

What is Bird Flu?

Avian Influenza is a virus that usually affects only birds. It circulates among the wild bird population (and sometimes, pigs) and like some other flu viruses, can change, or mutate.

All "Bird Flu" isn't the same

The avian influenza virus can be configured into more than 144 strains, as determined by the combinations of "H" and "N." The "H" --or Hemagglutinin, and the "N" --Neuraminidase, in the virus. For example, the virus may be classified as H1N2, H2N2 or H7N2.

There's more

To add to the mix, some avian influenza strains come in one of two strengths, known as "pathogenicity," or the ability to sicken or kill birds.

Low pathogenic avian influenza (LPAI) may be inapparent or make birds slightly ill. Highly pathogenic avian influenza (HPAI), on the other hand, may make birds very sick, or cause large death losses.

The highly visible "bird flu" in the news is a highly pathogenic H5N1 strain, which has not yet been detected in the U.S. However, could be "imported" by migrating wild birds, or by diseased birds or products smuggled into the country. Early detection is crucial.

You can't tell by looking

Avian influenza infection, the particular avian influenza strain, or its pathogenicity can't be determined by looking at a sick bird. A number of diseases or conditions can cause birds to become ill or to die. To determine the cause, laboratory tests must be conducted on blood, tissue or fecal material from a potentially infected bird. In Texas, the Texas Veterinary Medical Diagnostic Laboratory (TVMDL) conducts the laboratory testing.

Wild Bird Testing

Wild waterfowl are the natural host for the avian influenza virus. Since 1998, more than 12,000 migratory birds and waterfowl have been tested in Alaska, and it is not unexpected to detect some avian influenza strains. All tests, however, have been negative for H5N1.

This year, more wild birds are being tested along their migratory paths--called flyways. Texas is in the Central Flyway, and the U.S. Department of Agriculture's Wildlife Services and the Texas Parks and Wildlife Department in 2006 will collect several thousand samples from targeted species, selected due to their potential risk for carrying avian influenza. Collectively in the U.S., more than 100,000 wild birds will be sampled.

Do I report dead wild birds?

A dead bird in your yard should not cause undue concern. However, because birds may die from a variety of causes, don't touch the bird with bare hands. Place a plastic bag over your hand and pick up the bird, enclosing it in the bag and disposing of it in the garbage. Then wash your hands thoroughly. If you see a die-off of many birds, notify your local health officials, Texas Parks and Wildlife Department, or the Texas Animal Health Commission (the state's livestock and poultry health regulatory agency). Samples then can be collected to determine if the birds died from avian influenza or some other cause.

What about domesticated flocks?

Commercially produced poultry (including chickens and turkeys) are raised indoors, protected from contact with wild birds.

Biosecurity measures are employed, which may include disinfecting boots and tools prior to entering poultry houses, restricting visitor access, and cleaning vehicle tires at the farm gate, to avoid introducing disease.

Routine disease surveillance for avian influenza is performed on commercial flocks. Since 1995, the Texas' commercial poultry industry submitted more than 200,000 samples yearly to the TVMDL. Last

year, the sample count topped 366,665. Routine disease surveillance also is conducted on many noncommercial flocks.

In 2004, two strains of avian influenza (not H5N1!) were detected in the state. The TAHC and the USDA-Texas staff responded immediately to quarantine the flocks, and control, then eliminate the infection. On the affected sites, cages, poultry houses and equipment were thoroughly disinfected. Before releasing the quarantine, the team conducted widespread area testing of both commercial and noncommercial flocks to ensure the disease had been eradicated.

The TAHC encourages all flock owners to report to their veterinarian or the TAHC unusual signs of illness in their birds or significant death losses. TAHC and USDA veterinarians, trained as foreign animal disease diagnosticians, can collect and submit samples for testing.

For more information about biosecurity, or to report unusual illness or death loss in your flock, call the Texas Animal Health Commission (TAHC) at 1-800-550-8242.

Under its Fowl Registration Program, the TAHC requires domestic and exotic fowl sellers, distributors and transporters who sell at public sites to register with the agency, if they're not enrolled in a recognized avian influenza surveillance program. This will enable the TAHC to quickly contact flock owners if a disease outbreak is associated with a public sale.

The TAHC also has increased live bird market and backyard flock disease surveillance.

Don't "chicken out" because of avian influenza fears!

What's YOUR preference? Scrambled eggs? Chicken leg, turkey sandwich?

What would summer be without chicken on the grill, fried drumsticks on a picnic, accompanied by deviled eggs, or a succulent smoked turkey leg at the local fair? Enjoy!

As with any food product, follow safe and proper food storage, handling, cooking and serving practices to avoid spoilage.

What's the story in Asia & Europe?

H5N1 has been detected in about 50 countries. It is believed to be carried by wild birds or spread through the illegal movement of poultry and fowl. Animal health officials in many countries follow procedures similar to those used by states and the USDA to address the disease. In the U.S., immediate response is crucial.

Why have people gotten sick from H5N1?

Since 2003, about 200 persons have contracted the H5N1 virus. Nearly all had extensive direct contact with sick or dead birds, or consumed improperly prepared products from sick birds. Human-to-human transmission has not been demonstrated.

Lack of biosecurity, extreme crowding, and cultural practices may contribute to the transmission of H5N1 to humans. As of late May 2006, nearly 50 human cases had been confirmed in Indonesia, a country roughly three times the size of Texas, but with 245 million citizens and more than 780 million poultry, most in small, backyard flocks.

In contrast, Texas has 23 million residents, and most of the state's 100 million poultry are produced commercially.

What's the concern?

The worst-case scenario would be a mutation of the virus that results in rapid human-to-human transmission. To date, H5N1 remains primarily a bird disease with only limited bird-to-human transmission.

Preparation. Communication.

At the national level, the USDA is working with a cadre of agencies in preparation for response to an H5N1 outbreak, should one occur. As in most other states, the TAHC is working cooperatively with

state and federal animal and human health agencies, and industry to prepare for an avian influenza situation.

The TAHC is working with: The College of Veterinary Medicine, Texas A&M University, Department of State Health Services (Texas), Foreign Animal & Zoonotic Disease Center, Texas A&M University, Texas Cooperative Extension Service, Texas Department of Agriculture, Texas Farm Bureau, Texas Parks and Wildlife Department, Texas Poultry Federation, Texas Veterinary Medical Diagnostic Laboratory, Texas Veterinary Medical Association, USDA's Veterinary Services, USDA's Wildlife Services, US Fish and Wildlife Service.

Also, as a member of the Governor's Division of Emergency Management, the TAHC may enlist support from more than 30 agencies, if a disease outbreak occurs. The Foreign and Emerging Animal Disease response plan is the state's blueprint for a disease response.

To develop and maintain expertise, TAHC veterinarians and animal health inspectors have worked on poultry disease outbreaks and have participated in state- and national-level preparedness meetings. What's YOUR preference? Scrambled eggs? Chicken leg, turkey sandwich? What would summer be without chicken on the grill, fried drumsticks on a picnic, accompanied by deviled eggs, or a succulent smoked turkey leg at the local fair? Enjoy!

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The following is text from a new avian influenza brochure from the Texas Animal Health Commission (TAHC) that describes some of the surveillance measures and preparedness to address an avian influenza outbreak. This brochure is available in a version for web posting, or in a brochure format.

For more information, a supply of brochures, or to schedule a presentation, contact the Texas Animal Health Commission (TAHC) 1-800-550-8242 TAHC web site: <http://www.tahc.state.tx.us>