Avian Influenza (Bird Flu)

HERE IS NO PANDEMIC AVIAN INFLUENZA in the world today but we must be prepared. We do not know when or where a pandemic may begin or how severe it will be. What is a pandemic? A pandemic is a global disease outbreak. A pandemic flu happens when a new flu virus appears in humans causing serious illness, large numbers of deaths and spreads simultaneously worldwide. Pandemics of flu are caused by new viruses. Humans have little or no protection against a new pandemic virus because they have not been infected with a similar virus before.

Ongoing worldwide efforts to produce a vaccine for humans is in process by manufactures and clinical trials are being preformed in several countries.

History of three pandemic influenza viruses in the 20th century:

- 1918–19—"Spanish Flu" (A(H1N1) known to have caused the highest number of influenza deaths. More than 500,000 people died in the United States and approximately more than 50 million may have died worldwide.
- 1957–58—"Asian Flu" (A(H2N2) approximately caused 70,000 deaths in the United States. It was identified in China in February 1957; it then spread to the United States by June 1957.
- 1968–69—"Hong Kong Flu" (A(H3N2) caused approximately 34,000 deaths in the United States. The virus was identified in China in early 1968 and it spread to the United States in the same year. This type of virus (H3N2) still circulates today.

The viruses from 1957–58 and 1968– 69 were both caused by viruses containing a combination of human influenza virus and an avian influenza virus. The 1918-19 influenza pandemic virus appears to have had an avian origin.

There has not been a confirmed case

of Avian Influenza (H5N1) in humans in the United States and the American government monitors every aspect of the disease to keep the public informed since it developed in 1997. Since it developed in 1997 to 2006, there were several outbreaks of low pathogenic avian influenza A viruses (H5 and H7 subtype) and one outbreak of highly pathogenic avian influenza A (H5N2) in poultry in the United States. In 2003 New York reported that a person was infected with the H7N2 avian influenza A virus, the patient recovered and was sent home. Maryland, Delaware and New Jersey reported outbreaks of the (H7and N2) to poultry without human transmission in 2004. In the same year, Texas reported an outbreak of H5N2 to poultry without human transmission. In 2006 Michigan, Maryland and Pennsylvania reported LPLI H5N1 in wild swans and wild ducks.

The World Health Organization (WHO) has reported many cases of humans infected with the avian influenza A virus (H5N1). Vietnam and Indonesia have the highest number of human cases reported. Other countries such as those in Eastern Europe, Africa and Asia have also reported human cases. Mortality is reported in almost 60% and the majority are children and adults less than 40 years old. The highest mortality occurred in cases ranging from 10 to 19 years old. Education is critical to prepare for a pandemic. We need to understand what a pandemic is as well as what needs to be done at all levels in order to be prepared.

When a pandemic influenza virus emerges, its global spread is considered inevitable. Countries may delay arrival of the virus through measures of restricting travel and closing borders but it will be very difficult to stop it. This is why it is very important to be armed with information because the public can play a big role in helping the government control By Marilena Salmones

the disease.

**Cumulative Number of Confirmed Human Cases of Avian Influenza A/ (H5N1) Reported to World Health Organization (WHO). 30 April 2008

**Total number of cases includes number of deaths. WHO reports only laboratory-confirmed cases. All dates refer to onset of illness.

**For a full detailed timeline of major events for each country reporting avian influenza in animals and humans go to: www.who.int/csr/disease/avian_ influenza/ai_timeline/en/index.html

Flu Terms Defined (from www.avianflu.gov)

Seasonal (or common) flu: A respiratory illness that can be transmitted person to person. Most people have some immunity and a vaccine is available.

Avian Influenza (or bird flu): Caused by influenza viruses that occur naturally among wild birds. The H5N1 variant is deadly to domestic fowl and can be transmitted from birds to humans. There is no human immunity and no vaccine is available worldwide yet, but there is global ongoing research to develop a vaccine. Several countries are trying "test" vaccines to treat the H5N1 virus. These clinical trials will help improve the research to develop a vaccine for the future to be used worldwide.

Pandemic flu: A virulent human flu that causes a global outbreak or pandemic of serious illness and deaths. Because there is little natural immunity, the disease can spread easily from person to person. Currently, there is no pandemic flu.

An informed and responsive public is essential to minimizing the health effects. Today, people do not have all the correct information about the avian flu. Ignorance can only hurt us, this is why it is very important to arm yourself with information as well as be prepared in case the pandemic reaches our country.

Country	2003		2004		2005		2006		2007		2008		Total	
	cases	deaths												
Azerbaijan	0	0	0	0	0	0	8	5	0	0	0	0	8	5
Cambodia	0	0	0	0	4	4	2	2	1	1	0	0	7	7
China	1	1	0	0	8	5	13	8	5	3	3	3	30	20
Djibouti	0	0	0	0	0	0	1	0	0	0	0	0	1	0
Egypt	0	0	0	0	0	0	18	10	25	9	7	3	50	22
Indonesia	0	0	0	0	20	13	55	45	42	37	16	13	133	108
Iraq	0	0	0	0	0	0	3	2	0	0	0	0	3	2
Lao People's Democratic Republic	0	0	0	0	0	0	0	0	2	2	0	0	2	2
Myanmar	0	0	0	0	0	0	0	0	1	0	0	0	1	0
Nigeria	0	0	0	0	0	0	0	0	1	1	0	0	1	1
Pakistan	0	0	0	0	0	0	0	0	3	1	0	0	3	1
Thailand	0	0	17	12	5	2	3	3	0	0	0	0	25	17
Turkey	0	0	0	0	0	0	12	4	0	0	0	0	12	4
Viet Nam	3	3	29	20	61	19	0	0	8	5	5	5	106	52
Total	4	4	46	32	98	43	115	79	88	59	31	24	382	241

Keep yourself informed by visiting these web sites

www.usda.gov/wps/portal/usdahome www.aphis.usda.gov/ www.pandemicflu.gov/

Pandemics can cause economic and social disruption

Major impact on citizens and communities: travel bans, cancellations of events, importation/exportation bans, public transportation may be disrupted, schools and businesses closings, etc Information regarding Avian Influenza is constantly changing and updated. It is important to be current, check the World Health Organization for updates.

Aviculturist should monitor all information pertaining to Avian Influenza and be well informed to be able to protect their birds. Some states have regulations regarding traveling with birds to bird shows, bird marts, bird fairs and even having fowl and exotic birds on the same property.

Biosecurity for the birds

Avian Influenza (H5N1) or "bird flu" is a highly contagious disease that can infect all types of birds. Avian Influenza is a disease of wild and farm birds caused by influenza viruses. Bird flu viruses do not usually infect humans, but since 1997 there have been a number of confirmed cases of human infection from bird flu viruses. Most of these resulted from close or direct contact with infected birds such as domesticated chickens, quails, turkeys, pheasants, geese and ducks.

Cases reported of domestic poultry infected with Avian Influenza have been identified as two types of viruses. The low pathogenic type which usually goes undetected due to the mild symptoms and the high pathogenic type which spreads more rapidly by affecting multiple vital organs and almost reaching 100% mortality rate within 2 days.

Wild birds can carry bird flu viruses but usually do not get sick from them. However, recent reports in various countries have documented deaths of wild birds from Avian Influenza.

Infected birds shed the virus through nasal discharge, droppings and saliva. Birds coming into contact with these excretions become contaminated. Domesticated birds such as chickens, quails, geese, turkeys, pheasants, and ducks can become very sick and even die if they come into contact with an infected wild bird having the avian flu virus. If you have outdoor aviaries, take the time to check and protect your birds from contact with wild birds.

Know the signs of Avian Influenza:

- Sudden death without clinical signs.
- Lack of energy and appetite.
- Decreased egg production and/or soft shelled or misshapen eggs.
- Swelling of the head, eyelids, comb, wattles and hocks.
- Purple discoloration of the wattles, combs and legs.
- Nasal discharge, coughing and sneezing.
- Incoordination.
- Diarrhea

Spreading Avian Influenza

Avian Influenza spreads quickly from bird to bird contact. Viruses can be carried by manure, vehicles, eggs, equipment, clothing, crates, shoes and people who have come in contact with the virus. Migratory waterfowl can also carry the disease.

Backyard Biosecurity

To prevent the possible spread of diseases:

- Restrict traffic onto and off your property.
- Disinfect clothes, shoes, hands, egg trays, vehicles and tires.
- Avoid visitors and visiting other farms or bird owners.

People are always asking me if they can

come and visit my aviary; the ones who already know me do not ask anymore. Many years ago I had an old friend who told me many interesting stories about how diseases were carried from aviary to aviary. Innocently enough, people would visit aviaries and carry bird dust, viruses, etc., in their hair, clothes and shoes.

He taught me how not to feel bad as I explained to people who would ask to see my aviary that I do not allow people in my bird building. I am forever grateful to my old friend. Today I keep a closed aviary and I do this to protect my birds. If you must sell birds, you can invite them to a part of your property where you do not keep birds and you can show the birds you have for sale there. Always remember how much money you have invested in your birds and how easily it can all disappear by being careless. You are not being secretive, you are protecting your birds.



Be smart when purchasing birds:

- Buy from a reputable person or dealer.
- Request certification from suppliers/importers that birds were legally imported.
- Maintain records of all sales and shipments of flocks.
- Keep new birds separated from your flock for at least 30 days.
- Keep young and old birds, birds from different species and from different sources apart.

If your birds start dying, please seek immediate help from a local veterinarian or call the U.S. Department of Agriculture's (USDA) Veterinary Services to find out why at 1 866-536-7593.

You are the best protection your birds have. All Rights Reserved

References:

- U.S. Department of Health & Human Services
- Centers for Disease Control and Prevention (CDC)
- World Health Organization (WHO)
- U.S. Department of Agriculture
- Animal & Plant Health Inspection Services (APHIS)
- World Organization for Animal Health (OIE)
- Department of Homeland Security (DHS)
- U.S. Department of the Interior
- National Association of State Departments of Agriculture

Marilena Salmones, has successfully bred many species of African and Australian Finches, Softbills and many species of Psittacines for over 25 years. She is a member of the Board of the African Lovebird Society and the North American Parrot Society. She has written many articles in several languages and published in several countries. For many years, she has been involved with researching bird behaviors of different species and has a Rare Lovebird Consortium through the U.S. Department of the Interior to import Rare Lovebirds and research their breeding and nesting behaviors. She can be reached at AvianWndow@aol.com

