



Fifth session  
Geneva, 16-27 September 1996

Working paper submitted by the Czech Republic

LIST OF TERMS AND DEFINITIONS

Common understanding of the meaning of trigger terms is essential for the Ad hoc Group progress. There were different attempts to elaborate some definitions of selected important terms. However, there are many terms used in the text of the BWC and other documents. Due to our experiences we came to the conclusion that the terms should be selected and - if possible - defined. Perhaps some of the terms do not need definitions because of their general understanding or their existence in available sources. Some of the terms have different definitions according to the source. We tried to choose the most convenient ones for our purposes. Some of the terms are under consideration. These are listed without definitions. The aim of this WP is to summarize the terms appeared in the BWC and other documents and in some cases to define them. The list is not an exhaustive one and it is expressing the opinion of our experts, evaluating in some cases materials submitted by other delegations and it is open for discussion. The list of terms and definitions used in the BWC and other documents is as follows:

**AEROBIOLOGY** : (for BWC use) work with aerosols of microorganisms at open test sites - work with large scale open air release of pathogens or toxins.

**AEROSOL**: Microbial aerosols are suspensions in the air of particles consisting partially or wholly of microorganisms. Particles in the 1 - 5  $\mu$  range are easily drawn into the alveoli of the lungs and may be retained there.

**AEROSOL DISSEMINATION** :Dissemination of a solid or liquid particle suspended in a gaseous medium, solution which can be finely atomised.

**AEROSOL DISSEMINATION EQUIPMENT** : Equipment for fine atomisation and dissemination of aerosol.

**AEROSOLISATION OF BIOLOGICAL MATERIAL** : Fine atomisation of a suspension or other bacteria containing material.

**AGENT (OF DISEASE)**: A factor such as microorganism or chemical substance whose presence is essential for the occurrence of the disease.

**AGGREGATE FERMENTERS** :A set of apparatus for anaerobic enzymatic conversion of organic compounds, especially carbohydrates to simpler compounds.

**AGGREGATE FERMENTER CAPACITY** : Capacity of the apparatus for aggregate fermentation, aggregation - the progressive attachment of particles or droplets around a nucleus, thereby causing growth.

**AIRBORNE INFECTION** : A mechanism of transmission of an infectious agents by particles, dust, or droplet nuclei suspended in the air.

**ANAEROBIC CHAMBERS** : Chambers maintaining atmosphere with oxygen at very low partial pressure.

**ANIMAL AND PLANT PATHOLOGY** : Branch of science which treats of the essential nature of disease, especially structural and functional changes in tissues and organs of the animal or vegetal body which cause or are caused by disease.

**ANIMAL MODEL**: Study in a population of laboratory animals that uses conditions of animals analogous to conditions of humans to model processes comparable to those that occur in human populations.

**ANTIBIOTIC SENSITIVITY** : Sensitivity of microorganisms to antibiotics (and chemotherapeutics).

**ANTIBODY**: Protein molecule formed by exposure to a "foreign" or extraneous substance,e.g. invading microorganisms responsible for infection, or active immunization.

**ANTIGEN:** A substance that is capable of inducing specific immune response. Introduction of antigen may be by the invasion of infectious organisms, immunization, inhalation, ingestion etc.

**ANTIMICROBIAL RESISTANCE :** Resistance of microorganisms to antimicrobials (antibiotics and chemotherapeutics).

**ANTISERUM :** A serum that contains antibody or antibodies, may be obtained from a human or an animal that has been immunized naturally (by infection) or artificially.

**ANTIBIOTICS :** Agent that kills microorganisms or suppress their multiplication or growth.

**ARTHROPOD VECTORS :** A carrier that transfers an infective agent from one host to another from the family of Arthropoda.

**AUDIT:** An examination or review that established the extend to which a condition, process or performance conforms to predetermined standards or criteria. Audits may be carried out on the provision of care, compliance, completeness of records, etc.

**AUTOCLAVES :** An apparatus for sterilization by steam under pressure and high temperatures.

**BACTERIOLOGY :** The science that treats of bacteria.

**BIAS:** Deviation of results or inferences from the truth, or process leading to such deviation.

**BIOCONTAINMENT LEVEL :** see BL 3 and BL 4.

**BIOCHEMISTRY :** The chemistry of living organisms and of vital processes.

**BIOLOGICAL AEROSOL :** Aerosol containing biological material.

**BIOLOGICAL DEFENSE FACILITY**

**BIOLOGICAL DEFENSE PROGRAMME :** Activities related to protection against the use of microbial or other biological agents or toxins for hostile purposes or in armed conflict.

**BIOLOGICAL SAFETY CABINETS** : Cabinets where biological hazard is restricted by specific technical means.

**BIOREACTORS** see FERMENTERS

**BIOSAFETY LEVEL REQUIRMENTS** : see BL 3 and BL 4

**BIOSENSORS** : Organ or cell that responds to a physical or chemical (biochemical) stimulus by generating an impulse that can be measured or otherwise interpreted.

**BIOTECHNOLOGY** : The use (or science) of microorganisms on an industrial scale to produce drugs, bulk foodstuffs or other products.

**BIOLOGICAL SAFETY CABINETS** : BSC are the principal items of equipment for providing physical containment, they minimize the risk of airborne infections by preventing the escape of aerosols into the laboratory environment. There are three types of BSC: Classes I,II and III. Their effectiveness depends on air flow, containment capability and integrity of the HEPA filters.

**BL 3** : The Containment laboratory-Biosafety Level 3 is designed and provided for work with Risk Group 3 microorganisms,i.e. those that present a high risk to laboratory workers but a low risk to the community. Laboratories in this category should be registered or listed with the national or other appropriate health authorities (WHO recommendation). Basic requirements for BL 3 : room sealable for decontamination, ventilation:inward air flow, filtered air exhaust, double-door entry, autoclave:on site and in the laboratory room, biological safety cabinets.

**BL 4** : The Maximum Containment laboratory-Biosafety level 4 is designed for work with infectious materials or experiments in microbiology that present,or are suspected of presenting, a high risk to both the laboratory worker and the community. Laboratories in BL 4 should be under the control of national or other appropriate health authorities (WHO recommendation). Basic requirments for BL 3 : isolation of laboratory, room sealable for decontamination, ventilation:inward air flow, mechanical independent, filtered air exhaust, double door entry, airlock with shower, effluent treatment, autoclave:double ended on site and laboratory room, BSC Class III.

**CASE FATALITY RATE**: The proportion of cases of disease which are fatal within a specified time (abbr. for BWC use: ratio of dead to sick persons - animals).

(expressed in percentage) =  $\frac{\text{Number of diagn.cases of that disease}}{\text{-----}} \times 100$

CAUSATIVE AGENT : Agent that causes any disease, injury or changes in function or structure of the body.

CELL DISRUPTIVE EQUIPMENT : Equipment used to break cell integrity.

CENTRIFUGAL SEPARATORS : Centrifugal apparatus for separation of material with different density (specific weight).

CONTAINMENT : Prevention of the spread of agents outside the laboratory.

CONTAGIOUSNESS : Potential to be transmitted to (or to invade) the body. Contagious - in common usage, "highly infectious". Capability to be transmitted from a sick person (animal) to healthy person (animal)

CONTROL OF COMMUNICABLE DISEASES : System of primary and secondary measures and checking procedures to control of communicable diseases.

CULTIVATION OF MICROORGANISMS IN CELL LINES: special procedures for multiplication of bacteria or viruses in live medium (cell lines).

CULTURE COLLECTIONS : Maintenance in vitro of strains of microorganisms with aim to preserve their original quality.

DEATH RATE (SYN: MORTALITY RATE): An estimate of the proportion of the population that dies during specified period. The numerator is the number of persons dying during the period, the denominator is the average size of the population usually the mid year population.

=  $\frac{\text{Number of deaths during a specified period}}{\text{-----}} \times 10^n$

population

- 6 -

DECONTAMINATION : The freeing of a person or an object of some contaminating substance (gas, radioactive material, infectious material)

DISINFECTION: Killing of infectious agents outside the body by direct exposure to chemical or physical agents. Disinfection is necessary only for diseases spread by indirect contact; steam sterilization or incineration is desirable in the case of contamination by highly infectious agents.

DIAGNOSTIC FACILITY : The facility which is to carry out biological operation only for the purpose of isolation, diagnosis and identification of microorganisms, viruses and toxins, including the production of the reagents, which are related to the diagnosis, such as antigens and antibodies.

DISSEMINATING THE CAUSATIVE AGENT : Spread of the causative agents.

DISSEMINATION :Distribute over a considerable area.

DNA : Deoxyribonucleic acid, the molecule which carries the genetic information for the most organisms.

DOUBLE-ENDED AUTOCLAVE : Type of autoclave enabling filling of contaminated stuff from one side (room) and taking the sterilized one from the other side (another room). Eliminates the cross contamination.

ELECTROPHORETIC TECHNIQUES : Techniques which use electrophoresis for separation of complex mixtures of macromolecules.

ELIMINATION: Reduction of case transmission to a predetermined very low or zero level;e.g. elimination of tuberculosis as a public health problem. The etiological

agent may be still present in the human or animal population.

ELIMINATION OF TOXINS : Expulsion or extrusion of toxins from the environment (inner or outer).

EMERGING AND REEMERGING DISEASES : "Emerging diseases" are those whose incidence in humans has increased in the past two decades, or threatens to increase in the near future. "Reemergence" is the reappearance of known disease after a decline in incidence.

- 7 -

ENDEMIC DISEASE: The constant presence of a disease or infectious agent within a given geographic area or population group.

ENTOMOLOGY : The branch of science concerned with study of insects.

ENVIRONMENTAL SAMPLING : Collection of sample from environment.

ENZYMES : A protein molecule that catalyses chemical reactions of other substances without being destroyed or altered upon completion of the reaction.

EPIDEMIC: The occurrence of cases of an illness or other health related events in excess of normal expectancy within a specified territory and time. Even two cases of a rare disease associated in time and place may be sufficient evidence to be considered as an epidemic.

EPIDEMIC CURVE: A graphic plotting of the distribution of cases by time of onset.

EPIDEMIOLOGICAL HYPOTHESES : A suggested explanation for a group of facts or phenomena, either accepted as a basis for further verification (working h.) or accepted to be true, pertaining to epidemic process.

EPIDEMIOLOGICAL STUDIES OF INFECTIOUS DISEASES: The studies of the distribution and determinants of

infectious diseases including surveillance, observation, hypothesis testing, analytic research and experiments.

EPIDEMIOLOGY : The science concerned with the study of the factors determining or affecting the frequency and distribution of diseases, injuries, and other health related events and their causes in a defined human population for the purpose of establishing programs to prevent and control their development and spread.

EPIZOOTOLOGY : The science concerned with the study of the factors determining or affecting the frequency and distribution of diseases, injuries, and other health related events and their causes in a defined animal population for the purpose of establishing programs to prevent and control their development and spread.

EPIZOOTIC : An outbreak of disease in the population of animals.

- 8 -

ERADICATION OF DISEASE: Termination of transmission of infection by extermination of the infectious agent through surveillance and containment. The only disease eradicated is Smallpox. See also

ELIMINATION.

ETIOLOGY : Causality; in common usage cause.

EXPLOSIVE TEST CHAMBERS

FACILITY :The means or equipment facilitating the performance of any action. "Facility" means any "site" or "unit".

FATALITY: see Case fatality rate (abbr. for BWC use: ratio of dead to sick persons - animals).

FERMENTATION : The breakdown of organic substances by organisms with release of energy, the anaerobic

conversion of organic substances, especially carbohydrates to a simpler compound.

FERMENTER CAPACITY : Capacity of the fermentation equipment to produce an amount of converted compound in a unit of time.

FERMENTERS/BIOREACTORS : Equipment to perform a fermentation.

FREEZE DRYING EQUIPMENT : Equipment using freeze drying for production of specific compounds (to preserve material without water). In the microbiology used for storage of microorganisms in culture collections.

GENETICS: The branch of biology dealing with heredity and variation of individual members of a species.

GENETIC ENGINEERING : The manipulation of DNA using enzymes which can split the DNA molecule and rejoin it to form a hybrid molecule; the technique allows the by-passing of all the biological restraints to genetic exchange and mixing, and may even permit the combination of genes from widely differing species.

GENETIC MANIPULATION : A technology used to alter the genetic material of living cells of organisms in order to make them capable of producing new substances or performing new functions.

- 9 -

GENETIC MANIPULATION ON AGENTS CONTAINING PATHOGENS AND TOXINS The aim of such activity may be the attempt to enhance or reduce the virulence of strains, enhance or change the way of multiplication and/or resistance in the environment.

GENETIC MODIFICATION see GENETIC MANIPULATION

GOOD MANUFACTURING PRACTICE : Internationally agreed rules assuring high quality and safety of vaccines and other medicinal products. All the elements in established practice that will collectively lead to final products or services consistently meeting expected specifications.

HEPA FILTERS : High-efficiency particulate air filter. Filters suitable for biological safety cabinets (and other microbiological operations). Ideally not more than three particles should be recovered when the filter is challenged with a dose of 100 000 particles.

HERBICIDE RESISTANCE : Resistance of plants to herbicides (agents that are destructive to weeds or cause an alteration in their normal growth)

HIGH CONTAINMENT FACILITIES : Facilities containing areas protected according to the standard for maximum containment laboratories specified in 1993 WHO laboratory biosafety manual (Biosafety 4 or equivalent standards).

HIGH INFECTIVITY AND VIRULENCE : High potential of microorganisms to invade and multiply in a body tissues, and the degree of pathogenicity of a microorganism as indicated by the severity of the disease.

HOST: A person or animal, including birds and arthropods, that affords subsistence or lodgment to an infectious agent under natural conditions.

HUMAN PATHOLOGY : That branch of human medicine that treats of essential nature of the disease, especially of the structural and functional changes in tissues and organs of the body which causes or are caused by disease.

IMMUNITY (ACTIVE) : Resistance developed in response to stimulus by an antigen (infecting agent or vaccine) and usually characterized by the presence of antibody produced by the host.

- 10 -

IMMUNITY (PASSIVE) : Immunity conferred by an antibody produced in another host and acquired naturally by an infant from its mother or artificially by administration of antibody-containing preparation (antiserum or gamaglobulin).

IMMUNIZATION (SYN:VACCINATION) : Protection of susceptible individuals from communicable disease by administration of a living modified agent (as in yellow fever), a suspension of killed organisms (as in whooping cough), or an inactivated toxin (as in tetanus). Temporary passive immunization can be produced by administration of antibody in the form of immunoglobulin in some conditions.

INCIDENCE : Number of new cases of a disease in a defined population (human or animal) within the specified period of time

INCIDENCE RATE (morbidity):

$$= \frac{\text{Number of new cases in specified period}}{\text{Number of persons (animals) exposed to risk during this period}} \times 10^n$$

In the dynamic population denominator is the average size of the population, often estimated population at the mid period.

INCINERATOR : Device or equipment for burning to ashes, cremation, device in which solid, semi-solid, liquid or gaseous material is burned as a means of disposal.

INCUBATION PERIOD (syn:latent period): 1. The time interval between invasion by an infectious agent and appearance of the first sign or symptom of the disease in question.

2. In a VECTOR the period between the entry of the infectious agent into the vector and the time at which vector becomes infective, i.e. transmission of the inf. agent from the vector to a fresh final host is possible (extrinsic incubation period).

Note: In infectious disease epidemiology, the latent period corresponds to the period between exposure and the onset of infectiousness (this may be shorter or longer than the incubation period).

INFECTION: The invasion and development or multiplication of an infectious agent in the body of man or animals. Infection is not synonymous with infectious disease; the result may be inapparent or manifest. It is usually followed by the antigen - antibody response.

INFECTION, LATENT PERIOD OF : The time between initiation of infection and first shedding or excretion of the agent.

INFECTIVITY : 1. The characteristic of the disease agent that embodies capability to enter, survive, and multiply in the host. A measure of infectivity is the secondary attack rate.

2. The proportion of exposures, in defined circumstances that result in infection. (abbr. for BWC use: ratio of infected (man, animal, plant) to total number of exposed (man, animal, plant)).

INFECTIVE DOSE : see infectious dose

INFECTIOUS DOSE : That (smallest) amount of pathogenic microorganisms that will cause infection in susceptible subjects (man, animal, plant), abbr. ID.

INOCULATION : Introduction of microorganisms, infective material, serum or other substances into tissues of man, animals or living plants, or culture media; introduction of a disease agent into a healthy individual that results in a disease, introduction of a disease agent e.g. vaccine, into a healthy individual to produce a mild form of the disease followed by immunity.

INTERNAL QUALITY CONTROL : The system of checking procedures that assures high quality of products or results, in manufacturing or laboratory activities.

INTERNATIONAL HEALTH REGULATIONS : Internationally accepted relevant rules determining primary and secondary preventive measures for prevention of transmission of selected contagious diseases.

INTOXICATION : A state of impaired functioning of the organism resulting from penetration of toxic substances (including toxins) into inner environment.

LEVEL OF IMPACT : The ratio between the area of impact on the plants and total area of crops.

- 12 -

LOW EFFECTIVE DOSE : That low quantity of a drug or agent which will produce the effects for which it is administered.

LOW INFECTION DOSE : That low amount of pathogenic microorganisms that will cause infection in susceptible subjects. (Highly virulent strains require low infection dose to infect the individuals).

LYOPHILIZATORS : Device for the creation of a stable preparation of a biological substance by rapid freezing and dehydration of the frozen product under high vacuum.

MICROBIOLOGY : Science that deals with the study of microorganisms, including algae, bacteria, fungi, protozoa, and viruses.

MICROENCAPSULATION EQUIPMENT : Equipment to form microcapsules which contain a substance not normal to the part.

MILITARY MEDICAL PROGRAMME : Special medical programme on protection from diseases or injury to ensure physical and psychological health of military personnel, including prophylaxis and treatment programme on weapons injury, military public health programme under special environment, military programme against infections and usual diseases, programme of medical services etc.

MILITARY RELATED BIODEFENCE PROGRAMME : The biological defense programme for military purposes.

MORBIDITY : A disease condition or state; the incidence or prevalence of a disease or of all diseases in a population. See morbidity rate and incidence rate.

MORBIDITY RATE : A rate in which the numerator is a number of cases and denominator is a definite population in definite time span. See incidence rate (abbr. for BWC use: rate of sick to healthy person or animals).

MORTALITY: See mortality rate and death rate

MORTALITY RATE : A rate in which the numerator is a number of deaths and denominator is a definite population in definite time span. See death rate (abbr. for BWC use: rate of dead to healthy persons or animals).

- 13 -

OPEN AIR DISSEMINATION : Spread of a material in an open air (outer environment).

OPEN-AIR RELEASE OF PATHOGENS OR TOXINS : Spread of pathogens or toxins in an open air (outer environment).

ORBITAL OR RECIPROCAL SHAKERS : Laboratory equipment to produce homogenous mixture or suspension.

OUTBREAK : Sudden, violent or spontaneous occurrence, esp. of communicable disease.

PARTICLE SIZE ANALYZER : Equipment for analysis of particle size distribution.

PATHOGENICITY :The property of an organism that determines the extent to which overt disease is produced in an infected population, or the power of an organism to produce the disease. It could be measured by the ratio of the number of persons developing clinical illness to the number exposed to infection. See also VIRULENCE, with which pathogenicity is sometimes confused.

PATHOGENS : Microorganisms endowed with the quality of producing or the ability to produce pathologic changes or disease.

PCR - POLYMERASE CHAIN REACTION : Chain reaction of enzymes that catalyses polymerization, especially nucleotides to polynucleotides, used for diagnostic purposes. A technique for generating "in vitro", an increased quantity of target segment of DNA.

PESTICIDES/INSECTICIDES : Poisons used to destroy pests of any sort; the term includes fungicides, herbicides, insecticides, rodenticides etc.; poisons used to destroy insects.

PHARMACEUTICAL SCIENCES : Sciences dealing with the preparation, dispensing, and proper utilization of drugs.

PHYTOCHROMES : Plant pigments that become activated by red light, and their activated form initiates growth, germination, flowering etc.

PRESUMED USE OF A BIOLOGICAL WEAPON

- 14 -

PREVENTION OF COMMUNICABLE DISEASE : Any measures devised to avert the occurrence of disease, by primary and secondary means.

PRION : An infectious agent of unknown etiology which causes spongiform encephalopathies of humans and animals.

PRODUCTION CAPABILITY

PRODUCTION MICROBIOLOGY : Includes production of human and animal vaccines, production of microorganisms for diagnostic and scientific purposes, drugs and bulk foodstuffs production.

PROFICIENCY TESTING : An external assessment of the ability of staff to undertake a series of prescribed tests.

ProMED : Programme to Monitor Emerging Diseases. WHO global programme of monitoring infectious diseases involving experts from all parts of the world.

PROPHYLAXIS : The prevention of disease, usually by administering specific drugs, chemicals or mechanical means. In the case of infectious diseases administration of antibiotics, immunoglobulins and in some instances vaccines, exceptionally drugs. Prophylaxis (in the contrary to prevention of infection) is started after exposure of man or animal to infectious agent or toxin (e.g.during the incubation period).

QUALITY ASSURANCE :System of procedures, checks, audits, and corrective actions to ensure that all research, testing, monitoring, sampling, analysis, and other technical and reporting activities are of the highest achievable quality.

QUALITY ASSESSMENT-PROFICIENCY TESTING : Quality assessment is a system in which specimens of known but undisclosed content are introduced into the laboratory and examined by the staff using the same procedures as would normally examine patient's specimens of the same type. Usually organized externally.

QUALITY CONTROL : The part of quality assurance programme which consist of retrospective tests or measures that must be completed with satisfactory result before proceeding further in a given process, and which demonstrates compliance with certain defined limits and specifications.

- 15 -

QUALITY MANUAL : A document stating the quality policy, quality system, and quality practices of an organization.

QUALITY MONITORING :The part of quality assurance concerned with maintenance and improvement of quality, that deals with the identification and use of indicators to detect variations from standards or specifications.

QUARANTINE : Restriction of the activities of well persons or animals who have been exposed to a case of

communicable disease during its period of communicability (i.e.contacts) to prevent disease transmission if infection should occur, for a period of time not longer than the longest usual incubation period of that disease.

RE-EMERGING DISEASES : Diseases in the past eliminated or controlled occurring nowadays with higher frequency.

RECOMBINANT ANTIGENS : Antigens produced by recombinant process (genetic engineering).

RECOMBINANT DNA : DNA formed by joining "in vitro" segments of DNA from different organisms.

SENSITIVITY : The limit of detectable, specific reactions using certain reagents or test systems.

SHAKING INCUBATORS : An apparatus for maintaining a constant and suitable conditions for the development of microbial or cell cultures increasing the growth or a compound production by light movement.

SHORT LIFE CYCLE

SITE : "Site" means an area , structure or building containing one or more "units" with auxiliary and associated infrastructure.

SPECIFICITY : The ability of a reagent or test system to react selectively. Ideally, it represents the absence of false-positive reactions.

SPRAY DRYING EQUIPMENT

STABILITY IN THE ENVIRONMENT : Ability of the agent to retain its properties and resist temperature, humidity and insolation.

- 16 -

STOCK BREEDING (multiple cloning, gene manipulation) : process of large scale bearing offspring from a common ancestor, process of producing plants or animals by appropriate method of reproduction.

STUDIES OF PATHOGENICITY AND VIRULENCE : Studies to determine

1. the quality of producing or the ability to produce pathologic changes or disease;

2. the quality of being poisonous, especially the degree of virulence of a toxic microbe or of poison.

SURVEILLANCE : Continuous analysis, interpretation, and feedback of systematically collected data, generally using methods distinguished by their practicality, uniformity, and rapidity rather than by accuracy and completeness. By observing trends in time, place and persons, changes can be observed or anticipated and appropriate action, including investigative or control measures, can be taken.

SYMPTOMS : Any subjective evidences of disease or a patient's condition indicative of some bodily or mental state.

SYNDROME : A symptom complex in which the symptoms and/or signs coexist more frequently than would be expected by chance on the assumption of independence. The sum of signs of any morbid state.

TEST CHAMBERS

THRESHOLD QUANTITIES : Minimum quantities that produce detectable effect.

TOLERANCE TO ABIOTIC FACTORS : The ability to endure unusually large doses of abiotic factors.

TOXICITY : The quality of producing or the ability to produce pathologic changes or disease; the quality of being poisonous, especially the degree of virulence of a toxic microbe or of poison.

TOXICOLOGY : The scientific discipline involving the study of actual or potential danger presented by the harmful effects of chemicals (poisons) on living organisms and ecosystems, of the relationship of such harmful effects to exposure, and of the mechanisms of action, diagnosis, prevention, and treatment of intoxication.

TOXIN : A poison, frequently used to refer specifically to a protein produced by higher plants, certain animals, and pathogenic microorganisms, which is highly toxic for other living organisms.

TRANSMISSIBILITY : Ability to be transferred, as of disease from one individual to another.

TRANSMISSION (of infection) : Any mechanism by which an infectious agent is spread from a source or reservoir to another person or animal. Airborne transmission is the dissemination of microbial aerosols to a suitable portal of entry , usually the respiratory tract. Microbial aerosols are suspensions in the air of particles consisting partially or wholly of microorganisms. They may remain suspended in the air for long periods of time, some retaining and others losing infectivity or virulence. Droplet nuclei are usually the small residues that result from evaporation of fluid from droplets emitted by infected host. They may also be created purposely by a variety of atomizing devices. They usually remain suspended in the air for long periods of time.

UNIT : "Unit" means a combination of those items of equipment necessary for the development, production (processing) and stockpiling of biologically active materials, or for biological defense programmes.

UNUSUAL OUTBREAK : An outbreak that is unexpected within the prevailing context of biological, ecological, social and environmental parameters.

ULTRAFILTRATION EQUIPMENT : Equipment for filtration through filter with minute pores, thus allowing the separation of extremely minute particles e.g. viruses (less than 1  $\mu$ ).

VACCINE : Immunobiological substance used for active immunization by introducing into the body a live modified, attenuated, or killed inactivated infectious

- 18 -

organism, or its toxin, or a purified part of it. Some vaccines are prepared synthetically or by genetic engineering. The vaccine is capable of stimulating immune response by the host, who is thus resistant to infection.

VALIDATION : The process of establishing that a method is sound.

VECTOR : In infectious disease epidemiology, an insect or any living carrier that transports an infectious agent from an infected individual or its wastes to a susceptible individual or its food or immediate surroundings.

VETERINARY SCIENCE : Branch of science dealing with the disease and other disorders of animals.

VERIFICATION : Confirmation by examination and provision of evidence that specified requirements have been met. Process of prove to be true, confirmation.

VIROIDS : Any of class of infectious agents consisting of small strand of RNA not associated with any protein, known to cause several plant diseases.

VIRULENCE : The degree of pathogenicity; the disease-evoking power of a microorganism in given host.

VIRUSES : One group of minute infectious agents, characterized by lack of independent metabolism and by the ability to replicate only within host cells.

WORK WITH LISTED PATHOGENS AND TOXINS : Any manipulation with them, inter alia in such fields as maintaining culture collections, examining the properties of listed

agents and toxins, development of methods and means of their detection and prophylaxis, as well as in the field of production, aerobiology, genetic modification and toxinology.

ZOONOSIS : An infection or infectious disease transmissible under natural conditions from vertebrate animals to humans. Examples include rabies and plague. May be enzootic and epizootic.

-----

\_\_\_\_\_