

Diagnostic Facilities

It is extremely important for Poultry Research Institute, Rawalpindi to apply a systematic approach when conducting field investigations. An autopsy (necropsy) is essential for technical services personnel seeking to establish a preliminary diagnosis. The autopsy also allows samples to be collected and submitted to a diagnostic laboratory for confirmatory testing. Samples collected may include blood, serum, plasma, swabs, feathers, tissues, scrapings or smears, as needed for confirmation or exclusion of the potential causative pathogens. Excellent video-based information on practical procedures for clinical examination and sample collection can be accessed.

The *outré* status quo of Directorate of Poultry Research Institute, Diagnostic Laboratories was quite passive. With the advent of an enlightened era, the earnest endeavors to restore & dovetail the missing links, and to rationalize & rekindle the available resources (human, mental and material) were made. The Poultry Research Institute, Rawalpindi is now in a dynamic mode and is ready to embark upon new challenges of alternate future. Poultry Disease Diagnostic Laboratories serve as a platform to cater the diagnostic and surveillance needs of the sector. There is a province wide network of 10 Diagnostic Laboratories in Punjab.

Laboratories

These laboratories work under the administrative control of Poultry Research Institute, Rawalpindi:

- Poultry Disease Diagnostic Laboratories are on the frontline in implementing control and eradication strategies in Poultry populations, develop health management protocols and safe, effective treatments.
- Progressive Poultry health management through disease investigation and surveillance provides a crucial method of managing risk in Poultry based industries.
- Through field based research, regulations, and intensive disease investigation and surveillance programs in Poultry production, these laboratories enhance the safety and quality of food for public use. Risks of drug residues or microbiological contaminations are thereby reduced.

Mandate

Below mentioned is the mandate of the laboratories:

- To provide gratis disease diagnostic and laboratory referral services to poultry populations.

- Disease & immune-surveillance to carry out and advise timely institution of immune prophylaxis, remedial & mitigatory approaches.
- To minimize the economic losses through investigation and containment of disease outbreaks
- To safeguard public health through screening of Poultry against diseases (like Bacterial Diseases, Viral Diseases, Neoplastic Diseases, Parasitic Diseases, Mycoses and Mycotoxicosis, Deficiency Diseases and others)

Facilities

Facilities available at Disease Diagnostic Section are as under:

Post-mortem Labs

- Post mortem examination of poultry
- Clinical examination of poultry
- Clinical examination of fancy birds
- Slide examination of coccidiosis
- Kit based examination of avian influenza
- Kit based examination of ND

Mycoplasma Labs

- Isolation & identification of MG
- Plate agglutination test for MG
- Plate agglutination test for MS
- Plate agglutination test for SPG
- ELISA test for MG

Bacteriology Labs

- Isolation & identification of salmonella
- Isolation & identification of E. coli
- Isolation & identification of pasteurized milk
- Antibiotic sensitivity
- Impression smear of bacteria
- Water analysis
- Live bacterial count

HPS Labs

- Vaccine production of HPS
- Autogenous HPS vaccine production

Virology Labs

- Isolation & identification of ND
- Isolation & identification of H5
- Isolation & identification of H7
- Isolation & identification of H9
- PCR based diagnosis of avian influenza H5
- PCR based diagnosis of avian influenza H7
- PCR based diagnosis of avian influenza H9
- PCR based diagnosis of ND
- PCR based diagnosis of Marek's disease

- PCR based diagnosis of IBD
- Agar gel precipitation test
- HI test for ND
- HI test for H5
- HI test for H7
- HI test for H9
- ELISA based test for Avian Influenza
- ELISA based test for ND
- ELISA based test for IB
- ELISA based test for IBD

Histopathology Labs

- Histopathological identification of Marek's disease
- Histopathological identification of lymphoid leucosis
- Histopathological identification of HPS
- Histopathological identification of ILT
- Histopathological identification of Pox
- Differential diagnosis of ND, AL, CRD, IB, toxicity and fatty liver etc.