

Staff screening and treatment after infection outbreaks – occupational health aspects



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This guidance is aimed at occupational health practitioners involved in managing an outbreak of infectious disease.

Screening of healthcare workers, including medical staff, through microbiological testing of samples as part of the investigation and management of an infection outbreak, may occasionally be advised by an OCT (outbreak control team) as a control measure. This may cause understandable concern on the part of healthcare workers in relation to the occupational health and employment implications of test results. This document summarises the ethical principles and legal framework that apply.

Outbreaks of infection may arise in hospitals, residential institutions and in the community and can cause significant morbidity and mortality in vulnerable patients/residents. The rapid systematic management of outbreaks following an agreed outbreak plan and supported by detailed outbreak investigation are important ways of reducing the impact of the infection¹. Prompt establishment of an OCT coupled with early communication and the rapid institution of control measures are the most effective ways of restricting the extent of outbreaks to minimise morbidity and mortality². Investigation of outbreaks can occasionally include staff screening using microbiological tests. Control measures can include decolonisation treatment of staff and/or chemoprophylaxis with antimicrobial agents. Occupational health services may be involved in administering these tests and treatments.

An infection outbreak may be defined as²:

- An incident in which two or more people experiencing a similar illness are linked in time or place
- A greater than expected rate of infection compared with the usual background rate
- A single case for certain rare diseases for example diphtheria, botulism, rabies and viral haemorrhagic fever
- A suspected, anticipated or actual event involving microbial contamination of food or water

In outbreaks of infection the protection of public health takes priority over all other considerations². The primary objective in outbreak management is to protect public health by identifying the source of infection and implementing control measures to prevent further spread or recurrence of the infection. Responsibility for managing outbreaks is shared by all members of the OCT. The OCT are required to give due consideration to its responsibilities in supporting investigations which may give rise to legal proceedings, for example, under the Corporate Manslaughter and Corporate Homicide Act 2007, the Food Safety Act 1990 and associated regulations, and the Health and Safety at Work Act 1974 and associated regulations.

The possible membership of an OCT is at appendix one^{1,2}. OCTs are likely to be similarly constituted to hospital infection control committees³. It is important that senior professionals and decision makers from relevant disciplines should be represented. This usually includes the presence of a consultant occupational physician on the OCT to advise on the occupational health aspects of any decision to screen and/or treat staff.

All activities and decisions of the OCT should be underpinned by a suitable and sufficient risk assessment. The risk assessment should be agreed by members of the OCT and regularly reviewed. It should be evidence-based, taking into account all relevant information and any available local policy and/or outbreak specific national guidance. A communications strategy will be agreed by

the OCT and reviewed regularly. Effective communication with all stakeholders, including affected healthcare workers, is important. Occupational health practitioners must ensure that the control measures which arise from the risk assessment, and which are implemented by occupational health services, are evidence based and comply with the requirements of all relevant legislation in terms of confidentiality, consent and medical effectiveness.

If, following an evidence review and risk assessment, screening and/or treatment of staff is felt to be a proportionate measure by the OCT, then a screening/treatment strategy needs to be considered, agreed and communicated to affected staff. The strategy should take the following into account:

- Who to screen (based on an agreed definition of exposure or contact)
- When to screen (based on an agreed timing window for screening the group and also if samples are taken pre-shift or during the shift)
- How to screen (agreed sampling method and site of swabs)
- Where to screen (workplace or occupational health department)
- Which test (based on an agreed microbiological test)
- Who will undertake the sampling (occupational health, self or colleagues)
- How results (both negative and positive) will be communicated to affected staff, ensuring appropriate confidentiality
- How outcomes, in terms of fitness to practise, will be shared with the OCT and line management
- How positive results are managed; considering the need for any decolonisation/treatment; if advised, which antimicrobials, what dose and duration of treatment; if exclusion from clinical work is advised and if so, for how long; any need for follow-up screening and, if so, when and how; and also appropriate information sharing with the individual's GP about results and treatment.

The HSWA 1974 (Health and Safety at Work Act 1974) is the primary overarching legislation covering occupational health and safety in the UK. It sets out the general duties that employers have towards employees and also to members of the public, which in a healthcare setting includes patients/residents as well as visitors to hospitals/residential settings. These duties are qualified in the act by the principle; 'so far as reasonably practicable'. Section seven of the HSWA 1974 applies to employees. There is a legal duty on employees to take reasonable care to protect the health and safety of themselves and others who may be affected by their work activities. This includes cooperating and complying with management policies and procedures. Under the HSCA 2008 (Health and Social Care Act 2008) the government published a specific code of practice for the prevention and control of healthcare-associated infection. One of the aims of the HSCA 2008 is to reduce health care associated infections. A summary of relevant health and safety legislation is set out in appendix two and a summary of the HSCA 2008 code of practice relating to healthcare-associated infections is at appendix three.

In addition, doctors and nurses have ethical obligations set out by the GMC⁴ and the NMC⁵. 'Good Medical Practice' states that doctors 'must make the care of patients their first concern' and 'must protect and promote the health of patients and the public'. The NMC code states that nurses 'must take all reasonable personal precautions to avoid any potential health risks to colleagues, people receiving care and the public'.

The DPA (Data Protection Act) second principle states that employers must not process personal health data without a clear purpose. The Employment Practices Code⁶ issued with the DPA states

that managers should not have access to more information about a worker's health than is necessary to carry out management responsibilities. As far as possible information provided to managers should be confined to that necessary to establish fitness for work, rather than consist of more general medical details. These principles of confidentiality apply to health screening conducted in the context of an outbreak of infection.

REFERENCES:

1. National Guidelines on the Management of Outbreaks of Norovirus Infection in Healthcare Settings. Prepared by the Viral Gastroenteritis Subcommittee of the Scientific Advisory Committee of the National Diseases Surveillance Centre (December 2003)
2. Communicable Disease Outbreak Management Operational Guidance. Public Health England. Gateway number 2014252 (August 2014)
3. The Management and Control of Hospital Acquired Infection in Acute NHS Trusts in England. Report by the Comptroller and Auditor General. National Audit Office HC 230 Session (17 February 2000) London, The Stationary Office
4. Good Medical Practice, GMC available at: http://www.gmc-uk.org/guidance/good_medical_practice.asp
5. The Code – Professional Standards of Practice and Behaviour for Nurses and Midwives, NMC available at <https://www.nmc.org.uk/globalassets/sitedocuments/nmc-publications/nmc-code.pdf>
6. Data Protection Act Employment practices code; <https://ico.org.uk/media/for-organisations/documents/1064/the-employment-practices-code.pdf>.

APPENDIX ONE

Possible Membership of the OCT (outbreak control team)

Membership of the OCT will vary according to the nature or circumstances of the outbreak.

Members could include the following:

- Consultant in communicable disease control /health protection or consultant epidemiologist (Public Health England), likely to chair and lead the OCT
- Consultant microbiologist
- Infection control nurse
- Public health physician
- Chief executive or senior representative
- Consultant medical staff
- Senior nurse manager
- Consultant occupational physician
- Senior occupational health nurse
- Domestic services manager
- Communications/press officer
- Other relevant staff considered necessary, for example, health and safety officer, clinical risk manager, consultant in infectious diseases etc.

APPENDIX TWO

The Health and Safety at Work Act 1974

Section 2 - The duty on employers related to employees - 'An employer must ensure, as far as reasonably practicable, the health, safety and welfare of his employees'. There is a duty to provide information, instruction and training about health and safety

Section 3 - Duties on employers to persons other than employees - Applies to contractors on site, visitors to premises and applies to patients in a hospital

Section 7 - Duties of employees - 'Employees must take reasonable care to protect the health and safety of themselves and others at work'. There is a duty on employees to cooperate and comply with management policies and procedures

The Management of Health and Safety at Work Regulations 1999

Regulation 3 - Every employer shall make a suitable and sufficient assessment of the risks to the health and safety of employees (and others not in employ if affected by his work practices, for example patients). If more than five employees the risk assessment must be recorded

Risk assessment is hazard identification and risk evaluation. Hazard = potential to cause harm (substances including microbiological hazards, machines, methods of work, work organisation). Risk = likelihood of harm from a particular hazard and should take into account the severity of consequences

Regulation 11 - Employers' duty to provide information, instruction and training about health and safety matters

The Control of Substances Hazardous to Health (COSHH) 2002 (as amended)

Regulation 2 - Definition of a substance hazardous to health is any substance that creates a hazard to the health of any person arising out of or in connection with work, which is under the control of the employer and includes any microorganism that creates a hazard to health, as well as chemicals, dusts or other hazardous substances

Regulation 6 - Risk assessment - An employer shall make a suitable and sufficient assessment of the risks to health of workers exposed to substances hazardous to health with a view to controlling those hazards and reducing risk

Regulation 7 - Prevention or control of exposure - Every employer shall ensure that the exposure of his employees, and those not in his employ, to hazardous substances is prevented, or where this is not reasonably practicable, adequately controlled

Regulation 8 - Control measures, use and maintenance - Employer should ensure proper use or application of control measures for example universal precautions, vaccination. Employee should make proper use of control measures, for example universal precautions, vaccination

Regulation 12 – Information, instruction and training - Employer must provide employee with information, instruction and training about the risks to health created by the exposure and about control measures

APPENDIX THREE

THE HEALTH AND SOCIAL CARE ACT 2008

CODE OF PRACTICE ON THE PREVENTION AND CONTROL OF HEALTH CARE ASSOCIATED INFECTIONS AND RELATED GUIDANCE, PUBLISHED DECEMBER 2010

Part 1. Introduction

Good infection prevention and control are essential to ensure that people who use health services receive safe and effective care.

One of the aims of the HSCA 2008 (Health and Social Care Act 2008) is to reduce HCAs (health care associated infections). The Act establishes the CQC. It states that good management and organisation are essential to reducing HCAs. This is about HCAs in both patients and health care workers. The CQC's role is to assess compliance.

The HSCA 2008 and regulations are law. The Act refers to health and safety legislation for example the Health and Safety at Work Act and the Control of Substances Hazardous to Health (COSHH) Regulations.

Part 2. The Code of Practice

There are **ten** compliance criteria, a number of which are relevant to occupational health.

Criterion one - 'There must be systems to manage and monitor the prevention and control of infection. These systems use risk assessment and consider service users and any risks that their environment and other users may pose to them'

Criterion nine - 'Have and adhere to policies, designed for the individual's care and provider organizations, that will help to prevent and control infections'

Criterion ten - 'Ensure, so far as reasonably practicable, that healthcare workers are free of and are protected from exposure to communicable infections during the course of their work, and that all staff are suitably educated in the prevention and control of HCAI'