Executive Summary

Health Council of the Netherlands. Antiviral agents in an influenza pandemic. The Hague: Health Council of the Netherlands, 2004; publication no. 2004/05.

On 7 August 2003 the Health Council of the Netherlands received a request for advice from the Minister of Health, Welfare and Sport concerning the use of antiviral agents in an influenza pandemic. The Minister asked the Health Council to report on the current state of knowledge regarding antiviral agents and to review the National Institute of Public Health and Environmental Protection report entitled Scenario analysis of the expected number of hospitalizations and deaths due to pandemic influenza.

The massive incidence of avian influenza in South-East Asia, which could in the near future lead to an influenza pandemic in humans, has prompted a Health Council decision to publish an interim advisory report on antiviral agents. In this report, the investigating Committee indicates the measures that it believes would need to be taken if such a pandemic were to reach the Netherlands in the not too distant future. The Committee identifies two objectives: distributing the pandemic over time by reducing the number of clinical cases and containing the impact of infection by administering antiviral therapy.

General practitioners and hospitals will be better positioned to treat the patients if the peak(s) in the number of clinical cases are levelled out. There will also be less social disruption and ‘breathing space’ will be created until sufficient antiviral remedies or vaccine are available. Once influenza has emerged in a given region, the Committee recommends that mass simultaneous infection should be combated by closing down schools and banning events at which large numbers of people gather in a confined space. Examples cited by the Committee for the latter included football matches and pop concerts.

The Committee endorses the Dutch government's choice of the neuraminidase inhibitor oseltamivir as an antiviral agent. In the event of there being a shortage of oseltamivir, the Committee considers that the neuraminidase inhibitor, zanamivir, could be purchased for those patients who are unlikely to experience problems with the inhalations that are required with this remedy.

Given the lack of neuraminidase inhibitors, the Committee advises that these compounds should be used therapeutically but not prophylactically, notwithstanding their protective effect against infection.

When the first clinical cases in the Netherlands are recorded and appear isolated, the Committee advocates treating not only the patient, but also – as quickly as possible after the emergence of the first clinical symptoms – other members of his/her family or household. By adopting this approach, one can treat the patient and at the same time combat the spread of the virus. The decision on the commencement and cessation of this form of treatment would best be entrusted to experts – such as, for example, the government-appointed Outbreak Management Team.

In the event of larger numbers of patients, the Committee recommends providing neuraminidase inhibitors within 48 hours of the emergence of the first clinical symptoms to patients from the following three groups :

- people from the risk group that was accorded the highest level of priority in the Health Council’s advisory report on Vaccination policies in case of an influenza pandemic (published in 2000), except for the patients with furunculosis. This risk group comprises patients with serious abnormalities or functional disorders affecting the airways, lungs or heart who would be at great risk of lung or heart function decompensation if they were to be infected by the pandemic influenza virus. Patients with an insulin-dependent form of diabetes mellitus also belong in the category with the highest level of priority
- professionals, that is to say all those responsible for the diagnosis, treatment and care of influenza patients and all those with logistical responsibility for the requisite medication
- people in the pandemic-specific risk group (if such a risk group exists).

The Committee advises that people who do not fall into a risk group should only be treated with neuraminidase inhibitors if they are hospitalized because of complications arising from an influenza infection. It realizes that some of these otherwise healthy people will only receive the neuraminidase inhibitors at a relatively late stage (more than 48 hours after the emergence of the first clinical symptoms). The Committee has nevertheless arrived at this recommendation because pneumonia caused by the influenza virus is one of the possible complications.