

# Influenza, Test or Treat?

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Every year, influenza causes many people to become ill. All children 6 months and age and older should receive a yearly flu vaccine. Vaccination remains the best way to prevent influenza. Symptoms of influenza include abrupt onset of fever, myalgias, headache, nonproductive cough, sore throat and runny nose. Fever and cough are the two most common symptoms. When presented with these symptoms, providers are faced with the question to test and confirm the diagnosis of influenza or to initiate influenza treatment.

Jennifer Goldman, MD, Infectious Diseases specialist at Children's Mercy, discusses the role of influenza testing in clinical care and the risks and benefits of oseltamivir use.



Featured Speaker:

## Jennifer Goldman, MD

Jennifer Goldman, MD is an Associate Professor of Pediatrics at the University of Missouri-Kansas City School of Medicine and is an infectious diseases physician at Children's Mercy Kansas City. She is also a trained pediatric clinical pharmacologist. Her clinical time and research is focused on selecting the right antibiotic for the right infection and trying to minimize undesired side effects from antibiotics.

**[Learn more about Jennifer Goldman, MD](#)**

**<http://www.childrensmercy.org/profiles/jennifer-l-goldman>**

Transcription:

Dr. Michael Smith (Host): Alright. So, our topic today is influenza, test or treat? My guest is Dr. Jennifer Goldman. Dr. Goldman is an infectious disease physician at Children's Mercy Kansas City, an associate professor of pediatrics at the University of Missouri Kansas City School of Medicine. Dr. Goldman, welcome to the show.

Jennifer Goldman, MD (Guest): Great. Thanks for having me.

Host: So, when we talk about the flu season, I always like to ask the excerpts like yourself and get difference of opinions. Why do we have a flu season? Why are we always talking about influenza this time of the year?

Dr. Goldman: Yeah, that's a great question. You know flu hits in North America anytime in between typically January or February, but it can start this time of year. Although it's unpredictable exactly the time it'll hit, it hits every single year. So, you know as we get prepared and start to vaccinate people and try to protect people as much as possible before influenza rears its ugly head in our communities.

Host: At this point in the year, what do you think? Is this going to be... Not to put you on the spot, just looking for your opinion. Is this going to be a bad season for the flu, or what do you think?

Dr. Goldman: Yeah, unfortunately that's unpredictable. What we do know already, the CDC came out

and said several states are already seeing an uptick on the visits of children and adults going to see their doctor with influenza like symptoms. So, I believe in the next several weeks we're definitely going to see it on the rise. Unfortunately, it was a really significant season. In the U.S alone, we saw about 180 pediatric deaths. So, I think it's always a little bit unpredictable, but I think the one thing that we can do is prepare the best that we can.

Host: Yeah, so I want to talk a little bit about how we can prepare and get your opinion. But let's just kind of review influenza in general just kind of as a nice update for people. What are the common symptoms of influenza?

Dr. Goldman: Yeah, I think that's a great question because I think many of us, out in the communities you'll hear people say that they have a cold or they have flu. They can't really tell which. Most of the time, flu isn't just a bad cold. Both the flu and cold can cause similar respiratory symptoms. Usually with flu you'll have fevers and chills and cough. I mean those two symptoms together are pretty standard for flu. In kids, we can also see sore throats or runny nose or muscle aches. Typically, you don't have the stomach issues with diarrhea or vomiting. It's really just overall feeling cruddy and it's quite contagious. Most of the time, both children and adults will get better quickly with flu. But sometimes it can definitely linger and take days. Unfortunately, sometimes it can develop into really severe complications like pneumonias or other infections.

Host: That's what makes it hard to treat because a lot of times patients are coming in late. Isn't that correct? They're missing those initial symptoms. It lingers for a while, and then next thing you know they're high fever, they're really sick, and now they come in. Is that too late? If it is, how do we get people in faster to be checked?

Dr. Goldman: Yeah, you bring up great points. So, when's the best time to test and treat for flu? The earlier the better, just like you highlighted. So ideally if a child develops symptoms such as fever or cough and we're in the peak of influenza season, they should be tested early. So, the tests are most reliable within the first three to four days or symptoms. Then if the decision by the clinician is to treat with antivirals, really again ideally those should be started within the first couple of days, the first 48 hours of symptoms. That's where the data show that that is when the antiviral medications are at their best.

Host: When we are able to treat early, and it is decided that the patient needs antivirals, the outcome is just better right? We know that when we're able to treat quickly, we see a lot less consequences. We see less hospitalization. All of that is true. Correct?

Dr. Goldman: Well, it's a little bit more complicated than that. So, we know prevention is by far the best treatment. So, prevention with vaccination is by far the best. We know that there are antiviral medications approved by the Food and Drug Administration for kids, such as oseltamivir or Tamiflu. That's an oral medication. Or there's an inhaled antiviral zanamivir or Relenza. That can be used in kids seven years of age and up. Those are the best two antivirals that have been studied in kids. Most of the studies have been performed in children with uncomplicated influenza. So those actually that don't get hospitalized.

What the data shows is that prompt initiation of antiviral medications typically results in about a day, a

day and a half less of symptoms. So, again, early diagnosis, early treatment can result in a day or so less of symptoms. We really don't have the data in pediatrics to know if it prevents hospitalization and things like that. What we do know is not getting the flu and trying to prevent that is the best way to decrease hospitalization rates.

Host: Yeah. So, let's go back to that because you mentioned the vaccine. Are you seeing less and less kids being vaccinated? I know there's a lot of, I don't know. What is it? Antivaccine noise out there. Is that having an impact on the number of kids being vaccinated? What do you think?

Dr. Goldman: Yeah. So, I mean the most important thing is to know what the recommendations are for flu vaccine. The CDC and the American Academy of Pediatrics actually recommends everyone in the United States greater than six months of age getting immunized. We know that that is the most important part of immunization. Anyone of the right age to get immunized. We know that parents and family members that get immunized, their children are more likely to get immunized. We know that the vaccine is effective.

So, what we also know is as soon as that pediatrician has that vaccination available in their clinics, you can differ from clinic to clinic, it's important to start the vaccination process. We don't wait for the first case of flu. What we also know is even if someone did delay or miss the opportunity to get immunized, they can get vaccinated throughout the whole flu season. So, if a pediatrician is seeing a child even in January or February, we still recommend vaccination and to vaccinate as many children as possible.

Host: What about the different types of vaccines that are available? Can you run through some of that with us?

Dr. Goldman: Yeah, I sure can. So, there are the inactivated influenza vaccine. Those are an injection. They are, again, recommended for any child six months of age and greater. Then there is a live attenuated vaccine, which is the nasal spray, which was actually not recommended the past couple of years by the American Academy of Pediatrics because the initial data shows that it may not be as effective in preventing influenza. Actually, that data is inconclusive. So, the American Academy of Pediatrics came out this year and said you can, for any child greater than two years of age who has no reasons not to get live influenza vaccine if they're completely, if they don't have asthma or anything else. They can, as an alternative, they can get the nasal spray vaccination this year. So those are the two types. The injection and the nasal spray.

Host: So, Dr. Goldman, we're entering into the flu season, as you know. I guess I want to end with this. What would you like people to know about influenza?

Dr. Goldman: Yeah, that's a great thing to end on because I think it's always a constant reminder that we see otherwise healthy children get sick from the flu every single year, unfortunately. We take care of them here at Children's Mercy. Across the country, thousands of children and adults come to clinics and hospitals requiring sometimes pretty significant medical care. So, I think it is important for all of us to continue to remind families how critical it is to be aware of the symptoms that are associated with flu, to seek medical care early, and then to get vaccinated. Those are really the most important take home messages during the influenza season.

Host: Gotcha. Fantastic Dr. Goldman. I want to thank you for the work that you're doing at Children's Mercy and thank you for coming on the show today. You're listening to Pediatrics in Practice with Children's Mercy Kansas City. For more information, you got to [childrensmercy.org](http://childrensmercy.org). That's [childrensmercy.org](http://childrensmercy.org). I'm Dr. Mike Smith. Thanks for listening.

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