



Health Sheet

VACCINATION AND FLU Q&A with Cody Meissner, MD pediatric infectious diseases

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VACCINATIONS FOR CHILDREN ARE A CRITICAL PART of their healthy development. However, many questions have arisen surrounding these shots over the last few years. Parents wonder when, and sometimes if, they should vaccinate their children. The appearance of H1N1 or Swine Flu on the scene this year complicates the issue further. Everyone is wondering what the flu season will be like and how they should prepare and respond.

H. Cody Meissner, MD, Chief of Pediatric Infectious Diseases at Floating Hospital for Children at Tufts Medical Center and a national expert on the vaccinations and the flu, answers questions to help parents best understand how to care for their children.

There has been a lot of discussion around immunizations lately. What are the benefits and risks of childhood vaccinations?

Every human activity from riding in a car to eating an egg carries some risk. There is no such thing as a risk free activity. The risks associated with immunization are either so minor (sore arm) or so rare (seizure), they are far outweighed by the lives saved and the illness prevented by immunization. A typical five-year-old child will experience an average of six infections during the year. Do the benefits of vaccination (avoiding infection) outweigh the risks (side effects)? Yes. For all vaccines, the benefits clearly outweigh the risks.

What would happen if we stopped vaccinating?

Before long we would see epidemics of diseases that have disappeared or are nearly under control now. This is because the germs that cause these diseases are still around us but controlled by vaccines. Vaccine preventable diseases may be either eliminated or very uncommon, but the bacteria and viruses that cause these diseases are still present, so it is important for every child to continue to receive all recommended vaccinations.

What vaccinations should every child receive?

The following immunizations are recommended for all children in the United States: hepatitis B, rotavirus, diphtheria, tetanus, pertussis, Haemophilus influenzae type b, pneumococcal, poliovirus, influenza, measles, mumps, rubella, chickenpox, hepatitis A, meningococcal and HPV.

What about autism. Is there a link between vaccines and autism?

There is no scientific evidence to support the existence of a link between any vaccine and autism. In fact, many scientific studies show there is no link between vaccines and autism.

I hear about different components in vaccinations that may be harmful or that I should be aware of — for example thimerosal and aluminum. What should I know about these?

Thimerosal is mercury containing preservative used in some vaccines since the 1930s. There is no convincing scientific evidence of harm caused by the low doses of thimerosal used in vaccines except for minor reactions like redness and swelling that sometimes occur at the injection site. Since 2001, all vaccines recommended for children six years

of age and under in the United States have been produced without thimerosal as a preservative, with the exception of inactivated influenza vaccine. There is no scientific proof of any adverse consequence from the small amount of aluminum in any vaccine.

Should I delay when my child has certain vaccinations?

The recommended immunization schedule from the CDC and the American Academy of Pediatrics has evolved over many years with much deliberation. The recommended time for administration of each immunization is provided in this schedule. Parents should work hard to comply with the recommended schedule to be certain their children are protected against any of the vaccine preventable diseases. Parents can view the recommended immunization schedule at www.cdc.gov/vaccines/recs/schedules/child-schedule.htm. Any delay in administering a recommended vaccine will leave your child susceptible to that vaccine-preventable disease until the vaccine is administered.

I am concerned about the influenza virus. How can I best protect myself and my child from this infection?

The best way to prevent the flu is by getting a flu vaccination each year. Yearly flu vaccination should begin in September or as soon as vaccine is available and continue throughout the influenza season, into December, January, and beyond. This is because the timing and duration of influenza seasons vary. While influenza outbreaks can happen as early as October, most of the time influenza activity peaks in January or later.

In general, anyone who wants to reduce their chances of getting the flu can get vaccinated. However, certain people should get vaccinated each year either because they are at high risk of having serious flu-related complications or because they live with or care for high risk persons. It is recommended that all children aged six months up to 19 years get vaccinated each year.

Here are some steps you can take to reduce the risk of getting influenza:

- ▶ Cover your nose and mouth with a tissue when you cough or sneeze. Throw the tissue in the trash after you use it. If a tissue is not available, you should cough into your elbow and not your hands.
- ▶ Wash your hands with soap and water, especially after you cough or sneeze. Alcohol based hand cleansers are also effective.
- ▶ Avoid touching your eyes, nose and mouth. Germs spread this way.

- ▶ Try to avoid close contact with sick people.
- ▶ Stay home if you are sick until you have been symptom-free for 24 hours. This is to keep from infecting others and spreading the virus further.

What new developments are there concerning H1N1/Swine Flu? What do I need to know to be up-to-date?

Novel H1N1 (referred to as "swine flu" early on) is a new influenza virus causing illness in people. This new virus was first detected in people in the United States in April 2009. Other countries, including Mexico and Canada, have reported people sick with this new virus. This virus is spreading from person-to-person, probably in much the same way that regular seasonal influenza viruses spread. The symptoms of novel H1N1 flu virus in people are similar to the symptoms of seasonal flu and include fever, cough, sore throat, runny or stuffy nose, body aches, headache, chills and fatigue. A significant number of people who have been infected with this virus also have reported diarrhea and vomiting. Also, like seasonal flu, severe illnesses and death has occurred as a result of illness associated with this virus.

How will H1N1/Swine flu change the immunizations my child needs this fall?

Every child aged six months up to 19 years should be vaccinated each year against seasonal influenza as soon as that vaccine becomes available which is usually in September or October. If your child is less than 9 years old and being vaccinated for the first time, two doses of the seasonal vaccine should be administered 1 month apart. If your child was fully immunized in a previous year with the seasonal influenza vaccine, only 1 dose is needed.

Hopefully, the swine influenza vaccine will be available in October or November. It is anticipated that everyone will need two doses of the swine influenza vaccine. Because it is likely that there will not be enough swine influenza vaccine for everyone in October, the CDC has established guidelines for those persons who should receive the vaccine first because they are at highest risk of severe complications from influenza:

- ▶ pregnant women
- ▶ house-hold contacts and care-givers for children less than 6 months
- ▶ health care personnel and emergency medical services
- ▶ children and adolescents from 6 months to 24 years
- ▶ persons 25 to 64 with certain medical conditions □

RESOURCES

Recommended web sites for more information: www.aap.org — www.cdc.gov/vaccines — www.cdc.gov/vaccinesafety — www.immunize.org

Please refer to our website: <http://www.floatinghospital.org/OurServices/InfectiousDiseases> for the latest updates on H1N1/Swine flu