, is likely to brown before it is completely cooked, so use a meat thermometer to ensure that meat is heated to at least 160 F at its thickest point. If you do not have a thermometer, cook ground meat until no pink shows in the center.

- To prevent the growth of bacteria in your kitchen, thoroughly wash anything that comes in contact with raw meat, including your hands, counters and utensils. Use hot, soapy water, bleach or disinfecting wipes.

- Order beef cooked medium or well-done when eating out. Be persistent about getting what you ask for, even if it means sending your food back more than once.

- Drink pasteurised milk, juice and cider. Any boxed or bottled juice kept at room temperature is likely to be pasteurised.

- Wash raw produce thoroughly, using plenty of running water and a scrub brush or a vegetable wash. Children, older adults and people with weakened immune systems should avoid alfalfa sprouts.

- Avoid drinking untreated water from lakes and streams and swallowing water when swimming — even pool water, which can be contaminated with feces.

- Make sure that family members, including children, wash their hands after using the bathroom, changing diapers and before eating.



Talk therapy may be best for depressed people

Talk therapy may beat medication for older adults' depression, particularly when therapists work along with the patient's primary care doctor, a research review suggests.

The review involved eight previous clinical trials, which found that psychological counselling was more effective, compared with the "usual care," from family doctors for older adults with depression.

Usual care was up to each patient's primary care doctor, but typically involved antidepressant medication.

The other patients received various forms of cognitive-behavioral therapy — in combination with medication in some studies, and as a stand-alone therapy in others.

In general, researchers found, these latter patients did better than those given routine treatment. But the most positive results came from two studies that used an "interdisciplinary" approach — meaning mental health providers worked along with patients' primary care doctors to design their treatment.

This is important, according to the researchers, because studies have found that older adults prefer to seek depression therapy from their primary care doctors — but, at the same time, they also favor talk therapy over antidepressants.

"We think the findings give us some valuable information about what works," lead study author Dr Karyn M Skultety, of the VA Palo Alto Health Care System in California, said.

There is already substantial evidence that, in contrast to traditional "clinical lore," older adults do not prefer drugs over psychological counselling, the researchers note.

What is more, the researchers point out, older adults' depression is often related to physical illnesses and disabilities — the very things for which they see their primary care doctors. And these depression symptoms not only stem from medical conditions, but can also exacerbate them.

Source: Health Psychology

Medical Update

Breast cancer screening under 50 questioned

Screening women under 50 years old for breast cancer does not significantly reduce deaths from the disease, British researchers said.

They estimated giving women annual mammograms beginning at the age of 40 could save about four lives for every 1,000 women screened.

But they added the benefit must be weighted against increased radiation exposure, which could raise breast cancer risk, anxiety caused by false positive results and higher costs for the screening programmes.

"This trial did not find a significant reduction in breast cancer mortality in women offered annual screening between the ages of 40 and 48 years," said Dr Sue Moss of the Institute of Cancer Research in London.

She added the results of the research are consistent with the findings of previous studies that analysed the risks and benefits of screening women under 50 years old for breast cancer.

The disease, the leading cause of cancer in women, occurs most in the over-50s.

Moss and her team assessed the impact of screening younger women in a 10-year study. More than 160,000 women in Britain were randomly selected to have annual mammograms from the age of 40 or from 50 years old.

Although cancer deaths in the younger screening group dropped compared to deaths in those screened later, it was

not statistically significant, according to the researchers.

Twenty-three percent of women who had regular mammograms from 40 had at least one false positive result, compared to an estimated 12 percent in the older group.

"Longer follow-up of this trial will provide further information. It is important that all the potential advantages and disadvantages of screening are taken into account when considering any changes in policy," Moss added.

Robert Smith, the director of cancer screening at the American Cancer Society, said the results of the study do not substantively call into question the value of mammography for women in their 40s.

"Current evidence supporting mammograms is even stronger than in the past. In particular, recent evidence has confirmed that mammograms offer substantial benefit for women in their 40s," he said.

But Professor John Toy, of the charity Cancer Research UK which funded the trial, said it showed no definitive evidence for women in their 40s to be included in screening programmes.

"We encourage women of all ages, and particularly older women in whom breast cancer is more common... to see their doctor straight away if they notice any changes in their breasts," he added.

Source: The Lancet

Medical Mystery

Pakistani boy leads to pain discovery

A young Pakistani street performer and members of three related families have enabled scientists to make a genetic breakthrough that could lead to more effective painkillers.

During his short life, the unnamed boy never felt pain. He was a local celebrity in northern Pakistan where he astonished crowds by plunging knives through his arms and walking on burning coals. He died on his 14th birthday after jumping from a roof.

By studying his case, and other individuals from families in the same clan, researchers have discovered that they all had a rare inherited genetic mutation that stopped them feeling pain.

"All six affected individuals had never felt any pain, at any time, in any part of their body," said Dr Geoffrey Woods, of the University of Cambridge Institute for Medical Research (CIMR) in England.

The mutation Woods and his collaborators in Britain and Pakistan have discovered is on a gene called SCN9A. It stops a sodium channel, which produces nerve impulses that convey pain signals to the brain, from functioning. So the otherwise healthy individuals do not experience pain.

Woods said drugs that block the function of the channel "have the potential to produce new and potentially safer analgesia."

Although it hurts, pain is a useful sensation because it warns people of danger and injury or if something is too hot or too cold. It also has a survival benefit because when people begin to feel pain they change their behavior to avoid it.

Dr John Wood, of University College London and a co-author of the study, said the discovery is potentially as important as the identification of morphine and opiate receptors two decades ago which improved understanding about how drugs work and led to the discovery of chemicals in the body that control pain.

"The discovery is really striking. No other single gene deletion has such a dramatic effect on pain perception without other deleterious consequences," Wood said.

"So this is a major new insight and I think it has the potential for a completely new class of painkilling drugs."

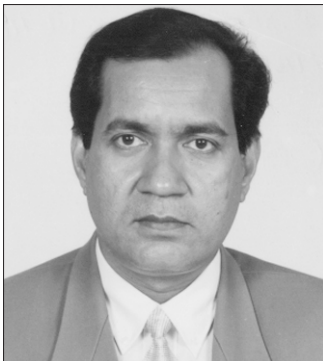
Source: Nature



Your Doctor



Ophthalmology



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Dear Doctor,
I am 70 years old and my eyes are constantly tearing. What may cause this? How can I get rid of this problem? Kindly advise me.

Regards
Saiful Islam
Hajigonj, Chandpur.

Answer:
Watery eyes or constant tearing in older adults may have many causes. Normally when you blink, your eyelids move tears across your cornea to the little openings at the inner part of your eyelids (called puncta). Tears enter the puncta and drain through a small tube (called nasolacrimal duct) into your nose.

In case of you, age-related changes may cause your eyelid tissues to relax, which interferes with their normal function in removing tears. If the lid tissues

relax too much, the inner part of the lid may not lie flat against the eye surface, which prevents tears from entering the puncta. This condition is called ectropion. Treatment of ectropion may include eye drops, protective eyewear or surgery depending upon the cause and severity of the disease.

Narrowing or partial obstruction of the puncta is another cause of watery eyes. This can often be corrected with a relatively simple procedure done by an ophthalmologist.

Other possible causes of watery eyes include irritation, infection, dry eyes, allergies and blocked tear ducts. To get proper guideline for treatment of watery eyes, consult an ophthalmologist. Doctor can advise you an appropriate treatment by evaluating your eyes.

Paediatrics



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Dear Doctor,
My 19-month-old son has had several episodes of wheezing and coughing over the last few days. I have consulted with a doctor. Now my baby is getting antibiotic according to doctor's prescription. I heard that it is a sign of asthma. Does this mean he has asthma? Please clarify me.

Regards
Mrs Farah Rahul
Buet Teacher's Quarter, Dhaka.

Answer:
Wheezing — a high-pitched, whistling kind of noise that comes from the airways, typically the lower airways — is a classic sign of asthma. However, not every child who wheezes will develop asthma, and not every child with asthma wheezes.

Wheezing commonly occurs

in infants and young children with certain viral infections. This is because their airways are so small that any airway infection can cause breathing difficulties.

In older children and adults, special breathing tests (lung function tests) can be used to make a diagnosis. But these tests are less practical in case of your son since he is very young. Usually we do not label asthma in case of children aged under 2 years. We rather call these children *Wheezy child*. Moreover, you did not mention whether there is a family history of asthma. This is very important to diagnose the likelihood of asthma in children.

Treatment in your child's case needs further evaluation I think. You should consult with a paediatrician.