Protocol for cleaning blood and bodily fluid spills

Health services should have management systems in place for dealing with blood and body substance spills. Protocols should be included in procedural manuals, and emphasised in ongoing education or training programs.

- The basic principles of blood and body fluid/substance spills management are:
- Standard precautions apply, including use of personal protective equipment (PPE), as applicable
- Spills should be cleared up before the area is cleaned (adding cleaning liquids to spills increases the size of the spill and should be avoided)
- Generation of aerosols from spilled material should be avoided.

Using these basic principles, the management of spills should be flexible enough to cope with different types of spills, taking into account the following factors:

- The nature (type) of the spill (for example, sputum, vomit, faeces, urine, blood or laboratory culture)
- The pathogens most likely to be involved in these different types of spills – for example, stool samples may contain viruses, bacteria or protozoan pathogens, whereas sputum may contain Mycobacterium tuberculosis
- The size of the spill – for example, spot (few drops), small (10cm) 10>
- The type of surface – for example, carpet or impervious flooring
- The location involved – that is, whether the spill occurs in a contained area (such as a microbiology laboratory), or in a public or clinical area of a health service, in a public location or within a community premises
- Whether there is any likelihood of bare skin contact with the soiled (contaminated) surface.

Cleaning spills – equipment

Standard cleaning equipment, including a mop, cleaning bucket and cleaning agents, should be readily available for spills management. It should also be stored in an area known to all.

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This is particularly important in clinical areas.

To help manage spills in areas where cleaning materials may not be readily available, a disposable 'spills kit' could be used, containing a large (10 L) reusable plastic container or bucket with fitted lid, containing the following items:

- Appropriate leak-proof bags and containers for disposal of waste material
- A designated, sturdy scraper and pan for spills (similar to a 'pooper scooper')
- About five sachets of a granular formulation containing 10,000 ppm available chlorine or equivalent (each sachet should contain sufficient granules to cover a 10- cm diameter spill)
- Disposable rubber gloves suitable for cleaning (vinyl gloves are not recommended for handling blood)
- Eye protection (disposable or reusable)
- A plastic apron
- A respiratory protection device, for protection against inhalation of powder from the disinfectant granules or aerosols (which may be generated from high-risk spills during the cleaning process).
- Destroyed by incineration
- Immersed in sodium hydroxide or sodium hypochlorite for 1 hour, rinsed and placed in a pan of clean water, and sterilised on an 18-minute cycle.

Single-use items in the spills kit should be replaced after each use of the spills kit.

With all spills management protocols, it is essential that the affected area is left clean and dry.

Sodium hydroxide (caustic soda) spills kits should be available for areas at risk for higher-risk Creutzfeldt–Jakob disease (CJD) spills, such as in neurosurgery units, mortuaries and laboratories.

Cleaning spills – procedures

In clinical areas, blood and body fluid/substance spills should be dealt with as soon as possible. In operating rooms, or in circumstances where medical procedures are under way, spills should be attended to as soon as it is safe to do so.

Care should be taken to thoroughly clean and dry areas where there is any possibility of bare skin contact with the surface (for example, on an examination couch).

PPE should be used for all cleaning procedures, and disposed of or sent for cleaning after use. Hands should be washed and dried after cleaning.

Where a spill occurs on a carpet, shampoo as soon as possible. Do not use disinfectant. Steam cleaning may be used instead.

Wash hands thoroughly after cleaning is completed.

Cleaning spots or small spills

Spots or drops of blood or other small spills (up to 10 cm) can easily be managed by wiping the area immediately with paper towels, and then cleaning with warm water and detergent, followed by rinsing and drying the area. Dry the area, as wet areas attract contaminants.

A hospital-grade disinfectant can be used on the spill area after cleaning.

Cleaning large spills

Where large spills (more than 10 cm) have occurred in a 'wet' area, such as a bathroom or toilet area, the spill should be carefully washed off into the sewerage system using copious amounts of water and the area flushed with warm water and detergent.

Large blood spills that have occurred in 'dry' areas (such as clinical areas) should be contained and generation of aerosols should be avoided.

Granular formulations that produce high available chlorine concentrations can contain the spilled material and are useful for preventing aerosols. A scraper and pan should be used to remove the absorbed material. The area of the spill should then be cleaned with a mop, and bucket of warm water and detergent. The bucket and mop should be thoroughly cleaned after use and stored dry.

Sodium hypochlorite (bleach)

It is generally unnecessary to use sodium hypochlorite for managing spills, but it may be used in specific circumstances. It is recognised, however, that some healthcare workers and members of the public may feel more reassured that the risk of infection is reduced if sodium hypochlorite is used.

Healthcare workers and members of the public should be aware that there is no evidence of benefit from an infection control perspective.

Hypochlorites are corrosive to metals and must be rinsed off after 10 minutes and the area dried.