### Which is it: the flu, RSV, or COVID?



Photo by Leeloo, Prexel

Parents ask us every day the difference between the flu (influenza), RSV (respiratory syncytial virus), or COVID (coronavirus disease 2019). While no method is fool proof, here are some typical differences among these viruses:

The flu, caused by influenza virus, comes on suddenly and makes you feel as if you've been hit by a truck.

Flu almost always causes fever of 101°F or higher and some respiratory symptoms such as runny nose, cough, or sore throat (many times, all three). In addition to the usual respiratory

body aches, headaches, and often the sensation of your eyes burning. Fever can last 5-7 days. Children, more often than adults, can vomit and have diarrhea along with their respiratory symptoms, but contrary to popular belief, there is no such thing as "stomach flu." All symptoms come on at once; there is nothing gradual about coming down with the flu.

COVID can cause the same symptoms. Since home COVID tests are readily available, you can answer the question of "Flu or COVID?" at home.

### Colds, even really yucky ones from RSV, come on more gradually.

RSV, a common cause of the common cold, is notorious for causing very thick mucus. The mucous is why some babies and young children have more severe coughing and breathing difficulties with this particular cold virus. Our immune systems are not good at mounting a lasting immunity to RSV so kids and adults tend to get this virus again and again. The first time someone is hit with RSV is usually their worst episode.

Symptoms usually start out with a sore throat or mild runny nose. Gradually, the nose runs more and a cough starts. Sometimes RSV can cause fevers for a couple of days and some hoarseness. Children are often tired from interrupted sleep because of cough or nasal congestion. This tiredness leads to extra crankiness. To further complicate things, Covid can cause identical symptoms.

Usually kids still feel well enough to play and attend school with colds like RSV.

The average length of a cold is 7-10 days although sometimes it takes two weeks or more for all coughing and nasal congestion to resolve.

### Wondering about the color of mucus?

The mucus from a cold can be thick, thin, clear, yellow, green, or white, and can change from one to the other, all in the same cold. The color of mucus in the first few days does NOT tell you if your child needs an antibiotic and will not help you differentiate between a cold and the flu.

#### So, is it the flu, RSV, or COVID?

- Flu = sudden and miserable
- Colds, including RSV = gradual and annoying
- COVID = either

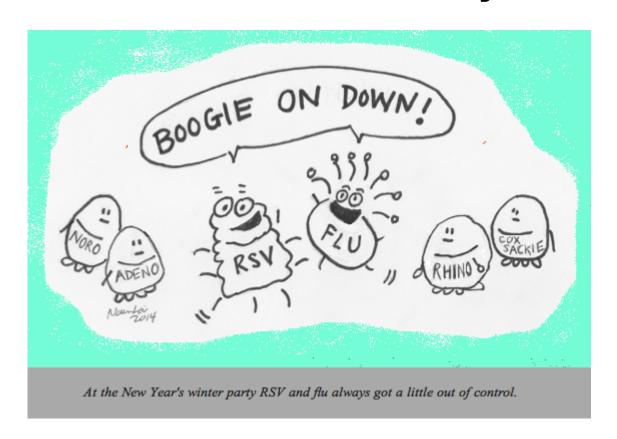
If your child has several days of runny nose and cough, but is drinking well, playing well, sleeping well and does not have a fever, the illness is unlikely to "turn into the flu." A home test can help tease out COVID from a cold or the flu.

And yes, a kid can have multiple respiratory viruses at the same time. Let's hope that does not happen this winter.

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# What to do with the flu, and what about elderberry?



So you just read our post "Does my child have the flu or a cold" and you've decided that your child likely has the flu (short for influenza). Now what do you do? When do you call the pediatrician? Does your child need medication?

First take a deep breath. Then, make sure your child is breathing easily. She may be coughing a lot but as long as her breathing is unlabored, and you see no retractions (see 6 second video in our coughing post), her lungs are most likely OK. Kids who are short of breath can become agitated or lethargic. A little tiredness from illness is normal, but extreme lethargy is not.

**Think about it**. Is your child's mental state OK? Is she thinking clearly, walking well, talking normally, and consolable? She may be more sleepy than usual but when awake she should be rational and easily engaged.

**Hydrate!** A high fever and cough increases a child's hydration needs. Make up for lost fluids by aiming to give her at least one and one-half times the amount she usually drinks in a day. For example, if she typically drinks 24 ounces of water or milk per day, try to give at least 36 ounces of fluid per day. Offer your child ANYTHING she wants to drink, including soup, juice, lemonade, electrolyte replenishers (e.g. Gatorade or Pedialyte), decaffeinated tea or a little flat decaffeinated soda.

If your child is not eating, avoid hydrating solely with plain water. Kids need salt to keep their blood pressure up and sugar to keep their energy levels up. And yes, milk is **great** to offer. **If milk doesn't cause your child to make more mucus when she is healthy, then it won't affect her nose or lungs when she is sick.** Even chocolate milk is fine! For infants, give breastmilk or formula—no need to switch. The goal is to produce PEE. Well hydrated kids pee at least every 6-8 hours. Other signs of dehydration include dark urine, dry mouths/lips, the inability to produce tears, sunken eyes, and sunken soft spot (in an infant).

**Offer food as well.** My grandmother used to say, "Feed a cold, starve a fever." I loved my grandmother, but she was incorrect about this advice. Food = nutrition = improved germ fighting ability. However, don't argue with your sick kid about eating if she is not hungry. Just know that drinking extra is a MUST.

**Placate pain**. She may have muscle aches, a headache, or a sore throat. Relieve her discomfort with ibuprofen (Motrin, Advil) or acetaminophen (Tylenol). Offer some ice pops and a movie on the couch. If she is in severe pain, is unable to move normally, or is inconsolable, call your child's doctor. Unable to move or inconsolable = very bad.

It's OK to play and move about. Your child with flu might spend a large portion of her day on the couch or in bed but it's fine to let her play and have some activity. Some walking

around and playtime helps her exercise her lungs. "Moving" her lungs with a cough actually prevents pneumonia by preventing germy mucus from lodging in the lungs. Also, seeing that your child can walk around, despite her aches and discomfort, will reassure you that she is handing her illness.

Does every kid with flu need to see a doctor? No. Some kids have medical problems that predispose them to complications of illness and doctors will want to see those kids more often. Most otherwise healthy kids get through the flu, as long as they drink enough and can be kept comfortable. The fever from flu usually lasts from 4-7 days and can go quite high, but you know from reading our fever post that the number alone is not what you fear. What matters is how your child is acting.

#### Some reasons your child should see a doctor:

- -difficulty breathing
- -change in mental state or you cannot console her
- -your child is dehydrated
- -a new symptom that concerns you
- -the fever goes away for a day or two and then returns with a vengeance
- -fever goes on more than 4-7 days, but you can certainly call the doctor to check in by day 3-5
- -a rash appears during the flu illness (this can be a sign of overwhelming bacterial infection, not the flu)
- -new pain (eg. ear pain from an ear infection) or severe pain
- -your gut instinct tells you that your child needs to see a doctor

What about Tamiflu (brand name for oseltamivir)? Some areas of the United States are experiencing a shortage of this antiflu medicine. Oseltamivir can lesson the severity of flu symptoms and perhaps shorten how long the flu lasts by about a day. Since most people recover in about the same amount of time without the medication, the CDC (Centers for Disease Control) and the AAP (American Academy of Pediatrics) issued treatment guidelines. Kids with certain lung, heart,

neurologic, or immune system diseases, kids with diabetes, and kids under the age of two years may be medication candidates. You can check the exhaustive list here. The other two medications that cover the two main types of flu are not available in oral form.

Better than Tamiflu is the flu vaccine. Remember the saying, "An ounce of prevention is worth a pound of cure?" A 2017 study showed that the flu vaccine prevented kids from dying of the flu. Vaccinated kids who do end up with the flu tend to have less severe illness. The vaccine prevents several types of the flu, so even if your child gets flu and did not receive the flu shot this season, it's not too late. Take her to get it after her fever is gone. Also put in a reminder to yourself to schedule a flu vaccine appointment for your child next September, in advance of next winter's flu season.

**Over-the-counter flu medications** do not treat the flu, but they can give side effects. In fact, cough and cold medicines should not be given to children younger than four years, according to the American Academy of Pediatrics. Instead, try these natural remedies:

- -If older than one year, you can give honey for her cough and to soothe her throat.
- -Run a cool mist humidifier in her bedroom, use saline nose spray or washes, have her take a soothing, steamy shower, and teach her how to blow her nose.
- -For infants, help them blow their noses by using a bulb suction. However, be careful, over-zealous suctioning can lead to a torn-up nose and an overlying bacterial infection. Use a bulb suction only a few times a day.

What about black elderberry (sambucus)? Articles abound on social media about the benefits of black elderberry in fighting flu symptoms. However, if you read a credible source such as the National Institute of Health information site about complementary and alternative medicine, you will find,

"Although some preliminary research indicates that elderberry may relieve flu symptoms, the evidence is not strong enough to support its use for this purpose." The research was not conducted with kids, so unfortunately we cannot recommend this unproven treatment for flu.

Take heart. While the groundhog predicted 6 more weeks of winter this year, history shows that the groundhog is usually wrong.

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# Enterovirus D-68 put into perspective

No doubt, there has been a n uptick in respiratory illness in our area, but the news media is causing panic specifically over one o f them: enterovirus D-68.



The name "enterovirus" does not imply "deadly." Many of you are well familiar with hand-foot-mouth disease, aka "Coxsackie virus." Guess what? This extremely common, benign but annoying

virus is also an enterovirus!

Let's put into perspective how this "new" respiratory virus compares with an "old" well-known respiratory virus, influenza (The Flu). Remember that both flu and enterovirus D-68 are tracked by REPORTED cases. Most of the time doctors do not test children with mild disease so most reported cases are hospitalized patients.

Enterovirus D-68, the numbers: From mid-August through the first week in October (peak enterovirus season)- 664 people are known to have been infected in the USA, most of whom are children. You can track these numbers on this Centers for Disease Control website.

Influenza, the numbers: Each year in the US, approximately 200,000 people (children and adults) are hospitalized from complications of the flu. This year's flu season in the northern hemisphere is just starting. Generally peak flu season is in the winter months. Large numbers of people contract the flu but they are not sick enough to be hospitalized- they suffer a week of fever, cough, sore throat and body aches at home but recover uneventfully. Up to 20% of the population are infected with flu each season.

**Death from enterovirus D-68**: 1 child. Four other children died who tested positive for this virus but it is unknown if the virus caused their deaths.

**Death from influenza** during the 2013-2014 flu season: 108 children

**Symptoms of enterovirus D-68**: range from mild cold symptoms to high fever and severe respiratory symptoms

**Symptoms of flu**: usually abrupt at the onset: fever, body aches, cough, and runny nose. Please see our prior post for more information.

**Prevent enterovirus D-68**: same as for all "cold" viruses- wash hands, sneeze/cough into elbow, not hands.

Prevent flu: Same as for enterovirus D-68, AND we have an Influenza vaccine for all children aged 6 months and above, with a few exceptions-see our article for more information. Last year the flu vaccine was about 60% effective: it's not perfect, but it is certainly better than not vaccinating.

Overall, remember that enterovirus D-68 is one of many cold viruses that circulate the country. We are all familiar with back-to-school viruses. My teen-aged son told me, amid his sniffles and nose-blowing last week, that "more than half my school has a cold now."

Certainly some of those colds could be enterovirus-D-68. But please don't panic. All respiratory illnesses, including colds, have the potential to travel into your child's lungs. It is more important to practice good illness prevention techniques and to recognize the signs of difficulty breathing. As we have said before, if we parents could worry all illnesses away, no one would ever be sick.

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