INFECTION PREVENTION AND CONTROL POLICY AND PROCEDURES
Sussex Partnership NHS Foundation Trust (The Trust)

IPC16

RECOGNITION AND MANAGEMENT OF AN OUTBREAK OF INFECTION

INTRODUCTION

An outbreak of communicable disease / infection can be defined as the incidence of disease above that normally expected. Usually this means that there are two or more linked cases with the same illness / symptoms. In some instances, only one case may be sufficient to instigate investigation as an Incident, e.g. meningococcal meningitis. Outbreaks in mental healthcare settings will be similar to those experienced in acute hospital settings e.g. viral gastro-enteritis, influenza etc.

Outbreaks of infection may vary in extent and severity, ranging from a few cases of infestation to a large number of food poisoning cases, affecting hundreds of people. Recognition of an outbreak in the early stages may be difficult, therefore medical and nursing staff must remain vigilant.

The Consultant in Communicable Disease Control (CCDC) at the local Public Health England (PHE) has overall responsibility for outbreaks of infection in all health and social care provider settings (both NHS and independent sector) and the designated infection prevention and control lead / senior manager on call must inform the local Health Protection Team (HPT) of any suspected outbreak of infection. An on-call service is provided by the HPT out-of-hours and at weekends.

STAFF RESPONSIBILITIES

Individual staff – particularly senior clinical staff and senior managers should be able to recognise a potential outbreak of infection or food poisoning

Staff should be familiar with the reporting system when they suspect an outbreak of infection and should report their concerns promptly to the line manager who will investigate and advise further necessary reporting.

Staff have a duty of care to prevent further transmission of the outbreak by implementing appropriate infection prevention and control measures as advised by the Infection Prevention and Control Lead / Health Protection Team (HPT).

Staff have a responsibility to maintain communication with interested parties, especially service users and visitors as well as other clinical staff / areas, including other providers of care, who may be affected and local commissioners of services.

REPORTING STRUCTURE

Person suspecting possible / probable outbreak

Senior Manager

Infection Prevention and Control Lead / Local Health Protection Team

ACTION WHEN SUSPECTING AN OUTBREAK OF INFECTION

All outbreaks of suspected or confirmed infection must be reported through the line manager to the designated Infection Prevention and Control Lead or Director of Infection Prevention and Control (DIPC), Deputy Director of Infection Prevention and Control (DDIPC) or Senior Manager who will decide on appropriate action and liaise with the local Public Health Team. The IPC lead / DIPC together with the nominated senior manager will review the situation and decide on the appropriate steps to be taken, and if necessary convene an outbreak meeting.

OUTBREAK MANAGEMENT TEAM

Membership of the **Outbreak Control Team** will usually include the following:

- IPC lead / Specialist Nurse
- DIPC (usually the Chairperson)
- Deputy DIPC
- Environmental Health if required (food poisoning only)
- PHE CCDC / Health Protection Practitioner
- Communications Manager if required
- Relevant physician / GP / healthcare professional
- Senior manager of area(s) concerned
- Pharmacist if required
- Estates and Facilities
- Housekeeping
- Occupational Health Advisor
- Other members as deemed appropriate

OUTBREAK TEAM FUNCTION

The function of the team will be to:

- Review the problem;
- Decide on appropriate action;
- Specify tasks and responsibilities for team members;
- Communicate required action to affected staff;
- Ensure all affected staff are aware of their responsibilities;
- Ensure appropriate supplies are available;
- Institute further investigation;
- Evaluate progress;
- Agree media statements and communication to service users/visitors/general public
- Ensure communication as necessary with Chief Executive, local Clinical Commissioning Group (CCG) / acute NHS Trust, etc.
- Agree report of outbreak and future recommendations to prevent similar recurrences;
- Prepare a final report at the end of the outbreak including submission as Serious Incident in line with local policy.

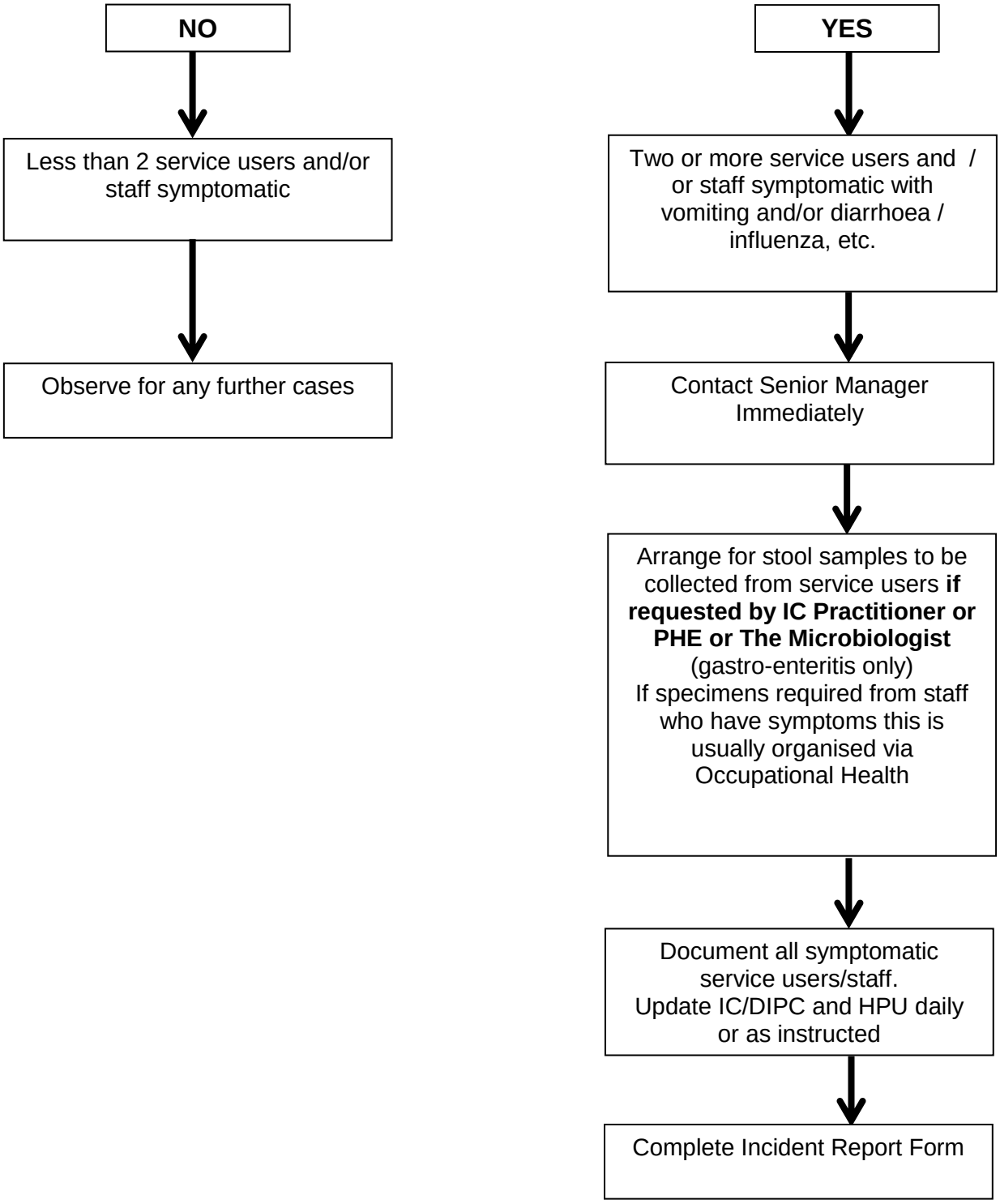
At the first meeting of the team an interim report of the outbreak will be prepared for the Chief Executive and the Management Board. The nominated lead person will inform all relevant external parties as appropriate. Where relevant the team will also involve the Marketing and Communications Department and assist in preparing a draft press release, as necessary.

A Root Cause Analysis of the outbreak should be undertaken to systematically review all aspects of the management of the outbreak and to provide evidence for a final report including a review of actions taken, lessons learned and changes to be made to practice to avert a similar occurrence.

Outbreak Policy Flow Chart
Caring for patients who are experiencing Vomiting / Diarrhoea or both

Issues Identified	What to do
An outbreak of Gastroenteritis is defined when 2 or more patients become ill with vomiting / diarrhoea within a 24 hour period	Ward Manager / person in charge will inform the IPC team, Monday to Friday 9am to 5pm mobile 07341 737164 and also e-mail PhysicalHealthInfectionControl@sussexpartnership.nhs.uk Out of hours and weekends, contact Public Health England on: 0344 225 3861. Out of hours the Trusts on-call Manager must be informed.
Activate the Trusts IPC Outbreak Policy and implement transmission-based infection prevention control measures immediately. The Ward Team and the IPC Specialist will notify the following personnel:	The ward / unit will liaise with the IPC Specialist for any further guidance. The following personnel need to be informed:- Director of Nursing (DIPC)/ Deputy Director of Nursing, Doctor in Charge/Clinical Director Operations Manager/Site Manager Estates and Facilities/Occupational Health Manager for Nurse Bank, Bed Manager Communications Department Public Health England Relatives and carers and display clear Signage on ward entrance
Collect stool samples immediately	Label stool pots correctly/request correct test Send to designated testing facility, following local protocol for both in and out of hours.**NB** Staff affected refer to Occupational Health/GP-Staff must not return to work until symptom free for 48 hours
Monitor progress of outbreak daily	Complete Outbreak Form Daily, Record all laboratory results and send to IPC Lead/Director/Deputy Director of Nursing.
At the end of the outbreak Evaluate management of outbreak with IPC lead	When there have been no further cases for 48 hours, deep clean the ward / unit. Lift transmission –based IPC Ensure that all personnel as **in Item 2** are informed that ward/unit is open. Evaluate with IPCT.

APPENDIX 1 OUTBREAK MANAGEMENT GUIDANCE



MANAGEMENT OF AN OUTBREAK OF VIRAL GASTRO-INTESTINAL ILLNESS (e.g. Norovirus)

INTRODUCTION

Viral gastro-intestinal illness is usually caused by norovirus. This has also been called “winter vomiting”, Norwalk virus and small round structured virus (SRSV). Norovirus is a highly contagious gastro-intestinal virus that can be spread by a number of different routes – by direct contact with an affected individual; by aerosolisation of virus particles in body fluids and in particular in vomit; food-borne either from contaminated food or water or by food handlers that are symptomatic; by aerosol droplets (from vomit / faeces) landing onto surfaces and equipment and then being transferred onto hands and then into the mouth.

Norovirus causes a short illness (usually twelve – sixty hours) associated with nausea, headache, profuse vomiting – often projectile, diarrhoea, fever and painful abdominal cramps. The infection is self-limiting but can cause dehydration and deterioration of pre-existing conditions especially in those who are on poly pharmacy (multiple medications), immunosuppressed and the very young and elderly.

Outbreaks of norovirus infection in healthcare environments can have a devastating effect on activity due to the numbers of affected individuals which can includes staff. Business continuity can be adversely affected and provider Organisations have been known to close due to the effect of widespread outbreaks. Often entire communities are affected with schools, nurseries, hospitals, care homes etc. being the most affected due to the large numbers of susceptible individuals in confined environments. The role of the local Public Health England (PHE) Unit in advising in the early detection and management of norovirus outbreaks is crucial to the success of local control measures.

Outbreaks of diarrhoea and/or vomiting are common in hospitals as well as other settings such as nursing homes and schools. The definition of diarrhoea is ‘frequent loose stools’. This should not be confused with occasional loose stools. Other symptoms can be associated with diarrhoea such as fever, malaise, nausea, vomiting and abdominal pain. It is vital to identify potential outbreaks speedily in order to manage their symptoms most effectively. Outbreaks usually affect both patients and staff, which can have a significant effect on the operational effectiveness of the unit concerned

Prompt identification of possible cases of norovirus infection is crucial so that early interventions aimed at limiting spread can be implemented.

CRITERIA FOR SUSPECTING NOROVIRUS OUTBREAK

- Vomiting in > 50% of cases (although sometimes diarrhoea is the prominent symptom)
- Duration of illness 12 – 60 hours

- Service users AND staff affected (this is a critical criterion)
- Cases often occur in clusters up to 48 hours apart due to incubation period of 15 – 48 hours

CLINICAL FEATURES OF NOROVIRUS

- Vomiting (can be projectile) which is a classical symptom
- Diarrhoea, which tends to be acute and short-lived (but not always present as this is a vomiting infection)
- Nausea
- Abdominal cramps
- Headache
- Myalgia
- Chills
- Fever
- Dehydration

Symptoms usually last between one and three days and recovery is usually rapid. **Stool specimens should be sent where possible and should be identified for virology. If clostridium difficile is suspected, the stool specimen should be marked for CDT toxin. Suspected outbreaks should be discussed with the acute trust microbiologist before specimens are sent.**

MODES OF TRANSMISSION

SRSVs (Norovirus) are spread from person to person by the faecal / oral route and from aerosol transmission from somebody who is vomiting, and by environmental contamination and subsequent indirect person-to-person spread.

Food can potentially transmit SRSVs and bacteria if handled by an infected or contaminated food handler. Buffet-type food should not be prepared or handled when there are incidences of diarrhoea in any setting.

COMMUNICATIONS

Inform the infection prevention and control service at the earliest opportunity when there is a cluster (two or more cases) of unexplained vomiting or diarrhoea among service users. The Occupational Health Service should be advised if staff are unwell. Inform the Trust's locality lead for infection prevention and control.

REPORTING / RECORDING AN OUTBREAK OF VIRAL GASTRO-ENTERITIS

As soon as an outbreak is suspected, it is essential to report cases through the local incident reporting mechanism. The local Infection Prevention and Control Lead should be contacted for further guidance. In addition, clinicians must be made aware. It is essential that the local Public Health England Unit and the Microbiologist at the Acute Hospital Trust is notified of the existence of an outbreak, irrespective of whether this is deemed to be trivial. Public Health England (PHE) have a responsibility to assist with managing outbreaks of infection in health & social care settings. Outbreaks of viral gastro-enteritis in mental health settings can have a significant knock-on impact on local acute NHS healthcare facilities if service users require admission to hospital for further care. It is *essential* that PHE England are involved at the earliest opportunity so that they can coordinate responses across the whole economy.

DOCUMENTATION

It is advised that staff accurately maintain a DAILY outbreak record sheet to assist in managing the outbreak and for documentation purposes. It is essential to include symptomatic staff on the record sheets as well as service users. Examples of a Outbreak Management Form (record sheet) can be found in Appendix 1 for Service Users and Appendix 2 for Staff; these can be modified and photocopied for local use. Appendix 3 provides an example of the 'Bristol Stool Chart' which can be use in individual service user records.

INVESTIGATION OF SPECIMENS

Faecal specimens should be taken from affected service users as soon as possible after symptoms develop. Ideally, symptomatic staff should also submit faecal samples via their own GP. Only a small sample is required, do not fill container to top and it is acceptable to obtain a specimen from a bedpan that also contains urine, as this will not affect results. Request cards should be sent for both C&S **and** virology, and marked "outbreak". Send specimens PROMPTLY for investigation as virus particles deteriorate rapidly leading to difficulty in detection. Unless specifically requested, do NOT send samples of vomit as these are not usually required.

OUTBREAK MANAGEMENT

The most important aspects of outbreak control are (a) outbreak recognition and reporting and (b) implementation of strict enteric precautions to minimise spread.

ENTERIC PRECAUTIONS

The three most important actions during an outbreak of diarrhoea and vomiting are:

- Effective hand hygiene
- Isolation of affected service users, restriction of service user, visitor and staff movement and exclusion of affected staff
- Enhanced cleaning of the environment and equipment

EFFECTIVE HAND HYGIENE

Effective hand hygiene is vital to prevent transmission of infection and must be actively encouraged. Managers must ensure that staff are properly trained in hand washing technique and that they have easy access to hand hygiene facilities including warm water, liquid soap and paper towels. For hand decontamination plain liquid soap is usually adequate, however the use of an antiseptic hand wash preparation may be used during outbreak situations where prolonged reduction of microbial flora on the skin is necessary.

Service users must also have access to hand washing facilities and be encouraged to clean hands, particularly after using the toilet and before eating and drinking.

Please note:
Alcohol-based hand rubs should **NOT** be used when caring for service users with vomiting or diarrhoeal illness regardless of whether or not gloves have been used. Soap and water should always be used

ISOLATION AND MANAGEMENT OF SERVICE USERS

It is necessary to isolate service users with symptoms of diarrhoea and / or vomiting. This means they have to remain in their own bay or room, i.e. away from others who are well (asymptomatic), and with their own toilet facilities and designated cleaning equipment. If en-suite facilities are not available, specific toilet areas or a commode should be designated for their use only. The commode should if possible be kept in the room or by the service user bed and be thoroughly cleaned and disinfected after each use.

It is very important that strict isolation procedures are implemented by staff e.g. hand washing, environmental cleaning, and safe handling of infected linen/ waste etc. for the duration of the illness. Service users should remain isolated until forty-eight hours <u>after last episode of diarrhoea/vomiting.</u>

Segregation (cohorting) is usually necessary in an outbreak situation when single rooms may not be available for all affected persons. In general, however, it is important that symptomatic people are kept apart from those that are asymptomatic.

Staff caring for affected service users should, where possible not care for those who are not affected and should be allocated workload by rooms where staff numbers allow.

All unnecessary items of equipment should be removed from rooms and bays to minimise the risk of contamination. This includes medical equipment and foodstuff such as fruit.

It is recognised that isolation of service users in mental health care settings can pose difficulties, however the need to protect others from infection is vital. To gain co-operation Infection Prevention Control measures to be put in place should always be explained to the service user especially if they are required to stay in their bedroom.

MOVEMENT OF SERVICE USERS IN AFFECTED AREAS

During an outbreak, service users should NOT leave the ward / unit to visit other areas unless it is essential for their clinical management. This includes attending day care facilities, rehabilitation etc.

TRANSFERS OUT OF AN AFFECTED WARD / UNIT / FACILITY

TRANSFER TO OTHER HOSPITALS

The transfer of service users to another hospital during an outbreak of diarrhoea and vomiting should be avoided other than in a medical emergency, and ideally the clinician caring for the patient should agree such transfers with the receiving hospital Consultant / Consultant Microbiologist. In such instances, staff **MUST** inform the receiving Hospital and also the Ambulance Trust providing the transport that they are transferring from an area affected by diarrhoea and vomiting. This will allow ambulance personnel to take appropriate precautions and the receiving hospital to adequately isolate the service user on arrival thus minimising the risk of further spread.

TRANSFER TO OTHER FACILITIES

No service users should be transferred out to other Mental Health or other care settings during an outbreak unless they have been symptomatic and subsequently symptom-free for a minimum of forty-eight hours. If transfer is considered, it should be with medical approval only and in the full knowledge of the receiving facility manager. Service users that have not been affected should NOT be transferred as they may be incubating the virus and could easily spread this to other health or care settings.

DISCHARGES TO SERVICE USERS OWN HOME

Service users may be discharged to their own homes during an outbreak situation as long as any one providing care is aware of the outbreak and what actions they should take. This may include family members and Community Care providers both mental health and physical care.

WARD / HOSPITAL CLOSURE

In order to reduce the risk of transmission of infection it may be necessary to reduce the number of people that an affected person comes into contact with. This is done in the first instance with isolation procedures but, where more than two people are affected in a ward, it may be appropriate to temporarily halt admission and transfers into the affected area until the outbreak has passed.

If an outbreak is confirmed, then a decision may be made to close the ward or hospital to new admissions. Revised guidance Guidelines for the management of norovirus outbreaks in acute and community health and social care settings (Health Protection Agency (HPA), 2012) allows for closure of areas within a ward on some

occasions. The Outbreak Committee should consider this guidance and specialist advice when making closure decisions. This must be communicated to relevant external agencies by the outbreak committee (if convened) or by a designated manager.

At such times, restrictions on movement of staff, service users and visitors are of paramount importance in order to limit spread.

Decisions to reopen a closed facility will be made by the Outbreak Committee, with advice from specialists. This is often seventy-two hours after last symptom in the area. No facility will be re-opened to admissions until a thorough terminal clean of the entire affected area has taken place, including the changing of curtains, steam cleaning of carpets and thorough cleaning of service users' furniture and equipment especially seating, commodes, moving and handling equipment etc.

STAFF MOVEMENT

Certain groups of staff move between healthcare environments e.g. allied health professionals, agency nurses and medical staff. Such staff should be reminded of the importance of hand hygiene both before and after care and should consider visiting affected facilities / service users AFTER visiting non-affected facilities and service users.

Staff working in affected areas must not work in unaffected areas for forty-eight hours after the end of the shift (including bank and agency staff).

Uniforms should be changed DAILY and laundered at the highest temperature the fabric will allow. In particular, agencies providing staff should be notified of outbreaks of viral gastro-intestinal infection. This will enable them to take necessary actions to ensure their personnel do not inadvertently transmit infection to other facilities.

EXCLUSION OF AFFECTED STAFF

Exclusion is vital for any symptomatic staff member who should be sent home immediately they become affected. They should not return to work until forty-eight hours after symptoms have resolved. This includes bank and agency staff as well as visiting staff. It is the responsibility of the individual to ensure that they are fit to work.

EXCLUSION OF VISITORS

It is important that visitors to wards during an outbreak are advised of the fact by affixing notices to all doors. If visiting more than one clinical area e.g. visiting clergy, they should be advised to visit affected areas at the end of their visit to avoid unnecessary transmission to unaffected areas / service users. In addition visitors should be advised that if they (or members of their household) have symptoms of diarrhoea and / or vomiting they should not come to the ward until 48hours after symptoms have resolved.

In certain circumstances it may be advisable to restrict / cancel all but essential visiting. This decision will be made on a case by case basis by the Infection Control

Team and local PHE who will advise on the potential for increased spread within a community.

ENVIRONMENTAL CLEANING

A documented procedure for outbreak or enhanced cleaning should be available to inform staff.

Cleaning / housekeeping staff should be made fully aware of the outbreak situation and supervisory staff / managers notified immediately there is the suspicion of an outbreak, to ensure that they are able to respond to the increased demand for cleaning in the affected areas and for additional demand for cleaning supplies etc.

Cleaning frequency should be increased, with a standard clean using detergent to be followed by a further clean of all areas using a hypochlorite solution. Alternatively a combined detergent / chlorine-based disinfectant solution such as Chlor-Clean can be used.

- Particular attention should be paid to toilets, taps, door handles etc.
- Sodium Hypochlorite 1000ppm should be used to decontaminate all surfaces after washing the area with warm water and detergent
- Alternatively use a combined detergent / chlorine-based disinfectant solution e.g. Chlor-Clean
- Staff must be aware of and comply with control of substances hazardous to health (COSHH) regulations when using a chlorine-based product
- All cleaning cloths must be disposable and discarded after each use. Strict attention should be paid to correct colour-coding of cleaning equipment. If possible, yellow equipment should be used in those rooms deemed to be isolation areas
- A separate cloth, mop-head and bucket should be used for each area / room, OR equipment may be dedicated separately to affected and unaffected areas.
- Only disposable mop heads should be used in outbreak area and must be discarded at the end of the day
- Where service users are isolated or in cohort bays, these areas must be cleaned LAST at the end of ward cleaning, and cloths disposed of in the hazardous waste bin in that room / bay
- Aprons and gloves used in affected areas must be disposed of in the hazardous waste bin in that room / bay when removed

SPILLAGES
(See policy for Spillages of Blood and Body Fluids)

Spillages should be dealt with immediately following the guidance in the spillage section. Personal protective equipment (gloves and apron) should be worn whilst cleaning spills, and discarded immediately afterwards as clinical waste.

GUIDANCE ON CLEANING UP VOMIT AND FAECES

The following precautions should be used by individuals who clean up vomit or faeces in order to minimise the risk of infection to themselves:

- Always wear disposable apron and gloves – consider facial protection.
- Use paper towels to soak up excess liquid. Transfer these and any solid matter directly into a clinical waste bag.
- Clean the soiled area with detergent and hot water using a disposable cloth.
- Disinfect the contaminated area with freshly made 1000-ppm (0.1%) hypochlorite solution. (NB – Sodium Hypochlorite is corrosive and may bleach furnishings and fabrics).
- Dispose of gloves, apron and cloths into the clinical waste bag.
- Wash hands thoroughly using soap and water and dry them completely.

CLEANING UP VOMIT IN FOOD PREPARATION AREAS

- Using the above principles, carefully remove all vomit and clean the area.
- Disinfect the food preparation area (including vertical surfaces) with freshly prepared 0.1% sodium hypochlorite solution.
- Destroy any exposed food, food that may have been contaminated and food that has been handled by an infected person.
- Report the incident (including using an incident report form) as above and include appropriate managers.

DECONTAMINATION OF MEDICAL EQUIPMENT

(See policy for Decontamination of Medical Equipment)

Where possible, all medical equipment should be dedicated for use by individual service users (or bays of affected service users) during an outbreak. If this is not feasible, then all equipment MUST be adequately decontaminated after use with detergent and water followed by a chlorine-based disinfectant solution and then thoroughly dried with paper towels.

This is of particular importance for equipment such as commodes, wheelchairs, moving and handling equipment, etc. that may come into contact with contaminated

body fluids. Such items of equipment must be routinely decontaminated after each and every use during an outbreak of gastro-intestinal infection.

TREATMENT OF SPECIFIC MATERIALS

- Contaminated linen and bed curtains should be placed carefully into laundry bags appropriate to the guidelines for infected linen.

- Uncovered contaminated pillows should be disposed of. If covered with an impermeable cover, they should be disinfected with 0.1% sodium hypochlorite solution.

- Contaminated carpets should be cleaned with detergent and warm water.

- Cloths should be disposed of as clinical waste. Non-disposable mop heads should be laundered on a hot wash.

- Horizontal surfaces, furniture and soft furnishings in the vicinity of the soiled area should be cleaned with detergent and warm water using a disposable cloth.

- Fixtures and fittings in toilet areas should be cleaned with detergent and warm water using a disposable cloth, then disinfected with 0.1% sodium hypochlorite solution.

See Appendix 4 for a Quick Reference Guide for Staff During Viral Gastro-Enteritis Outbreaks Within Ward / Unit / Community Homes.

See Appendix 5 for Action Plan for Wards Affected by Outbreak of Viral Gastro-Enteritis

APPENDIX 1 INFECTION CONTROL OUTBREAK MANAGEMENT FORM

Type of Outbreak: **Diarrhoea and vomiting – Service Users Affected**

WARD:

Daily dates - insert at top of column for each subsequent day service user symptomatic (excluding day of onset)

Enter the following codes in each column as appropriate – D = diarrhoea, V = vomiting, DV = both diarrhoea and vomiting

Initials / Date of Birth	Symptoms	Date of Onset											Date Specimen Sent	Organism Isolated

Please ensure that patients who are affected by diarrhoea and / or vomiting are closely monitored for dehydration and that they are not simultaneously being treated with laxatives. Please update this report daily and e-mail to local infection prevention and control team by 4 p.m. each day.

APPENDIX 2 INFECTION CONTROL OUTBREAK MANAGEMENT FORM

Type of Outbreak: **Diarrhoea and vomiting – Staff Affected**

WARD:

Daily dates - insert at top of column for each subsequent day staff symptomatic (excluding day of onset)

Enter the following codes in each column as appropriate – D = diarrhoea, V = vomiting, DV = both diarrhoea and vomiting

Name	Grade Discipline	Symptoms	Date Symptoms Commenced	Returned to Work	Occupational Health Informed	Specimen Sent

Please ensure that patients who are affected by diarrhoea and / or vomiting are closely monitored for dehydration and that they are not simultaneously being treated with laxatives. Please update this report daily and e-mail to local infection prevention and control team <u>each day</u> as agreed at local level

APPENDIX 3 EXAMPLE OF THE BRISTOL STOOL CHART

Bristol stool chart

Type 1		Separate hard lumps, like nuts (hard to pass)
Type 2		Sausage-shaped but lumpy
Type 3		Like a sausage but with cracks on its surface
Type 4		Like a sausage or snake, smooth and soft
Type 5		Soft blobs with clear-cut edges (passed easily)
Type 6		Fluffy pieces with ragged edges, a mushy stool
Type 7		Watery, no solid pieces, **Entirely liquid**

APPENDIX 4

QUICK REFERENCE GUIDE FOR STAFF DURING VIRAL GASTRO-ENTERITIS OUTBREAKS WITHIN WARD / UNIT / COMMUNITY HOMES

- Cohort nurse or isolate symptomatic service users immediately. Offer en-suite facilities or provide with a commode.

- Implement standard infection control precautions (SICPs) with affected service users and environment.

- Send a stool specimen to pathology for culture and sensitivity as soon as possible and for each individual further affected.

- Contact local infection prevention and control service for advice; also inform domestic services, local management and infection prevention and control lead / specialist nurse, inform HPT and Trust DIPC / DDIPC.

- Ensure thorough and frequent washing of hands with soap and water between all care activities and after contact with service users' immediate environment and after removing PPE.

- After consultation with infection prevention and control services, it may be necessary to close the ward / unit / home to the introduction of new or day service users, transfers or discharges – this decision will be reached by the IPC leads and local managers. Ensure the infection prevention and control action plan is available for all staff to follow (See Appendix 5).

- Restriction movement. Avoid movement of infected service users to other wards or departments unless medically urgent and after consultation with the infection prevention and control team / microbiologist.

- Wear gloves and aprons for service user contact and environmental / equipment cleaning

- Change gloves and aprons between service users / tasks

- Clean up and disinfect spillages of vomit and faeces immediately

- Pay particular attention to the cleaning of commodes, moving and handling equipment, seat raisers etc.

- Increase the frequency of routine bathroom and toilet cleaning and also cleaning of frequently touched areas (door handles, phones etc.) This also includes the dirty utility area.

- Disinfect surfaces and equipment using freshly prepared 0.1% (1000ppm) chlorine-releasing agent after cleaning with neutral detergent

- Alternatively use a combined detergent/chlorine-based disinfectant e.g. Chlor-clean for surfaces and equipment

- Clean carpets and soft furnishings with warn water and detergent or steam clean.

- Ensure offensive waste, hazardous waste and infected laundry are handled with care, wearing personal protective equipment, and removed promptly from the area. Alginate bags to be used for fouled laundry

- Keep outbreak record sheet up-to-date on a daily basis

- Avoid movement of staff between affected and unaffected areas

- Exclude affected staff immediately and until asymptomatic for forty-eight hours. Occupational Health services should be advised of staff illness as soon as possible, and they may request a stool specimen for microbiology to assess whether the illness is the same as that affecting the service users, i.e. a healthcare acquired infection.

- Exclude non-essential personnel from the area and restrict visitors. Encourage all visitors to adopt strict hand hygiene practices.

- Communicate effectively and regularly to all who need to know including visitors. Provide notices indicating restrictions at entrance doors

- If in doubt, contact local Infection Control Nurse or PHE or Microbiologist at Local NHS Trust for guidance and support.

- Remove exposed or handled food / finger foods such as fruit / sandwiches / biscuits.

- The ward / unit / home should not be re-opened until the area has been deep cleaned throughout following forty-eight hours without incident of diarrhoea and / or vomiting. Deep cleaning can take place the following day and after agreement of the relevant infection prevention and control lead.

- Do not re-open to admissions until agreed with local specialist advisor / PHE.

- An incident reporting form (IR1) must be completed, in accordance with health and safety requirements, in addition to informing the Trust locality lead for infection control.

APPENDIX 5

ACTION PLAN FOR WARDS AFFECTED BY OUTBREAK OF VIRAL GASTRO-ENTERITIS

- The ward is now CLOSED.
- Source isolate service users in their own rooms – if this is difficult consider 1-1 nursing or cohort nursing the infected group in a bay / dormitory.
- Infection prevention and control notices should be displayed at the ward entrance to advise visitors.
- Obtain stool samples from those with diarrhoea as soon as possible.
- Inform all managers, hotel / domestic services, neighbouring wards, acute Trust's infection prevention and control team and microbiology department.
- Inform local infection prevention and control services.
- Complete the Trust's outbreak management form (for service users and staff, see Appendices 1 and 2) and update daily. Complete electronically and forward to local infection prevention and control services team each day.
- No new admissions or transfers in.
- No discharges to other care facilities.
- No transfers to other wards unless clinically essential – receiving facility must be informed of current situation in advance.
- Service users may be discharged to their own home if not suffering any clinical signs and / or symptoms with family having an appreciation of the current status on the ward.
- Staff and visitors are asked to clean their hands on entering and leaving the ward
- All staff to clean hands and wear gloves and aprons for each direct service user contact – washing with liquid soap is the preferred method in an outbreak situation. (Do not use alcohol gel).
- Avoid the use of sandwiches / portable uncooked food. Staff should not eat in the clinical environment. Remove all uncovered food from the clinical area and ensure biscuits are in individual packs and not loose in a communal tin.
- Routine use of a chlorine-based solution (1,000 parts per million for environmental cleaning) and stringent cleaning of service user equipment according to manufacturer instructions / Medical Devices Equipment Record sheets.

- Restrict visiting, i.e. visitors should be advised by staff of the position and requested not to visit if this can be avoided and not to visit if feeling unwell or until free of symptoms of diarrhoea and / or vomiting for at least forty-eight hours

- If relatives visit, they should be asked to clean their hands on entering and leaving the ward and to wear gloves and aprons if assisting with direct care

- Staff with symptoms of diarrhoea and / or vomiting should not be at work until at least forty-eight hours free of symptoms. They should also provide a stool sample if requested.

- Essential services to services users should continue. Non-essential activity should be delayed where possible until the outbreak is resolved.

- Bank / agency staff working on the ward must be made aware of control measures in place and advised not to work in other areas until forty-eight hours after leaving the ward.

ISOLATION AND MANAGEMENT OF INFECTIOUS SERVICE USERS

INTRODUCTION

The need to isolate service users in a mental healthcare or learning disability environment is rare. In most cases of communicable disease, single room care and the application of standard infection control precautions (SICPs) may be all that is required.

Service users who are identified as colonised or infected with the same organism may share a room (cohort nursing).

It is acknowledged that in mental health and rehabilitation settings there is the need to balance risk from infection with risk relating to the mental / psychological health of the service user.

Isolation in such circumstances is an unfortunate term given its association with restrictive procedures used for other purposes. It is used here to indicate the need for single room care to prevent the spread of transmissible micro-organisms.

For service users who may be at risk in isolation due to their mental health state, and where isolation is a high priority to prevent an outbreak of an infectious disease, additional supervision will be needed. All cases will need to be assessed individually and guidance sought from the infection prevention and control lead.

AIM

The aim of isolation or single room care is to contain and prevent the spread of potential or known pathogenic or epidemiologically important organisms in order to reduce the risk of transmission of infection to and from service users, visitors or staff.

BACKGROUND

The decision to isolate the service user should always be taken after assessing the risk to the individual, other service users and staff. When isolation precautions are required they should be tailored to meet the needs of each service user and based on nationally acceptable principles. Service users who are identified as colonised or infected with the same organism may share a room (cohort nursing).

INDICATIONS FOR ISOLATION / SINGLE ROOM CARE

- Severe or uncontrolled diarrhoea / vomiting
- Active bleeding or extensive wound exudates contaminating the environment
- Suspected or proven infection which may be transmitted through the airborne or contact route e.g. Meticillin Resistant Staphylococcus Aureus (MRSA), influenza. Service users with infectious tuberculosis (TB) are unlikely to be

cared for in a mental health environment. Were this to happen, advice should be sought from the TB Specialist team.

- Protective isolation for service users who are immuno-compromised or vulnerable to infection for some reason (for example service users with large, open wounds).

STRICT ISOLATION

- Rarely service users are diagnosed with a highly infectious condition. These service users must be cared for in a specialised infectious diseases unit.

COMMUNICATION

Service users, providing they have capacity as well as visitors have a responsibility to comply with the isolation guidelines. Therefore, they must be given a full explanation of the precautions required and the reasoning behind them. The use of pre-printed leaflets is recommended.

There is strong evidence that well-informed service users contribute positively to effective isolation and infection control practice.

Domestic / housekeeping staff must be informed if isolation procedures are being implemented

BEFORE COMMENCING ISOLATION

- Remove all non-essential equipment

- Place a copy of an isolation card on the outside of the door with due regard for Caldicott principles (relating to confidentiality)

- Keep door closed. If this is not possible advice should be sought from the Infection Prevention and Control Lead and the outcome of any risk assessment recorded in the service user's notes

ENTERING THE SERVICE USER'S ROOM

Protective clothing – gloves and plastic apron – must be worn to provide an effective barrier to prevent contamination of hands and clothing when giving direct care to an infected service user.

Wash hands before contact or donning gloves.

It is rarely necessary to wear protective clothing if the reason for entering the room is to provide non-clinical services and if there is not going to be direct contact with the service user; i.e. delivering meals, giving medication or during nursing hand-over.

It is not usually necessary for visitors to wear protective clothing unless they are giving personal care.

LEAVING THE SERVICE USER'S ROOM

Remove protective clothing and discard into a clinical / offensive waste bag taking care not to contaminate clothing with gloves.

Decontaminate hands using soap and water. However if not physically soiled or if **not** caring for service user with diarrhoea or vomiting alcohol rub can be used.

See Appendix 1 for Table of Standard Infection Control Precautions for Isolation Rooms

EQUIPMENT / FURNITURE

Keep the amount of equipment in the room to a minimum to prevent unnecessary contamination. Plastic bags used for clinical or domestic waste or laundry cannot be left in the service user room, as this presents a self-harm risk. A risk assessment should be done to work out the safest area to place these.

If the service user is not in the room already, remove all non-essential equipment and keep the amount of equipment in the room to a minimum throughout the isolation period to prevent unnecessary contamination. Equipment that has been in the room must be decontaminated prior to, or immediately after removal from the room. See policy for the Decontamination of Medical Equipment.

BEDPANS, URINALS AND COMMODES

Where possible retain one in the room.

Staff must wear appropriate protective clothing when handling bedpans and urinals.

Bedpans must be disinfected or disposable equipment used where possible.

MEALS

Meals should be served on the usual crockery - disposable crockery and cutlery are not necessary.

Educate the service user to maintain good personal hygiene and wash their hands before eating to reduce the risk of re-infection especially if they have an enteric illness (diarrhoea+/- vomiting).

CROCKERY AND CUTLERY

Crockery / cutlery should be removed after use. Use a dishwasher where possible, which reaches at least 80ºC during the final rinse. If a dishwasher is not available, wash thoroughly and then rinse the crockery/cutlery in very hot water. Where possible disposable items should be used.

SPECIMENS FOR LABORATORY

Place all specimens in the appropriate specimen bag provided.

Risk – Biohazard labels should be placed on all known infectious samples.

MEDICAL AND NURSING NOTES / CHARTS / X-RAYS

Medical notes and X-rays must not be taken into the room at any time, including during ward rounds.

Only essential personnel are to enter the side rooms.

VISITORS

Visitors are not required to wear protective clothing.

They must be advised to wash hands every time they leave the room.

They must not assist with other service users.

TRANSPORT OF SERVICE USERS TO OTHER HEALTHCARE ENVIRONMENTS

Unless it is medically necessary, service users in isolation with an infectious condition should not be transferred to any other healthcare establishment. If transfer has to take place, a risk assessment between the Consultant Psychiatrist, the Microbiologist and The Consultant at the receiving hospital must take place. Receiving staff must be informed of the potential risks and the appropriate precautions necessary prior to the transfer.

Visits to other departments should be kept to a minimum and should be essential to the service user's care and treatment.

Prior arrangements must be made with the department so that infection prevention and control measures can be implemented.

Inform the porters / transport services that the service user has an infection.

The patient should be seen / treated at the end of a working session.

The time spent in the department should be kept to a minimum.

The service user should not be kept waiting with other service users.

If transfer is by ambulance the ambulance team should be informed and where possible, the service user should be accompanied by a member of care staff who understands the risks and the necessary precautions, which need to be maintained in order to protect the service user as well as others - both service users and staff.

SERVICE USERS ATTENDING DAY CARE

Service users requiring isolation either because they themselves are infected or they are in a facility affected by an outbreak of infection e.g. diarrhoea / vomiting, should not, under normal circumstances be allowed to leave their room / ward to attend day care or other remedial departments such as occupational therapy. Guidance should be sought from the local Infection Prevention and Control Lead on a case by case basis.

DISCHARGE / TRANSFER OF SERVICE USER

In certain circumstances e.g. during outbreaks of viral infection such as norovirus it is inappropriate to transfer/discharge service users (except to their own homes) due to the risk of spreading the infection to other care settings. Advice should be sought from the Infection Prevention and Control Lead prior to arranging discharge / transfer to other care providers.

Inform the receiving healthcare facility /community staff /specialist nurse e.g. TB (tuberculosis) nurse (if the Service user has TB) before the individual is due for discharge or transfer, to ensure that the relevant advice on any special precautions necessary is given. If transferring an individual with a known infection the precautions in place must be documented on the transfer form.

DOMESTIC MANAGEMENT OF ISOLATION AREAS

The nurse in charge of the ward must inform the domestic staff when a service user is in isolation to ensure that the appropriate equipment is available.
A clean environment in an isolation area is essential. Service users in isolation often feel demoralised and depressed if the environment in which they are nursed if allowed to become dirty. Poor standards of hygiene are a health and safety risk.

DAILY REQUIREMENT

Cleaning equipment such as bowls and disposable cloths should be kept in the side room during the period of isolation. Other equipment such as detergent, clean mops and buckets, waste and linen sacks and protective clothing are to be stored outside the room and used as required.

Ensure that disposable hand towels and liquid soap are readily available to replenish supplies in the room.

MANAGEMENT AT THE END OF A PERIOD OF ISOLATION
NURSING RESPONSIBILITY

Any equipment in the room must be removed and appropriately decontaminated. If equipment requires reprocessing, place inside a clear plastic bag and ensure a decontamination certificate is attached. Disposable items must be disposed of into an orange clinical waste bag.

Bed linen must be removed and sent to the laundry following guidelines for disposal of infected linen.

The bed, mattress, pillows and duvet must be cleaned with detergent and water.

The domestic staff will be unable to clean the room unless all equipment is removed first.

DOMESTIC RESPONSIBILITY

Open windows.

Clean all surfaces, ledges, fittings, paintwork and the bed with detergent and water.

Clean and dry hand wash basin and fitting.

Clean the floor with detergent and water.

Floors and surfaces should be terminally disinfected with Sodium Hypochlorite solution – 1,000ppm (follow manufacturer's instructions).

It may be necessary to change and launder the curtains, although this is rarely required and is dependent on the length of stay and condition of the service user. The decision to change the curtains should be made by the infection prevention and control service. Curtains should be treated as infected linen and sent to the laundry in appropriate bags.

The infection prevention and control service should be contacted at any time for advice.

TERMINAL CLEANING (i.e. on discharge, transfer or death of service user)

Disposable items must be disposed of into a clinical waste bag.

Re-usable equipment must be decontaminated in the room. If they require reprocessing, place inside a clear plastic bag after cleaning and ensure a decontamination certificate is attached.

All surfaces must be cleaned thoroughly using the usual domestic cleaning procedures. Furniture washing and curtain changes may be required (if unsure contact the Infection Control Practitioner). The floor must be thoroughly cleaned using detergent and hot water.

During outbreaks of infection the usual cleaning solution may be changed to a disinfectant solution for the duration of the outbreak. This would be as advised by the local Infection Control Practitioner or Public Health England. In such circumstances the room will require terminal cleaning with the designated disinfectant solution.

Following terminal cleaning there is no need to keep the room empty before re-use.

PROTECTIVE ISOLATION

Occasionally, it may be necessary to nurse a service user in protective isolation. The purpose of protective isolation is to protect individuals with an increased susceptibility to disease from cross-infection due to a decreased immunity.

The degree of protective isolation varies with each individual; therefore expert guidance should be sought.

Service users who may require protective isolation are:

- Transplant recipients
- End-stage human immunodeficiency virus (HIV) infection
- Service users with a low neutrophil count.

DEATH OF AN INFECTIOUS PATIENT

If a service user has died as a result of the following diseases the body must be placed in cadaver bag, (also see policy for Last Offices):

- Open pulmonary tuberculosis (TB)
- Acquired Immune Deficiency Syndrome (AIDS)
- Anthrax (pulmonary and cutaneous)
- Chicken pox or shingles
- Cholera
- Creutzfeldt-Jakob disease (CJD) and other transmissible spongiform encephalopathies
- Diphtheria
- Dysentery
- Hepatitis Virus A, B and C
- Leprosy
- Plague
- Poliomyelitis
- Rabies

- Salmonella infection
- Typhoid and Paratyphoid infection
- Viral Haemorrhagic Fever
- Yellow Fever

On completion of last offices the identification bracelet on the ankle of the deceased must indicate a risk. The appropriate hazard label must also be attached to the shroud and the bag.

Inform the mortuary and funeral director (if they are involved in transporting the body to the mortuary) prior to transfer.

APPENDIX 1

TABLE OF STANDARD INFECTION CONTROL PRECAUTIONS FOR ISOLATION ROOMS

Precaution	Staff	Visitors
Before entering room	Please remove white coats, jackets and roll up sleeves.	Please talk to a member of staff
On entering room	Please leave door shut	Please leave door shut
Protective clothing	Wear apron and gloves Eye protection required if performing splash prone procedures	Wear apron and gloves if caring for service user Eye protection not required
Equipment	Only take essential equipment into room Decontaminate all equipment as per policy before leaving room	Discuss with member of staff before taking equipment into or out of room
Before exiting room	Remove apron and gloves and put into orange clinical waste bag Wash hands thoroughly	Remove apron and gloves, if worn and put into orange clinical waste bag Wash hands thoroughly

CLOSURE OF WARDS AND FACILITIES - OUTBREAK

INTRODUCTION

In order to reduce the risk of transmission of infection it may be necessary to reduce the number of people that an affected person comes into contact with. This is done in the first instance with isolation procedures but, where more than two people are affected in a ward, it may be appropriate to temporarily halt admission and transfers into the affected area until the outbreak has passed.

Wards and departments may require temporary closure and subsequent re-opening for a variety of reasons including an outbreak of infection e.g. diarrhoea / vomiting or for refurbishment or planned preventative maintenance (PPM).

During temporary closure resulting from an outbreak of infection the area usually remains fully functional. During this time service users will not be admitted or transferred out to other healthcare providers.

For refurbishment and planned preventative maintenance, see policy for Closure of Wards and Facilities – Refurbishment or Planned Preventative Maintenance.

AIM

To reduce the likelihood of exposing an unaffected service user or visitor to the microorganism that is causing the outbreak, and therefore limit the wider spread of the infection.

PROCEDURE

- Any service user (in-patient) with diarrhoea and / or vomiting or pyrexia of unknown origin should be isolated immediately whilst investigation takes place into the cause and until symptoms subside.
- All staff should be alert to the possibility of a communicable infection and immediately report anyone showing similar symptoms.
- Specimens should be sent to pathology services at the earliest opportunity and the microbiologist and infection prevention and control team in the relevant acute trust advised.
- The infection prevention and control lead for the area should be notified at the first available opportunity.
- All staff should carry out thorough hand decontamination and use personal protective equipment in all contacts with the affected individuals.
- Disposable / single use equipment should be used wherever possible for those affected.

- The affected individuals should be managed in en-suite facilities where possible. Where this is not possible a commode should be provided for their personal use only.

- The Infection Prevention and Control Service will advise on the closure of wards or cessation of day care activities where necessary – clinical staff must follow the advice of the infection prevention and control services and update them as appropriate as conditions change or the number of people affected alters.

- Senior managers must be advised immediately in the event of a ward or facility being closed to new admissions so that care can continue to be provided through alternative arrangements. The Trust 'Communications' department should be advised.

- Newly affected individuals should be identified to the infection prevention and control services as soon as possible.

- An outbreak chart must be initiated from the index case and updated as necessary. This should be returned to the Trust infection prevention and control lead nurse on a daily basis.

- Wards or facilities that have been closed must not re-open until advised to by the infection prevention and control team and before deep cleaning has taken place.

- Any staff members affected should notify the Occupational Health Department and their work base. Their involvement needs to be identified on the outbreak chart

This policy must be read in conjunction with the policy for Isolation of Infectious Service Users.

CLOSURE OF WARDS AND FACILITIES – REFURBISHMENT OR PLANNED PREVENTATIVE MAINTENANCE

INTRODUCTION

Wards and departments may require temporary closure and subsequent re-opening for a variety of reasons including an outbreak of infection e.g. diarrhoea / vomiting or for refurbishment or planned preventative maintenance (PPM).

During temporary closure resulting from an outbreak of infection the area usually remains fully functional. During this time service users will not be admitted or transferred out to other healthcare providers. In this instance refer to policy Closure of Wards and Facilities – Outbreak.

In the case of wards and departments closed (i.e. with no care activity) for refurbishment or PPM and in order to ensure that all infection control measures have been appropriately addressed, this protocol has been drawn up to ensure an effective process.

The Infection Control Practitioner should be informed of any closures, transfers or openings at least ten days before changes are made to ensure that all necessary control measures are in place. Infection Prevention and Control advice is likely to include:

- Water safety measures e.g. control of Legionella
- Dust control measures
- Domestic cleaning measures to ensure a safe environment
- Service user safety and placement in relation to infection risks

SPECIFIC RESPONSIBILITIES

Various departments and / or individuals have specific responsibilities in relation to the opening, transfer or closure of wards, which are:

INFECTION PREVENTION AND CONTROL LEAD (ICPL)

The remit of the ICPL is to ensure that any potential infection control risks have been appropriately addressed with the relevant persons.

HOUSEKEEPING SERVICES AND ESTATES DEPARTMENTS

These departments will address the areas specific to their remit but also have a responsibility to inform the Infection Prevention and Control Services of potential changes associated with upgrading and refurbishment of rooms, homes and departments. One of the most significant issues during refurbishment is to ensure

that all water outlets are flushed through regularly to minimise the risk of Legionella biofilm formation in the pipe-work due to lack of use.

HEALTH AND SAFETY PRACTITIONER

Ensures that all aspects of health and safety legislation are addressed when facilities are opened or closed

LOCAL MANAGERS

Local managers will take note of the advice given by the ICP and ensure that the recommended action is taken.

CLOSURE OR EMPTYING OF A WARD

Following the closure or emptying of a ward for refurbishment etc. it is important to ensure that the following individuals carry out an inspection of the area:

- The Ward Manager / Clinical Lead
- An Infection Prevention and Control representative
- A Housekeeping Services representative
- An Estates Department representative
- Project Manager (overseeing refurbishment)

This ensures that there are no residual risks remaining in the environment. It is the responsibility of the appropriate Manager to ensure this inspection takes place and any recommendations are complied with.

OPENING OR TRANSFER OF A WARD

Prior to the transfer into or opening of a ward, a risk assessment and inspection of that area must be carried out by the following personnel:

- The Ward Manager / Clinical Lead
- An Infection Prevention and Control representative
- A House-keeping Services representative
- An Estates Department representative
- Project Manager (overseeing refurbishment)

This ensures that any risks in the environment are addressed prior to occupation by service users. It is the responsibility of the appropriate Manager to ensure this inspection takes place and any recommendations are complied with.

CONCLUSION

During the inevitable complex planning for the transfer, opening or closure of wards / facilities, infection prevention and control measures can be easily overlooked. The purpose of these arrangements is to ensure that such measures are adequately addressed and thus avoid the potential for future problems and minimise risks to both service users and staff.