

General Information Sheet on Avian Influenza and Influenza Pandemics

Avian Influenza, an Animal Epidemic

As early as January 2004, the World Health Organisation (WHO) confirmed the occurrence of influenza viruses, which are capable of affecting the health of animals and as a consequence of human beings. Here we are dealing with a type of avian influenza that is also commonly known as "bird flu". Originally this appeared mainly in Asia with only a few isolated cases reported in Europe and, recently, Austria as well. Avian influenza occurs in chickens, turkeys and amongst numerous free-range bird species and can, firstly and foremost, cause considerable economic damage.

Please note: At the present time it is currently a worldwide veterinary problem, namely, an animal epidemic called avian influenza ("bird flu"). The risk for human beings lies primarily in the possible mutation of the virus. Whether and when such a mutation happens cannot be predicted by anyone at the present stage.

Measures against the spread of "bird flu" in Austria

After the death of several wild birds in Austria from avian influenza in mid-February, the Federal Minister of Health and Women has ordered a number of measures to prevent the transmission of avian influenza to domestic fowl in Austria.

Please note: The cases of avian influenza, which have appeared in Austria up until now, have exclusively been found in wild birds. So far no domestic fowl have been affected in Austria.

The most important measure is the current countrywide ban on keeping poultry outdoors, that is, all poultry must be kept in closed sheds and/or pens (the government veterinary surgeon can permit exceptions in individual cases where there are grounds e.g. ostrich farms to prevent animal cruelty). Furthermore, the following apply to the whole of Austria:

- All holdings of poultry and other birds must be reported to the local authorities.
- Ducks and geese are to be separated from other poultry.

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- The holding of animal shows, animal exhibitions, animal markets, animal fairs etc. are to be supervised by the government veterinary authority and have to be notified accordingly. This authority is entitled to prohibit the holding of such events.
- Stricter criteria for the notification of suspected avian influenza in domestic fowl stocks.
- Every wild bird found dead must be reported to the government veterinary surgeon at the corresponding local authority.

Please note: Avoid any contact with sick or dead birds and also keep your children away from them. Prevent your children from playing with birds. If you should nevertheless come into contact with sick or dead poultry, wash your hands thoroughly, in particular before eating.

In addition to these rules, which apply to the whole of Austria, protection and monitoring zones have been established in individual areas close to the locations where infected wild birds have so far been found and in which special measures, above and beyond those already stated, will be in force such as particular disinfection and decontamination procedures, bans on moving poultry or poultry products out of these areas etc. (details of the actual regulations as well as an up-to-date list of the affected areas are to be found at www.bmgf.gv.at).

Should, despite all these precautionary measures, "bird flu" be found in domestic poultry stocks in Austria then further regulations will come into force, deriving from the crisis plan set up for such a contingency, amongst which will be the setting up of crisis centres, the quarantining of concerns afflicted by the epidemic, the slaughtering of affected poultry, etc. (for details see "Crisis Plan for Avian Influenza and Newcastle Disease" (at www.bmgf.gv.at)).

Transmission to Human Beings

Basically "bird flu" can only be transmitted from animal to animal. Although an infection of a person through an infected animal is possible in principle, it only happens rarely and only where there is very close contact between animal and human (such as in Asia where people and animals live very close together). It has not been possible thus far

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to prove the direct transmission of this virus from an infected human being to another. Therefore you should note: in the cases of the illness that have occurred so far in Asia the infection of a human being has taken place because of a particularly close contact with diseased birds. This illness is dangerous for human beings but only results in fatalities through lack of, or delay in, medical treatment.

However, according to the WHO, the probability has increased that new aggressive influenza viruses will mutate. These could cause a pandemic, a worldwide flu epidemic (for precise definition of the terminology see below). Therefore, the WHO has called on all states to prepare corresponding measures. For Austria these have long been laid down in the "Influenza Pandemic Plan – Strategy for Austria" (for details see www.bmgf.gv.at).

The Protection of Human Beings

Thus far, as stated, one has been dealing with a virus that is only transmitted to human beings in exceptional cases. In animals the influenza virus multiplies over time in all organs and is secreted from the body in mucous and excreted in faeces, the latter are particularly infectious. Transmission to human beings presumably takes place through contact with poultry and their bodily secretions and excretions and through failure to wash hands or the breathing in of dust particles containing the virus. Therefore persons, who have contact with sick poultry should wear protective masks and observe general hygiene recommendations.

The viruses can also get into the eggs and the muscles of the infected animals. However, due to their extreme sensitivity to heat, the risk of transmission to human beings through food is regarded as minimal. Boiled food or that heated in another manner (> 70° C) is to be regarded as free of contagious viruses. However, deep-freezing does not de-activate the virus!

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Influenza, the "real flu"

The "bird flu" viruses are to be distinguished from the annually recurring influenza viruses which cause so-called "real flu" in our latitudes. This, in turn, is to be distinguished from an influenza-type infection:

Illness	Influenza-type Infection	Flu virus or real flu (influenza)
Incidence	Appears particularly often in the cold weather. Belongs to the most common infectious illnesses and there is still no treatment today for its cause. Mostly mild and of short duration.	Appears seasonally in winter caused by the particular variation of the influenza virus currently circulating.
Symptoms of the illness	<ul style="list-style-type: none"> • General feeling of weakness • Sneezing, runny nose • Sore throat, hoarseness • Headache and aching limbs • Slightly raised temperature (up to 38.5° C approx.) 	<ul style="list-style-type: none"> • Sudden onset, rapid deterioration • Whole body affected by symptoms • High fever • Unable to keep warm, shivering • Aching muscles and limbs • Headache • Exhaustion • Cough • Complications - such as pneumonia, middle ear infection - are possible
Vaccination	No vaccination possible. Note: influenza-type infections cannot be prevented by an influenza vaccination.	Annual preventative influenza vaccination possible. Particularly important for persons at risk: <ul style="list-style-type: none"> • all over 60s • all residents of old people's and care homes • all persons, who run a higher risk of infection through their work, e.g. if they work in establishments frequented to any great extent by the general public or work in the medical professions

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		<ul style="list-style-type: none">• children, young people and adults, whose health, as a result of an existing serious illness, is particularly at risk such as people with chronic lung and heart-lung disease, liver and kidney disease, diabetes mellitus and those with metabolic illnesses as well as those with genetic or acquired immune deficiencies. <p>Through vaccination catching the infection will be prevented or at least the severity will be substantially lowered. The protection afforded by vaccination starts no earlier than one week after the vaccination has taken place and becomes complete after two weeks has passed, providing protection for the whole winter. However, the vaccination does only provide protection for one winter as the surface of the virus mutates every year so that a completely new vaccination will be necessary the following year.</p>
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Influenza Pandemic

There are currently fears about the outbreak of an influenza pandemic, possibly by co-infection between the seasonal flu virus and the avian influenza virus. A new virus of this kind could possibly be communicated from human to human, with humans not yet having developed any immunity to it. In this case, the outbreak of a pandemic would be announced by the WHO. National emergency plans, such as the Austrian "Influenza Pandemic Plan" would then come into effect, and in addition joint action at EU and WHO level would determine the further course of action.

How can infection with influenza and the spread of an influenza pandemic be prevented?

- Avoidance of gatherings of people (cinemas, theatres, markets, mass transportation)
- Avoidance of close contact with other people
- Frequently washing one's hands
- Airing of rooms
- Disposal of used paper handkerchiefs
- Going out only when necessary – only shopping when absolutely necessary
- Using your own crockery, glasses and cutlery
- Avoidance of hand contact (shaking hands)
- If appropriate, wearing protective masks over the mouth

Note: although the flu vaccine currently available does not protect against possible infection with the H5N1 virus (the "bird flu" pathogen) or any possible new influenza viruses, immunisation is still advisable as possible co-infections can be avoided.

Provision of medications in the event of a pandemic

As recommended by the WHO, the federation and federal provinces are ensuring provision for 25 percent of Austrians, i.e. approximately two million people. There is no sense in having a larger stock as the pandemic will not spread over the entire country. Any person who becomes ill before a vaccine is available will be able to be treated with the reserve stock. In

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addition, supplies will be used to give prophylactic **treatment to those persons** who cannot avoid coming into contact with large groups of people (medical staff, employees working in retail, relief workers, etc.). The federation and federal provinces have already agreed on a quantity structure for the medications and the procurement process is going according to plan. All countries in the EU are currently in a very similar phase of preparation.

Provision of vaccines in the event of a pandemic

At present it is not possible to develop a vaccine as the form of the new virus is still completely unknown. Irrespective of this, the Federal Ministry of Health and Women has already launched negotiations with vaccine manufacturers in order to ensure that Austria is supplied should the case arise.

Explanation of terms used

<p>“Bird flu”</p>	<p>Technical term: avian influenza. In poultry the disease is called “classic avian flu”.</p> <p>Acute, highly infectious viral disease in birds. Occurs in chickens, turkey hens and numerous types of free-roaming birds. Ducks, geese, pigeons, and other wild birds are either barely affected by the disease or do not show any symptoms but could be significant in the spread of the pathogen.</p>
<p>“Emergency Plan, Avian Influenza and Newcastle Disease”</p>	<p>In Austria, the September 2005 version of this emergency plan sets out the course of action in the event of avian influenza (“bird flu”) occurring in the native poultry population. Can be found at www.bmgf.gv.at</p>
<p>Pandemic</p>	<p>Outbreak of a disease (regardless of the pathogen) in more than one country or on a global scale.</p> <p>In contrast to an epidemic, a pandemic is not limited by either time or geographical region.</p>
<p>Influenza</p>	<p>Influenza is a disease which occurs in humans and animals and is caused by so-called influenza viruses (=flu viruses). We distinguish between three different strains</p>

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	<p>of these viruses: influenza A, B and C viruses. These can be differentiated further on the basis of their surface. Flu viruses in humans are usually influenza A or B viruses.</p> <p>The current bird flu virus is an type A influenza virus of subtype H5N1.</p>
"Influenza Pandemic Plan – Strategy for Austria"	<p>This sets out the further course of action in the case of the occurrence of an influenza pandemic. Can be found at www.bmgf.gv.at</p>

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For further information, please dial **050 555 666** to contact the **Info-Hotline** of the Austrian Agency for Health and Food Safety (AGES).

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Please note that this paper is in no way exhaustive and we assume no liability for its contents. Further information is available at www.ages.at and www.bmgf.gv.at. These websites also provide downloadable information on the Austrian Pandemic Plan and the "Crisis Plan for Classical Avian Flue and Newcastle Disease 2000".