Glossary

Last Modified:

Alternative Test: Test methods considered in the OIE Terrestrial Manual that are suitable for the diagnosis of disease in a local situation, and that can also be used for import/export by bilateral agreement.

At-Risk Premises (ARP): Premises located in the Control Area with susceptible animals, but none have clinical signs compatible with the FAD. Premises objectively demonstrates that it is not an Infected Premises, Contact Premises, or Suspect Premises. At-Risk Premises seek to move susceptible animals or products within the Control Area by permit. Only At-Risk Premises are eligible to become Monitored Premises.

Buffer Zone (BZ): Zone immediately surrounding the Infected Zone or a Contact Premises. The BZ is a scalable area with a width that is never less than the width of the IZ but may be much larger than the IZ. The perimeter of the BZ should be at least 2 km (~1.24 miles) beyond the perimeters of the IZ. Width is generally not less than the minimum radius of the associated IZ, but may be much larger. The size of the BZ and CA depends upon the FAD agent and circumstances of the outbreak. The BZ may initially be as large as a county, township, district, regional area, State, Tribal Nation, or other jurisdictional level. The boundaries of the BZ can be modified or redefined as needed by the circumstances of the outbreak.

Case: An individual in a population or study group identified as having a particular disease or other health related event that is being investigated, with or without clinical signs.

Case Definition: A set of diagnostic criteria that must be fulfilled in order to identify an individual as a case of a particular disease. Case definition can be based on clinical, laboratory, or combined clinical and laboratory criteria.

Clinical Case Definition: Can be used to broaden or restrict the sensitivity of a surveillance system by designating the species of animal(s) under surveillance and inclusion or exclusion of clinical signs or lesions for the disease or condition under investigation. Clinical case definition may be used to screen animals for additional testing.

Close Contact: Animal is housed with an animal that is a confirmed case of the disease in question or having a high likelihood of direct contact with the confirmed case.

Confirmatory Test: A highly specific test (high diagnostic specificity) designed to confirm the results of an earlier (screening) test, these tests are typically less rapid and more difficult to perform, are less readily available within a laboratory system because of additional expertise needed to perform the test and are more expensive than more commonly used screening tests. The ideal confirmatory test should be highly specific. This test may be performed in an official laboratory, depending on the disease agent.

Confirmed Positive Case: A case that is laboratory confirmed with a confirmatory test

Confirmed Index Case: Isolation of the pathogen (influenza A virus identified as an H5 or H7 subtype for example) and determination of pathogenicity by the NVSL (HPAI or H5/H7 LPAI for example).

Contact Premises: Premises with susceptible animals that may have been exposed to the foreign animal disease (FAD) agent, either directly or indirectly, including but not limited to exposure to animals, animal products, fomites, or people from Infected Premises. Contiguous premises near an Infected Premises may also be classified as a CP. A CP identified outside the Control Area must be surrounded by a Buffer Zone until the disposition of the CP is determined.

Containment Vaccination Zone: Emergency Vaccination Zone typically within the Control Area and may include all or part of the IZ and/or BZ. CVZ is a secondary zone designation. Quarantine and movement control requirements, surveillance requirements, and biosecurity procedures for the CA apply to the CVZ.

Control Area (CA): Consists of an Infected Zone and a Buffer Zone. The size of the CA depends upon FAD agent and circumstances of the outbreak. The CA perimeter should be at least 5 km (~3.12 miles) beyond the perimeter of the closest Infected Premises. The CA may be much larger, such as a jurisdictional unit, geographic area, or region. The size of the CA is scalable to the risk posed by the disease agent and the circumstances of the outbreak.

Dangerous Contact Animal: An animal showing no clinical signs of disease but which, by reason of its probable exposure to disease, may be subjected to disease control measures, including slaughter.

Disease: The clinical and/or pathological manifestation of infection.

DRO: Disease Reporting Officer

EMRS: Emergency Management Response System

Epidemiology: The study of a disease pattern in a population to determine prevention and control strategies.

Epidemiological Link: An epidemiological link exists when two disease positive animals share a common risk factor that explains where and when the disease agent could have been transmitted between them. An epidemiologic link could be a common herd of origin or a location where the two animals were housed together or co mingled.

Epidemiological Unit: A group of animals with the same likelihood of exposure to a pathogenic agent. In certain circumstances, the epidemiological unit may be a single animal. (WOAH)

Establishment: The premises in which animals are housed.

Exclusion Criteria: Conditions which preclude entrance of candidates into an investigation even if they meet the inclusion criteria.

FAD: Foreign Animal Disease

FADDL: USDA, APHIS, Veterinary Services, Foreign Animal Disease Diagnostic Laboratory, Plum Island, New York

Free Premises (FP): Premises outside of a Control Area and not a Contact or Suspect Premises. FP can be located within the Surveillance Zone or elsewhere in the Free Area.

Free Area (FA): The Free Area is an area not included in any CA. The FA includes a SZ but extends beyond it. The FA may also include a Protection Vaccination Zone (PVZ). *The FA is an area in which the absence of the disease under consideration has been demonstrated by meeting requirements for "surveillance to demonstrate freedom from disease/infection " as specified in Chapter 1.4 of the OIE Terrestrial Animal Health Code 2017.*

Gold Standard: Test that is independent and valid that is used to determine the true disease status of an animal and to define the sensitivity and specificity of other tests, often widely accepted as being the best available.

HCD: Highly contagious disease

Infected Individual: An individual in which a disease agent invades and multiplies in body tissue

Infectious Individual: An infected individual capable of transmitting the disease agent

Infected Premises (IP): Premises or animal location where a presumptive positive case or confirmed positive case exists based on laboratory results, compatible clinical signs, case definition, and international standards.

Infected Zone (IZ): Zone immediately surrounding the Infected Premises. The IZ will initially encompass the perimeter of all presumptive or confirmed positive premises and include as many of the Contact Premises or contiguous premises as required epidemiologically or logistically. The IZ radius may be as small as 3 km (1.86 miles) radius beyond the perimeters of the presumptive or confirmed Infected Premises or infected animal location. The size of the IZ depends upon the FAD agent and circumstances of the outbreak. The IZ may initially be as large as a county, township, district, regional area, State, Tribal Nation, or other jurisdictional level. The boundaries of the IZ can be modified or redefined as needed by the circumstances of the outbreak.

Inference group: The whole collection of units from which a unit can be selected for collecting measurements; this may not be a population of individual animals, but the units could be groups of animals, premises, records, events, or similar.

Monitored Premises (MP): Premises located in the Control Area that objectively demonstrates it is not an Infected Premises, Contact Premises, or Suspect Premises. Only At-Risk Premises are eligible to become Monitored Premises. Monitored Premises meet a set of defined criteria in seeking to move susceptible animals or products out of the Control Area by permit.

NASS: National Agricultural Statistical Service

NVSL: USDA, APHIS, Veterinary Services, National Veterinary Services Laboratory, Ames, IA

Negative Predictive Value (NPV): The probability that the animal is not diseased (healthy), given that a diagnostic test is negative. For a given sensitivity (Sn) and specificity (Sp) of a diagnostic test, NPV is negatively correlated with prevalence of disease, i.e. if prevalence of disease decreases the NPV of the diagnostic test increases and if prevalence of disease increases the NPV of the diagnostic test decreases.

Outbreak: The occurrence of disease in an agricultural establishment, breeding establishment or premises (non agriculture) where animal(s) are housed, including all buildings as well as adjoining premises, where animals are present.

Passive Surveillance: Non-systematic, opportunistic observation of clinical or subclinical suspect cases, or non-clinical cases of a population; this method relies primarily on producers and practitioners to report suspect cases.

Positive Predictive Value: The probability that the animal is diseased, given that a diagnostic test is positive. For a given sensitivity (Sn) and specificity (Sp) of a diagnostic test, PPV is positively correlated with prevalence of disease, i.e. if prevalence of disease decreases the PPV of the diagnostic test also decreases and if prevalence of disease increases the PPV of the diagnostic test also increases.

Predictive Value (Negative): Synonymous with negative predictive value (NPV) of a diagnostic test.

Predictive Value (Positive): Synonymous with positive predictive value (PPV) of a diagnostic test.

Premises: A geographically and epidemiologically defined location, including a ranch, farm, stable, or other establishment.

Prescribed Test: Test methods that are required by the OIE Terrestrial Animal Health Code or other Official Source for the international or National movement of animals and animal products and that are considered optimal for determining the health status of animals.

Presumptive Positive Case: Meets the criteria of a suspect case and further testing indicates that infection with the pathogen is likely, but the pathogen has not been isolated or positive on an officially accepted test or by an accredited laboratory. This may vary with disease, for example, Avian Influenza presumptive cases require suspect case criteria and detection of antibodies that cannot be explained with vaccination, detection of antigen, or RNA identification with PCR (see AI Surveillance plan for more details).

Prevalence: The prevalence of a disease is the proportion of a population that are cases at a point in time.

Protection Vaccination Zone (PVZ): Emergency Vaccination Zone typically outside the Control Area. The PVZ will be surrounded by a SZ. *The PVZ is consistent with the (OIE) Terrestrial Animal Health Code 2017 definition for a Protection Zone. A Protection Zone is defined by the OIE as "a zone established to protect the health status of animals in a free country or free zone, from those in a country or zone of a different animal health status, using measures based on the epidemiology of the disease under consideration to prevent spread of the causative pathogenic agent into a free country or free zone. These measures may include, but are not limited to, vaccination, movement control and an intensified degree of surveillance.*

Quarantine: Enforced isolation or restriction of the free movement of an animal or animal product, imposed to prevent an agent from spreading.

Ring Vaccination: Vaccination of all susceptible animals around a focus of infection to provide a buffer against the spread of disease.

Risk: The likelihood of occurrence and magnitude of the consequences of an adverse event; a measure of the probability of harm and the severity of the adverse effects.

Sampling Frame: List of all units available for selection in the inference group.

Screening Test: Generally performed rapidly, are usually widely available within a laboratory system, and are relatively inexpensive. These tests typically exchange lower specificity for higher sensitivity, which results in some level of false positive results. False negatives are undesirable but may occur. These tests are of high diagnostic sensitivity suitable for large-scale application.

Selected Unit: The unit that is chosen randomly or non-randomly for measurement collection. This may be an individual animal, a group of animals, a premise, a record, an event, or similar.

Sensitivity (Se or Sn) of a Diagnostic Test: Proportion of reference animals with disease that have a positive test result; this is the proportion of true positives that are correctly identified by the test.

Specificity (Sp) of a Diagnostic Test: Proportion of reference animals free of a disease that have a negative test; this is the proportion of true negatives that are correctly identified by the test.

Stamping Out: Eradication procedures based on quarantine and slaughter of all infected animals and animals exposed to infection.

Surveillance: An ongoing organized system of sample design, data collection, collation, and analysis of animal health data to support animal health/disease hazard management goals, resulting in dissemination of vital information to persons that will take action.

Surveillance Component: The organizational structure associated with the data source and collection process or mechanism (diagnostic, laboratory, field operations, support, etc.) used to investigate the occurrence of one or more animal health hazards. At least one surveillance scheme is associated with each surveillance component.

Surveillance Plan: A document describing a surveillance system to support one or more hazard management goals. A surveillance plan includes descriptions of the

surveillance components and schemes, a disease description; list of stakeholders and responsible parties along with their roles; plans for analysis, reporting, and presentation; expected implementation and associated budgeting; and performance metrics and evaluation plans needed to develop, maintain, and improve the surveillance system.

Surveillance Scheme: A concise description of the data gathering and recording events in which measurements are taken on selected units from the inference group and their environment to address one or more surveillance objectives. A complete surveillance scheme includes the surveillance objective, how the surveillance supports disease response, and the context for the surveillance activity.

Surveillance Zone (SZ): Zone established outside and along the border of the Control Area (CA). The SZ is part of the Free Area (FA). The width of the SZ should be at least 5 – 10 km (~3.12 miles to ~6.21 miles) beyond the CA. The maximum size of the SZ may be much greater.

Suspect Case (animal): Animal meets epidemiologic criterion or has clinical signs that are consistent with the disease of interest. Following epidemiological investigation, surveillance requirements, and biosecurity requirements, a SP can be designated as an At-Risk or Monitored Premises if in a Control Area, or as a Free Premises if in a Free Area.

Suspect Premises (SP): Premises under investigation due to the presence of susceptible animals reported to have clinical signs compatible with the FAD. This is intended to be a short-term premises designation.

Vaccinated Premises (VP): Premises where emergency vaccination has been performed. This is a secondary premises designation. The primary premises designation will be IP, CP, ARP, MP if located in the Control Area, or FP if located in the Free area. Vaccinated Premises may be located in the Containment Vaccination Zone, typically within the Control Area, or in the Protection Vaccination Zone, typically outside the Control Area.

Print