

Hygiene Protocols for the Prevention
and Control of Diseases
(Particularly Beak and Feather Disease)
in Australian Birds

Glossary



Australian Government

Department of the Environment and Heritage

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AAVAC	Association of Avian Veterinarians, Australian Committee
Abdomen	The portion of the body that lies between the thorax and the pelvis.
Abdominal cavity	The space that contains the abdominal viscera
ACT	Australian Capital Territory
Acute	Refers to an illness with a sudden onset and a relatively short course.
Aerobic	Requiring oxygen (compare with anaerobic).
Aetiology	The study of causation, generally the study of why things occur, or even the reasons behind the way that things act. The study of the agents that cause disease processes
AGY	Avian Gastric Yeast (megabacterium, <i>Macrorhabdus ornithogaster</i>)
Air sacs	Thin-walled sacs that communicate with the lungs and some bones and are part of the avian respiratory system.
Airsacculitis	Inflammation of the air sacs in birds.
Anaemia	A reduction in the normal number of red blood cells, or erythrocytes, in the body
Anaerobic	Absence of oxygen; often refers to an organism that grows, lives, or is found in an environment devoid of oxygen, such as the cellular form of <i>Clostridium botulinum</i> , which causes avian botulism.
Antibody	A specific protein used by the immune system to identify and neutralize foreign antigens like bacteria, fungi and viruses. Each antibody recognizes a specific antigen unique to its target.
Antigen	Any foreign substance (generally proteins) to which the body reacts by producing antibodies. Antigens may be soluble substances such as toxins, particulate matter such as pollen, or microorganisms such as bacteria and viruses.
APV	Avian polyomavirus
Aseptic	Free from infection; sterile.
Asymptomatic	Without visible signs of illness; an asymptomatic carrier is an organism that harbors a disease agent, but that shows no outward signs.
Avirulent	Not virulent, does not cause disease.
AWHN	Australian Wildlife Health Network
Bacterium	Singular for bacteria. Any of a group of microscopic, unicellular organisms that have distinct cell membranes and that lack a distinct nucleus surrounded by a nuclear membrane.
Benign	Noninvasive, that is, tumors that do not spread to other parts of the body; not malignant.
BFDV	Beak and feather disease virus
Biosecurity	Security from transmission of infectious diseases, parasites and pests. An assurance that the ecology (either natural or intensive) sustaining animals is maintained.
Bumblefoot	An inflammation and, often, swelling of the foot of birds as the result of a bacterial infection.

Bursa (of Fabricius)	Part of the immune system of birds, located in the dorsal cloaca, where young lymphocytes released from the bone marrow mature into B-type lymphocytes (a type of white blood cell which produces antibodies)
CAC	Closed Aviary Concept
Carrier	An infected bird or flock that does not show obvious signs of clinical disease. They may or may not show clinical signs after infection, and although appearing healthy, shed the aetiologic agent either continually or intermittently. Examples are Pacheco's disease and chlamydophilosis.
CAV:	Chicken anaemia virus
Commissure	The point or surface where two parts, such as the beaks or eyelids join or form a connection
Contagious:	Transmissible by direct or indirect contact - spread of disease from bird to bird. All contagious diseases are infectious; all infectious diseases are not contagious
Caecum	(Plural caeca) a large, blind pouch or sac (often a pair) at the junction of the ilium and rectum. They are absent or rudimentary in some species.
Choana	One of the paired openings on the inner side of the maxilla (upper beak), near the back of the oral cavity, that opens into the nasal cavity.
Chronic	Persisting for a relatively long time.
Chronic losses	Mortality of attrition; small numbers of continual losses over extended periods of time.
Clinical sign	An abnormal physiological change or behaviour pattern that is indicative of illness. Signs are externally observable, as contrasted with symptoms, which are subjective.
Cloaca	A common pathway in birds, reptiles and amphibians for the excretory, reproductive and digestive wastes. It consists of three (potential) chambers from front to rear: coprodeum, urodeum, proctodeum ("CUP").
Congestion	The abnormal accumulation of blood in a tissue or organ; often causes a reddening of the affected area.
Contagious	Capable of being transmitted from animal to animal.
Crop	A dilation of the cervical oesophagus at the base of the neck of some birds (not present in gulls, penguins, ostrich).
Cull	To remove from the flock, birds that are not performing well, eg, because of illness or infertility.
DEH	Department of the Environment and Health
Depopulation	The destruction of an exposed or infected group of animals.
Direct life cycle	A parasitic life cycle that requires only a single host for its completion.
Ectoparasite	A parasite that lives on the external surface, or in the integument, of its host.
EDTA	Ethylenediamine tetra-acetic acid; an anticoagulant and a chelating agent that binds with lead and that is used in the treatment of lead poisoning.
ELISA	A molecular-based enzyme-linked immunosorbent assay; a type of test used to detect either antigen or antibody.
Emaciation	A wasted condition of the body; excessive leanness.
Endangered species	As defined in and listed under the EPBC Act, a native species is eligible to be included in the endangered category at a particular time if, at that time: <ul style="list-style-type: none"> (a) it is not critically endangered <i>and</i> (b) it is facing a very high risk of extinction in the wild in the near future, as determined in accordance with the prescribed criteria.
Endemic	In a broad sense, means belonging or native to, characteristic of, or prevalent in a particular geography, race, field, area, or environment. In epidemiology, an infection is "endemic" in a population in a specific geographic area when that infection is maintained in the population without the need for external inputs.

Endemic	A disease that commonly is present within a population or a geographical area.
Endoparasite	A parasite that lives within the body of its host.
Enteritis	inflammation of the intestine.
Enzootic	An animal disease that commonly is present within a population or geographical area.
EPBC Act	<i>Environment Protection and Biodiversity Conservation Act 1999</i> (Australian Government legislation)
Epidemic	In epidemiology, an epidemic is a disease that appears as new cases in a given human population, during a given period, at a rate that substantially exceeds what is "expected," based on recent experience (the number of new cases in the population during a specified period of time is called the "incidence rate"). (An epizootic is the same thing but for a nonhuman population.)
Epizootic	A disease affecting a greater number of animals than normal; typically, occurrences involving many animals in the same region at the same time.
Erythrocyte	Red blood cell
Exotic Disease	A disease that normally does not occur within a particular area.
Exotoxin	A toxin formed and excreted by bacterial cells.
Fauna	The animals of an area.
Fomite	An inanimate object (pencil, doorknob, handkerchief) that can harbour and transmit an infectious agent to a living organism; fomites such as food or water are called vehicles
Formalin	A liquid solution of formaldehyde that is used as a tissue fixative, usually to prepare tissues for microscopic examination.
Gizzard	The enlarged muscular ventriculus (stomach) of many birds.
Haemagglutination	The clumping of red blood cells. Used to titrate agents that agglutinate some avian erythrocytes under specific conditions.
Haemagglutination inhibition:	Used to detect and titrate specific antibodies to some viruses
	In HI assays, an antigen sample (e.g., BFDV) is incubated with serum and then RBCs sensitive to the virus are added and the incubation continued. If agglutination occurs, the serum does not contain BFDV-specific antibody.
Herpesvirus	One of the major groups of related viruses that have DNA nucleic acids and that are further characterized by similar size, shape, and physiochemical reactions.
HI	Haemagglutination-inhibition
History	Refers to information about the past life of a bird, especially medical, social, nutritional and environmental. It can also be a record of a bird's medical background.
Hygiene	The science or practice that deals with the promotion and preservation of health.
IATA	International Air Transport Association
Iatrogenic infection:	An infection caused as a result of medical procedures (vaccination, blood collection, surgery) which easily introduce pathogens into bird tissues
Incidence	The number of new cases of diseased birds in a flock at one time
Incubation period	The interval between exposure to an infectious agent and the first appearance of clinical signs
Infectious:	Relative ability of an organism to invade a bird.
Infection	The invasion and multiplication of an infectious agent in host body tissues.
Infectious agent	A living organism capable of invading another.
Insecticide	a pesticide used to kill insects.
Intracellular parasite	A parasitic organism, usually microscopic, that lives within the cells of the host animal

Isolate	A collection of a sub-population before the conduct of tests of biological characterisation
Keel	The narrow middle portion of a bird's sternum.
LA	Latex Agglutination
Latent	Dormant or concealed; a latent infection refers to the situation in which a disease condition is not apparent.
Lesion	An abnormal change in tissue or an organ due to disease or injury.
Megabacterium	AGY, Avian Gastric Yeast (<i>Macrorhabdus ornithogaster</i>)
Microbiology	Examination of diagnostic samples for bacteria or viruses
Morbidity	Disease; sickness; clinical illness
Mortality	Death
Nares	The external openings on the top of the bill of birds; the external orifices of the nose; the nostril
Nasal cavity	The forward (proximal) portion of the passages of the respiratory system, extending from the nares to the pharynx and separated from the oral cavity by the roof of the mouth.
Necropsy	The methodical examination of the internal organs and tissues of an animal after death to determine the cause of death or to observe and record pathological changes.
Necrosis	The death of cells in an organ or tissue.
Necrotic	Dead; exhibiting morphological changes indicative of cell death; areas of dead tissue.
Nematodes	Unsegmented, cylindrical parasitic worms; eg, ascarids.
NSW	New South Wales
NT	Northern territory
OBP	Orange-bellied parrot
Oesophagus	The passage extending from the mouth to the proventriculus
Pacheco's disease	Caused by Psittacine Herpesviruses 1 (PsHV1) and characterised by acute death in susceptible psittacine birds, enlarged liver with liver necrosis, and latency. The virus also causes mucosal papillomas .
Panzootic	A disease involving animals within a wide geo-graphic area such as a region, continent, or globally.
Parasitism	An association between two species in which one (the parasite) benefits from the other (the host), often by obtaining nutrients.
Pathogenesis	The origination and development of a disease process
Pathognomonic	A change that is characteristic or peculiar to a specific disease
Pathology	Study of the changes in structure and function associated with disease
PBFD	Psittacine beak and feather disease
PCR	Polymerase Chain Reaction, not "Positively Correct Result"!
PCV	Porcine circovirus, also packed cell volume (acronym, not used for latter in this document)
Plasma	The liquid component of blood before the cells have clotted
Prevalence	The ratio of the number of new cases in a flock at a specified time and the number of individuals in that flock at that specified time.
Protozoan	A one-celled animal with a recognisable nucleus, cytoplasm, and cytoplasmic structures.
PsHV	Psittacine herpesvirus, the cause of Pacheco's disease and mucosal papillomas
Psittacine bird	A birds in the order <i>Psittaciformes</i> that includes the families <i>Cacatuidae</i> (cockatoos and cockatiel) and <i>Psittacidae</i> (parrots).
QLD	Queensland
Reservoir	A site, bird or flock in which infectious agents remain viable and from which infection of individuals may occur

RVO	Regional Veterinary Officer
SA	South Australia
Septicaemia	The presence of pathogenic microorganisms or toxins in the blood.
Serology	The measurement of antibody concentrations in serum
Serum	The fluid component of the blood after the cells have been removed.
Signs	Observable evidence of disease in animals (“symptoms” is used in humans).
Strain	A sub-population with previously defined biological characteristics
Seroconvert	The development of antibodies in response to an antigen, natural or by vaccination.
Seroprevalence	The number of birds in a study population that have antibodies to a particular organism. The number of birds in a population who test positive for a specific antigen based on serology specimens; often presented as a percent of the total specimens tested.
Subcutaneous	Under the skin.
Systemic	Affecting the entire body.
TAS	Tasmania
Thorax	The part of the body between the neck and the liver, containing the heart and lungs, encased by the ribs.
Threatened species	Refers to the Australian Government list of threatened native species divided into the following categories as per the EPBC Act: critically endangered; endangered; vulnerable; conservation dependent
Thymus	Several lymph-gland-like organs located in the neck along the jugular veins.
Vector	A living animal agent which is capable of transmitting an infectious agent (ticks, fleas, flies mosquitoes)
Ventriculus	The gizzard
VIC	Victoria
Viraemia	The presence of virus in the blood.
Viraemic period	Period when a virus can be detected circulating in the blood.
Virulence	The disease-producing ability of a microorganism, generally indicated by the severity of the infection in the host and the ability of the agent to invade or cause damage or both to the host’s tissues.
Virulent	The degree to which an infectious agent produces adverse effects on the host; a highly virulent organism may produce severe disease, including death.
Viscera	The internal organs, particularly of the thoracic and abdominal cavities.
WA	Western Australia