Information sheet

Waste management

Defining clinical waste

This information sheet clarifies the definition of clinical waste in the Environmental Protection (Waste Management) Regulation 2000 (the Regulation).

Definitions

Clinical waste means waste that has the potential to cause disease, including the following:

- animal waste;
- discarded sharps;
- human tissue waste;
- laboratory waste.

Animal waste

Animal waste means any discarded materials, including carcasses, body parts, blood or bedding, originating from animals contaminated with an agent infectious to humans or from animals inoculated during research, production of biologicals or pharmaceutical testing with infectious agents[1].

Teeth, hair/fur, claws/hooves or bone fragments are not considered to be animal body parts for the purpose of managing clinical and related waste under the Regulation.

Animals that have been put down because of old age or injury do not have to be disposed of as clinical waste. They can be disposed of through local government collection services (if pick-ups are provided) or given to the owner if requested.

Biologicals refers to preparations that are made from living organisms and their products, which are used in diagnosing, immunising or treating humans or animals. This includes, but is not limited to:

- serums;
- vaccines;
- antigens; and
- antivenins.

Discarded sharps

Sharps means an object or device having sharp points, protuberances or cutting edges capable of causing a penetrating injury to humans.

[1] More information on infectious agents is given in the section on human tissue waste. For a full list of infectious diseases in animals see the Schedule in the *Exotic Diseases in Animals Regulation 1998*.
http://www.legislation.qld.gov.au/LEGISLTN/CURRENT/E/ExoticDisAnR98_01B_021101.pdf

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This waste includes discarded hypodermic, intravenous or other medical needles, Pasteur pipettes, disposable dental picks and drill bits, scalpel blades, lancets, scissors, glass slides and broken laboratory glass.

In order for an item for be defined as a sharp, it does not have to have been in contact with human blood, body fluids or an infectious agent.

However, the area of sharps generation can influence how the waste is managed for disposal. For instance, a hypodermic needle that has been used to give a patient a tetanus injection would be disposed of in a yellow-coloured sharps container for clinical waste. However, a sharp generated from an oncology ward which had been used to inject cytotoxic drugs would be disposed of as cytotoxic waste into a purple-coloured sharps container and a sharp which had contained radioactive material would be disposed of into a red coloured radioactive container.

All sharps from premises generating clinical or related waste must be disposed of in a container that complies with the relevant Australian Standards.

Human tissue waste

Human tissue waste means the following -

- tissue, blood, blood products and other body fluids that are removed from a person during surgery, an autopsy or another medical procedure;
- tissue, blood, blood products and other body fluids that are removed from a person during post-operative care or treatment;
- specimens of tissue, blood, blood products and other body fluids and containers in which the specimens are kept;
- discarded material saturated with, or containing, free-flowing blood and other body fluids.

Wastes categorised as human tissue waste include discarded waste human blood, discarded waste human blood components (serum and plasma), containers of free-flowing blood or blood components, or discarded material heavily contaminated with blood or blood components (whether free-flowing or dried).

Waste human blood and its components, including expired stocks from blood banks, is considered to be clinical waste and must be managed according to the legislative requirements for clinical waste.

Human body fluids such as saliva, mucus, pleural fluid, cerebrospinal fluid, pericardial fluid and any other fluid that is visibly contaminated with blood, and all body fluids generated from circumstances where there is potential for the presence of infectious agents, are included in this category. Urine, faeces and vomitus are not generally included as clinical waste, unless they originate from a person with a known infectious disease or are visibly contaminated with blood.

However, waste items that may be slightly contaminated with dried blood should not be considered to be clinical waste by generating premises. This may include a light blood smear on a disposable gown or a spot of blood on cotton wool from a blood test.
Blocks of tissue that have been fixed for cytological and/or histological examination, in paraffin or a similar embedding material that prevents material leaching into the environment, may be discarded as general waste. The chemical fixatives used are likely to destroy any potential pathogens in the tissue block.

If managed appropriately, sanitary hygiene waste is not considered to be clinical waste, unless it has been generated in an isolation area or by a person known to have an infectious disease.

Individual premises can, however, still develop their own infection control policies for this waste, especially in consideration of the Infection Control Principles of Standard and Additional Precautions (NHMRC 1996).

Infectious agent
Infectious agent means an organism, including a micro-organism or worm, that causes disease or another adverse health impact in humans. When used under the provisions of the Regulation relating to clinical or related waste, the term *infectious agent* includes organisms that cause notifiable diseases[2], controlled notifiable diseases or infectious animal diseases[1], including the following:

- Amoebiasis
- Anthrax
- Australian lyssavirus (including bat lyssavirus)
- Avian influenza virus
- Bovine spongiform encephalopathy (mad cow disease)
- Brucellosis (due to *Brucella abortus* or *B. melitensis*)
- Cholera
- Colibacillosis
- Dermatophilosis
- Diphtheria
- Encephalitis
- Food poisoning in two or more associated cases, caused by:
    - Camphylobacter infection
    - E.coli infection
    - Shigella infection
    - Yersiniosis infection
- Giardia infection
- Haemophilus influenzae
- Hepatitis (A; B; C; non-A; non-B)
- Human Immunodeficiency Virus
- Legionellosis
- Leprosy
- Malaria
- Measles
- Meningitis
    - Aseptic
    - Haemophilus
    - Meningococcal
    - Other
- Mumps
- Newcastle disease
- Pertussis
- Poliomyelitis
- Rubella
- Psittacosis
- Rat bite fever
- Ringworm
- Scarlet fever
- Smallpox
- Staphlococcal infection
- Streptococcal infection
- Syphilis
- Toxoplasmosis
- Tuberculosis (all forms)
- Typhoid
- Typhus (all forms)
- Yellow fever

[2] A full list of notifiable and controlled notifiable diseases can be found in the *Health Regulation 1996* (http://www.legislation.qld.gov.au/LEGISLTN/CURRENT/H/HealR96.pdf).

Laboratory waste

Laboratory waste means a specimen or culture discarded in the course of dental, medical or veterinary practice or research, including material that is, or has been contaminated by, genetically manipulated material or imported biological material.

This waste includes cultures and stocks of infectious agents (as outlined above), and associated biologicals, cultures and stocks from medical, research or pathological laboratories, wastes from the production of biologicals, discarded live or attenuated vaccines or culture dishes, and devices used to transfer, inoculate or mix cultures.

Cultures and stocks refer to systems that are used to grow and maintain infectious agents *in vitro*. This includes, but is not limited to:

- nutrient agars, gels and broths;
- human and primate cell lines; and
- impure animal cell lines.

Culture dishes and devices used to transfer, inoculate or mix cultures refers to items that have come into contact with high concentrations of infectious agents and may include:

- plastic or glass plates, flasks, vials, beakers, jars and tubes;
- inoculation wires and loops;
- stirring devices;
- stoppers and plugs;
- filtering devices; and
- materials used to clean and disinfect items.

Further information

Other information sheets in this series include:

Clinical or related waste management
Clinical or related waste storage
Clinical or related waste treatment and disposal
Determining whether waste is “clinical waste”
Managing sanitary hygiene waste
Pharmaceutical and cytotoxic waste management
Waste management laws

If you generate, transport or treat clinical waste you may be required to obtain a development approval[3] and become a registered operator with the relevant administering authority. Please refer to the EPA Information Sheet *Requirement to become a registered operator to carry out certain ERAs*.

For copies of EPA supporting information, visit the website at www.epa.qld.gov.au.
Advice and support are available through a statewide network of regional and district EPA offices. Contact details are available on the above website and in the White Pages.

[3] Development approvals are legally binding agreements (under the *Integrated Planning Act 1997*) that outline the holder’s commitment to protect the environment and the EPA’s approval of activities operating in an acceptable environmental manner.