

**Wheeling-Ohio County Health Department**  
**Key Points on H1N1: Mid to Late October 2009**  
(Updated 10/21/09)

**Vaccine Timing and Availability**

- Vaccine is now arriving in communities for use.
- As a nation, we had to choose between waiting to distribute vaccine until we had large quantities ready to vaccinate lots of people at once versus distributing limited quantities of the vaccine sooner. We chose the latter knowing that it would create some challenges and frustrations (for public health, providers, and the public), but also knowing that it would allow us to start protecting people against this disease sooner.
- Although it protects people faster, using vaccine as it comes off the production line makes for a bumpy start and an irregular flow. The amount of vaccine available to West Virginia (and other states) will vary widely up and down over the first few months of this effort. There will be times of higher flow and times of less supply.
- As vaccine comes off the production line, it goes through all the usual quality assurance and quality control checks and then is released for use, lot by lot.
- Over time between October and January, there is expected to be enough vaccine for anyone who wants to be vaccinated.
- We ask members of the public who want to receive this vaccine to be patient as this program gets underway.
- We expect the first increased amount of vaccine to be delivered by the end of October / early in November. The majority of this vaccine is expected to be delivered through public clinics, including but not limited to school based vaccination. This is because large numbers of people can be vaccinated in public clinics and this can help reduce disease transmission.
- In addition, LHDs will be working to outreach to other settings where those at highest risk of H1N1 complications are located. Some private provider offices may have vaccine, but this is expected to be limited in November and increase later in the season.
- Initial target groups for this October and November vaccine include those at highest risk of getting H1N1 flu and of its complications. This includes:
  - Pregnant women (they are at high risk of complications and vaccination protects both mother and baby.)
  - Household contacts and caregivers of children less than 6 months of age (for the infant is too young to be vaccinated but is at risk of flu complications)
  - Healthcare workers, including EMS (this is a worker and patient safety issue)
  - All persons age 6 months through 24 years of age (this is the age group most commonly getting H1N1 (Swine) flu. In addition, reducing disease spread in congregate settings – schools and universities – can help reduce disease spread to the rest of us)
  - All persons age 25 – 64 years with underlying medical conditions putting them at risk of complications for flu (asthma and other lung diseases, heart disease, neurologic disease, diabetes, liver or kidney diseases, weakened immune systems from HIV, medications, chemotherapy, etc.). These individuals have some of the highest death rates from H1N1 disease.
- Later in November and through the holidays, we expect vaccine to be more widely available through the private sector, including retail pharmacies.
- In time, anyone who wants to be vaccinated against H1N1 disease should be able to be.

**H1N1 Vaccine Expected Side Effects**

- Side effects seen in clinical trials of H1N1 vaccine are the same as those seen with seasonal vaccine. The most common is soreness and swelling or redness at the injection site. With the intranasal vaccine, it is congestion or runny nose for a few days. Like with other vaccines, adolescents occasionally faint when getting an injection. Injuries from falling can be avoided by having the person sit down while being vaccinated.
- Like with seasonal flu vaccines, H1N1 vaccine can cause a day or two of fever and aches following vaccination in some people. This is not the flu, is not dangerous, cannot be spread to others, and resolves on its own. Even if this occurs, it is much better than having flu itself.
- You cannot get the flu from flu vaccines. Even the live virus vaccine (nasal spray) does not cause flu disease, for it is a weakened virus that can only replicate (and therefore cause an immune response) at temperatures in the nasal passages. It cannot live at internal body temperatures such as that found in your lungs or blood stream.

### **H1N1 Vaccine Safety**

- There is nothing new about the H1N1 flu shot other than the virus it protects against.
- It's made just the same way and by the same manufacturers as seasonal flu shots are.
- It's made in the same formulation as seasonal flu vaccine.
- Millions of people get flu vaccines every year without complications.
- Given it's made just the same way, the safety of the H1N1 flu shot should be just the same as that for seasonal vaccine. This is what clinical tests done to date have shown as well.
- The same quality control checks have been taken with this vaccine as with seasonal vaccine. In fact it's had more safety testing than seasonal flu vaccine gets. Clinical trials didn't raise any red flags or areas of concern.
- Corners were not cut in making this vaccine. In pandemic planning over the past few years, experts always said it would take 4-6 months to make vaccine. The process began in May and product is becoming available in October – 5 months, just as expected.
- In sum, the fact that this vaccine is made using the same processes as seasonal vaccine and the data from clinical trials all suggest this vaccine has the same safety profile as seasonal vaccine.
- While there is no reason to believe safety problem with the vaccine will arise, many tracking systems and studies will be put in place just to make sure. This is to pick up any very rare problems that might arise (one can't find the rare one in a million events until millions of doses have been given.)

### **H1N1 Disease and Pregnancy**

- As with seasonal flu viruses, the H1N1 (Swine flu) virus can cause serious and even fatal complications in women who are pregnant.
- We know this because we have seen pregnant women get sick and die from Swine Flu at rates higher than the general population. For example, pregnant women make up 1% of the US population, but 6% of the deaths from H1N1 flu.
- Any pregnant woman who develops fever and cough or sore throat should contact their healthcare provider as soon as symptoms start, to evaluate the need for medical evaluation and for antivirals. Early treatment of pregnant women with flu can prevent complications and death. All healthcare providers should take flu like illness in a pregnant woman seriously and follow her closely. Clinical judgment is

important and results of rapid tests for flu should not be the basis upon which treatment decisions are made.

### **Pregnancy and the H1N1 vaccine**

- There is now a new way to prevent Swine Flu and protect both the health of the mother and the baby – H1N1 vaccine. Beginning the last two weeks of October, most health departments will be using vaccine arriving in communities to protect the public who fall into high risk groups – including pregnant women.
- Here's the facts pregnant women and their health care providers need to know about H1N1 vaccine:
  - The flu vaccine for pregnant women is the flu shot. (Nasal spray is not licensed for pregnant women).
  - Seasonal flu shots have been used safely and effectively in pregnant women for years.
  - There is nothing new about the H1N1 flu shot other than the virus it's made against.
  - It's made just the same way and by the same manufacturers as seasonal flu shots are.
  - The safety of the H1N1 flu shot should be just the same. This is what clinical tests done to date have shown as well.
  - Taking a H1N1 flu shot during pregnancy provides two for one protection:
    - It helps protect the pregnant woman from H1N1 flu and its potentially serious consequences.
    - It also protects the baby, for up to six months after birth. The mother passes on the protection she develops to her new baby. This is important, because babies are at risk of flu but can't be vaccinated until they are at least 6 months old.
  - There is little question about the risks and benefits of vaccine for pregnant women. It's a win-win situation for mother and baby.
  - The CDC, the American College of Obstetricians and Gynecologists, doctors specializing in public health, and most other major medical bodies recommend that all pregnant women, in any trimester, get vaccinated against both seasonal and H1N1 flu. Research this for yourself and learn more (<http://www.acog.org/> or <http://www.cdc.gov>).
  - Pregnant women should contact their local health department now to find out where and when vaccine will be available for you.
- Other important information about flu vaccines and pregnant women:
  - Close contacts of pregnant women (including their children, other family members, and health care workers providing prenatal care) can take either the nasal spray or the flu shot, whichever is right for them.
  - Pregnant healthcare workers can administer the shot or the nasal spray flu vaccine to others. There is no special protective equipment or material needed to administer this vaccine just because the vaccine administrator is pregnant.
  - Pregnant women need both a H1N1 flu shot and a seasonal flu shot, for they protect against different viruses.
  - Seasonal flu usually doesn't start circulating in West Virginia until at least December.
  - Pregnant women can get both H1N1 and seasonal flu shots at the same time (as long as given in different arms), or they can be given at any interval in any sequence.
- For more information see CDC website at <http://www.cdc.gov/h1n1flu/vaccination/> or WVDHHR's website at [www.wvdhhr.org](http://www.wvdhhr.org) for a fact sheet on [Pregnancy, flu, and flu vaccines](#)

### **H1N1 Vaccine and Health Care Workers**

- Health departments and hospitals are now offering H1N1 vaccine to health care workers with direct patient care responsibilities (especially those seeing lots of patients with or at risk for complications from H1N1 flu.)
- It is fine to use the nasal spray or the shot in most healthcare workers,
- The shot can be given to anyone age 6 months and older. It is the preferred formulation for people who are pregnant or have underlying health conditions putting them at risk for flu complications.
- The nasal spray is for anyone who is 2 – 49 years old, is otherwise healthy, and not pregnant.
- Nasal spray can be used in healthcare workers who are 2 – 49 otherwise healthy and not pregnant, even if they care for young children, pregnant women, HIV patients, people with diabetes, etc.
- Healthcare workers do not need to wait any interval of time before returning to care for patients at risk of complications, with one very rare exception. The exception is the healthcare worker who cares for patients who are so extremely immunosuppressed that they have to remain in a special room to prevent exposure to other people. This is the kind of room found in bone marrow transplant units. These healthcare workers should wait 7 days after receiving nasal mist vaccine to return to that setting of care or should use the flu instead.
- For more information, see the CDC website on H1N1 vaccines at <http://www.cdc.gov/h1n1flu/vaccination/general.htm> or a fact sheet on [Healthcare Workers and H1N1 Flu Vaccine](#) at the WVDHHR website at [www.wvdhhr.org](http://www.wvdhhr.org) .

### **Level of Disease and Circulating Flu Viruses**

- West Virginia currently is now reporting “widespread” disease, just like our neighboring states. This means that we are seeing evidence of increasing disease in at least half of the state’s regions.
- Cases are now rapidly rising in many communities – commensurate with what we see in flu season. The same happened in many of our surrounding states a few weeks ago. It is not uncommon for WV to be a few weeks behind others in our spread of flu (possibly due to our rural nature or travel patterns).
- It is very unusual to see this level of flu disease in October.
- Many viruses cause “influenza-like illness” (ILI) defined as fever plus cough or sore throat. Only a portion of these illnesses are caused by influenza itself.
- Most influenza viruses circulating in WV communities at present are the 2009 H1N1 (swine) virus. This is true elsewhere in the US as well.
- Finding flu viruses other than H1N1 circulating remains rare at present.
- Seasonal flu viruses usually begin to circulate in West Virginia in December and peak in January / February.

### **What to Expect this Fall**

- Flu seasons are hard to predict in terms of level of disease to be expected. While H1N1 is the primary flu virus being seen at present, we do not know how much this will remain the case through the season or whether we will see co-circulation of seasonal viruses as well.
- H1N1 flu will likely be with us for some time. Often pandemics come in waves. In addition, flu viruses often carry over from one season to the next.

### **H1N1 vs Seasonal Flu**

- H1N1 and Seasonal flu cause the same symptoms and are of similar severity.
- The difference is that more people are susceptible to the 2009 H1N1 virus since it is new to most of our immune systems.
- Another difference is who is most impacted by these flu viruses. H1N1 (Swine) flu primarily infects young people, especially those under 25 years old. It tapers off with age subsequently. Seasonal flu viruses have the biggest impact on the very young and the very old.
- The elderly are not getting swine flu very often. It is thought that many elderly were exposed to a flu virus similar to H1N1 (swine) flu in the past and have some natural protection from the virus. This is why we are seeing so little 2009 H1N1 (swine) flu disease in the elderly. When it does occur, however, the elderly do seem to be at increased risk of complications.
- Medical advice on how to manage seasonal flu and H1N1 flu is just the same. At present, there is no need to distinguish one from the other for treatment purposes.
- Since both seasonal and H1N1 viruses are likely to occur this fall, it is important to get vaccinated with both seasonal flu vaccine and the 2009 H1N1 flu vaccine when they are each available. The seasonal vaccine does not protect you from the H1N1 virus and vice versa

### **Disease Severity**

- Disease symptoms and severity of the 2009 H1N1 virus is similar to seasonal flu.
- The highest rates of Swine flu illness are in people under 25. Disease also occurs, though at somewhat lower rates among working age adults.
- The frequency of complications has been approximately the same as that seen for seasonal flu.
- Complications include pneumonias, hospitalizations, and deaths. Pneumonias can either be a primary flu pneumonia, or a secondary bacterial infection that follows flu illness.
- We would estimate that many thousand West Virginian's have now had swine flu and recovered well. Like with seasonal flu, deaths from Swine Flu can and unfortunately can be expected to continue to occur, although this happens in far less than 1% of cases.
- With most swine flu occurring in young and middle aged persons, we see the highest number of complications and deaths in these groups. That is different from seasonal flu where most of the deaths are in the very young and the very old. The rates of complications overall with seasonal and swine flu, however are similar.
- People most at risk of complications of flu include
  - pregnant women,
  - people with underlying medical conditions (e.g., diabetes, asthma and other lung diseases, neurologic disease, heart, liver, or kidney disease, or weakened immune systems), and
  - children under the age of 5 (especially those less than 2)
  - children on chronic aspirin therapy (due to the risk of Reye's syndrome).

### **Recent deaths from flu in WV**

- Deaths seen in WV mirror patterns seen nationally.
- National data shows us that the majority, though not all deaths occur in people with a medical condition that puts them at increased risk of complications.
- We have no reason to believe that these deaths reflect a change in the virus or in virus severity.

- As rare as such events are given the overall number of H1N1 cases (the vast majority of people recover fine), every death is tragic and heartbreaking.
- These deaths serve to remind us that flu can be a serious and life threatening disease.
- It is the reason why public health and health care providers take the H1N1 flu and seasonal flu threat seriously and why they put so much emphasis on prevention and now on use of vaccine.
- This is why the federal government has taken such dramatic efforts to assure a safe and effective vaccine is developed and available as soon as possible.

## Prevention

- All of us have a role in helping prevent flu spread – individuals, families, schools, employers, faith-based communities, etc.
- Interventions to reduce spread work to balance the benefit the prevention measures provide and the disruptions they sometimes cause. Multiple targeted approaches across a community are often more effective than any one approach taken by itself.
- Prevention approaches include good respiratory and hand hygiene, regular cleaning of commonly used surfaces, isolating sick persons from well persons (especially staying home from work or school if you get sick), and adapting settings to reduce the level of contact people have with each other.
- Vaccination is the most effective means of prevention of all.

## If I get sick, what care do I need?

### Who needs to see a healthcare provider?

- Most children and adults who are sick with the flu and are generally in good health will recover without needing to visit a health care provider. As long as symptoms are not severe and the person is otherwise healthy and not pregnant, individuals can be treated at home with basic good home care. You can get home care information from <http://www.cdc.gov/h1n1flu/parents/> or at <http://www.wvdhhr.org> (click on “Follow H1N1 flu updates” under Public Information, “[Treating Flu: Both H1N1 and Seasonal](#)”).
- The following people should call a healthcare provider to evaluate the need for medical care:
  - Children and adults who are at higher risk for severe illness or complications (see list below)
  - Children and adults with more severe flu symptoms should call their health care provider or go to an urgent care clinic or emergency department if they cannot reach their health care provider.
- Whenever possible, **call** your health care provider to get advice before making an appointment or visiting. Please do not go to an emergency department unless you have severe symptoms or you are at increased risk of complications and cannot access a doctor’s office or clinic.
- People at increased risk for more severe illness or complications from flu (H1N1 or Seasonal) include:
  - Pregnant women
  - People with the following medical conditions:
    - chronic diseases of the lung (including asthma), heart (except hypertension), kidney, liver, blood (including sickle cell disease), brain or nervous system, muscles (particularly those that cause difficulty with swallowing), or metabolism (including diabetes mellitus);
    - a weakened immune system, including caused by medications or by HIV; or
    - people 18 years old or younger who are receiving long-term aspirin therapy (due to risk of Reye’s Syndrome).
  - Children younger than 5 years old – particularly children younger than 2 years old

- Adults 65 years of age or older
- People at increased risk of severe illness and flu complications should call their healthcare provider early after symptom onset to evaluate the need for being seen and to consider the use of antivirals.

### Antivirals

- Antivirals are prescription medicines. They can reduce complications from flu for some people.
- Antivirals are recommended for people who are very sick with flu (for example hospitalized patients) and for those at increased risk of complications from flu. They are usually not needed for otherwise healthy individuals with mild disease.
- Antivirals work best when started within the first two days of illness.
- It is very important for people at increased risk of flu complications to call their healthcare provider to discuss the need for evaluation and treatment with antivirals if they develop fever and respiratory symptoms.
- See [www.wvdhhr.org](http://www.wvdhhr.org) H1N1 site for information on "[When to Seek Care for Flu](#)".

### When should I see a doctor right away?

- If you become ill and experience any of the following warning signs, go to an emergency room or urgent care center.

For **children**, emergency warning signs include:

- Fast breathing or trouble breathing
- Bluish or gray skin color (call 911 immediately)
- Not drinking enough fluids
- Severe or persistent vomiting
- Not waking up or not interacting
- Being so irritable that the child does not want to be held
- Flu-like symptoms improve but then return with fever and worse cough

For **adults**, emergency warning signs include:

- Difficulty breathing or shortness of breath
- Pain or pressure in the chest or abdomen
- Sudden dizziness
- Confusion
- Severe or persistent vomiting
- Flu-like symptoms improve but then return with fever and worse cough