

Opening Statement of the Honorable Gregg Harper
Subcommittee on Oversight and Investigations
Hearing on “Examining the U.S. Public Health Preparedness for and Response Efforts to
Seasonal Influenza”
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Good Morning. This year, like so many previous years, we’ve had a bad flu season. After months of record-breaking widespread flu activity, the CDC has reported that the flu season has finally peaked. We’re probably still going to see flu activity until the middle of April, so if you have the flu or flu symptoms, it is important to see your doctor and stay home.

Influenza is a leading cause of death in the United States, especially in a severe flu season. Every year, thousands of Americans die from the flu and thousands more are hospitalized from flu-related complications. Since 2010, the flu has caused between 12,000 and 56,000 deaths per year. This year was no exception. Tragically, as of February 24, there had already been 114 influenza-associated pediatric deaths this season. Some of these deaths have occurred in my home state of Mississippi.

Although we’ve enhanced our preparedness for the flu in recent years, there is still room for improvement. The best way to prevent the flu is by getting your flu shot. Millions of Americans receive a flu shot every year to help protect them against illness. Unfortunately, there are a lot of Americans who do not get vaccinated. Last year, only 59 percent of children and about 43 percent of adults received the flu vaccination. Even though only a little over half of Americans typically get vaccinated, CDC estimates that flu vaccination prevented 3,000 pneumonia and influenza deaths during the 2015-2016 flu season alone. Increasing the number of Americans that get the annual flu vaccine will prevent more deaths and illnesses.

Not only can the flu vaccine help prevent an individual from getting the flu, but it also may help reduce severe outcomes when someone does become sick with the flu. During past seasons, about 80 percent of flu-associated deaths in children have occurred in children who were not vaccinated. Similarly, a recent study found that receiving the flu vaccine reduced severe outcomes in hospitalized patients by reducing deaths, reducing ICU admissions, reducing ICU length of stay, and reducing overall length of stay for hospital patients.

While the flu vaccine is currently the best tool to prevent illness, there is room for improvement. The CDC recently announced that this year’s flu vaccine was only about 36 percent effective in preventing an individual from getting the flu. The vaccine’s effectiveness varied for different age groups and for different strains of the virus. For example, the vaccine was 59 percent effective in children; however, it was much less effective for adults. For all age groups, the vaccine was only 25 percent effective this season against the deadliest strain of the flu, H3N2.

The vaccine’s reduced effectiveness against H3N2, the most virulent and predominant strain of the flu this season, is especially concerning. Historically, we have struggled to make an effective vaccine against H3N2. For example, during the 2014-2015 flu season, this Committee

closely examined the flu vaccine's reduced effectiveness due to the mismatch between the H3N2 strain used to develop the vaccine and the H3N2 strain that was circulating. During the 2014-2015 season, the flu vaccine was only 19 percent effective because the H3N2 virus had mutated before the flu season started. This experience reminded us of the importance of being able to rapidly detect and respond to changes in the circulating flu viruses.

According to the FDA, this year the vaccine's reduced effectiveness against the H3N2 virus was not caused by a mismatch. One factor that may explain why the flu vaccine was not that effective against the H3N2 strain is a mutation caused by the vaccine and egg adaptation through the egg-based manufacturing process. Currently, about 80 to 85 percent of the flu vaccines are manufactured through the egg-based manufacturing process. When an inactivated flu virus is grown in chicken eggs during the vaccine manufacturing process, genetic changes can occur in the virus that make the vaccine less effective in humans. Some researchers think that egg adaptation might be especially problematic for the H3N2 virus. Of course, there are many different factors that also might explain the flu vaccine's reduced effectiveness for H3N2. This issue needs to be thoroughly investigated so we can improve the vaccine manufacturing process if necessary and improve the vaccine's effectiveness in the future.

I appreciate the hard work and dedication of the people at HHS to improve our flu preparedness, including those at CDC, NIH, ASPR, and FDA. One of our top priorities is to keep Americans healthy during flu season and improve the federal public health response. I look forward to today's testimony.