Advisory Committee on Immunization Practices and the North Dakota Department of Health Recommends Against the Use of Flumist® During the 2016 – 2017 Influenza Season

On June 22, 2016, the Centers for Disease Control and Prevention’s (CDC) Advisory Committee on Immunization Practices (ACIP) voted that live attenuated influenza vaccine (LAIV), also known as the “nasal spray” flu vaccine or Flumist®, should not be used during the 2016-2017 flu season. ACIP continues to recommend annual flu vaccination with either the inactivated influenza vaccine (IIV) or recombinant influenza vaccine (RIV) for everyone six months and older.

ACIP is a panel of immunization experts that advises the CDC. This ACIP vote is based on data showing poor or relatively low effectiveness of LAIV from 2013 through 2016. Last flu season, LAIV showed no protective benefit in vaccine effectiveness studies.

Health Care Provider Action:

Since LAIV should not be used next season, the North Dakota Department of Health (NDDoH) recommends that all North Dakota health care providers cancel pre-booked orders for LAIV with the manufacturer or distributor. Providers should order IIV to replace doses of LAIV. The Influenza Vaccine Availability Tracking System (http://www.izsummitpartners.org/ivats/) will be updated in the near future as to manufacturer and distributor influenza vaccine availability. Providers may not be able to obtain preferred brands or presentations of IIV.

For providers who pre-booked LAIV with the Vaccines For Children (VFC) Program, the NDDoH Immunization Program will be replacing LAIV doses with IIV doses. Providers do not need to contact the NDDoH to cancel pre-booked VFC LAIV. The VFC Program supplies vaccines for children who are American Indian, Medicaid-eligible, uninsured, or underinsured.

Background:

In late May, preliminary data on the effectiveness of LAIV among children two through 17 years during 2015-2016 season became available from the U.S. Influenza Vaccine Effectiveness Network. That data showed the estimate for LAIV vaccine effectiveness among study participants in that age group against any flu virus was three percent (with a 95 percent confidence interval (CI) of -49 percent to 37 percent). This three percent estimate means no protective benefit could be measured. In comparison, IIV (flu shots) had a VE estimate of 63 percent (with a 95 percent CI of 52 percent to 72 percent) against any flu virus among children.
two through 17 years. Other (non-CDC) studies support the conclusion that LAIV provided less protection than IIV this season. The data from 2015-2016 follows two previous seasons showing poor and/or lower than expected vaccine effectiveness (VE) for LAIV.

How well the flu vaccine works (or its ability to prevent flu illness) can range widely from season to season and can be affected by a number of factors, including characteristics of the person being vaccinated, the similarity between vaccine viruses and circulating viruses, and even which vaccine is used. LAIV contains live, weakened influenza viruses. Vaccines containing live viruses can cause a stronger immune response than vaccines with inactivated virus. LAIV vaccine effectiveness data before and soon after licensure suggested it was either comparable to, or better than, IIV. The reason for the recent poor performance of LAIV is not known.

Vaccine manufacturers had projected that as many as 171 million to 176 million doses of flu vaccine, in all forms, would be available for the United States during the 2016-2017 season. Last flu season, 11.2 percent of influenza doses distributed in North Dakota were LAIV. LAIV is sold as Flumist® Quadrivalent and it is produced by MedImmune, a subsidiary of AstraZeneca. LAIV was initially licensed in 2003 as a trivalent (three-component) vaccine. LAIV is currently the only non-injection-based flu vaccine available on the market.

Since February 24, 2010, CDC has recommended an annual influenza vaccination for everyone ages 6 months and older. CDC and ACIP briefly issued a preferential recommendation for nasal spray vaccine for young children (during 2014-2015); during the 2015-2016 season, influenza vaccination was recommended without any preference for one vaccine type or formulation over another.

Please contact the NDDoH Division of Disease Control, at 701.328.2378 or toll-free at 800.472.2180 with any questions or concerns regarding this issue.

Categories of Health Alert messages:

• **Health Alert** conveys the highest level of importance; warrants immediate action or attention.

• **Health Advisory** provides important information for a specific incident or situation; may not require immediate action.

• **Health Update** provides updated information regarding an incident or situation; no immediate action necessary.

• **Health Information** provides general information that is not necessarily considered to be of an emergent nature.

*This message is being sent to local public health units, clinics, hospitals, physicians, tribal health, North Dakota Nurses Association, North Dakota Long Term Care Association, North Dakota Healthcare Association, North Dakota Medical Association, and hospital public information officers.*