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Why a cold feels worse at nighttime

Circadian rhythm, mucus, hormones and other causes for our coughs and sniffles

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It's cold and flu season. That means you're very likely surrounded by a symphony of coughs and sniffling noses — if you're not actively coughing yourself.

And whether your main complaint is a cough, a fever, a headache or a runny or stuffy nose, you may notice that you tend to feel worse at night.

That's not your imagination. Several factors are to blame, starting with your circadian rhythm, which is your body's internal clock. When the sun sets, it tells your brain to wind down for bed and, at the same time, leads certain immune cells to become more active. Every night, those cells are recruited to different parts of your body, on the lookout for invading pathogens like viruses and bacteria.

"When they identify and try to fight off viruses, the immune cells can cause irritation and inflammation, which ends up making respiratory symptoms worse at night," said Dr. Diego Hijano, a pediatric infectious disease specialist at St. Jude Children's Research Hospital in New York.

Certain hormones, like cortisol, also follow a circadian rhythm. Cortisol levels are highest in the morning, which may help suppress inflammation during the day and, in turn, tamp down symptoms. As cortisol levels begin to fall in the evening, symptoms may start to flare up again.

Another factor that can make cough and cold symptoms worse at night is called postnasal drip, the mucus that starts to pool at the back of your throat when you are lying down. "Throughout the day, the accumulation of mucus is less of a problem because gravity helps drain it when you are upright and moving around," said Dr. Juan Chiriboga-Hurtado, a family medicine specialist at Keck Medicine of the University of Southern California. But at night, mucus can build up and trigger your instinct to cough and clear your airways. For most people with a common cold, nighttime coughing should clear up in five to seven days.

The lack of distractions — which is typically a good thing for sleep — also makes it harder to ignore your scratchy throat at night. And the environmental conditions in your bedroom, like the dryness of the air, can irritate your respiratory tract, Dr. Chiriboga-Hurtado said.

Other illnesses, like allergies, asthma and gastrointestinal reflux, are also linked to coughing that tends to worsen at night for many of the same reasons, he said. And some medicines, like certain blood pressure drugs, might also make you cough more.

For most people with a common cold, nighttime coughing should clear up in five to seven days along with other symptoms, Dr. Chiriboga-Hurtado said. In some cases, a cough can

linger for two weeks or more. But if it doesn't improve after three weeks, it's a good idea to see a doctor to check if there may be another cause.

HOW TO STOP COUGHING AT NIGHT

Fortunately, there are several home remedies that can help improve cough and cold symptoms at night. Dr. Hijano typically recommends that you drink more fluids throughout the day to keep mucus thinner and to minimize the postnasal drip when you do lie down. Taking a hot bath, using a nasal saline spray or flushing your nose with a neti pot before bedtime can also thin out mucus, and these are particularly helpful for young children who cannot blow their own noses, Dr. Hijano said.

You can also consider running a humidifier at night to keep nasal passages moisturized. Research has shown that keeping rooms at a humidity level of about 40 percent to 60 percent reduces the transmission of respiratory viruses and may ease symptoms like cough or congestion when you are sick.

Try elevating your head with a few extra pillows to help mucus drain while you sleep. For infants, use a wedge under their mattress, or prop up one side of their crib, Dr. Hijano said, because pillows are not considered safe for young babies.

For adults, cough suppressants that contain dextromethorphan can provide relief by reducing the urge to cough. Cough expectorants, such as medicines that contain guaifenesin, can help loosen mucus, making it easier to expel. These are available as stand-alone drugs or in the form of combination cough-and-cold medicines. Some combination products also include antihistamines, which can alleviate nasal congestion and reduce postnasal drip. You can skip products that contain the ingredient phenylephrine, which a Food and Drug Administration panel recently found is not effective at reducing nasal congestion. Another option is to use cough drops or honey, which can help prevent your throat from getting dry and irritated, Dr. Chiriboga-Hurtado said.