

# Avian Pathogen

## Avian Pathogen Sampling for PCR testing

### Objective

- To detect opportunistic human pathogens transmitted by birds and bats (*Cryptococcus neoformans*, *Histoplasma capsulatum*, and *Chlamydophila psittaci*) in soil, swab samples, or animal droppings.

### **Please note: Take caution while handling samples containing human pathogens!**

The Identification of *H. capsulatum* by PCR is qualitative (reported as "Detected" or "Not detected"). *C. neoformans* and *C. psittaci* are quantitative.

### Advantages and Disadvantages

- Accurate detection and identification
- Quick turnaround time

### Equipment

- Clean or sterile containers or Ziploc bags for bulk samples.
- Clean or sterile containers for water samples.
- DustChek™ or Mitest™ sampler (attachment for standard household vacuum cleaners) for dust sampling.
- 3-pc air sampling cassette with polycarbonate filter and vacuum pump for air sampling.

### Sampling

- Swab samples can be collected with liquid swabs from suspected area.
- For air samples from indoor areas follow same sampling procedures as for other PCR analyses.
- For bulk samples collect bird droppings or dust or soil from suspected area. 1 gram of material is sufficient for the testing.
- Collect water from suspected areas.

### Shipping

- Air cassettes, bulks and swab samples should be shipped to the laboratory for overnight delivery.