CDC Influenza Division Key Points
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Summary Key Messages

- FluView indicates that flu activity remains elevated and widespread nationally.
- States that saw early increases in activity are now beginning to see declines. Other states are just beginning to see increases in activity.
- The national proportion of people visiting a provider for influenza-like-illness is declining overall, but it's too soon to say whether the influenza season has peaked.
- Because large parts of the country have yet to experience significant flu activity, influenza-like illness may increase again and it's likely that flu activity will remain elevated nationally for several weeks still.
- Severity indicators reflecting hospitalizations and deaths increased again.
- These increases are not unexpected; severity indicators typically lag behind illness activity and hospitalization rates are cumulative over the season.
- Additional reports of hospitalizations and elevated levels of pneumonia and influenza mortality are likely to occur.
- The predominant virus so far this season is H1N1.
- This is the H1N1 virus that emerged in 2009 to cause a pandemic. This virus has continued to circulate since the pandemic as a seasonal flu virus, but this is the first season since the pandemic that this virus has circulated so widely.
- Seasonal flu is responsible for severe illness and death every year, but who is most affected each season can vary depending on the predominant circulating virus.
- During the pandemic, when H1N1 viruses were predominant, younger adults and children, and particularly people with chronic medical conditions, were harder hit by flu compared with adults aged 65 and older. (Other groups of people were also hard hit by H1N1 during the pandemic. See the following sections for more information: H1N1 and

Pregnant Women, H1N1 and People Who Are Morbidly Obese, H1N1 and American Indians/Alaska Natives.)

- While it is not possible to predict which influenza viruses will predominate for the entire 2013-2014 influenza season, if H1N1 virus continues to circulate widely, illness that disproportionately affects young and middle-aged adults may continue to occur this season.
- CDC has already received several reports of severe flu illness among young and middle-aged adults, many of whom were infected with the 2009 H1N1 virus. Some hospitalizations and deaths have been reported.
- So far, roughly 61% of the reported hospitalizations this season have been in people 18 to 64 years old. (See Influenza-Associated Hospitalizations By Age for more information.)
- More commonly, most flu hospitalizations occur in people 65 and older. Usually 50-60% of flu hospitalizations occur in people 65 and older.
- Unfortunately, younger adults – especially those who are otherwise healthy – are less likely to get vaccinated.
- Early estimates for this season as of mid-November were that among people 18-49 years, only 31 percent of people in that age group had been vaccinated. That is nearly 10 percent lower than the national average.
- These severe flu outcomes are a reminder that flu can be a very serious disease for anyone, including young, previously healthy adults.
- CDC urges people who still have not been vaccinated to get vaccinated now.
- All flu vaccines this season are designed to protect against H1N1.
- Influenza vaccination is especially important for people in the most vulnerable groups.
- People at high risk for serious flu complications include: people with underlying chronic medical conditions such as asthma, diabetes, heart disease, or neurological conditions; pregnant women; those younger than 5 years or older than 65 years of age; or anyone with a weakened immune system. A full list of high risk factors is available at http://www.cdc.gov/flu/about/disease/high_risk.htm.
- Also, as always, people who are at high risk for influenza complications should see their health care provider promptly if they get flu symptoms, even if they have been vaccinated this season.
- A health care provider can determine if the patient needs influenza antiviral drugs. Antiviral drugs can treat flu illness and prevent serious flu complications. These drugs work best when started soon after influenza symptoms begin (within 2 days), but

persons with high-risk conditions can benefit even when antiviral treatment is started after the first two days of illness.

- Flu symptoms include fever, cough, sore throat, runny or stuffy nose, muscle or body aches, headache, chills and fatigue.
- While how well the flu vaccine works can vary, CDC recommends a yearly flu vaccination as the first and most important step in protecting against flu and its potentially serious complications.
- Flu vaccination can reduce flu illnesses, doctors' visits, missed work due to flu, as well as prevent flu-related hospitalizations and deaths.
- More than 132 million doses of flu vaccine had been delivered in the United States as of January 10, with manufacturers projecting total production of 138-145 million doses this season.
- Flu vaccines are offered in many locations, including doctor's offices, clinics, health departments, retail stores, pharmacies, health centers, and by many employers and schools.
- At this point in the season, people may have to check with more than one vaccine provider in order to locate vaccine, but supplies of vaccine should still be available.

FluView Activity Update

- Flu activity remains high overall but is declining in parts of the country while increasing in other parts of the country according to this week's FluView report. Most notably the Southeast, which began experiencing high levels of flu activity at the end of November, is now showing declines in activity. CDC continues to receive reports of flu-related hospitalizations and deaths. Flu activity is likely to continue for some time.
- Below is a summary of the key indicators for the week of January 12-18, 2014:
    - For the week of January 12-18, the proportion of people seeing their health care provider for influenza-like illness decreased for the third week, but remains above the national baseline. All ten regions continue to report ILI activity above their region-specific baseline level. ILI activity is increasing among some Western and Northeastern states.
    - Thirteen states experienced high ILI activity. This is a decrease from the 14 states that reported high ILI activity last week. Seven states and New York City experienced moderate ILI activity. Fifteen states experienced low ILI activity. Fifteen states experienced minimal ILI activity. The District of Columbia did not have sufficient data to calculate an activity level. ILI activity data indicate the amount of flu-like illness that is occurring in each state.

- Forty-one states reported widespread geographic influenza activity; an increase from the 40 states that reported widespread activity in the previous week. Puerto Rico and eight states reported regional activity. The District of Columbia reported local activity and Guam and Hawaii reported sporadic influenza activity. The U.S. Virgin Islands reported no influenza activity. Geographic spread data show how many areas within a state or territory are seeing flu activity.
- 4,615 laboratory-confirmed influenza-associated hospitalizations have been reported since October 1, 2013. This translates to a cumulative rate of 17 hospitalizations per 100,000 people in the United States.
    - The highest hospitalization rates are among people 65 and older and children younger than 5 years. This is typical of most flu seasons.
    - However, of the 4,615 influenza-associated hospitalizations that have been reported this season, 61% have been in people 18 to 64 years old. More commonly, most flu hospitalizations occur in people 65 and older. This pattern of more hospitalizations among younger people was also seen during the 2009 H1N1 pandemic.
    - Hospitalization data are collected from 13 states and represent approximately 8.5% of the total U.S. population. The number of hospitalizations reported does not reflect the actual total number of influenza-associated hospitalizations in the United States.
- The proportion of deaths attributed to pneumonia and influenza (P&I) based on the 122 Cities Mortality Reporting System increased again this week, and remains above the epidemic threshold for the second consecutive week. When the proportion of the deaths due to P&I is above the epidemic threshold it means that the number of P&I deaths occurring are in excess of the number that is expected.
- Eight influenza-associated pediatric deaths were reported to CDC during the week of January 12-18. Five of the deaths were associated with a 2009 H1N1 virus. Three of the deaths were associated with an influenza A virus for which subtyping was not performed. A total of 28 influenza-associated pediatric deaths have been reported for the 2013-2014 season at this time. Additional information about the pediatric deaths from this season and previous seasons is available through FluView Interactive.
- Nationally, the percentage of respiratory specimens testing positive for influenza viruses in the United States during the week of January 12-18 decreased to 23.1%. During the last three weeks, the regional percentage of respiratory specimens testing positive for influenza viruses ranged from 19.8% to 40%.

- Influenza A (H3N2), 2009 influenza A (H1N1), and influenza B viruses have all been identified in the U.S. this season. To date, influenza A (H1N1) viruses have predominated. This is the H1N1 virus that emerged in 2009 to cause a pandemic. 2009 H1N1 viruses have continued to circulate among people since that time, but this is the first season that the virus has circulated at such high levels since the pandemic. During the week of January 12-18, 2,707 of the 2,793 influenza-positive tests reported to CDC were influenza A viruses and 86 were influenza B viruses. Of the 1,785 influenza A viruses that were subtyped, 3.2% were H3 viruses and 96.8% were 2009 H1N1 viruses.
- CDC has antigenically characterized 799 influenza viruses, including 711 viruses identified as 2009 H1N1 viruses, 72 influenza A (H3N2) viruses, and 16 influenza B viruses, collected since October 1, 2013.
    - 710 (99.8%) of the 711 2009 H1N1 viruses tested were characterized as A/California/7/2009-like. This is the influenza A (H1N1) component of the Northern Hemisphere quadrivalent and trivalent vaccines for the 2013-2014 season.
    - All 72 of the influenza A (H3N2) viruses tested were characterized as Texas/50/2012-like. This is the influenza A (H3N2) component of the Northern Hemisphere quadrivalent and trivalent vaccines for the 2013-2014 season.
    - Nine (56%) of the 16 influenza B viruses tested belonged to the B/Yamagata lineage of viruses, and were characterized as B/Massachusetts/02/2012-like. This is an influenza B component for the 2013-2014 Northern Hemisphere quadrivalent and trivalent influenza vaccines.
    - The seven (44%) other influenza B viruses belonged to the B/Victoria lineage of viruses, and were characterized as B/Brisbane/60/2008-like. This is the recommended influenza B component of the 2013-2014 Northern Hemisphere *quadrivalent* influenza vaccine.
- Since October 1, 2013, CDC has tested 1,827 2009 H1N1, 100 influenza A (H3N2), and 22 influenza B virus samples for resistance to the neuraminidase inhibitor influenza antiviral drugs. While the vast majority of the viruses that have been tested are sensitive to oseltamivir and zanamivir, seven additional 2009 H1N1 viruses proved resistant to oseltamivir during the week of January 12-18. So far this season 20 (1.1%) 2009 H1N1 viruses have shown resistance to oseltamivir. No viruses have shown resistance to zanamivir.
    - The neuraminidase inhibitors oseltamivir and zanamivir are currently the only recommended influenza antiviral drugs.

- As in recent past seasons, high levels of resistance to the adamantanes (amantadine and rimantadine) continue to persist among 2009 H1N1 and influenza A (H3N2) viruses. Adamantanes are not effective against influenza B viruses. Adamantanes are not recommended for use against influenza this season.

FluView is available – and past issues are archived – on the CDC website.

Note: Delays in reporting may mean that data changes over time. The most up to date data for all weeks during the 2013-2014 season can be found on the current FluView.

Influenza-Associated Hospitalizations by Age

- Seasonal flu is responsible for thousands of hospitalizations every year.
- Flu is often harder on older adults, relative to young healthy adults, but every season is different.
- For example, based on surveillance data, over the course of the 2012-2013 flu season 50.1% of hospitalizations occurred in adults 65 years and older (and 34.5% had occurred in adults 18-64 years).
- This season, a pattern of hospitalization that is similar to what was seen during the 2009 H1N1 pandemic has started to emerge. During the pandemic, younger people had more flu-related hospitalizations for severe illness than did older adults.
- To date this season, 61% of the reported hospitalizations have been in people 18 to 64 years old, while 23% of hospitalizations have occurred in adults 65 years and older.
- This season's pattern of more hospitalizations across younger age groups is likely due to existing levels of immunity to this virus across the population. Serology studies conducted during the pandemic suggested that people 65 years or older had existing antibodies against H1N1 viruses, perhaps because they were exposed to similar viruses – predecessors of 2009 H1N1 viruses – earlier in their lifetimes.
- Another likely factor is vaccination status. Unfortunately, younger adults – especially those who are otherwise healthy – are less likely to get vaccinated. Early estimates for this season as of mid-November were that among people 18-49 years, only 31 percent of people in that age group had gotten vaccinated. That is nearly 10 percent lower than the national average.
- It's important to note that even otherwise healthy people can get very sick from flu and end up in the hospital.

- This season, as in past seasons, the vast majority of adults and over half of children hospitalized with flu have had an underlying medical condition that puts them at high risk for flu-related complications.
- The most commonly reported underlying medical conditions among hospitalized adults this season have been obesity, metabolic disorders, cardiovascular disease, and asthma. (Some of the most commonly reported underlying medical conditions among hospitalized children this season have been asthma, neurologic disorders, obesity, and cardiovascular disease.)
- CDC recommends that everyone aged 6 months and older get a flu vaccine each season.
- People who are at high risk for influenza complications should see their health care provider promptly if they get flu symptoms, even if they have been vaccinated this season.

Influenza-Associated Pediatric Deaths

- Eight pediatric deaths were reported to CDC during the week ending January 18, 2014 (Week 3).
- This brings the total of influenza-related pediatric deaths have been reported for the 2013-2014 to 28.
- Additional information regarding pediatric deaths is now available through FluView Interactive.
- A pediatric death is a death in a person who is a U.S. resident and younger than 18 years old from an illness associated with infection with an influenza virus.
- During the 2012-2013 influenza season, a total of 171 influenza-associated pediatric deaths were reported to CDC.
- A review of the available pediatric death reports from the 2012-2013 season indicates that:
    - Of the 164 deaths in which the child's medical history was known, 55% occurred in children who had underlying medical conditions that placed them at high risk of developing serious flu-associated complications. However, 45% had no recognized underlying health problems.
    - The proportions of pediatric deaths that occurred in unvaccinated children and among children with underlying medical conditions that placed them at high risk from flu complications are largely consistent with what has been seen in the past.

- Since 2004, when flu-associated pediatric deaths became a nationally notifiable condition, the number of deaths reported to CDC each season has ranged from 35 (2011-2012 season) to 171 (2012-2013 season).
- During the 2009 H1N1 pandemic — April 15, 2009 to October 2, 2010 — 348 pediatric deaths were reported to CDC.
- These deaths are a somber reminder of the danger flu poses to children.
- The single best way to protect children against seasonal flu and its potential severe consequences is to have them receive a seasonal flu vaccine each year.
- Among children, vaccination is especially important for those younger than 5 years of age and those of any age with an underlying medical condition like asthma; a neurological, neuromuscular or neurodevelopmental disorder; or immune suppression. These children are at higher risk of serious complications if they get the flu.
- Yearly vaccination also is especially important for people who come in contact with high risk children in order to protect the child (or children) from the flu.
- Even previously healthy children can become seriously ill if they get the flu. Data on laboratory-confirmed influenza hospitalizations during the 2012-2013 flu season indicated that 46% of children hospitalized with the flu had no identified underlying medical conditions.
- Flu-associated deaths in children younger than 18 years old should be reported through the Influenza-Associated Pediatric Mortality Surveillance System. The number of flu-associated deaths among children reported during the 2013-2014 flu season will be updated each week and can be found at http://www.cdc.gov/flu/weekly/.
- Additional information about the pediatric deaths, including basic demographics, underlying conditions and week and place of death, for the 2013-2014 season as well as past influenza seasons, is available through the Influenza Associated Pediatric Mortality application of FluView Interactive at http://gis.cdc.gov/GRASP/Fluview/PedFluDeath.html.

Oseltamivir-Resistant Influenza Viruses

- Influenza viruses can sometimes develop resistance to antiviral medications.
- Antiviral resistance means that a virus has changed in such a way that the antiviral drug is less effective in treating or preventing illnesses caused by the virus.
- Influenza viruses constantly change as the virus makes copies of itself. Some changes can result in the viruses being resistant to one or more of the antiviral drugs that are used to treat or prevent influenza.

- Resistance of influenza A viruses to antiviral drugs can occur spontaneously or emerge during the course of antiviral treatment.
- Antiviral resistance is detected through laboratory testing.
- CDC reports specimens collected and tested through national surveillance as well as additional specimens tested at public health laboratories who share testing results with CDC.
- For the week ending January 18, 2014 (week 3), seven oseltamivir-resistant 2009 H1N1 viruses were reported, bringing the total number of oseltamivir-resistant viruses to 20 for this season.
- Oseltamivir resistance among 2009 H1N1 viruses is rare.
- The majority of 2009 H1N1 viruses circulating in the United States remain susceptible to the neuraminidase inhibitor antiviral medications, oseltamivir and zanamivir.
- Oseltamivir-resistant viruses often have a single known substitution in the neuraminidase protein of the virus (H275Y) that seems to confer oseltamivir resistance. The viruses reported during week 3 have this substitution.
- CDC and state and local partners will continue to watch influenza viruses closely for possible emerging patterns of antiviral resistance in addition to watching for antigenic changes.
- Two FDA-approved influenza antiviral medications are recommended for use in the United States during the 2013-2014 influenza season: oseltamivir (Tamiflu®) and zanamivir (Relenza®). More information about antiviral drug resistance can be found at http://www.cdc.gov/flu/about/qa/antiviralresistance.htm and http://www.cdc.gov/flu/antivirals/index.htm.
- Information on the monitoring of antiviral resistance of influenza viruses to oseltamivir and zanamivir is updated weekly in the CDC FluView surveillance report, which is available at: http://www.cdc.gov/flu/weekly/.

2009 H1N1 Influenza, Background

- CDC estimates that during the season of the pandemic (2009-2010), there were 52 million flu-associated illnesses, 24 million medically-attended illnesses, 290,000 hospitalizations, and 12,000 flu-associated deaths.

2009 H1N1 Influenza in Pregnant Women

- Pregnant women up to two weeks post-partum are at an increased risk of developing severe flu-related complications compared with women who are not pregnant.

- These complications can adversely affect mothers and babies and can lead to preterm labor, and in some cases, hospitalization and death.
- It is particularly important for pregnant women to be vigilant about protecting themselves against flu during seasons such as this when H1N1 influenza viruses predominate, as the 2009 H1N1 pandemic was particularly harsh for pregnant women.
- The current H1N1 virus emerged in 2009 to trigger a pandemic and continues to circulate. So far it is the most common flu virus in the United States this season. During the pandemic, pregnant women, were highly impacted.
- Five percent of 2009 H1N1-related deaths during the pandemic occurred in pregnant women. Among women of childbearing age (15-44 years) who were hospitalized with laboratory-confirmed influenza, 31% were pregnant.
- Data from one study conducted in the early months of the 2009 H1N1 pandemic show that pregnant women were 4 times more likely than the general population to be hospitalized as a result of 2009 H1N1 virus infection.
- CDC has already received reports of flu hospitalizations and deaths in pregnant women with influenza virus infection this season.
- At this time, 23% of reported flu hospitalizations among women of childbearing age (15 to 44 years) have occurred in pregnant women.
- Pregnant women who have not gotten a flu shot yet this season, should get one immediately.
- A flu shot is the best way to help protect pregnant women from flu and its serious complications.
- A recent study using data from the 2010-2011 and 2011-2012 flu seasons showed that getting a flu vaccine reduced a pregnant woman's risk of illness from influenza viruses by half. A web spotlight highlighting this study is available on the CDC website: http://www.cdc.gov/flu/news/pregnancy-flu-vaccine-study.htm.
- The flu shot has been safely given to millions of pregnant women over many years. (Pregnant women should only receive the flu shot, not the nasal spray vaccine.)
- If a pregnant woman suspects she is sick with flu (even if she got vaccinated), she should seek medical care immediately.
- There are prescription drugs that can treat influenza infection.
- A doctor may prescribe antiviral drugs to help treat flu illness. More information about antiviral drugs is available at http://www.cdc.gov/flu/antivirals/index.htm.
- For more information about pregnancy and flu, visit http://www.cdc.gov/flu/protect/vaccine/pregnant.htm.

2009 H1N1 Influenza in People Who are Morbidly Obese

- "Obesity" and "morbid obesity" are defined based on the body mass index (BMI). BMI is a measure of body fat based on a person's height and weight.
- "Obesity" is defined as a BMI greater than or equal to 30 kilos per meter squared.
- Based on cumulative hospitalization data reported so far to CDC this season, 43% of adults hospitalized with flu have been obese. Eleven percent of children hospitalized with flu have been obese (data is as of week ending Jan 18, 2014). For more information, see FluView Interactive: http://gis.cdc.gov/grasp/fluview/FluHospChars.html.
- This information is preliminary and based on a subset number of cases (about 25%) with complete medical chart abstraction; findings may change as more data become available.
- "Morbid obesity" is defined as a BMI greater than or equal to 40 kilos per meter squared.
- Morbid obesity is a risk factor that places people at higher risk of serious complications from flu.
- During the 2009 H1N1 pandemic, public health researchers observed that people who were morbidly obese were at higher risk of hospitalization or death. (For more information, see the "Background" section).
- Because this same H1N1 virus is spreading and causing illness this season, people who are morbidly obese may be at higher risk of hospitalization and death this season compared with those who aren't morbidly obese, even if they do not have any other previously recognized high-risk condition.
- Because morbid obesity places people at high risk of serious flu-related complications and because of the precedent that this particular H1N1 virus has for impacting obese people, it is particularly important that people who are morbidly obese to get a seasonal flu vaccination. This season's flu vaccine protects against the H1N1 virus. Getting a seasonal flu vaccine is the most important step people can take to prevent flu and its complications.
- If you are morbidly obese and you do develop flu illness, seek medical care right away.
- Your doctor may choose to treat your flu illness with prescription medications called "antiviral drugs".

- Antiviral drugs are prescription medicines (pills, liquid or an inhaled powder) that fight against the flu in your body. Antiviral drugs are different from antibiotics, which fight against bacterial infections.

- When used for treatment, antiviral drugs can lessen symptoms and shorten the time you are sick by one or two days. Antiviral medications also can prevent serious flu complications, like pneumonia. For people with a high-risk medical condition, treatment with an antiviral drug can mean the difference between having milder illness stead of a very serious illness that could result in a hospital stay.

- For more information on flu antiviral medications, see http://www.cdc.gov/flu/antivirals/index.htm.

Background

- When the 2009 H1N1 virus (also known as "H1N1pdm" virus) first emerged in spring 2009, early reports from the United States and internationally suggested that obesity was more frequently reported among people hospitalized with 2009 H1N1 disease or among people who died following 2009 H1N1 infection.

- Prior to the 2009 H1N1 pandemic, neither obesity nor morbid obesity were considered independent risk factors that placed a person at higher risk for serious flu-related complications.

- However, studies conducted during the pandemic provided data that showed that morbid obesity was associated with increased 2009-H1N1 associated hospitalizations and deaths compared to people of normal weight. (Note: The studies which identified morbid obesity as a risk factor for serious flu-related 2009 H1N1 complications are available in the ACIP recommendations.)

- As a result, CDC's Advisory Committee on Immunization Practices (ACIP) added morbid obesity to its list of risk factors associated with serious flu-related complications. The full list of these high-risk factors is available from the CDC website here: http://www.cdc.gov/flu/about/disease/high_risk.htm.

2009 H1N1 Influenza in American Indians/Alaska Natives

- During the pandemic, minority populations were harder-hit by the H1N1 virus than non-minority populations.

- CDC collected data on 2009 H1N1-related hospitalizations through the Emerging Infections Program (EIP), now called the Influenza Hospitalization Surveillance Network (FluSurv-Net).

- EIP Hospitalization data collected from April 15 – August 31, 2009 and from September 1, 2009 - January 26, 2010 showed that minorities were more heavily affected by 2009 H1N1 than non-minorities. (For more information, see Dee DL, Bensyl DM, Gindler J, et al. 2011.)

- In the fall-winter wave of the pandemic, American Indians/Alaska Natives (AI/AN), and other minority groups, including Hispanics, and Black, non-Hispanics, had higher hospitalization rates than White, non-Hispanics.

- American Indians/Alaska Natives had slightly higher hospitalization rates than other groups, followed by Hispanics, and then Black, non-Hispanics.

- Overall, hospitalization rates among minority groups were about double those of White, non-Hispanics.

- Data from a CDC MMWR study conducted during the winter wave of 2009 H1N1 activity found that American Indians and Alaska Natives were four times more likely to die from 2009 H1N1 than people in other racial/ethnic groups. This study is available at http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5848a1.htm?s_cid=mm5848a1_e.

- The study investigated the influenza-related deaths between April 15 and November 13, 2009 occurring in the 12 states (Alabama, Alaska, Arizona, Michigan, New Mexico, North Dakota, Oklahoma, Oregon, South Dakota, Utah, Washington, and Wyoming) which represent 50% of the AI/AN population in the United States. About 10% of influenza-related deaths occurred among AI/AN people, although AI/AN people made up only about 3% of the population in the 12 states.

- There is no evidence to suggest people's racial or ethnic group alone makes them more susceptible to influenza infection, illness or death. Factors that may explain the disparity which puts AI/AN people at increased risk from the flu include higher rates of underlying chronic illnesses like asthma and diabetes, poverty, delayed access to health care, and low vaccination coverage.

- CDC continues to investigate factors contributing to increased influenza-associated hospitalizations and mortality among racial and ethnic minorities, including AI/AN people.

- Health professionals and agencies, especially those serving AI/AN people, should expand community education regarding the risk for influenza complications and mortality.

- Vaccination is the best way to prevent the flu and its complications. People at high risk for influenza complications and death, including AI/AN people, should be vaccinated against seasonal flu. More information about influenza vaccines is available at http://www.cdc.gov/flu/protect/keyfacts.htm.

- Antiviral treatment is recommended for persons with suspected or confirmed influenza who are hospitalized; have severe or progressive illness; or are in a group at increased risk for flu complications.

- AI/AN people are at high risk for influenza-related complications. Antiviral treatment should be empirically given for all suspected influenza cases, even in the absence of confirmatory lab results and/or history of influenza vaccination, and regardless of illness severity.

- More information about antiviral drugs is available at http://www.cdc.gov/flu/antivirals/index.htm.