FACT SHEET – SEASONAL INFLUENZA VIRUS INFECTION

Seasonal Influenza Virus Infection
Seasonal influenza is an acute viral infection caused by an influenza virus.

Infectious Agent
There are three types of seasonal influenza – A, B and C. Type A influenza viruses are further typed into subtypes according to different kinds and combinations of virus surface proteins. Among many subtypes of influenza A viruses, currently influenza A(H1N1)pdm09 and A(H3N2) subtypes are circulating among humans. Influenza viruses circulate in every part of the world. Type C influenza cases occur much less frequently than A and B. That is why only influenza A and B viruses are included in seasonal influenza vaccines.

Symptoms
Seasonal influenza is characterized by a sudden onset of high fever, cough (usually dry), headache, muscle and joint pain, severe malaise (feeling unwell), sore throat and runny nose. Most people recover from fever and other symptoms within a week without requiring medical attention. But influenza can cause severe illness or death in people at high risk (see below).

Incubation Period
The time from infection to illness, known as the incubation period, is about two days.

Who is at risk?
Yearly influenza epidemics can seriously affect all age groups, but the highest risk of complications occur among children younger than age two, adults age 65 or older, and people of any age with certain medical conditions, such as chronic heart, lung, kidney, liver, blood or metabolic diseases (such as diabetes), or weakened immune systems.

Transmission
Seasonal influenza spreads easily and can sweep through densely populated places such as schools, nursing homes or businesses and towns. When an infected person coughs or sneezes, infected droplets get into the air and another person can breathe them in and be exposed. The
virus can also be spread through contact by hands infected with the virus. To prevent transmission, people should cover their mouth and nose with a tissue when coughing or sneezing, and wash their hands regularly.

Treatment
Antiviral drugs for influenza are available and they effectively prevent and treat the illness. There are two classes of such medicines, 1) adamantanes (amantadine and remantadine), and 2) inhibitors of influenza neuraminidase (oseltamivir and zanamivir). Some influenza viruses develop resistance to the antiviral medicines, limiting the effectiveness of treatment. WHO monitors antiviral susceptibility in the circulating influenza viruses.

Seasonal epidemics
Influenza epidemics occur yearly during autumn and winter in temperate regions of the world. Illnesses result in hospitalizations and deaths mainly among high-risk groups (the very young, elderly or chronically ill). Worldwide, these annual epidemics result in about three to five million cases of severe illness, and about 250,000 to 500,000 deaths. Most deaths associated with influenza in industrialized countries occur among people age 65 or older. In tropical countries like Sri Lanka, influenza viruses circulate throughout the year with one or two peaks during rainy seasons.

Disease effects
Influenza can cause serious public health and economic problems. In developed countries where influenza disease and its effects had been extensively studied, epidemics can result in high levels of worker absenteeism and productivity losses. In communities, clinics and hospitals can be overwhelmed when large numbers of sick people appear for treatment during peak illness periods. While most people recover from a bout of influenza, there are large numbers of people who need hospital treatment and many who die from the disease every year. Little is known about the effects of influenza epidemics in developing countries. Sri Lanka started its influenza surveillance in 2008.

Prevention
Following methods can help to prevent the spread of respiratory illnesses like influenza.

- Cover nose and mouth with a tissue or handkerchief when coughing or sneezing. Dispose the tissue/handkerchief safely after using.
- Wash your hands often with soap and water, especially after coughing or sneezing. Alcohol-based hand cleaners are also effective.
- Avoid touching eyes, nose or mouth.
- Try to avoid close contact with infected people.
- Staying home away from work or school or crowded places and limit contact with others if infected.
An effective way to prevent the disease or severe outcomes from the illness is vaccination. Safe and effective seasonal influenza vaccines have been available and used for more than 60 years in temperate countries.