Glossary of Influenza (Flu) Terms

Term	Definition
Acute respiratory illness (ARI)	Acute respiratory illness (ARI) is disease that typically involves the airways within the nose and throat (i.e., the upper respiratory tract) and that may or may not include fever (measured by a thermometer) or feverishness (i.e., self-reported sense of fever). ARI is generally defined as the presence of two or more signs or symptoms such as fever, cough, runny nose or nasal congestion, or sore throat). ARI is a more sensitive (broader) way than influenza-like illness (ILI) to describe illness consistent with influenza (flu) because fever or feverishness is not required.
Adjuvant	A vaccine adjuvant is a substance that is added to a vaccine to increase and improve the body's immune response to the vaccine antigen(s). Antigens are the components of the flu vaccine that prompt your body to have an immune response. Vaccine adjuvants can allow flu vaccines to be produced using less antigen. Therefore, use of adjuvants can allow vaccine manufacturers to produce more doses of vaccine with less antigen.
Antigen	A protein on the surface of an influenza (flu) virus that can stimulate an immune response. Antigen is the component of the flu vaccine that prompts your body's immune response. The immune response to vaccination results in the development of protective antibodies against the viruses used to make the vaccine.
Antiviral chemoprophylaxis	Antiviral chemoprophylaxis is the use of influenza (flu) antiviral drugs to prevent flu illness. Antiviral chemoprophylaxis is often used in response to flu outbreaks in nursing homes or other types of facilities that care for residents at high risk of flu complications, so as to prevent spread of disease. It is also used as a precautionary measure to prevent illness in people who have been exposed to animals infected with or environments contaminated by novel (i.e., new in humans) influenza A viruses, such as the viruses that cause bird flu or swine flu.
Asian HPAI H5N1 influenza virus	Asian HPAI H5N1 influenza viruses are avian influenza A viruses that originate from Asia and that cause severe illness and death in poultry (this means the viruses are "highly pathogenic" and these viruses are called "highly pathogenic avian influenza" or "HPAI" for short). These viruses were first detected in 1996 in geese in China. Asian HPAI H5N1 virus infection in humans was first detected in 1997 during poultry outbreaks in Hong Kong and has since been detected in poultry and wild birds in more than 60 countries in Africa, Asia, Europe, and the Middle East since 2003. HPAI H5N1 is regularly found (i.e., "endemic") in poultry in six countries: Bangladesh, China, Egypt, India, Indonesia, and Vietnam. Asian HPAI H5N1 viruses have also infected other kinds of animals (e.g., dogs, cats, pigs, tigers, leopards, and stone martens). Asian HPAI H5N1 viruses are different from the HPAI H5N1, H5N2, and H5N8 viruses that have been detected in U.S. wild birds and poultry since December 2014.
Attenuated virus vaccine	An attenuated virus vaccine (such as the nasal spray flu vaccine, a.k.a. the "live attenuated influenza vaccine") is a vaccine that consists of live virus that has been weakened through chemical or physical processes to produce an immune response without causing disease in the vaccinated person. The United States currently licenses attenuated vaccines for influenza, measles, mumps, rubella, polio, yellow fever and varicella (i.e., chicken pox).
Avian influenza A virus	Avian influenza A viruses (i.e., bird flu viruses) primarily infect birds. These viruses occur naturally among wild aquatic birds worldwide and can infect domestic poultry (such as chickens, ducks and turkeys) and other bird and animal species. Avian influenza A viruses are classified as low pathogenic or highly pathogenic based on molecular characteristics of the virus and the virus' ability to cause disease and mortality in chickens in a laboratory setting. For more information, see the definitions for "highly pathogenic avian influenza" and "low pathogenic avian influenza". Wild aquatic birds can be infected with avian influenza A viruses in their intestines and respiratory tract, but usually do not get sick. However, avian influenza A viruses are very contagious among birds and some of these viruses – particularly highly pathogenic avian influenza viruses – can sicken and even kill certain domesticated birds. In the past, some avian influenza A viruses (such as H5N1 and H7N9) have infected people, but human infections are rare. Since they do not typically spread among people and most people do not have antibodies against such viruses, avian influenza A viruses are also considered to be novel influenza A viruses.

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Candidate vaccine virus	A candidate vaccine virus is an influenza (flu) virus that has been prepared by CDC or its public health partners for use by vaccine manufacturers, if needed, to mass produce a flu vaccine. CDC collaborates in the preparation of candidate vaccine viruses that are provided to vaccine manufacturers prior to every flu season. In addition, as part of its pandemic influenza preparedness responsibilities, CDC produces candidate vaccine viruses against new (novel) influenza A viruses with pandemic potential. These candidate vaccine viruses can be used in case of a public health emergency to produce a pandemic flu vaccine.
Case under investigation (see also suspected case)	A patient who meets illness criteria for influenza (flu) but laboratory tests for influenza virus infection have not been performed. A case under investigation (CUI) will have an exposure history that will prompt a public health investigation. For example a CUI for avian influenza A(H7N9) virus infection could have illness compatible with flu and recent travel to a country where avian influenza A(H7N9) virus is circulating in birds. Suspected cases include but are not limited to CUI.
Close contact	A close contact is someone who has come within about 6 feet (2 meters) of a confirmed case or case under investigation (CUI) while the case was ill (beginning one day prior to symptom onset and continuing until resolution of illness). This can happen when health care personnel provide care for a confirmed or suspected case, family members of a confirmed or suspected case, people who lived with or stayed overnight with a confirmed or suspected case, and others who have had similar close or direct contact in a community or workplace environment.
Close proximity	Close proximity is generally thought to involve coming within about 6 feet (2 meters) of an infected person, infected animal or contaminated surface, but not touching or handling that person, animal or surface.
Confirmed influenza case	A patient who tests positive for influenza virus (flu) infection by an approved laboratory test.
Conjunctivitis	Conjunctivitis is the medical term for inflammation of the eyelids or the covering over the eye, typically caused by infection or chemical exposure. Some influenza (flu) viruses, such as some avian flu A (bird flu) viruses, can cause conjunctivitis in people.
Direct contact	Direct contact means handling or touching. For example, direct contact with a bird may include activities such as de-feathering, butchering, or other activities which require touching.
Emergency use authorization (EUA)	An emergency use authorization (EUA) in the United States is a legal means for the Food and Drug Administration (FDA) to allow for the use of drugs or provide new indications for previously approved drugs during a declared emergency.
Epidemic influenza	In general, a flu epidemic occurs when flu activity in an area (e.g., a city, a country, or another region) is higher than normal. In the United States, a flu epidemic occurs when flu activity is higher than a CDC-defined “baseline” value. The baseline may be the level of flu activity during months when flu viruses are not widely circulating spreading in people (usually from mid-May to September in the United States). For flu, there is a seasonal epidemic almost every year in the United States usually between October and mid-May. CDC and the medical community refer to this as the flu season. The season is marked by elevated flu activity across the nation. During the flu season, the level and timing of flu activity in specific states or counties might be different than in the country overall. Epidemics of influenza are not uncommon and can occur at any time—this is in contrast to pandemic influenza, which is quite rare.
Hemagglutinin (HA)	Hemagglutinin (HA) is a surface protein found on influenza (flu) viruses. HA plays an important role in infection by allowing a flu virus to enter a healthy cell. HA is also an antigen. Antigens are molecular structures on the surface of viruses that are recognized by the immune system and are capable of triggering an immune response (i.e., the creation of antibodies). These antibodies protect the host from re-infection with the same influenza virus in the future. Therefore, HA is the active component (antigen) of inactivated flu vaccines. Most seasonal flu vaccines are designed to target the HA of the flu viruses that research suggests will be most common during the flu season.

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Highly-pathogenic avian influenza (HPAI)	Avian influenza A viruses are classified into the following two categories: low pathogenic avian influenza (LPAI) and highly pathogenic avian influenza (HPAI) viruses. The categories refer to molecular characteristics of a bird flu virus and the virus' ability to cause disease and mortality in chickens in a laboratory setting. HPAI viruses are highly contagious among birds and can be deadly to them, especially domestic poultry. Though relatively rare, sporadic human infections with HPAI H5 and HPAI H7 viruses have occurred and caused serious illness and death.
HPAI H5 viruses	This term is used to refer to highly-pathogenic avian influenza (HPAI) A (H5) viruses. Examples of HPAI H5 viruses include HPAI H5N1, HPAI H5N2, HPAI H5N6, HPAI H5N8 and HPAI H5N9.
Inactivated vaccine	Inactivated vaccine refers to vaccine that contains inactivated or "dead" virus. The flu shot is an inactivated virus vaccine. Inactivated virus vaccines cannot cause infection in a vaccinated person.
Influenza-like illness (ILI)	ILI is defined as fever (temperature of 100 °F or greater) and cough and/or sore throat. It is used for flu surveillance worldwide.
Long-term care facility (LTCF)	A health care facility, such as a nursing home, a skilled nursing facility, or an assisted living facility that provides medical and personal care to people who are unable to manage independently in the community. Influenza outbreaks occur at LTCFs every year, and LTCF residents are considered to be at high risk for developing flu-related complications.
Low pathogenic avian influenza (LPAI)	Avian influenza A viruses are classified into the following two categories: low pathogenic avian influenza (LPAI) A viruses and highly pathogenic avian influenza (HPAI) A viruses. The categories refer to molecular characteristics of a bird flu virus and the virus' ability to cause disease and mortality in chickens in a laboratory setting. HPAI A viruses can cause very severe disease in birds; however, infection of poultry with LPAI viruses may cause no disease or mild illness (such as ruffled feathers and a drop in egg production) and may not be detected. Though relatively rare, sporadic human infections with LPAI viruses have occurred and have ranged in severity from mild illness to serious illness that can result in death.
Neuraminidase (NA)	Neuraminidase (NA) is a surface protein found on influenza (flu) viruses. NA plays an important role in infection by allowing a flu virus to exit an infected cell in order to spread infection to other healthy cells. NA is also an antigen. The neuraminidase inhibitor class of antiviral drugs, which includes oseltamivir, zanamivir and peramivir work by targeting and inhibiting the function of the NA of an influenza virus.
Non-U.S. HPAI H5N1 virus	A highly pathogenic bird flu virus of the H5 subtype that has not been found in animals or people in the United States. For more information, see the definition for "highly pathogenic avian influenza" (HPAI).
Novel influenza A virus	A novel influenza (flu) A virus is an influenza A virus that has caused human infection and is different from current seasonal influenza A viruses spreading among people. Novel influenza A viruses can be viruses that originate in animals that gain the ability to infect and spread among humans or human viruses that change significantly so as to be different from current human seasonal influenza A viruses.
Oseltamivir	Oseltamivir is an influenza (flu) antiviral drug that is approved for use in the United States. Antiviral drugs are prescription medications that can be used to treat (or prevent – see "antiviral chemoprophylaxis") flu illness. Oseltamivir is available as a generic version or under the trade name Tamiflu® and given orally. It is a neuraminidase (NA) inhibitor that targets and inhibits the NA surface proteins of an influenza virus. For more information, see What you should know about flu antiviral drugs.
Pandemic influenza	An influenza pandemic occurs when a novel influenza A virus spreads from person to person around the world and affects a very large number of people. A novel flu A virus might cause a flu pandemic if the novel virus can spread efficiently from person to person (instead of just from animals to people or from one person to another, but then no further). Another condition for a pandemic to occur is that most people will not have immunity to the new virus. People can have some immunity to novel or pandemic flu A viruses that are similar to flu A viruses they've been infected by in the past. If a new flu A virus is very different from earlier flu A viruses, it may be more likely to cause a pandemic. Influenza B viruses do not cause influenza pandemics.

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Term	Definition
Peramivir	Peramivir is an influenza (flu) antiviral drug that is approved for use in adults in the United States. It is an intravenous (IV) medication. Antiviral drugs are prescription medications that can be used to treat (or prevent – see "antiviral chemoprophylaxis") flu illness. Peramivir is commercially available under the trade name Rapivab®. It is a neuraminidase (NA) inhibitor class antiviral drug that targets and inhibits the NA surface proteins of an influenza virus. For more information, see What you should know about flu antiviral drugs.
Person-to-person transmission	Person-to-person transmission is also called human-to-human transmission. This refers to the ability of an influenza (flu) virus to spread from one person to another (instead of from an animal to a person, for example). Seasonal influenza viruses spread easily from person to person, most commonly through large or small droplets containing influenza virus that are expelled when a sick person is coughing or sneezing. Most novel influenza A viruses do not spread easily.
Potential to cause severe disease	Some new influenza A viruses have not caused disease in humans, but are related to other viruses that have caused severe disease in people. An example of this is the HPAI A(H5N2) virus that caused outbreaks in birds in the U.S. beginning in December 2014, but has not yet been documented to infect people. CDC considers this HPAI A (H5N2) virus to have the potential to cause severe disease in people, since it is genetically related to the Asian HPAI A(H5N1) and A(H5N6) viruses that have caused severe and fatal disease in people.
Probable case	A patient who meets illness criteria for influenza (flu) but does not yet have laboratory confirmation of influenza virus infection. Probable cases are usually thought to be more likely to have a disease than cases under investigation. This can be because they have some laboratory evidence that suggests flu virus infection, but not enough evidence to confirm it.
Reassortment	Reassortment refers to a process in which two or more influenza (flu) viruses infect a single host and exchange genetic material. This can result in the emergence of a novel (i.e., new) influenza A virus. Many of the past pandemics were caused by influenza A viruses from animals that gained the ability to infect and spread among humans by swapping genetic information with human influenza A viruses through the process of reassortment.
Respiratory specimen	A sample of respiratory secretions, such as a nose or throat swab that can be tested for influenza virus infection. Respiratory specimens are usually needed for laboratory testing to determine if a case under investigation for influenza is a confirmed case.
Seasonal influenza virus	Seasonal influenza viruses are influenza A and B viruses that spread and cause illness in people during the time of year known as the "flu season." Seasonal influenza viruses cause annual U.S. influenza epidemics during fall, winter, and spring, and circulate among people worldwide. Seasonal influenza A and B viruses are continually undergoing evolution in unpredictable ways.
Severe acute respiratory infection (SARI)	SARI is an acute respiratory infection (see ARI and ILI) that results in severe clinical illness, typically requiring hospitalization and/or resulting in death.
Suspected case (see case under investigation)	A patient who meets illness criteria for influenza but has not had laboratory testing for influenza virus infection. Suspected cases are now referred to as cases under investigation.
Variant influenza virus	Influenza (flu) viruses that are known to circulate in pigs are called "swine influenza viruses" when isolated from pigs, but are called "variant viruses" when isolated from humans. Variant viruses are designated with the letter "v" (e.g., influenza A H3N2v). Note that "variant" is not used to describe influenza viruses from animals other than pigs. Variant influenza viruses are a subset of novel influenza A viruses.
Zanamivir	Zanamivir is an influenza (flu) antiviral drug that is approved for use in the United States. The approved form of zanamivir is available as an orally inhaled powder, which is commercially available under the trade name Relenza®. An intravenous form of zanamivir is available for compassionate use. Antiviral drugs are prescription medications that can be used to treat (or prevent – see "antiviral chemoprophylaxis") flu illness. Zanamivir is a neuraminidase (NA) inhibitor class antiviral drug that targets and inhibits the NA surface proteins of an influenza virus. For more information, see What you should know about flu antiviral drugs.