2025 HPAI Guidelines: Preparedness

Biosecurity is a set of practices, things you do every day, that helps prevent the introduction of viruses/bacteria/pathogens out of your facility and patients. These practices can also prevent spread between patients or into wild populations. (Dummies, n.d.)

Self-Assessment guide:

Key areas to assess in a facility biosecurity evaluation:

1. Personnel Practices:
Staff training: Regular training on biosecurity protocols, proper hygiene practices, disease recognition, and reporting procedures.

Personal protective equipment (PPE): Appropriate use of PPE like gowns, gloves, boots, and masks based on the biosecurity risk level.

Access control: Restricted access to high-risk areas, employee identification checks, and visitor management procedures.

Health monitoring: Knowledge of zoonotic practices and symptoms of note. How to alert your doctor and advocate for an investigation.

2. Facility Design and Infrastructure:

Physical barriers: Proper separation between different animal groups (native/non-native, parrots vs waterfowl etc), clean and dirty zones within the facility, and dedicated entrance and exit points.

Ventilation system: Airflow management to minimize pathogen transmission.

Sanitation practices: Regular cleaning and disinfection protocols for all surfaces, equipment, and animal housing areas. Protocols for disinfection concentrations and contact times.

Waste disposal: Secure storage and appropriate disposal of animal waste to prevent pathogen spread.

3. Animal Movement and Introduction:

Quarantine procedures: Isolation of new animals for a specified period to monitor for disease before introducing them to the main population.

Animal health checks: Regular veterinary inspections, disease surveillance, and pre-release screening/assessment.

Vehicle sanitation: Disinfecting all vehicles entering the facility, especially those transporting animals.

4. Equipment Management:

Dedicated equipment: Use of separate equipment for different animal groups to prevent cross-contamination.

Equipment cleaning and disinfection: Proper cleaning and disinfection protocols for all equipment used within the facility.

5. Biosecurity Documentation:

Written biosecurity plan: A comprehensive document outlining all biosecurity procedures, responsibilities, and emergency response plans.

Recordkeeping: Detailed records of animal movements, health checks, sanitation procedures, and any potential biosecurity incidents.

Assessment Process:

Review existing biosecurity plan: Analyse the current biosecurity plan for completeness, clarity, and effectiveness.

On-site observation: Conduct a physical inspection of the facility, observing staff practices, animal housing conditions, and sanitation procedures.

Interviews with staff: Gather feedback from employees regarding their understanding of biosecurity procedures, risks associated with their work and any potential concerns.

Identify gaps and areas for improvement: Analyse the assessment data to identify areas where biosecurity practices can be strengthened.

Develop corrective action plan: Create a plan to address identified weaknesses and implement necessary changes to enhance biosecurity.

By conducting a thorough biosecurity assessment, facilities can proactively identify and mitigate potential disease risks, protecting animal health and maintaining a high standard of biosecurity practices.

If you need help with this assessment, our WReNNZ committee members are happy to help! Email us via the contact form on our website here: https://www.wrennz.org.nz/contact

Recommended reading:

1. Biosecurity guidelines – comprehensive: https://wildlifehealthaustralia.com.au/Portals/0/ResourceCentre/BiosecurityMgmt/National_Wildlife_Biosecurity_Guidelines.pdf
2. Risk management for people working with wild birds: https://www.woah.org/app/uploads/2022/08/avian-influenza-and-wildlife-risk-management-for-people-working-with-wild-birds.pdf

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Common terminology:

Airborne/aerosolised	transmission of a pathogen through the air via attachment to dust or tiny respiratory droplets. Can remain in the air for potentially long times and distances.
Contact transmission	transmission via either direct physical contact with contaminated bodily fluids or indirect contact via a fomite or vector.
Contagious/infectious	infected hosts capable of transmitting a pathogen to another host.
Contaminate	to expose a surface or organism to a pathogen.
Direct transmission	when the infection can be passed on to the next host via physical contact.
Droplet transmission	transmission of a pathogen via respiratory mucous expelled via sneezing or coughing. Can only travel up to ~ 3 feet (91cm) from the infected person.
Fomite	non-living object that can be contaminated and transfer pathogens. feathers
Indirect transmission	transmission that does not require physical contact. This can be via droplet or airborne transmission, or via a fomite or vector.
Contagious	When coming into contact with an infectious person/animal
infectious	When coming into contact with an infectious agent that enters the body
Zoonotic	A disease that can be transmitted from animal to human e.g. psittacosis
Viral infection	Caused by a virus e.g., PBFD is a circovirus
Bacterial infection	Caused by bacteria e.g., salmonellosis
Fungal infection	Caused by a fungus e.g., Aspergillosis
Yeast infection	Caused by yeast e.g., candidiasis
Pandemic	A widespread occurrence of an infectious disease over a whole country or many/the world e.g., Coronavirus COVID19
Epidemic	A disease outbreak within a specific geographical location
Endemic	A disease that persists at a consistent level within a region