Handling infected cadavers

Introduction

Handling infected cadavers may pose a risk to healthcare workers, funeral directors and their staff. Modern funeral practices put complex demands on practitioners and funeral workers, who need a wide knowledge of disposal procedures and regulations.

Previously guidance on this subject has been poorly implemented, resulting in inconsistent advice and inappropriate practices. This is compounded by individual hospitals having differing policies and practices.

The Health and Safety Executive has issued guidelines on handling bodies with infections (www.hse.gov.uk). This comprehensive guidance applies to all organisations involved in the handling of the deceased.

The information provided in this chapter, and drafted at the request of the Association of Funeral Directors, deals with communication between the healthcare organisations and the funeral directors and their staff.

Code of practice

A model Code of practice should be the starting point for the development of a local policy in an NHS trust. A model Code of practice was developed by Dr Surinder Bakhshi in 2004 on behalf of Birmingham Health Authority, with the co-operation of local funeral directors. The Code of practice developed by Dr Bakhshi provides the basis for this chapter, together with the latest HSE guidance and all the legal requirements necessary to ensure the health and safety of staff and public.

The legal position

The following regulations lay down how infected bodies should be dealt with.

- The Control of Substances Hazardous to Health Regulations (COSHH) 2002 requires risk assessment, which will take into account the risk from exposure to hazardous substances (including microbiological agents) and also the control measures to be applied.¹

- Sections 2 and 3 of the Health and Safety at Work etc Act 1974 require that all work activities are conducted to ensure the safety of employees and members of the public.

¹ www.hse.gov.uk/coshh
• The Public Health (Control of Diseases) Act 1984, Section 10, names notifiable diseases:
  – under section 43 a registered medical practitioner, or a medically-qualified officer appointed by the local authority, may prevent removal of a body associated with a notifiable disease from a hospital, except to a mortuary, cemetery or crematorium
  – section 44 places responsibility on the owner of the premises where a notifiable disease was the cause of death to prevent others being exposed to the body
  – section 45 forbids wakes to be held if the deceased had a notifiable infection.
• Regulation 3 and Schedule 1 of the Public Health (Infectious Diseases) Regulations 1988 define the additional 24 infectious diseases, which must be notified.
• Regulation 14, Cremation Regulations, England 1993, gives power to a medical referee to order cremation if the death was due to a notifiable disease. In line with these legal requirements, a guidance form should accompany the body when released from the mortuary. It should list:
  – the reasons for the use of a body bag (if used)
  – whether the bag may be removed at the funeral home to enable the preparation of the body for burial or cremation
  – procedures such as embalming, or access to the deceased
  – information on transmission routes and the precautions that should be taken.
This will ensure that medical confidentiality is preserved after death.

A survey by PHLS Communicable Diseases Surveillance Centre was carried out in 1995 to discover the knowledge, attitude and behaviour of Consultants in Communicable Disease Control (CsCDC) in England in relation to the management of HIV, hepatitis B and TB. It showed that:
• two-thirds had no policy for funeral workers and one-sixth had no policy for hospitals
• policies that did exist mainly related to deaths associated with HIV infection or tuberculosis
• two-thirds allowed unrestricted viewing of bodies with the three infections
• most could not recall being consulted by a funeral worker. They expressed the view that putting bodies in bags was excessive
• there was consensus that a national policy should be developed to manage the deceased after death.
While no action was taken at the time of the PHLS survey it did eventually lead to work taken forward by Dr Bakhshi in 2004 to develop the Code of practice to be used by the NHS and funeral directors.

**Biohazard information for healthcare workers**

When a body imposes an infection risk, the body should be placed in a bag for transportation from the mortuary to a funeral home. The detailed advice on procedures developed by the HSE depends on the degree of hazard, transmission route and the procedures to be performed.

Each body presents a differing degree of hazard, but the general control principles apply to all of them. A physician should complete an infection control notification sheet (guidance form for funeral workers).

The completed guidance form for funeral workers should accompany the body when it is released from a mortuary. It lists the reasons for the use of the body bag, whether the bag may be removed at the funeral home and whether body preparation may be carried out. If so, it gives advice on body preparation.

The form will advise on procedures, including embalming and access to the deceased. It provides information on infection transmission routes, to explain the need for precautions to be taken. This preserves patient confidentiality while controlling risk.

Medical confidentiality is preserved after death. Funeral workers do not have the right to be told of a specific diagnosis.

**Practical risk assessment**

In general, few organisms in a cadaver pose an infection risk. However, there are some important hazards to be considered. A practical risk assessment should include the following three categories of infections.

1. Infections that pose minimal transmission risk and are preventable with hygienic practice. Usually there is available prophylaxis or treatment for such infections. Examples are chicken pox, influenza, measles, meningitis, mumps, rubella, scarlet fever and whooping cough.

2. Infections causing severe human illness, but with limited or no transmission risk. Such infections have intermediate insect and animal vectors, which are rarely met within the UK. These infections may, however, be transmitted by accidental blood inoculations, transplantation or in research work. Examples are yellow fever, rabies, malaria and anthrax.

3. Infection hazards such as those listed below, which present a quantifiable risk:
   - airborne droplets or particles – tuberculosis
   - discharges from body orifices – typhoid and paratyphoid fevers, amoebic or bacillary dysentery and food poisoning
• inoculation risks – HIV infection, hepatitis B and C infections, leptospirosis and brucellosis
• skin lesions – staphylococcus aureus and streptococcus pyogenes
• skin infestations – body lice and scabies.

In all cases, universal precautions against infection must be used (see the chapter on protecting staff from infection). In addition, before being released, the cadaver should be labelled with the appropriate actions that need to be followed. In all cases, a safe working environment is a greater safeguard against infection than relying on the use of body bags. The body bag should be viewed as an adjunct to safe practice, rather than a requirement for all cadavers.

Information about any infection that poses a threat should be passed on to the funeral director and his staff.

Advice from the hospital mortuary staff or a physician should be given to those who are collecting the deceased, covering body preparation, bagging, examination or storage in the mortuary and funeral home. The family of the deceased should be asked about their requirements before starting the body preparation. Some relatives may wish to perform ritual preparation of the body of their loved one.

Responsibility

The lead responsibility lies with the Consultant in Communicable Disease Control (CCDC) in conjunction with the hospital infection control officer (HICO) for safety in handling bodies. The CCDC is also responsible for training of funeral workers, while the HICO prepares the hospital policy and trains hospital workers. Expert advice from government and professional institutions is available on biological risks to healthcare and funeral workers.

See the following sample guidance form.
Table 2
Infection control notification sheet

Name of deceased ...........................................................................................................................................

Date and time of death ......................................................................................................................................

Source hospital and ward ....................................................................................................................................

The deceased remains are a potential source of infection

YES/NO/UNKNOWN (see note 1 below) Ring as appropriate

If YES: (see note 2 below)

The remains present an infectious hazard of transmission by: (Ring as appropriate)

Inoculation (blood-borne virus) Aerosol Ingestion

Instructions for handling remains – if YES above, tick as appropriate

☐ Body bagging is necessary
☐ Viewing is not recommended
☐ Embalming presents high risk eg blood-borne virus (BBV)

Signed ................................................................. Print name ..........................................................

On behalf of .............................................................. Hospital/mortuary/GP

Notes

• In hospital cases, the doctor certifying death, in consultation with ward nursing staff, is asked to sign the notification sheet.

• Where a post-mortem examination has been undertaken, the pathologist is asked to sign the notification sheet.

• In non-hospital situations, the doctor certifying death is asked to sign the notification sheet.

Note 1 – Not all infected patients display typical symptoms, therefore some infections (including blood-borne viral infections) may not have been identified at the time of death.

Note 2 – In accordance with health and safety law and the information provided in the Health Services Advisory Committee guidance, Safe working and the prevention of infection in the mortuary and post-mortem room (2nd edition 2002).