

Flu update 2014-2015- We may be in for a rough winter



Ben's runny nose, as depicted by Ben

Because we couldn't have said it better ourselves, we have reprinted (with permission) our pediatrician colleague Dr. Roy Benaroch's recent flu update from his blog The Pediatric Insider.

Some bad news about flu this year

We could be in for a rough influenza winter.

First, data just released from the CDC shows that a lot of the flu circulating in the USA isn't a good match for the strains in this year's flu vaccines. About 82% of flu since autumn is a type A H3N2, one that historically has been associated with more-severe illness. Of those, only about half are closely related to the A/Texas/50/2012 strain that was chosen in February to be included in the vaccine. Unfortunately, current methods of vaccine production take a long time, and manufacturers have to commit early—months ahead of time—to what will be included in the vaccines. In February, when the World Health Organization made their recommendations for the Northern Hemisphere 2014-2015 flu vaccine, they chose the H3N2

that was then in circulation. Since then, it's "drifted", or changed, to a related but non-identical type.

What this means is that the current vaccine is well-matched to only about 40% of circulating flu. The vaccine will probably offer some protection against the other 60%— illness will be milder and shorter—but a lot of people who got their flu vaccines are still going to get the flu, and spread the flu. Now, some protection is still better than none, so I'd still go and get that flu vaccine now if you haven't gotten it already. An imperfect (or, honestly, far-less-than-perfect) flu vaccine is better than none. But it isn't looking good this year.

And it gets worse. It's becoming increasingly clear that Tamiflu, the anti-viral medication we rely on to help treat influenza, doesn't work very well. As summarized by the Cochrane Collaboration earlier this year, studies show that Tamiflu is only modestly effective in reducing the length of influenza illness, and may be only slightly effective at reducing complications. If it does work for treatment of flu, it works best when started very early in the course of the illness. The FDA labeling calls for it to be started within 48 hours, but honestly it seems to barely work if started that late. Better to get it started within 24, or even better, 12 or 6 or 2 hours.

In practice, Tamiflu really doesn't seem to do much of anything for most of the flu patients seen in hospitals and doctor's offices, because we usually see patients too late. It does have a role in helping family members at risk for flu. They can start it immediately, at the first symptoms, and will probably get more benefit.

Tamiflu can also be used as a prophylactic, or preventive, agent in people exposed to flu with no symptoms, though again, the benefits are modest at best. Crunching the numbers, we probably have to treat about 33 people on average for just one

person to benefit from prophylaxis. That's not very good, especially considering that all 33 people will have to pay for it and risk the side effects.

And Tamiflu does have some significant side effects. Nausea and vomiting are quite common, but the scarier reactions are depression, hallucinations, and psychosis. Neuropsychiatric side effects are most common in people of Japanese ancestry.

So: the flu vaccine, this year, will probably offer only modest benefits. And Tamiflu really has very limited usefulness. It looks like we'd better prepare for a rough winter, and keep in mind some of the old-fashioned ways to keep from getting the flu:

- Stay away from sick people.
- If you're sick, stay home.
- Keep your mucus to yourself—sneeze into your elbow, or better yet into a tissue. And then wash your hands.
- Don't touch your own face. Flu virus on your hands doesn't make you sick until you help it get into your body by touching your eyes, nose, or mouth.
- Wash or sanitize your hands frequently, and especially before touching your face or eating.

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In practice near Atlanta, Georgia, Dr. Roy Benaroch is an assistant clinical professor of pediatrics at Emory University, a father of three, and the author of *The Guide to Getting the Best Health Care for your Child and Solving Health and Behavioral Problems from Birth through Preschool*. Most recently he is the Narrator of the Great Courses Series: *Medical School for Everyone*. We are fans of his blog *The Pediatric Insider*