Dear Sir,

The Member States and World Health Organization are in the process of reflecting on their experiences as we prepare for the approaching influenza season. During the past two weeks, we have seen low but increasing levels of influenza activity in the European Region indicating the start of the influenza season\(^1\). Through this letter, I would like to provide you with an update of the situation as well as recommendations for action.

All three viruses that currently circulate globally have been detected, including the pandemic (H1N1) 2009 virus. All three viruses are included in the 2010/2011 Northern hemisphere seasonal influenza vaccine. So far, one country has reported 12 fatal cases (2 due to influenza B and 10 due to pandemic (H1N1) 2009) since early September, 2010. Preliminary information on cases infected with the pandemic (H1N1) virus indicates that high risk groups for severe or fatal illness identified during the pandemic remain at heightened risk (see Enclosure 1). At least some of these fatal cases were not vaccinated.

While the above situation was not unexpected\(^2\), it is important to ensure high rates of seasonal influenza vaccine uptake in those individuals at risk of developing complications due to influenza infection. Especially pregnant women need to be targeted as they have not traditionally been targeted by seasonal influenza vaccination campaigns in the past. Vaccination campaigns should include the mobilization of health care workers as they have been proven to be key agents of change in raising awareness and in increasing vaccine acceptance among those individuals at risk for severe disease due to influenza.

It is also important to alert family doctors, hospitals and especially intensive care units that an increase in influenza patients can be expected so that triage and early treatment of pneumonia

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1. http://www.euroflu.org/cgi-files/bulletin_v2.cgi
patients can be instigated, especially in resource-poor environments. The pandemic experience
unambiguously taught us that improved triage and early treatment can save lives every influenza
season. Clinicians should initiate treatment for influenza when they suspect the illness without
relying on rapid diagnostic tests or waiting for laboratory confirmation. A report from one Member
State indicates that critical care facilities may become stretched, especially when the start of the
influenza season occurs coincidentally with an increase in infections due to other infectious agents
including Respiratory Syncytial Virus infections.

With regards to surveillance, continued reporting\(^3\), and in particular, enhancing surveillance for
severe disease caused by influenza, is required. As we learned during the pandemic, standard
methods to monitor severe disease are needed to compare the severity of each influenza season to
previous seasons, to monitor viruses that are specifically associated with severe clinical
presentations, and to provide a standard mechanism to monitor underlying risk conditions that are
associated with severe illness.

Further recommendations and information regarding clinical management, vaccination and
surveillance can be found in Enclosure 1. We hope you find this information useful and request you
to address any questions you may have to Dr Caroline Brown, Programme Manager a.i., Influenza
& Other Respiratory Pathogens, at cbr@euro.who.int.

I would like to thank all countries in the WHO European Region for collaborating closely with
WHO and for their important contributions to the Regional and Global surveillance of influenza.
We are confident that this collaboration will continue, during current and future influenza seasons
and in the revision of our pandemic preparedness plans.

Yours very truly,

Zsuzsanna Jakab
Regional Director

Enclosures:
1. Key principles, recommendations and considerations for clinical management of severe disease caused by
   influenza

Copies for information to:

\(^3\) http://www.ecdcwhosurveillance.org/
Enclosure 1

Key principles, recommendations and considerations for the 2010/2011 Northern hemisphere influenza season

Risk factors for severe disease from pandemic (H1N1) 2009 virus infection

Risk factors reported to date are considered similar to those risk factors identified for complications from seasonal influenza. These include the following groups:

- Infants and young children, in particular <2 years
- Pregnant women
- Persons of any age with chronic pulmonary disease (e.g. asthma, COPD)
- Persons of any age with chronic cardiac disease (e.g. congestive cardiac failure)
- Persons with metabolic disorders (e.g. diabetes)
- Persons with chronic renal disease, chronic hepatic disease, certain neurological conditions including neuromuscular, neurocognitive, and seizure disorders), hemoglobinopathies, or immunosuppression, whether due to primary immunosuppressive conditions, such as HIV infection, or secondary conditions, such as immunosuppressive medication or malignancy
- Children receiving chronic aspirin therapy
- Persons aged 65 years and older

A higher risk of severe complications from pandemic (H1N1) 2009 virus infection has also been reported in individuals who are obese (particularly in those who are morbidly obese) and among disadvantaged and indigenous populations.

On average, about 1/2 of hospitalized patients have had at least one or more underlying medical conditions. However, about 1/3 of patients with very severe illness admitted to ICU were previously healthy persons.

The incubation period appears to be approximately 2-3 days, but could range up to 7 days.

Clinical case management

- National authorities should initiate or enhance awareness raising campaigns among individuals at risk for complications due to influenza to emphasize the need to seek medical advice or care early in the course of infection. All other individuals experiencing severe disease due to respiratory infection should also be encouraged to seek early medical care. Clinical leaders and critical care services need to be alerted to a possible increase in patients with severe respiratory disease due to influenza.
Clinical case management should follow WHO guidance provided for pandemic (H1N1) 2009, as shown below. (http://www.who.int/csr/resources/publications/swineflu/h1n1_guidance_pregnancy/en/index.html) (English).

Ensure early treatment for groups at risk through the establishment of a robust and secure system for the distribution and monitoring of antivirals. Primary health care and other community-based health networks should be considered to support outreach activities.

Adequate and efficient clinical case management requires the development of triage criteria to guide: hospital admissions, admission to intensive care units, and patient referrals.

Oxygen saturation and respiratory rate are the most important clinical parameters to inform the management of severe cases. Continuous monitoring of oxygen saturation is needed and oxygen saturation must be maintained over 90% (92–95% for pregnant women). Respiratory rate above 30 breaths per minute in adults should trigger intervention.

The availability of pulse oximeters should be ensured at least in all hospital settings. Supply of (medical or industrial) oxygen must be established and maintained in all hospital settings. High-flow oxygen at 5 or more litres per minute, administered with simple face mask, must be ensured. These are fundamental critical care needs that must be met and be accessible to all patients before any addition to ventilator capacity.

Lung-protective mechanical ventilation strategies, based upon published evidence-based guidelines for sepsis-associated acute respiratory distress syndrome (ARDS), should be used.

High-sedative therapy requirements may be unexpectedly high in some patients on mechanical ventilation.

WHO does not recommend the routine use of systemic corticosteroids unless indicated for other reasons.

Some countries have approved the use of immunomodulators for the prevention and treatment of influenza, including pandemic (H1N1) 2009. WHO will continue to review the evidence base on the efficacy of immunomodulators, but currently there is insufficient evidence for WHO to recommend their use for prophylaxis and treatment.

WHO recommends a fluid conservative strategy while treating cases.

Antibiotic chemoprophylaxis should not be used. When pneumonia is present, clinicians must consider empiric antimicrobial therapy for community-acquired pneumonia.

**Antivirals**

Pandemic (H1N1) 2009 virus is sensitive to neuroaminidase inhibitors – oseltamivir and zanamivir – and is resistant to adamantanes (amantadine). WHO recommends the use of oseltamivir and zanamivir for case treatment (http://www.who.int/csr/resources/publications/swineflu/h1n1_use_antivirals_20090820/en/index.html). Oseltamivir and zanamivir are hereafter referred to as antivirals.

Early antiviral treatment, within 48 hours from the onset of influenza-like-illness (ILI), has been shown to reduce progression towards severe illness associated with pandemic (H1N1) 2009 virus infection.
Prioritizing the use of antivirals

- Considering the limited availability of antivirals in many Member States, WHO recommends prioritizing the prompt/immediate use of antivirals for the treatment of individuals presenting with serious or deteriorating illness, and those at higher risk for severe or fatal disease associated with pandemic (H1N1) 2009 virus infection. Groups at risk include: children younger than 2 years of age, pregnant women (especially during the third trimester), individuals with asthma, individuals with chronic obstructive pulmonary diseases, and individuals with morbid obesity (BMI > 40). Additional risk factors for severe and/or fatal disease might emerge depending on the vulnerability profile of the population.

- Delayed antiviral therapy is associated with worse outcomes. Antiviral treatment should commence on clinical grounds without delay, prior to and regardless of laboratory test results. Early access to health care is critical to minimize morbidity and mortality.

- WHO recommends immediate use of antivirals for severe or deteriorating illness even when treatment is started after 48 hours of symptom onset.

- Higher doses of oseltamivir and prolonged duration of therapy are reasonable/appropriate in patients with pneumonia or progressive illness.

- Individuals not belonging to groups at risk and presenting with ILI or ARI should be instructed to remain at home and seek medical care should the illness worsen or not resolve within 72 hours from onset.

- The prophylactic use of antivirals is generally not recommended by WHO. Vaccination is recommended for the prevention of infection.

Infection control

- Infection control measures – standard and droplet precautions – should be adhered to at all times. Whenever performing high-risk aerosol-generating procedures (e.g. bronchoscopy, or any procedure involving aspiration of the respiratory tract), the use of particulate respirator (N95, FFP2 or equivalent), eye protection, gowns and gloves is recommended. ([http://www.who.int/csr/resources/publications/swineflu/swineinfcont/en/index.html](http://www.who.int/csr/resources/publications/swineflu/swineinfcont/en/index.html) (English), [http://www.who.int/csr/resources/publications/swineflu/swineinfcont/ru/index.html](http://www.who.int/csr/resources/publications/swineflu/swineinfcont/ru/index.html) (Russian)).

Hospital preparedness

Vaccination

- National authorities should ensure risk groups are vaccinated against all three currently circulating influenza virus strains, as described in the WHO recommendations for the 2010/2011 Northern hemisphere influenza season.
- The prioritization of target groups for vaccination should be determined by Member States based on national surveillance data and local vaccination capacities. The priority groups targeted for vaccination will depend on the objectives of vaccination but any strategy should reflect the country’s epidemiological situation, resources and ability to access vaccine, and ability to implement vaccination campaigns in the targeted groups. Priority groups that should be considered for immunization include:
  - Pregnant women
  - Individuals six months of age and older with chronic heart or lung diseases, metabolic or renal disease, chronic liver disease, chronic neurological conditions, or immunodeficiencies
  - Health care workers including those that work in homes that care for older persons or those with disabilities
  - Elderly persons over a nationally defined age limit, irrespective of other risk factors
  - Residents of institutions for older persons and the disabled
  - Other groups defined on the basis of national data and capacities

NOTE: Member States should consider influenza vaccination programs that target all persons 6 months of age and older if they consider it feasible. This approach would further target young adult and adult populations that are not in the traditional risk groups for seasonal influenza vaccination but which have been adversely affected by the pandemic (H1N1) 2009 virus. It would also increase vaccination of persons with undiagnosed chronic underlying conditions who would not otherwise be captured in programs targeting known high risk groups.
- National authorities are encouraged to employ communication strategies aimed at influencing human behaviour so that people are more likely to accept vaccination to protect themselves and others. Health care workers need to be specifically targeted as they will in turn influence the behaviour of the public at large.

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Early warning systems and influenza monitoring

- Ensure the presence of the early warning function to detect “unusual events” of epidemiological, clinical or virological nature, observed within or in relation to influenza. These events warrant immediate investigation as they might signal changes in the characteristics of currently circulating influenza viruses and/or the emergence of novel influenza virus strains.
• Ensure the ability of the epidemiological surveillance system to monitor the following indicators and to make this data available to WHO: geographical spread, trend of cases, intensity of disease, incidence of cases (both ARI and ILI in the community as well as cases of Severe Acute Respiratory Infection, SARI, in hospitals) and impact on the health care system. In the European Region, data collection is coordinated between WHO/Europe and the ECDC and a single data entry point to regional and global platforms for all Member States has been arranged: EU/EEA Member States provide data to Tessy and all other Member States provide data to EuroFlu. Transfer of data between the two platforms and to global platforms ensures that all WHO European Member States contribute to both regional and global surveillance. A particular focus for both organizations is to assist Member States with establishing or enhancing routine sentinel surveillance for SARI.

• Ensure the ability of the virological surveillance system to characterize and monitor circulating influenza virus strains. This requires the development of a sampling strategy prioritizing cases of acute respiratory illness (ARI) with severe manifestations and compatible with the existing laboratory capacity.

• Ensure that samples obtained within the virological surveillance scheme are regularly sent to the WHO collaborating centre for reference and research on influenza for further characterization. This procedure is supported by WHO through well established mechanisms.

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1 Member States are requested to send viruses to the WHO Collaborating Centre for Reference and Research on Influenza, National Institute for Medical Research, Mill Hill, London, United Kingdom