Advice 24-2009 of the Scientific Committee of the FASFC on the assessment of the veterinary impact and of the zoonotic risk of porcine influenza viruses in general and of pandemic human influenza A/H1N1 (2009) virus in particular in Belgium.

The aim of this own initiative dossier is to analyse the animal health aspects of porcine influenza viruses in general and of pandemic human influenza A/H1N1 (2009) virus in particular.

Swine flu (or swine influenza) is a zoonosis. Swine flu is enzootic in Belgium and often sub-clinical. So far, no cases of transmission from swine to humans have been reported in Belgium. The viruses circulating at the present time in swine in Europe and in North America belong to the subtypes H1N1, H3N2 and H1N2. The viruses circulating in Europe and in North America are different.

The pandemic influenza A/H1N1 (2009) virus is a human virus originating from swine. Its transmission is at the present time only inter-human, with three supposed cases of exceptional transmission from human to pigs in Canada, Argentina and Australia. The virus does not circulate at present in the swine population. This new virus can theoretically be transmitted from swine to humans by direct contact or by aerosol. There exists no evidence of a food-borne transmission. Consequently, the consumption of (products of) pork meat represents no danger. As this virus at the moment does not circulate in swine, the risk of transmission from swine to humans is currently considered to be negligible.

The Scientific Committee discloses a series of recommendations related to the zoonotic aspects in case the new pandemic virus would circulate in the swine population (bio-security, vaccination of the pig farmers and veterinarians when a specific vaccine is available, etc.).

The risk of transmission of the pandemic virus from humans to swine is small at the moment, but will increase parallel to the increase of human cases. If the virus is transmitted to pigs, the risk that it will circulate in the swine population becomes real. Nevertheless, because of the weak gravity of the illness, it is suspected that the economic impact and the impact on animal health will be low. The Scientific Committee discloses recommendations to reduce as much as possible the risk of transmission of the pandemic virus from human to swine and to limit its introduction in and dissemination from the pigfarms. The Scientific Committee thinks that it is too early, under the current conditions, to consider vaccination of the pigs against pandemic influenza A/H1N1 virus, for a certain number of reasons elaborated in the advice. If a vaccine specific for the pandemic A/H1N1 influenza virus is developed, the vaccination of pigs could be recommended in case of low grade or widespread en zootic circulation in the swine population, on one hand to protect public health, and on the other hand, to limit the risk of mutation of the virus in swine, which could have negative consequences for the human population.

The Scientific Committee recommends to continue the monitoring of porcine influenza viruses in general and also the establishment of a targeted virologic surveillance of the pandemic influenza A/H1N1 (2009) virus in swine.

The Scientific Committe also discloses recommandations for scientific research.

This risk evaluation concerns only the current epidemiological situation (on the 17th of august 2009) on swine flu, and has to be reviewed according to the evolution of this epidemiological situation.

The full text is available on this website in dutch and in french, respectively under the section “Wetenschappelijk Comité/Adviezen” and “Comité scientifique/Avis”.