## How can I protect myself against flu?

### Yearly flu vaccination is the best tool currently available to protect against influenza (flu).

While how well the flu vaccine works can vary, the Centers for Disease Control and Prevention (CDC) recommends a yearly flu vaccination as the first and most important step in protecting against flu and its potentially serious complications. Millions of people have safely received flu vaccines for decades. Flu vaccination can reduce flu illnesses, doctors' visits, and missed work and school due to flu, as well as prevent flu-related hospitalizations.

Recent studies\* by CDC researchers and other experts indicate that flu vaccine reduces the risk of doctor visits due to flu by approximately 60% among the overall population when the vaccine viruses are like the ones spreading in the community.

A flu vaccination does not guarantee protection against the flu. Some people who get vaccinated might still get sick. However, people who get a flu vaccine are less likely to get sick with flu than someone who does not get vaccinated.

## Why should I get the flu vaccine?

### There are lots of reasons to get a flu vaccine each year.

- Flu vaccination can keep you from getting sick from flu. Protecting yourself from flu also protects the people around you who are more vulnerable to serious flu illness.
- Flu vaccination can help protect people who are at greater risk of getting seriously ill from flu, like older adults, people with chronic health conditions and young children (especially infants younger than 6 months old who are too young to get vaccinated).
- Flu vaccination also may make your illness milder if you do get sick (Belshe, 1998).
- Flu vaccination can reduce the risk of more serious flu outcomes, like hospitalizations and deaths.
  - A recent study showed that flu vaccine reduced children's risk of flu-related pediatric intensive care unit (PICU) admission by 74% during flu seasons from 2010-2012 (Ferdinands, 2014).
  - One study showed that flu vaccination was associated with a 71% reduction in flu-related hospitalizations among adults of all ages and a 77% reduction among adults 50 years of age and older during the 2011-2012 flu season (<u>Talbot, 2013</u>).
  - Flu vaccination is an important preventive tool for people with chronic health conditions. Vaccination was associated with lower rates of some cardiac events among people with heart disease (<u>Ciszewski, 2008</u>; <u>Phrommintikul, 2011</u>), especially among those who had had a cardiac event in the past year (<u>Udell, 2013</u>). Flu vaccination also has been shown to be associated with reduced hospitalizations among people with diabetes (79%; <u>Colquhoun, 1997</u>) and chronic lung disease (52%; <u>Nichol, 1999</u>).
  - Vaccination helps protect women during pregnancy and their babies for up to 6 months after they are born. One study showed that giving flu vaccine to pregnant women was 92% effective in preventing hospitalization of infants for flu (<u>Benowitz, 2010</u>).
  - Other studies have shown that vaccination can reduce the risk of flu-related hospitalizations in older adults. A study that looked at flu vaccine effectiveness over the course of three flu seasons estimated that flu vaccination lowered the risk of hospitalizations by 61% in people 50 years of age and older (<u>Talbot, 2011</u>).

\*A list of references for the research studies mentioned above is available on the CDC website <u>http://www.cdc.gov/flu/about/qa/benefit-publications.htm</u>.

National Center for Immunization and Respiratory Diseases Influenza Division



### How well do flu vaccines work?

# The benefits of flu vaccination can vary. The most important factors that affect how well the flu vaccine works include:

- The "match" between the flu vaccine and the flu viruses that are spreading that season; and
- Factors such as the age and overall health of the person being vaccinated. For example, older people with weaker immune systems may respond less well to vaccination.

Experts are working to create flu vaccines that work better, but existing flu vaccines still offer important health benefits to the community.

# The following is a list of all the health and age factors that are known to increase a person's risk of getting serious complications from the flu:

#### Asthma

Blood disorders (such as sickle cell disease)

Chronic lung disease (such as chronic obstructive pulmonary disease [COPD] and cystic fibrosis)

Endocrine disorders (such as diabetes mellitus)

Heart disease (such as congenital heart disease, congestive heart failure and coronary artery disease)

Kidney disorders

Liver disorders

Metabolic disorders (such as inherited metabolic disorders and mitochondrial disorders)

Neurological and neurodevelopmental conditions

People younger than 19 years of age on long-term aspirin therapy

Weakened immune system due to disease or medication (such as people with HIV or AIDS, or cancer, or those on chronic steroids)

#### Other people at high risk from the flu:

Adults 65 years and older

Children younger than 5 years old, but especially children younger than 2 years old

Pregnant women and women up to 2 weeks after the end of pregnancy

American Indians and Alaska Natives

#### Morbid obesity

## It is especially important that these people get a flu vaccine and seek medical treatment quickly if they get flu symptoms.

For more information, visit <u>www.cdc.gov/flu</u> or call 800-CDC-INFO.