Infection Control

NHS
Worcestershire Health and Care
NHS Trust

Occupational Health
(Linked to Infection Prevention and Control)
Guidelines

This guidance sets out to promote, so far as is reasonably practicable, that care workers are free from infections and when read in conjunction with safe working practices (Trust Standard Infection Prevention and Control Precautions Section B) will promote protection from exposure to infections which can spread in healthcare settings. These guidelines include information on:

- overview of occupational health linked to infection prevention and control
- exposure prone procedures
- infections presenting in healthcare staff
- precautions for pregnant healthcare staff
- recommended healthcare restrictions for healthcare workers
- promoting adherence to best practice with regard to infection prevention and control and occupational health provision in compliance with the Health and Social Care Act 2008 (updated 2015).

For management of blood borne contamination incidents, please refer to appropriate guidance in countywide policy. Advice is available from the Infection Prevention and Control Team on 01386 502552 or out of hours from the on call medical microbiologist via switchboard at either Worcestershire Royal Hospital or the Alexandra Hospital Redditch.

OCCUPATIONAL HEALTH (Linked to Infection Prevention and Control) GUIDELINES

Document Type	Infection Prevention and Control Guidelines
Document Purpose	To promote knowledge and standard practices linked to occupational health provision in relation to infection prevention and control within the Trust. This guidance sets out to provide instruction on minimising the risk of infection linked to occupational health, which need to be complied with by all healthcare staff.
Document Author	Infection Prevention and Control Team
Target Audience	All staff working within healthcare settings
Responsible Group	Infection Prevention and Control Committee
Date Ratified	First Issue: 2000. Updates: July 2005; July 2008; October 2013
Review Year **Unless indicated by changes in national guidance**	2018/2019
Expiry Date	February 2024

The validity of this guideline is only assured when viewed via www.worcestershirehealth.nhs.uk or via the Trust intranet site. If this document is printed into hard copy or saved to another location, its validity must be checked against the internet version using the review data in the footer of the guideline. The internet version is the definitive version.

Learning and Development

Worcestershire Health and Care NHS Trust recognises the importance of ensuring that its workforce has every opportunity to access relevant training. The Trust is committed to the provision of training and development opportunities that are in support of service needs and meet responsibilities for the provision of mandatory and statutory training.

All staff employed by the Trust are required to attend the mandatory and statutory training that is relevant to their role and to ensure they meet their own continuous professional development.

CONTENTS

OVERVIEW OF OCCUPATIONAL HEALTH

Occupational Health providers must ensure that policies and procedures are in place in relation to the prevention and control of infections including Healthcare Associated Infections.

In compliance with The Health and Social Care Act 2008 (updated 2015), all NHS Trusts must ensure that the Occupational Health services provided include:

- Assessment for fitness for work pre-employment and during employment with ongoing health screening for communicable diseases.
- Advice on appropriate occupational immunisations and screening following assessment of biological hazards by service managers and staff.
- Management of exposure to infections, which should include provision for emergency treatment out of hours.
- Addressing of health concerns resulting from work or affecting a person's ability to work safely.
- Contributions, where appropriate, to the management of exposure to biological hazards.
- Advising employers on policy/practice that may affect occupational health and wellbeing.
- Health promotion in the workplace, including promotion of immunisation to prevent against and minimise spread of infections such as influenza and measles.
- Relevant occupational immunisations are provided and arrangements are in place for regularly reviewing the immunisation status of healthcare workers and providing vaccinations to staff as necessary in line with *Immunisation Against Infectious Diseases* (Green Book) and other Department of Health guidance which is regularly updated on line http://immunisation.dh.gov.uk/category/the-green-book/ Dependent upon staff group and nature of job, vaccination and immunisations offered will be tailored for individuals based on national guidance.
- A record of all relevant immunisations must be maintained.
- In respect of blood borne viruses:
  - arrangements for health clearance of new healthcare workers and for identifying and managing healthcare workers infected with Hepatitis B, HIV or Hepatitis C and restricting their practice as necessary in line with Department of Health guidance.
  - liaising with the UK Advisory Panel for Healthcare Workers Infected with Blood Borne Viruses when advice is needed on procedures that may be carried out by blood borne virus-infected healthcare workers, and when patient tracing, notification and offer of blood-borne virus testing may be needed.

Occupational Health policies on the prevention and management of communicable diseases in healthcare workers including immunisation, must be adhered to.

In addition to Occupational Health requirements it is imperative that line managers ensure that:

- prevention and control of infection is included in induction programmes for new staff, and in training programmes for all staff;
- there is a programme of ongoing education for existing staff (including support staff, agency/locum staff and staff employed by contractors);
- there is a record of training and updates for all staff; and
- the responsibilities of each member of staff for the prevention and control of infection is reflected in their job description and in any personal development plan or appraisal.

In using Occupational Health Services, please note:-

- The Occupational Health service is essentially a preventative service and should not be used in place of treatment services available through General Practice or Accident and Emergency Departments.
- Any health concerns that a staff member or manager has about an employee which may have resulted from a workplace hazard should be discussed with their Occupational Health team.
- Necessary immunisations will be available from Occupational Health, it is the employee's responsibility to attend these appointments.
- Health Care Workers who are *Hepatitis B e antigen positive* or have $>10^3$ DNA copies should not perform exposure prone procedures in which an injury to the staff member could result in their blood contaminating a patient's open tissues. Modification of work practices may be necessary and confidential advice is available from the Occupational Health Department.
- Health Care Workers potentially infected with *HIV* or *Hepatitis C* must seek appropriate expert medical and Occupational Health advice. If infected with *HIV* or *Hepatitis C* exposure prone procedures must cease. Referrals to the Occupational Health Department can be made by managers or the individual involved.
- The communicable diseases of special concern in the workplace are *Hepatitis B and C, Tuberculosis, Measles, Rubella, HIV, Hepatitis A and Varicella.*
- Notifying the Occupational Health Department of health concerns affecting staff allows the Occupational Health doctors and nurses to advise. For example Occupational Health can provide advice to an employee without immunity to chicken pox who has been in contact with either chicken pox or shingles.

So far as is reasonably practicable, healthcare workers must be free of and protected from exposure to communicable infections during the course of their work, and all healthcare staff must be suitably educated in the prevention and control of infection.

EMPLOYEE RESPONSIBILITIES

Employees have a duty to protect their patients, themselves and their colleagues from infection. The infectious conditions covered in this policy are not exhaustive but designed to provide information about common infectious conditions that employees may experience that could pose a risk to their patients and colleagues and the control measures required. Responsibilities that all employees have include:

- Promoting and accepting vaccines which are offered, including, but not limited to influenza to ensure that patients, colleagues and employees are protected against infections which they may be exposed to.
- Promptly identifying when they are presenting with signs and symptoms of infection and seeking appropriate, timely advice linked to work and work tasks.
- If indicated by role, ensuring fit testing of FFP3 masks is completed and current, this will link to staff in minor injury units, staff who are frequently involved in aerosol generating procedures (staff within dental and child and family services). Other staff groups may also require mask fit testing and this is outside of the remit of the Infection Prevention and Control Team and local arrangement must be made with occupational health to ensure appropriate protection can be evidenced (e.g. estates team, podiatry staff).
- Promoting use of sharps safety devices in accordance with safe working practices guidance and management of sharps, staff using these devices must have received appropriate training in the device prior to use.
- If sustaining a blood borne contamination incident (e.g. needlestick, bite, puncture wound or splash of blood or body fluid into the eye) appropriate first aid must be undertaken, follow up as per Trust blood Borne Contamination Incident Policy and accompanying poster Appendix I is advised and staff complete an incident form.
- Reporting to Occupational Health and line manager if you have experienced contact dermatitis in the past, this is to enable any measures that may protect you to be implemented as you are potentially at a greater risk of recurrent if at work and your job involves contact with irritants or allergens (RCN 2018).
- Ensuring full compliance with Trust Hand Hygiene and Safe Working Practices Infection Prevention and Control guidance (Sections A1 and B of Trust Infection Prevention and Control Guidance).

OCCUPATIONAL DERMATITIS

There are a number of skin conditions that can be caused or made worse by work or that affect a health care worker's ability to work in a health and social care environment. Intact skin is the best defence system to protect from infection and therefore it is imperative that actions are taken to promote this. Contact dermatitis is the main work-related skin condition affecting the hands of health care workers; glove use; infection prevention and control practice; and the importance of considering glove use from a holistic perspective are essential in balancing this risk and ensuring appropriate occupational health, infection prevention and control and health and safety standards are maintained. Within the Trust, occupational dermatitis can, and should be prevented to minimise risk of infection and cross contamination. It is recommended that this three-step approach is followed *Avoid–Protect-Check* as recommended by the RCN (2018) for both employers and employees.

The Trust has a duty to ensure that the risks of developing occupational dermatitis are managed. Under the Health and Safety at Work Act (1974) employers have a broad duty to protect the health of employees, and others who may be affected from work activities such as contractors or agency staff also COSHH regulations place specific duties on employers to assess the risk of exposure to substances hazardous to health including chemicals and biological agents in the workplace.

Prevention of Dermatitis and Safe Hand Hygiene Practices

Refer to Section A1 of the Trust Infection Prevention and Control Guidance on Hand Hygiene and Section B on Safe Working Practices for further information.

If hand hygiene is not done correctly it can increase the risk of dermatitis. Hand hygiene products such as liquid soap and alcohol hand gel are of an appropriate quality and standardised to enable monitoring and also ensure compatibility. The products used and promoted are effective at cleaning hands and also minimise the risk of skin disease.

- All staff must be aware that they need to wet their hands first before applying soap, and that they should rinse them in water that is neither too hot nor too cold. The optimum temperature for rinsing is 32^{o}c, water that is too hot could exacerbate skin problems and prevent staff from complying with hand hygiene.
- The Trust also promotes use of white soft and absorbent paper towels. Skin should be patted dry, paying attention to each finger and the skin between the fingers. Hot air dryers must not be used in clinical settings because of the risk of re-circulating micro-organisms via air currents.
- Balancing washing of hands with use of alcohol hand gel where appropriate. Alcohol hand gel contains emollients to reduce drying of skin and dermatitis.
- Moisturisers/Hand creams can be applied to care for the skin on hands but must be compatible with other products. Only individual tubes or hand cream from wall mounted dispensers should be used. Purell Hand Medic is promoted within the Trust due to known compatibility with other products.
- Always wear disposable vinyl/latex/nitrile gloves when handling blood/body fluids. Gloves must be powder free and hand hygiene must occur following their removal.

Avoid	direct contact between unprotected hands and hazardous substances and/or wet work where this is sensible and practical.
Protect	the skin if you cannot avoid contact.
Check	hands regularly for the first signs of itchy, dry or red skin. Take action to eliminate cause and seek advice to ensure skin remains in as good a condition as possible.

EXPOSURE PRONE PROCEDURES

Exposure-prone procedures (EPPs) are those invasive procedures where there is a risk that injury to the worker may result in the exposure of the patient's open tissues to the blood of the worker.

All breaches of skin or epithelia by sharp instruments are by definition invasive. Most clinical procedures, including invasive ones do not provide an opportunity for blood of a Health Care Worker to come into contact with the patient/clients open tissues. This is providing that the general measures to prevent occupational transmission of blood borne viruses are adhered to at all times, most clinical procedures pose no risk of transmission of a blood borne virus from an infected Health Care Worker to a patient/client and can be safely performed.

Exposure Prone Procedures include those where the worker's gloved hands may be in contact with sharp instruments, needle tips or sharp tissues (e.g. splinters of bone or teeth) inside a patient's open body cavity, wound or confined anatomical space where the hands or fingertips may not be completely visible at all times. Other situations in some circumstances may also be considered as exposure prone such as pre-hospital trauma care and care of patients where the risk of biting is regular and predictable (e.g. staff working with violent patients/clients). These procedures should be avoided by healthcare workers who are restricted from performing Exposure Prone Procedures.

When there is any doubt about whether a procedure is exposure prone or not, expert advice should be sought in the first instance from the Occupational Health Team who may discuss further with the UK Advisory Panel for healthcare workers infected with blood-borne viruses (UKAP). Some examples below of advice given by UKAP may serve as a guide, but cannot be seen as necessarily generally applicable, as the working practices of individual healthcare workers vary.

Procedures where the hands and fingertips of the Health Care Worker are visible and outside the patients/clients body at all times, internal examinations or procedures that do not involve possible injury to the worker's gloved hands from sharp instruments and/or tissues are considered not to be exposure prone provided routine infection control procedures are adopted at all times. Examples of such procedures include venepuncture, minor surface suturing, the incision of external abscesses.

Staff who believe that they may have been exposed to blood borne Hepatitis (B and C) or HIV infection **must** declare this and discuss it in complete confidence with the Occupational Health Physicians or Advisors, either at their initial screening or when they first become aware of the risk.

The Department of Health (1998[b], 2002[a], 2002[b], 2003, 2007; PHE 2017) has produced guidance on staff with blood borne viral infections. In general such staff may require a work risk assessment and must avoid exposure prone procedures.

Staff should be aware that any misrepresentation about their previous health record may result in disciplinary action.

INFECTIONS IN HEALTHCARE STAFF

Staff with signs of infection should report to the Occupational Health Department promptly to ensure the necessary action is taken. It is recognised that this is not a complete list of all infections and further advice can be sought from the Infection Prevention and Control Team.

CHICKENPOX (Varicella) or SHINGLES (Herpes Zoster)

Any member of staff with suspected or diagnosed infection should report to the Occupational Health Department. This is particularly important for staff dealing with children, the immuno-compromised and staff working within operating theatres.

Staff who have never had chickenpox but have been in contact with a client/patient with chickenpox must not work until further advice from Occupational Health is sought.

Chicken pox is highly contagious and spread via the respiratory route or by direct contact with skin vesicles. The infectious period extends from 2 days before to approximately 5 days after the onset of the rash. Crusted vesicles are no longer infectious; infections in adults are generally more severe than those in children. It usually begins with a sudden onset of slight fever (temperature), feeling unwell and an itchy rash starting with flat red spots which become raised and fill with fluid. The rash is usually on the body more than on the face or limbs. Spots occur in successive groups and scab over 3-4 days after appearing whereas Shingles is characterised by pain and spots on one side of the face or body.

Every healthcare worker with no history of chickenpox should have serological testing for antibodies, those with a negative result will be offered Varicella Zoster Immunisation. For those who are **non immune**, if having contact with chicken pox at work Varicella Zoster Immunoglobulin (VZIG) prophylaxis is recommended where their clinical condition increases the risk of them acquiring varicella, (DoH 1996). This includes the following groups:-

- Pregnant women at certain stages of pregnancy, refer to Infection Control Team for further advice before administering VZIG.
- Neonates (Babies born before 30 weeks or below 1kg), contact Infection Prevention and Control Team before administering VZIG.
- Patients with reduced immunity i.e. patients/clients with cancer, especially of lymphoid tissue, patients with leukaemia.
- Patients/Clients on systemic steroid drugs. Patients or parents of children at risk who use systemic corticosteroids should be advised to take reasonable steps to avoid close contact with chickenpox or shingles and to seek urgent medical attention if exposed to chickenpox.

VZIG is given by intramuscular injection as soon as possible and not later than 10 days after exposure. It must not be given intravenously. If a second exposure occurs after 3 weeks a further dose is required. VZIG does not necessarily prevent infection.

Always consult a member of the Infection Prevention and Control Team for further advice regarding the use and need for VZIG.

CONJUNCTIVITIS

If staff are suffering from conjunctivitis, clearly the cause for this needs to be diagnosed. Exclusion from work may not be necessary, however, high risk areas i.e. staff working in neonatal units will need to contact Occupational Health for advice. Hand hygiene is essential after applying the ointment and touching the affected eye.

CYTOMEGALAVIRUS (CMV)

Cytomegalovirus (CMV) is a common viral infection throughout the world. The diseases caused by CMV in people with impaired immunity (eg those with HIV or on immuno-suppressive drugs) include fevers, pneumonia, inflammation of the retina and inflammation of the liver. While CMV may be commonly encountered in urine and saliva, infection is largely preventable by applying standard precautions including the use of gloves and regular hand washing.

DIARRHOEA AND/OR VOMITING

Staff with symptoms of vomiting and/or diarrhoea which are unexplained or thought to be infectious in nature should refrain from working until they are 48 hours symptom free. Advice can be obtained from Occupational Health or the Infection Prevention and Control Team. It is advised that wherever possible a stool specimen is obtained from the member of staff. If symptomatic when at work the member of staff should be sent off duty.

In general, staff may return to work once they are asymptomatic, feel well again if illness is not thought to be infectious or, if thought to be infectious in nature, following a 48 hour symptom free period. In addition to this, a confirmed negative culture may be required with certain infections.

Infection Prevention and Control Team/Occupational Health can offer further advice and information dependent upon the clinical presentation and micro-organism isolated.

In cases of viral diarrhoea and/or vomiting, staff will be asked not to return to work until 48 hours after their clinical recovery, the 48 hour period will not be counted as sickness and must be recorded as medical exclusion. Separate guidance is available for all catering staff with diarrhoea and/or vomiting.

HERPES SIMPLEX VIRUS (HSV) cold sores

Cold sores are infectious from the prodomal phase (the first signs of a cold sore developing e.g. tingling, burning, itching in the area where it is going to appear) to the end of the ulcer phase. For healthcare personnel there is the potential to transmit this infection to patients.

Basic hygiene practices reduce this risk:-

- Avoid touching the sore
- Wash your hands before all patient contacts
- Avoid close facial contact with patients.

IMPETIGO

Impetigo is an infectious bacterial skin disease and may be a primary infection or a complication of an existing skin condition such as eczema, scabies or insect bites. The infection can develop anywhere on the body but lesions tend to occur on the face, flexures and limbs not covered by clothing. Spread is by direct contact with discharge from the scabs of an infected person. The bacteria invade skin through minor abrasions and then spread to other sites by scratching. Infection is spread mainly on hands and the incubation period is between 4 to 10 days. Staff should be excluded from work if lesions cannot be covered with an occlusive dressing until the lesions are either healed or crusted or they have had 48 hours of oral antibiotic treatment.

INOCULATION INJURIES (including bites, needlesticks etc.) - **see Blood Borne Contamination Incident Policy and accompanying flow chart poster – Appendix I**
Please note all inoculation injuries must be reported on the Trust incident reporting system and actions taken as per Trust protocols. Following on from an inoculation injury, staff, in conjunction with their manager are advised to consider why the event occurred and whether there are any practices that could be adopted or safety devices which could be utilised to minimise risk of recurrence (PHE 2017).

INFLUENZA LIKE ILLNESS Staff with probable/suspected flu or flu like symptoms, (fever of >38°C or history of fever **plus** two or more symptoms of cough or other respiratory symptoms, chills, sore throat, headache, muscle aches) should stay away from work and inform their manager of symptom presentation. If influenza is suspected linked to healthcare contact or confirmed swab results staff should remain off work for a minimum of five days from symptom onset and should stay away from work until they feel well. Contacts of someone with influenza who remains asymptomatic may continue to work. All staff should follow standard precautions to prevent spread of viral respiratory infections.

METICILLIN RESISTANT STAPHYLOCOCCUS AUREUS (MRSA)
Routine screening for staphylococcal carriage is not recommended. Screening may be instituted if an outbreak occurs or if healthcare workers are felt to be at risk or potentially associated with the spread of infection. Please seek advice from either the Occupational Health Department or Infection Prevention and Control Team prior to sending MRSA screening swabs.

PARVOVIRUS (erythrovirus) B19
Human Parvovirus is usually transmitted via the respiratory route but the virus is very resistant in the environment and biological materials such as blood. Infection early in pregnancy may affect the foetus; pregnant healthcare workers should therefore avoid contact with patients/clients who have parvovirus.

RUBELLA
Rubella (or German Measles) is caused by a virus. It is associated with a mild fever and a rash. A child may have few symptoms but adults may have a fever, rash, headache and possibly conjunctivitis for up to 5 days. Swelling of glands around the neck and ears often occurs. Female adults may also experience pain in the joints. Serological testing is important for all staff who have patient contact. If rubella antibody is absent or below protective levels then vaccination may be offered to health care workers on commencement of employment. A previous diagnosis of rubella has proved unreliable. During pregnancy there is a risk to the unborn foetus and it is estimated that 9 out of 10 pregnancies may have serious complications including developmental issues and miscarriage which occur in the first 8 – 10 weeks (DoH 1996). At this stage staff may not be aware of their expectant state.

SKIN SEPSIS
Minor skin lesions should be covered with an appropriate occlusive dressing. Other skin lesions should be reported to the Occupational Health Department who will assess the individual regarding their suitability to remain on duty and will perform any necessary screening. The Infection Prevention and Control Team may advise on individual cases.
Staff with severe skin conditions, e.g. eczema, psoriasis should always seek advice from the Occupational Health Department.

SORE THROATS

Staff suffering with a severe and persistent sore throat should report to their GP where a throat swab may be taken. It is advisable for staff who work in theatre or surgical areas to be sent off duty if symptomatic.

Isolation of a Group A Streptococcal Organism - Staff will require a course of antibiotic treatment if a streptococcal infection is identified. They may return to unrestricted duties after 48 hours treatment (PHE 2008 and 2018)

If a member of staff is a household contact of someone with a confirmed Group A Streptococcal infection, they must be aware of the need to remain vigilant for signs and symptoms of possible infection in the following 30 days, signs and symptoms potentially indicative of infection include:

- Throat infections, swollen glands or discomfort when swallowing.
- Skin infections, sores, blisters or impetigo type presentation through to cellulitis and scarlet fever type rash (sand paper feel to touch).
- Ear infections, ear ache or discharge from ear.
- Sinusitis or discomfort in forehead and cheekbones, which causes a blocked or runny nose and a throbbing pain in your face.
- Unexplained vaginal discharge.

Clearly staff who feel unwell are advised to refrain from working and seek medical advice if this is deemed necessary. A heightened index of suspicion for infection in close contacts should be maintained for 30 days after the diagnosis in the index patient. Further information can be accessed on https://www.gov.uk/government/collections/group-a-streptococcal-infections-guidance-and-data.

CONTACT WITH KNOWN OPEN PULMONARY TUBERCULOSIS

All healthcare staff who can potentially come into contact with Tb in a client/patient should be confirmed Tb immune prior to employment. Following identification of Tb positive sputum from a patient (ZN positive) the Infection Prevention and Control Team will instruct staff to collate a list of all staff who have been close contacts of the patient and pass this on to the Occupational Health Department who will carry out the necessary follow up.

Healthcare workers who are identified with pulmonary tuberculosis will be managed on an individual basis with contact tracing linked to patients and colleagues occurring as clinically indicated. This will be coordinated by an Outbreak Management Group established within the Trust which will include local or national Public Health England colleagues and others with experience in management of cases within healthcare staff.

WHOOPING COUGH (*Bordetella pertussis*)

Whooping cough is most contagious during catarrhal state and communicability will diminish rapidly after onset of cough that can persist in untreated cases for up to 3 week. Healthcare workers who have been diagnosed with this should be excluded until 48 hours of appropriate antibiotic treatment has been completed or for 21 days from onset of symptoms if appropriate antibiotic treatment has not been completed. Staff must seek advice if they become aware of contact with an individual with suspected or confirmed whooping cough to ensure appropriate follow up. This is in addition to follow up of confirmed/suspected cases.

VULNERABLE STAFF

Some staff may have certain medical conditions which make them more vulnerable to infections. These may be infections that would not normally pose a problem for most people but within this vulnerable group illness may occur.

Staff in this vulnerable group could include:

- those being treated for leukaemia or other cancers;
- those on high doses of steroids by mouth ;
- those with conditions which seriously reduce immunity.

Staff should be aware of any particular risks that exist for them and be mindful that evolving or novel infections e.g. pandemic influenza could affect varying groups of staff who are vulnerable to infections.

Staff who are suffering from significant chronic respiratory, heart or renal disease, diabetes requiring treatment other than dietary control, or are immuno-suppressed either as a result of disease or treatment and pregnant women are advised to attempt to minimise their contact with confirmed or suspected influenza cases as far as possible. They should inform their line manager of their condition so suitable arrangements can be put in place. Whilst influenza vaccination is promoted within the Trust, it is recognised that this particular group of staff will be offered their influenza vaccine by their GP.

PREGNANCY

Please contact either Occupational Health or the Infection Prevention and Control Team for further information.

Pregnant healthcare and child care staff should be aware of how some infections can affect either them or their unborn child and the precautions that should be adopted to minimise any risks. In addition to this, if cases of infection present in the early years and child care setting which do pose a risk during pregnancy then consideration should be given to informing parents through a notice on the door to ensure that they can discuss with staff if there is a risk that their child may be susceptible and potentially pass infection on to them. Templates of these notices can be obtained from the infection prevention and control team.

- In general, if a pregnant woman develops a rash or is in direct contact with someone with a potentially infectious rash this should be investigated by a doctor. The greatest risk to pregnant woman from such infections tends to come from their own lifestyle rather than the workplace. The following are some of the infections which can pose problems during pregnancy. It is important that if pregnant staff have been exposed to these infections they discuss this with their midwife.
- **Chickenpox** can affect the pregnancy if there has been no previous history of chicken pox in the individual. Particular risk exists during early pregnancy (first 20 weeks) or very late pregnancy (last three weeks). It is always advised that potential contact without previous knowledge of symptoms is discussed with a GP or Midwife as soon as the risk is identified. It is likely that a blood test will be carried out to determine immunity to this viral infection. The individual may also be given varicella zoster immunoglobulin (VZIG) if they do not have any antibodies (evidence of immunity) to varicella. This must be given within 96 hours of exposure. If the pregnant member of staff has previously had chicken pox then there is no risk of infection and the GP and ante-natal carer should be informed. If unsure this should be treated as a potential risk. It must also be noted that Shingles is caused by the same virus as chicken pox and therefore anyone who has not had chickenpox is potentially vulnerable to this infection if they have contact with the fluid in the shingles blisters.
- **Cytomegalovirus (CMV)** Cytomegalovirus (CMV) is a common virus and is part of the herpes group of viruses, which can also cause cold sores or genital warts. It is estimated that up to 40% of the population could have a CMV infection as once somebody catches the virus they will stay infected for the rest of their lives. In most people CMV does not cause any symptoms and they will not know they are infected. However, infection can be hazardous during pregnancy as it can cause problems for unborn babies. This is particularly true if a pregnant woman has had no previous exposure to CMV before becoming pregnant. CMV infection in early pregnancy may affect the unborn child. Whether the baby is affected depends on many factors including previous infection in the mother and the stage of pregnancy. The risk is very low if the mother has had CMV infection before but the risk of problems increases if the mother catches the disease in early pregnancy. People who have contact with young children and are exposed to children's urine and saliva are at risk of CMV infection; however the risk is still not great with good hygiene practices which includes hand washing after toileting or changing nappies, prior to breaks or going home and not kissing children on the mouth.

- **German Measles (Rubella)** if a pregnant woman comes into contact with German Measles she should inform her GP and ante-natal carer immediately to ensure investigation. The infection can affect the developing baby if the woman is not immune and exposed in early pregnancy.
- **Measles** during pregnancy can also result in problems including an early delivery or even loss of the baby. If a pregnant woman has been in contact with a potential case of Measles she should immediately inform whoever is giving ante-natal care to ensure investigation. All healthcare workers should have evidence of two doses of MMR vaccine or undergo serological testing. Any worker without measles antibodies can be offered a course of MMR vaccine.
- **Slapped cheek disease/Fifth disease, Erythema infectiosum (Parvovirus B19)** can occasionally affect an unborn child if exposed early in pregnancy (before 20 weeks). The symptoms of this disease may include a 'slapped cheek' rash (red cheeks that look as though they have been slapped) or arthritis. If there is a case in the setting or a pregnant member of staff develops these symptoms, or illness is suspected at any stage during the pregnancy it is advised that either the person's GP or Midwife are made aware.
- **Toxoplasmosis** Toxoplasmosis infection in pregnancy may lead to problems. There is no risk if the mother has had the disease before, but this is often unknown. Toxoplasmosis is acquired from contact with cat faeces (e.g. in soil or sandpits) or eating poorly cooked meat. If a member of staff is considering pregnancy, they should be advised of the way in which this infections spreads and avoid handling pet litter trays.

FOOD HANDLING STAFF

Food handlers and catering staff may present a particular risk to the health of OTHERS if they become infected (or have close contact) with diseases that can be transmitted to others via the food or drink. These diseases commonly affect the gastro-intestinal system and usually cause diarrhoea or vomiting, or both.

Food handling staff suffering from such infections will be excluded from all food handling activity until the Trust are advised by the local Environmental Health Officer that they are clear to return to work. Staff should not be present if they are currently suffering from diarrhoea or vomiting, or both. At the very least, persons suffering from gastro-intestinal diseases should not return to work until 48 hours post recovery (no further diarrhoea or vomiting).

Employers should notify their local Environmental Health Department immediately that they are informed of a member of staff engaged in the handling of food has become aware that he or she is suffering from, or is the carrier of, any infection likely to cause food poisoning.

There must be clear understanding in all food handling staff that they must inform their manager immediately if they are suffering from:

- typhoid fever;
- paratyphoid fever;
- other salmonella infections;
- dysentery;
- shigellosis;
- diarrhoea (cause of which has not been established);
- infective jaundice;
- staphylococcal infections likely to cause food poisoning like impetigo, septic skin lesions, exposed infected wounds, boils;
- *E. coli* VTEC infection.

EXCLUSION FROM WORK

Sometimes staff who are not actually ill may need to be excluded from work because either they are colonised with micro-organisms that may be a risk to patients, e.g. MRSA carriage, or because they have had significant contact with and are non immune to an infectious disease and may become infectious during the incubation period e.g. chicken pox or they are required to refrain from working due to either confirmed infection or indicative symptoms for a set time frame e.g. diarrhoea and/or vomiting (48 hours symptom free). In these situations, this would be considered an exclusion for infection control reasons, rather than sickness absence.

SUMMARY OF WORK RESTRICTIONS FOR HEALTHCARE WORKERS

Disease/Infection	Work Restrictions
Chicken Pox	Restrict from work until rash is dry and individual feels well. Chickenpox is infectious from approximately 5 days before until 5 days after spots first appear. No infection prevention and control restrictions once out of this time frame.
Conjunctivitis	Seek advice on appropriateness of work, this will depend upon clinical speciality, number of cases presenting, extent of conjunctivitis, likely cause, potential for spread and treatment plan.
Cytomegalavirus	No restrictions.
Diarrhoea and/or Vomiting	If considered to be infectious in nature, staff should be 48 hour symptom free prior to returning to work. In the event of an outbreak advice will be issued by Infection Prevention and Control Team that is dependent upon the source organism.
Head Lice	No exclusion, treatment or wet combing must be undertaken to eradicate colonisation.
Hepatitis A	Restrict from patient contact, contact with patients' environment and food handling until 7 days after onset of jaundice. In an outbreak situation Public Health England will advise the Trust on management.
Hepatitis B Healthcare Worker with acute or chronic Hepatitis B (HbsAG positive) <u>who does not perform exposure prone procedures</u>	No restrictions. Standard precautions should always be applied. This is a blood borne virus that is not infectious through normal casual contact.
Hepatitis B Healthcare Worker with acute or chronic Hepatitis B (HbsAg positive) <u>who does perform exposure prone procedures</u>	Do not perform exposure prone invasive procedures. Seek advice from Occupational Health who will review and recommend procedures.
Hepatitis C	
Herpes Simplex • Hands (Herpatic Whitlow) • Orofacial	Restrict from patient contact and contact with the environment until lesion has healed. Seek advice from Infection Prevention and Control Team or Occupational Health Department. This will be based on clinical tasks being undertaken.
HIV Infection	Do not perform exposure prone invasive procedures. Seek confidential advice from Occupational Health
Impetigo	Staff should be excluded until lesions are crusted/healed or for 48 hours after starting antibiotic treatment. Antibiotic treatment speeds up healing and reduces the infectious period.
Influenza Contacts	Contacts of someone with influenza who remains asymptomatic may continue to work. All staff should follow standard precautions to prevent spread of infection.

Disease/Infection	Work Restrictions
Influenza and Influenza Like Illness (ILI)	Staff with probable/suspected flu or flu like symptoms, (fever of >38°C or history of fever **plus** two or more symptoms of cough or other respiratory symptoms, chills, sore throat, headache, muscle aches) should stay away from work and inform their manager of symptom presentation. If influenza is suspected linked to healthcare contact or confirmed swab results staff should remain off work for a minimum of five days from symptom onset and should stay away from work until they feel well.
Measles	Staff with Measles must be excluded for four days from onset of rash and return to work only when feeling well. Measles is preventable by vaccination (2 doses of MMR) which should be offered to agreed staff groups. Pregnant staff who are contacts should seek prompt advice from their GP or midwife.
Mumps	Staff with Mumps must be excluded for five days from onset of swelling and must feel well before returning to work. Mumps is preventable by vaccination (2 doses of MMR) which should be offered to agreed staff groups. Staff who are contacts should seek prompt advice from Occupational Health.
Ringworm	Treatment will usually be provided from GP and member of staff if completing healthcare tasks will need to keep affected area covered. For staff with ringworm on their face/scalp further advice should e sought.
Scabies	Restrict from patient contact until treated. If crusted scabies, further treatments may be necessary prior to returning to work and advice from the Infection Prevention and Control Team/Occupational Health Department should be sought.
Shingles	If rash is dry, or covered with an occlusive dressing as long as the individual is medically well they are fit for work. Care should be taken if Shingles rash is sited on a face and further advice is required from Infection Control or Occupational Health in this situation.
Streptococcal Group A infection (*Strep pyogenes*)	If infection is identified a course of antibiotic treatment is required. Staff may return to unrestricted duties after 48 hours treatment. If a member of staff is a household contact of someone identified with a Group A Streptococcal infection, the member of staff must be aware of need to be vigilant for any signs and symptoms of infection presenting in the 30 days from time of contact. If asymptomatic no further actions are required.
Pulmonary Tuberculosis	Exclude from work until proven non-infectious.
Whooping Cough (*Bordetella pertussis*)	Ensure Public Health England guidance on health management of pertussis in healthcare settings is followed up.

For further advice on specific infections refer to Section F (Guidance for the control and management of specific infections) or Infection Prevention and Control Leaflets. Advice can also be obtained from either the Occupational Health Department or the Infection Prevention and Control Team.

🕮 REFERENCES & BIBLIOGRAPHY

BOLYARD E.A, O.C. TABLON, W.N. WILLIAMS. 1998. *Guidelines for Infection Control in Healthcare Personnel. American Journal of Infection Control.* **26.** (3) 289 – 354.

DEPARTMENT OF HEALTH. 1998[a]. *Guidance for Clinical Healthcare Workers. Protection against blood borne viruses*. UK health departments. London.

DEPARTMENT OF HEALTH. 1998[b]. *AIDS/HIV infected health care workers. Guidance on the management of infected health care workers and patient notification.* UK health departments. London.

DEPARTMENT OF HEALTH. 2000. *Hepatitis B infected health care workers.* Guidance on implementation of Health Service Circular 2000/020. London: DH.

DEPARTMENT OF HEALTH. 2000. HSC 2000/020: *Hepatitis B infected health care workers.* London: DH.

DEPARTMENT OF HEALTH. 2002[a]. HSC 2002/010: *Hepatitis C infected health care workers.* London: DH.

DEPARTMENT OF HEALTH. 2002[b]. *Hepatitis C infected health care workers.* Guidance on implementation of Health Service Circular 2002/010. London: DH.

DEPARTMENT OF HEALTH. 2005. *HIV-infected health care workers: Guidance on management and patient notification.* London: DH.

DEPARTMENT OF HEALTH. 2006. Immunisation and Infectious Disease. The Stationery Office. Wales. Please refer to electronic update sections on http://immunisation.dh.gov.uk/category/the-green-book/

DEPARTMENT OF HEALTH. 2007. *Hepatitis B infected healthcare workers and antiviral therapy.* London: DH.

DEPARTMENT OF HEALTH. 2015. *The Health and Social Care Act 2008: Code of Practice for the NHS on the prevention and control of healthcare associated infections and related guidance.* https://www.gov.uk/government/publications/the-health-and-social-care-act-2008-code-of-practice-on-the-prevention-and-control-of-infections-and-related-guidance

FOOD STANDARDS AGENCY 2009. *Food Handlers: Fitness to Work* Regulatory Guidance and Best Practice Advice For Food Business Operators. https://www.food.gov.uk/sites/default/files/media/document/fitnesstoworkguide.pdf

PUBLIC HEALTH ENGLAND (2008). Invasive group A streptococcal disease: managing close contacts. https://www.gov.uk/government/publications/invasive-group-a-streptococcal-disease-managing-community-contacts

PUBLIC HEALTH ENGLAND. (2017). *Integrated guidance on health clearance of healthcare workers and the management of healthcare workers infected with bloodborne viruses (hepatitis B, hepatitis C and HIV).* October 2017. https://www.gov.uk/government/publications/bbvs-in-healthcare-workers-health-clearance-and-management

PUBLIC HEALTH ENGLAND. (2017*). Integrated guidance on health clearance for healthcare workers and the management of healthcare workers infected with bloodborne viruses (hepatitis B, hepatitis C and HIV) Quick Reference Guide.* October 2017.

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/654939/Integrated_guidance_on_BBV_in_HCW_-_Quick_reference_guide.pdf

PUBLIC HEALTH ENGLAND. (2018) Group A streptococcal infections: guidance and data including The characteristics, diagnosis and management of group A streptococci infections. https://www.gov.uk/government/collections/group-a-streptococcal-infections-guidance-and-data

RCN (2018) Glove Aware Campaign https://www.rcn.org.uk/get-involved/campaigns/glove-awareness

USEFUL WEB LINKS

www.gov.uk - Department of Health/Public Health England

www.hse.gov.uk – Health and Safety Executive

www.iosh.co.uk – Institution of Occupational Health and Safety