

Technical Report | Version May 20th 2006
ECDC Scientific Advice – Who is at Risk of getting HPAI?

Version May 20th 2006 (This table is available on the ECDC web site at http://www.ecdc.eu.int/avian_influenza/Human_H5N1_Bird_Flu_Risk.pdf)

Table 1. Who is at risk of getting “Bird Flu” - Highly pathogenic H5N1 avian influenza?

- *“a group of influenza viruses of birds, poorly adapted to humans whom they find hard to infect except at high doses. They are dangerous as they are highly pathogenic in those few humans that do become infected, but then they generally do not transmit on to other humans.”*

From ECDC Revised Risk Assessment May 2006

Broadly speaking there are two types of Risk Groups:-

Group 1 - Low but Real Risk

The risk of infection is almost entirely confined to the small numbers of **people who have close and intense contact with sick H5N1 infected domestic poultry (chickens, ducks etc) or their droppings or sometimes wild birds. For example through having sick and H5N1 infected poultry in the house.** Human cases have almost entirely been in this category.

In these circumstances **children** may be at higher risk than adults. This probably represents behavioral rather than constitutional susceptibility. In these setting children being more play with or look after poultry and are less likely to practice good persona hygiene than adults.

People traveling to countries where H5N1 is prevalent can sometimes enter this category if they are staying with families with domestic poultry.

The people who are **at highest risk of acquiring H5N1** are the very small number of **people living in the same household as cases of H5N1 in humans.** It is thought that this is through shared exposure. Though person to person transmission also occasionally happens. This is why early identification of human cases and early treatment of them and their household contacts is crucial.

Group 2 Theoretical Risk – Precautions Required

There are also those at theoretical risk who may be exposed to the virus and should take appropriate precautions. This includes the following where H5N1 may be present:

- Health care workers caring for those with H5N1 infection though there have been no cases in this group for nearly a decade the risk is there and preventive measures should be taken. A related group are those working in laboratories with H5N1 viruses
- Veterinarian and people involved in controlling outbreaks in birds (culling)
- People who work on industrial poultry farms,
- People who may have close contact with infected wild birds e.g. some ornithologists and hunters,
- People who deal with sewage which is contaminated with H5N1

Current maps showing where H5N1 has been found recently are available **for the EU** at

<http://europa.eu.int/comm/food/animal/diseases/adns/map/europe.htm>
and **for the rest of the world** through <http://disasters.jrc.it/AvianFlu/>

For both Groups 1 and 2 there is probably greater risk of catching other potentially serious infections from birds – examples include campylobacter and salmonella infections. Standard hygienic precaution to protect against these infections will protect against H5N1.

For the majority of people who have no contacts with domestic or wild birds or their droppings, the risk of acquiring H5N1 is almost non existent.