Active surveillance: Investigator-initiated collection of animal health related data using a defined protocol to perform actions that are scheduled in advance. Decisions about whether information is collected, and what information should be collected from which animals is made by the investigator (Hoinville, 2012).

Census: Every unit of the target population is examined.

Design prevalence: A standard hypothetical prevalence of disease specified at the herd (herd design prevalence, P*H) or at the animal level (P*A) against which to measure surveillance sensitivity (Cameron, 2012a).

Host: An animal or arthropod that is capable of being infected with, and therefore giving sustenance to, an infectious agent (Thrusfield, 2005).

Incidental (accidental or dead-end host): Does not usually transmit agent to other hosts (Thrusfield, 2005).

Infectiousness: Refers to the duration of the period when an animal is infective and the relative amount of an infectious agent that an animal can transmit. The period between infection and shedding of the agent is the parasite's prepatent period, a virus's eclipse phase, and a bacteriums latent period. The time between infection and availability of an infectious agent in an arthropod vector is the agent's extrinsic incubation period
(Thrusfield, 2005).

Passive surveillance (also referred to as "scanning surveillance"): Observer-initiated provision of animal health related data (e.g. voluntary notification of suspect disease) or the use of existing data for surveillance. Decisions about whether information is provided, and what information is provided from which animals is made by the data provider (Hoinville, 2013). So cases are reported to the investigator (often the central unit) which takes a "passive" role. A typical example is suspect case reporting as legally required in most countries.

Primary (natural) host: An animal that maintains an infection in the latter's endemic area. Since an infectious agent frequently depends upon a primary host for its long-term existence, the host is also called a maintenance host (Thrusfield, 2005).

Reservoir host: One in which an agent normally lives and multiplies, and therefore is a common source of infection to other animals; thus, it is frequently a primary host (Thrusfield, 2005).

Reservoir: Any animal species, insect, soil or combination of these in which the infectious agent normally lives and multiplies so that it can be transmitted to a susceptible animal.

Relative risk: The probability of an event occurring in one part of the population, divided by the probability of it occurring in another. Also known as risk ratio (FAO, 2014).

Risk: The likelihood of the occurrence and the likely magnitude of the biological and economic consequences of an adverse event or effect to animal or human health (Hoinville et al, 2013).

Risk-based analysis: Use of prior or additional information about the probability of hazard occurrence, including contextual information and prior likelihood of disease to revise conclusions about disease status (Hoinville, 2012).

Risk-based prioritisation: Determining which hazards should be selected for surveillance based on information about the probability of their occurrence and the extent of biologic and/or economic consequences of their occurrence (Hoinville, 2012).

Risk-based requirement: Use of prior or additional information about the probability of hazard occurrence to revise the surveillance intensity required to achieve the stated surveillance purpose (Hoinville, 2012).

Risk-based sampling: Designing a sampling strategy to reduce the cost or enhance the accuracy of surveillance by preferentially sampling strata (e.g. age groups or geographical areas) within the target population that are more likely to be exposed, affected, detected, become affected, transmit infection or cause other consequences (e.g. large economic losses or trade restrictions) (Hoinville, 2012).

Risk-based surveillance: Use of information about the probability of occurrence and the magnitude of the biological and/or economic consequence of health hazards to plan, design and/or interpret the results obtained from surveillance systems (Hoinville, 2012). Risk-based surveillance can include one or several of the following four approaches:

- Risk-based prioritisation
- Risk-based requirement
- Risk-based sampling
- Risk-based analysis

Risk of consequences: The extent of (biologic and/or economic) consequences of the occurrence of a given hazard (Hoinville, 2012).

Risk of detection: Probability of being detected by the surveillance activity.

Risk of infection: Probability of becoming infected if hazard is currently present in the population.

Risk of introduction: Probability of being infected if hazard is not currently present in the population.

Sample: A subset of the target population is examined.

Secondary (aberrant) host: A species that additionally is involved in the life-cycle of an agent, especially outside typical endemic areas (e.g. cattle infected with strains of foot-and-mouth virus that usually cycles in buffaloes). A secondary host sometimes can act as a maintenance host. (Thrusfield, 2005)

Study population: The subset of the target population from which the sample is selected.

Study sample: The study sample is a subset of the sampling frame.

Surveillance component: Specific surveillance activity conducted as part of a surveillance system.

Surveillance system: The systematic, continuous or repeated, measurement, collection, collation, analysis, interpretation and timely dissemination of animal health and welfare related data from defined populations. These data are then used to describe health hazard occurrence and to contribute

to the planning, implementation, and evaluation of risk mitigation actions (Hoinville, 2012). A system consists of at least one component. A surveillance system can focus on a hazard, e.g. surveillance of BSE, or can be broader, e.g. emerging disease surveillance system.

Susceptibility of a host depends on genetic or constitutional factors, specific immunity, and nonspecific factors that affect an individual's ability to resist infection or to limit pathogenicity. Severity of the disease resulting from such infections and the ability to maintain and transmit infection may, however, vary between the species concerned (see Hosts).

Target population: The larger population to which the study results will be generalised.

Vector: An animate transmitter of infectious agents. By common usage, vectors are defined as invertebrate animals, usually arthropods, that transmit infectious agents to vertebrates.