

## Working with Poultry (Chickens and Turkeys)

### University of Missouri – Columbia

There are some health risks associated when working with poultry (chickens and turkeys) that one should be aware of so proper preventative measures can be used to minimize potential infection with zoonotic agents. These diseases include infection with a variety of gastrointestinal agents that can cause diarrhea in humans as well as exposure to certain environmental agents that may cause respiratory issues in people.

#### **GENERAL PREVENTATIVE MEASURES:**

In order to reduce the potential exposure to zoonotic or environmental agents, simple measures should be followed which include:

- 1) Washing hands after handling animals or animal materials,
- 2) No eating or drinking in animal areas,
- 3) Avoid consumption of uncooked eggs or meat,
- 4) Proper personal protective attire to avoid contamination of street clothes,
- 5) Wearing a face mask.

#### **IMPORTANT HEALTH RISKS:**

##### **Enteric diseases:**

Disease causing organisms: gastrointestinal bacteria *Salmonella* and *Campylobacter*, as well as the protozoal agent *Cryptosporidium* which are commonly associated with poultry. Infections in chickens or turkeys may be subclinical and therefore animals may be spreading the organism while showing no sign of disease.

- ? Source: clinically affected animals or those showing no signs, mostly from fecal material but eggs, environment and animals may be contaminated
- ? Transmission: fecal/oral route
- ? Disease in humans: diarrhea, vomiting, fever and dehydration
- ? Prevention: wash hands often, do not eat in animal areas, avoid contact with your face and mouth when working with animals.

##### **Allergies/Dust:**

- ? Source: animal dander, animals wastes, environmental dust aerosolized by poultry
- ? Transmission: respiratory inhalation and exposure to the animal products and dust, skin exposure to animals products
- ? Disease in humans: may cause mild signs such as itchy eyes, watery eyes, runny nose, sneezing, skin irritation, or more severe signs such as shortness of breath and trouble breathing

- ? Prevention: wear a mask when working with animals, wear protective clothing so that street clothes are not contaminated with animal products, wear gloves to reduce skin exposure

**Histoplasmosis:**

Disease-causing organism: a fungus called *Histoplasma capsulatum*.

- ? Source: commonly found in soil and dirt containing poultry droppings and feces, therefore farm environments may be contaminated
- ? Transmission: inhalation of conidia (small spores) into the lungs. Infection occurs 5 to 18 days post-exposure.
- ? Disease in humans: Histoplasmosis infection can last for years either asymptotically or as a mild infection. Infection can also be severe and produce an illness similar to tuberculosis. Signs include fever, cough, exhaustion, liver and spleen enlargement, weakness, chest pains, or cough. The severity of symptoms can vary with the magnitude of the exposure and are particularly severe in immunocompromised individuals.

Please contact the Office of Animal Resources (OAR) for any additional information or concerns.