

Pandemic (H1N1) 2009 briefing note 4

Preliminary information important for understanding the evolving situation

24 JULY 2009 | GENEVA -- The number of human cases of pandemic (H1N1) 2009 is still increasing substantially in many countries, even in countries that have already been affected for some time.

Our understanding of the disease continues to evolve as new countries become affected, as community-level spread extends in already affected countries, and as information is shared globally. Many countries with widespread community transmission have moved to testing only samples of ill persons and have shifted surveillance efforts to monitoring and reporting of trends. This shift has been recommended by WHO, because as the pandemic progresses, monitoring trends in disease activity can be done better by following trends in illness cases rather than trying to test all ill persons, which can severely stress national resources. It remains a top priority to determine which groups of people are at highest risk of serious disease so steps to best to protect them can be taken.

In addition to surveillance information, WHO is relying on the results of special research and clinical studies and other data provided by countries directly through frequent expert teleconferences on clinical, virological and epidemiological aspects of the pandemic, to gain a global overview of the evolving situation.

Average age of cases increasing

In most countries the majority of pandemic (H1N1) 2009 cases are still occurring in younger people, with the median age reported to be 12 to 17 years (based on data from Canada, Chile, Japan, UK and the United States of America). Some reports suggest that persons requiring hospitalization and patients with fatal illness may be slightly older.

As the disease expands broadly into communities, the average age of the cases is appearing to increase slightly. This may reflect the situation in many countries where the earliest cases often occurred as school outbreaks but later cases were occurring in the community. Some of the pandemic disease patterns differ from seasonal influenza, where fatal disease occurs most often in the elderly (>65 years old). However, the full picture of the pandemic's epidemiology is not yet fully clear because in many countries, seasonal influenza viruses and pandemic (H1N1) 2009 viruses are both circulating and the pandemic remains relatively early in its development.

Although the risk factors for serious pandemic disease are not known definitively, risk factors such as existing cardiovascular disease, respiratory disease, diabetes and cancer currently are considered risk factors for serious pandemic (H1N1) 2009 disease. Asthma and other forms of respiratory disease have been consistently reported as underlying conditions associated with an augmented risk of severe pandemic disease in several countries.

A recent report suggests obesity may be another risk factor for severe disease. Similarly, there is accumulating evidence suggesting pregnant women are at higher risk for more severe disease. A few preliminary reports also suggest increased risk of severe disease may be elevated in some minority populations, but the potential contributions of cultural, economic and social risk factors are not clear.

Vaccine situation

The development of new candidate vaccine viruses by the WHO network is continuing to improve yields (currently 25% to 50 % of the normal yields for seasonal influenza for some manufacturers). WHO will be able to revise its estimate of pandemic vaccine supply once it has the new yield information. Other important information will also be provided by results of ongoing and soon-to-be-initiated vaccine clinical trials. These trials will give a better idea of the number of doses required for a person to be immunized, as well as of the quantity of active principle (antigen) needed in each vaccine dose.

Manufacturers are expected to have vaccines for use around September. A number of companies are working on the pandemic vaccine production and have different timelines.