



# Outbreak Workshops

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# Introduction



Welcome, Housekeeping & Registration



Introduction to the Infection Prevention & Control Team



Presentation & Activities



Evaluation forms/paper or online/certificate of attendance.



# GET SMART

Join the fight against the spread of infection



## Outbreak Workshops

### The Aim of today's session is

To raise awareness about outbreaks, how to manage an outbreak, and gain further knowledge



# Who am I?

Sometimes when you take antibiotics the balance of bacteria in your bowel can change and cause this infection. It can grow and produce toxins that damage the cell lining of the bowel resulting in diarrhoea. It can spread easily from person to person.

It often affects people who have been taking antibiotics.

Diarrhoea

Loss of  
appetite/weight  
loss

High  
temperature

Stomach-ache

Feeling sick

Risk Factors -  
>65  
Recently taken  
antibiotics  
In a care home

Treated by stopping  
antibiotics possibly  
causing this infection  
and starting some  
that particularly  
treat this bacteria

Diagnosed –  
sample sent to  
the lab

# CDI (Clostridioides Difficile)

**Isolation**

**Environmental  
cleaning**

**Barrier Nursing**

Immediate  
actions to be  
taken

**Outbreak restrictions**

**Hand hygiene**

**Report to UKHSA**

**Monitor for signs of  
dehydration**

**Take a specimen**



- CDI can spread easily through spores to other people because bacteria is passed out of the body in a person's faeces. The spores of CDI is resistant to heat, alcohol, and many disinfections. It can persist for months in the environment; therefore, enhanced cleaning is essential.
- Isolation is key to help prevent the spread – isolation maybe discontinued once they are free of symptoms for 48 hours.
- Barrier Nursing/PPE – to protect staff and also prevent the spread. Essential staff are aware of current donning and doffing procedures for PPE. Apron, and gloves.
- Hand Hygiene – Alcohol gel does not kill CDI bacteria therefore hand hygiene is essential. Hands must be washed with soap and water before and after contact with the resident, their environment or equipment and on leaving the isolation room (Refer to '5 Moments' for Hand Hygiene)



- Monitor for signs of dehydration and speak to GP for advice.
- Environmental cleaning - All commodes, toilets and bathroom areas of CDI residents should be cleaned and then disinfected after each use with a chlorine agent (1000ppm available chlorine). 48 hours clear of outbreak – terminal deep clean.
- Outbreak restrictions – possibly postpone visiting/admissions. Can discuss with us for further advice on this. We can complete admission risk assessments.
- Report to UKHSA – they can help with managing outbreak and organising specimens.
- Collect a specimen, refer to Bristol stool chart





# Transmission










- Spores are **ingested** and then germinate in the bowel
- The individual becomes colonised before they develop the clinical features
- C. difficile can survive on surfaces for months or even years.
  
- The main routes of transmission of C. difficile spores are:
- Hands of staff and patients
- Contact with contaminated surfaces or equipment



# Stool Chart Game



# 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. <b>Entirely Liquid</b>

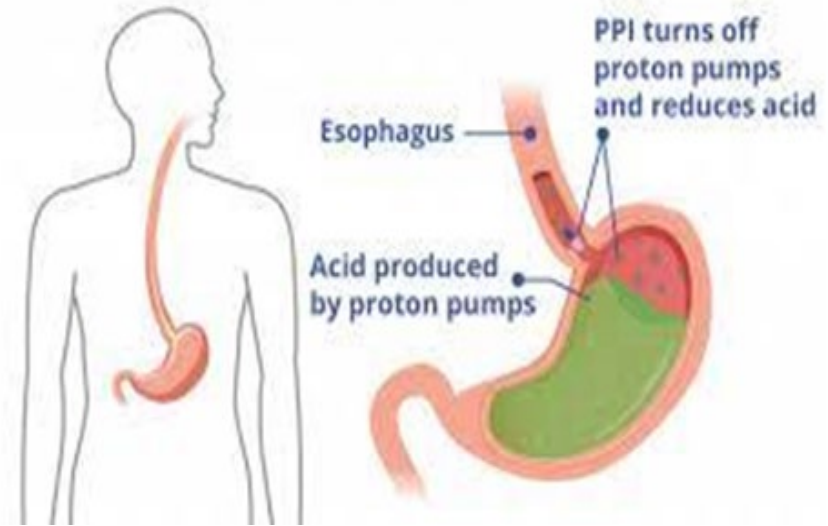


# Severity

- Assess severity of CDI each day as follows:
- Mild CDI is not associated with a raised WCC; it is typically associated with <3 stools of type 5–7 on the Bristol Stool Chart per day.
- Moderate CDI is associated with a raised WCC that is  $<15 \times 10^9/L$ ; it is typically associated with 3–5 stools per day.
- Severe CDI is associated with a WCC  $>15 \times 10^9/L$ , or an acute rising serum creatinine (i.e.  $>50\%$  increase above baseline), or a temperature of  $>38.5^\circ\text{C}$ , or evidence of severe colitis (abdominal or radiological signs). The number of stools may be a less reliable indicator of severity.
- Life-threatening CDI includes hypotension, partial or complete ileus or toxic megacolon, or CT evidence of severe disease

# PPI

- Protein Pump Inhibitor (PPI)
- Should be reviewed and stopped while on treatment



# What PPE to wear when assisting Cdiff Patient?



# Remember!



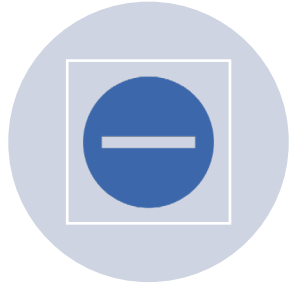
Effective hand washing technique involves: preparation, washing, rinsing, and drying.

# UKSHA Donning and Doffing Video

- [https://www.youtube.com/watch?v=-GncQ\\_ed-9w](https://www.youtube.com/watch?v=-GncQ_ed-9w)



# What is Scabies?



Scabies is common and anyone can get it. It should be treated quickly to stop it spreading



Classical scabies – has fewer than 20 mites all over the body



Rarer Norwegian scabies can be seen in immunosuppressed individual's, can have thousands of mites which can cause a more severe reaction in the skin



Infestation is common, and can be found worldwide





# Life cycle game





# Transmission

Person to person via direct contact e.g skin to skin

Prolonged contact other 5 minutes to allow the mites to migrate from one person to the next

Infestation is easily spread to sexual partners and household members

Infected persons who have no itching can pass the mite on to others

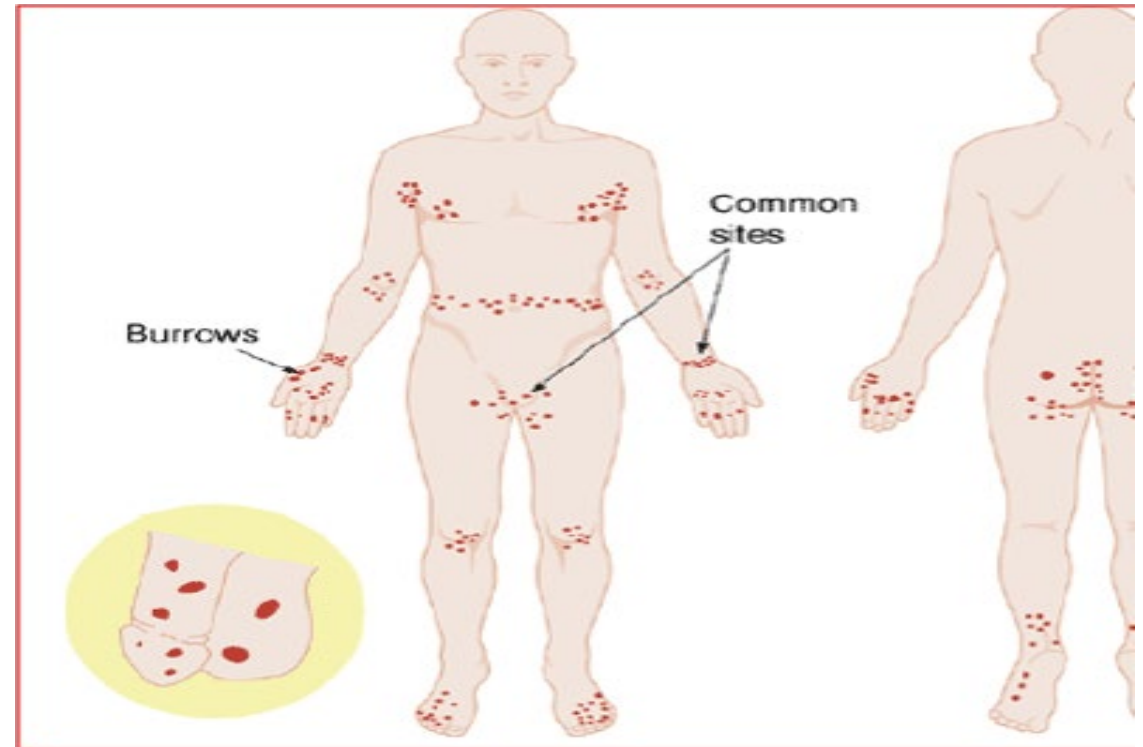
A person can be infected for up to 4 to 6 weeks before the rash or itching occurs

Away from the body die within 48 – 72 hours

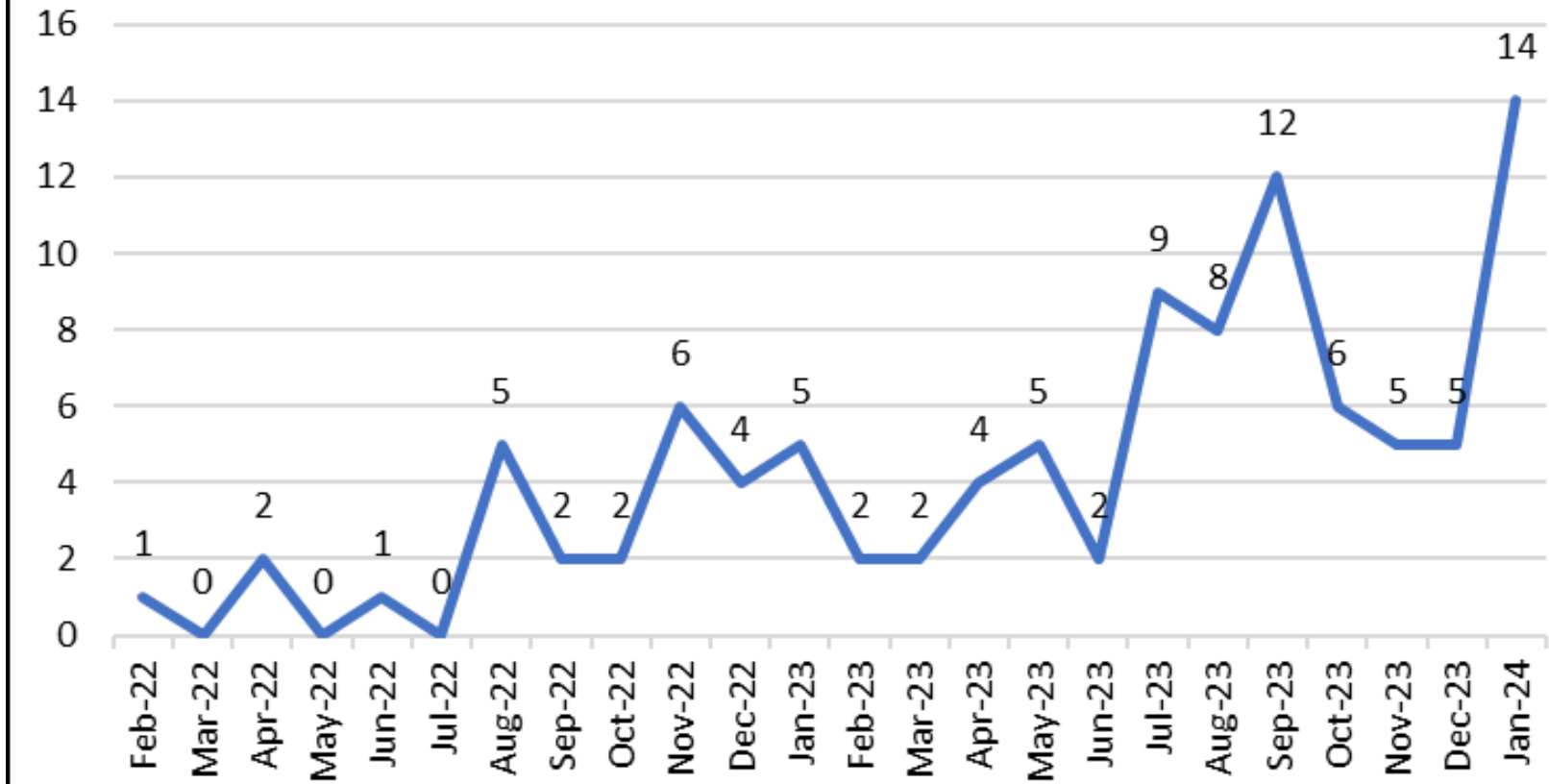


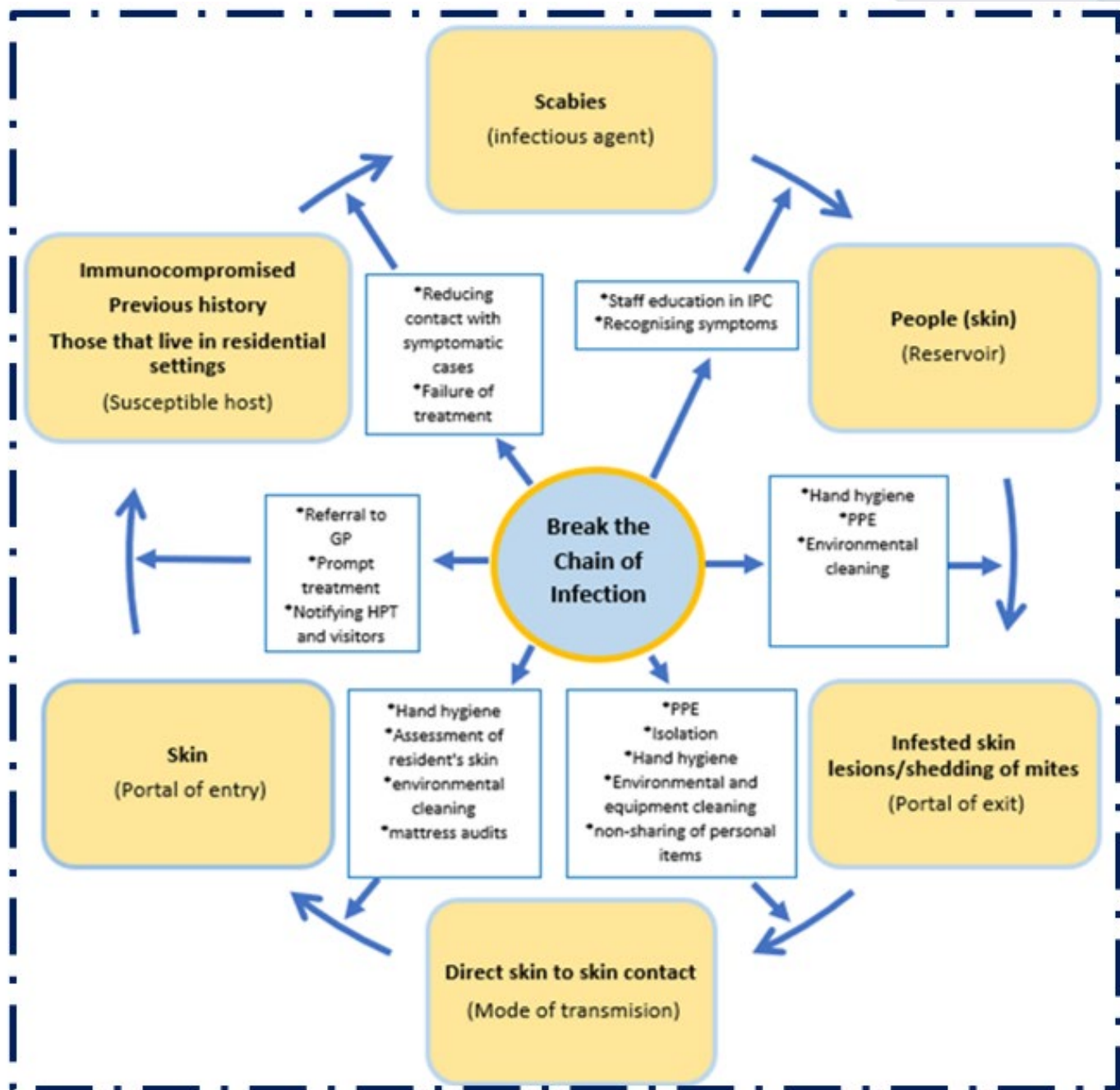
# Diagnosis and Classical Sites of Scabies rash, body mapping

- Between fingers
- Wrists
- Penis and scrotum
- Buttocks
- Ankles
- Inside of legs
- Axillary areas



## Scabies outbreaks 22 - 24





# Line Listing

- A line list is a table that contains key information about each case in an outbreak, with each row representing a case and each column representing a variable such as demographic, clinical and epidemiologic information (e.g., risk factors and exposures). Line list information describes an outbreak in terms of person, place and time.
- The line list may include:
  - All residents of the setting unless there is a clear rationale for more limited tracing.
  - Residents on a single affected floor or wing if there is no mixing or movement of staff or residents and between floors or wings.
  - All members of staff (including agency staff) exposed to the index case without wearing appropriate PPE.
  - Visitors to the setting who have had prolonged or frequent skin-to-skin contact with a case.
  - Ancillary staff, for example, hairdressers, podiatrists, community health professionals and agency staff



# Management of Outbreak



- If 2 or more linked cases within an 8-week period, assess all individuals (staff and residents) within the setting for scabies infection.
- Identify close contacts (up to 8 weeks prior to diagnosis) including visitors.
- Co-ordinate treatments of all cases and contacts linked to the setting.
- Provide hygiene and exclusion advice and avoid transfers to other settings during treatment.
- Advise on appropriate PPE for staff and visitors.
- Consider isolation of residents or exclusion of staff until mass treatment completed.
- Warn and inform visitors to setting until mass treatment completed





# Exclusion or isolation

## **Classical scabies**

Isolation of residents who are diagnosed as having scabies is not usually warranted in the event of an outbreak, as once an outbreak has been identified contacts will either be wearing appropriate PPE or undergoing treatment at the same time. Although it may be advised for those who have been diagnosed with scabies to refrain from skin-to-skin contact until 24 hours after the first treatment

## **Crusted scabies**

Crusted scabies is highly transmissible; however, standard infection control principles and wearing appropriate PPE to avoid skin-to-skin contact should be sufficient to prevent transmission. Isolation of people with crusted scabies is therefore not recommended. Close contact with persons not undergoing concurrent treatment or unable to wear appropriate PPE should be limited as much as possible. Although Due to the complexities of treating crusted scabies, the decision as to whether the patient is no longer infectious should be guided by the specialist clinician involved in care. Limiting skin-to-skin contact where possible is advisable until non-infectious



# Co-ordination of Mass Treatment



All cases and contacts should be treated at the same time to break the cycle of transmission. If staff are off duty at the time of treatment, they should complete the first 24-hour treatment dose before returning to work.

Individual case management should happen simultaneously for all cases and contacts in the outbreak.

Where occupational exposure of staff has led to their need for treatment, it is recommended that the employer should consider funding any treatment rather than staff paying for their own prescriptions. This encourages treatment uptake and promotes a prompt return to normal working.

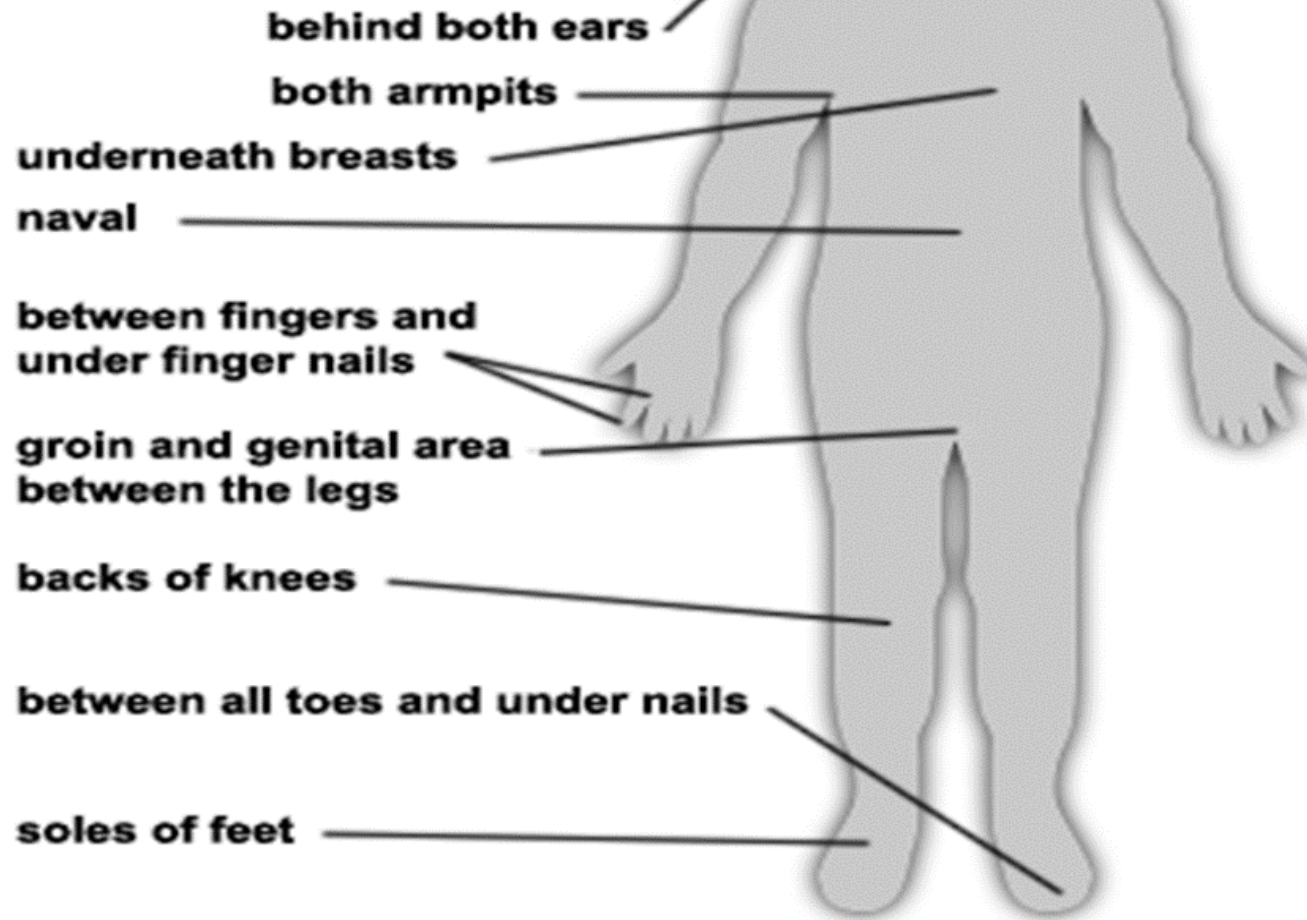


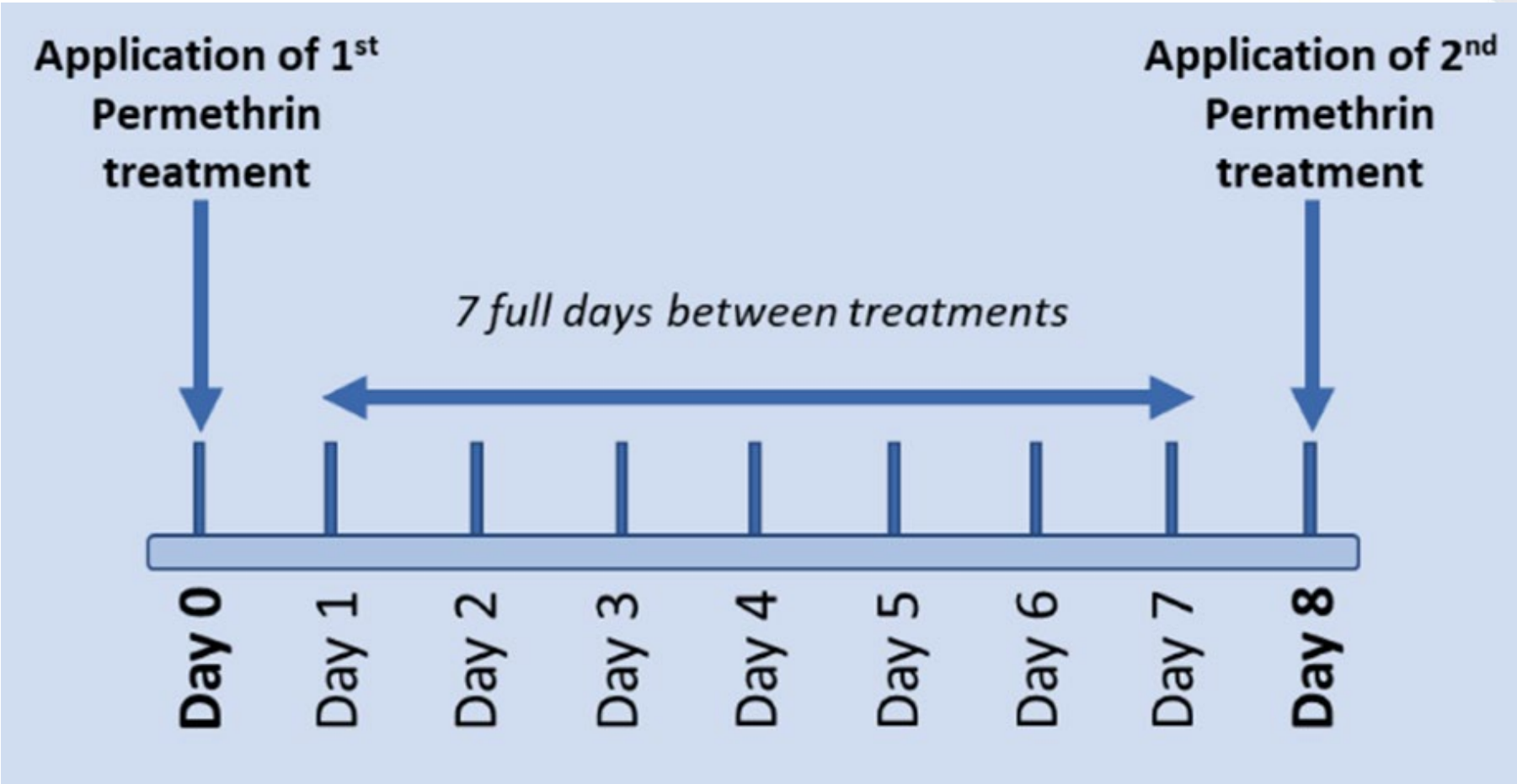


# Application of Treatment Game



# Pay special attention to these areas when you put on the lotion or cream





# Environmental cleaning / Laundry



- Routine cleaning of hard surfaces in the environment with warm water and pH neutral detergent is sufficient.
- Soft furnishings with non-wipeable covers should be removed from use following treatment and placed into plastic bags and sealed for 72 hours, to allow any mites on the fabric to die. The items should be vacuumed.
- Lined should be handled with PPE
- Soluble laundry bags used
- Contaminated laundry not mixed with unaffected residents
- Hot wash minimum 50C
- Any items not laundered to be placed in plastic bag for 4 days



# Linen and Towels



Bed linen and towels of cases should be processed as infected linen. Items should be placed in dissolvable alginate bags (where available and if compatible with available washing machines) and either processed in a commercial or the on-site laundry using an enhanced process:

- wash temperature should be at least 50°C (122°F)
- thermal disinfection at 71°C for 3 minutes or 65°C for 10 minutes is advised
- linen should not be removed from water-soluble bags or sorted by hand
- washing machines should not be overloaded
- after laundering items should be dried immediately in a tumble drier



# Environmental Game



Comfort break  
5 minutes



- Respiratory infections, including Covid-19 and Influenza (flu) may be co-circulating at high levels this winter, putting those who are vulnerable at increased risk and increasing pressure on hospitals and other health care services
- Within the North West there have already been Flu outbreaks in care settings (this is earlier circulation than in previous years)
- There are no COVID 19 restrictions for the general population therefore it is imperative that we practice/promote/influence high standards of infection prevention daily.
- It is important to manage other transmissible infections correctly such as gastrointestinal infections (Norovirus/C.difficile)
- Infection prevention and control measures are crucial to prevent infections from spreading – we can make a difference
- Effective prompt recognition and management of infection(s)/outbreaks can reduce spread within care settings and help to keep residents safe





Respiratory infections can spread between people easily

Droplets from the nose and mouth can contaminate hands, toys, environment or other items and spread to those who may touch them, in particular if they then touch their nose or mouth

Sneezing, coughing, singing and talking may spread respiratory droplets from an infected individual to another person close by



I am also responsible for illness and deaths in adults and the elderly

I can cause headaches

I am responsible for mild illnesses and I mainly occur in children

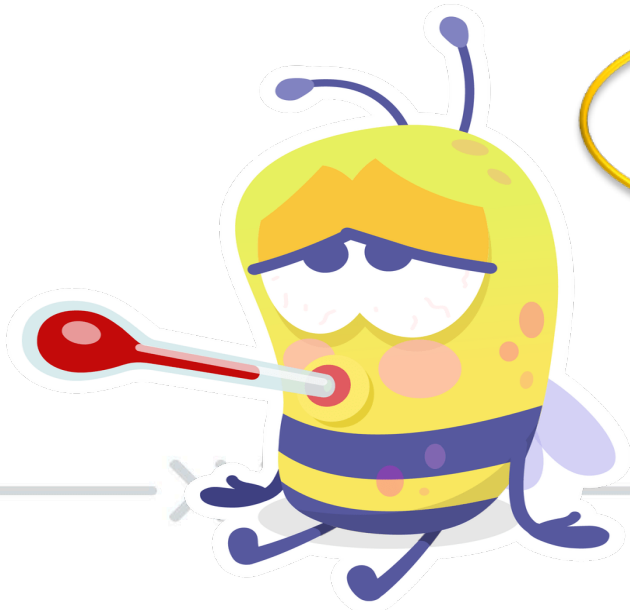
I can cause Bronchitis and bacterial pneumonia if not treated.

## WHO AM I ?

I am also responsible for illness and deaths in adults and the elderly

I am responsible for Pandemics

I can cause a fever



Different types including – Influenza A, B, C, Respiratory Syncytial Virus

Report UKHSA

Cough and hand etiquette

Personal protective equipment should always be used

Vaccination can help to reduce the symptoms of the flu

# Influenza

Staff should not cross over between positive and non positive cases

Residents should stay isolated for minimum of five days or until symptom free

Deep cleans should be adhered to during an outbreak



# Flu

**Transmission:** Droplet spread.

**Incubation period:** 1-4 days with average of 2 days

**Infectious period:** Usually 24 hours before onset symptoms start, until 5-6 days while symptomatic

**Common Symptoms:** Headache, fever, sore throat, aching muscles and joints, gastrointestinal symptoms in children

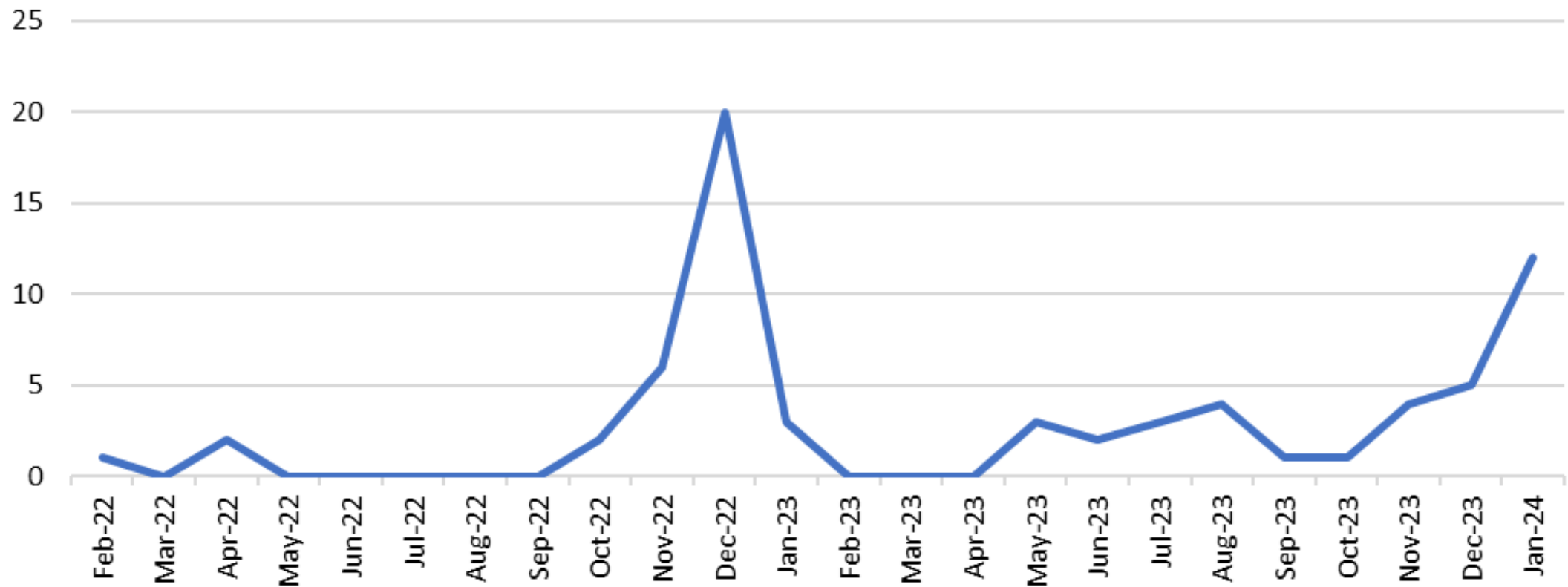
**Exclusion period:** If symptoms remain then individual is still infectious. Return when no fever and fully recovered, minimum of 5 days (Symptomatic residents should be cared for in single rooms and any symptomatic staff should isolate at home )

**Prevention :** Flu vaccinations now part of the childhood vaccinations in all primary school year groups.

**Children at risk:** Chronic heart, chest or kidney diseases are offered annual vaccines .

**Pregnant staff:** Offered flu jab during pregnancy.

## ARI/ Influenza outbreaks



# Respiratory syncytial virus - RSV

**RSV is one of the common viruses that cause coughs and colds in winter.**

**Transmission;** Large droplets from contact with an infected person

**Incubation period ;** 3 to 5 days.

**When RSV circulates:** generally start in October and last for 4 to 5 months, peaking in December

**High-risk groups;** Under 1 year of age and the elderly are at the greatest risk. infants aged less than 6 months frequently develop the most severe disease such as bronchiolitis and pneumonia, which may result in hospitalisation

**Statistics ;** Over 60% of children have been infected by their first birthday, and over 80% by 2 years of age

**Symptoms;** similar to a cold, including rhinitis (runny nose, sneezing or nasal congestion), cough, fever, ear infections and croup

**Risks;** most common cause of bronchiolitis in infants

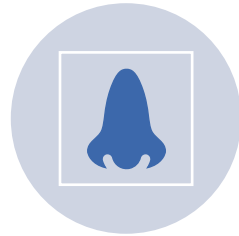
**Prevention;** respiratory & hand hygiene, (washing with soap and warm water, and cleaning of surfaces)



RESPIRATORY INFECTIONS ARE COMMON IN CHILDREN AND YOUNG PEOPLE, PARTICULARLY DURING WINTER MONTHS



SYMPTOMS CAN BE CAUSED BY SEVERAL RESPIRATORY INFECTIONS; E.G. COMMON COLDS, COVID-19 AND RSV



CHILDREN AND YOUNG PEOPLE WITH MILD SYMPTOMS SUCH AS A RUNNY NOSE, SORE THROAT, OR SLIGHT COUGH, WHO ARE OTHERWISE WELL, CAN CONTINUE TO ATTEND THEIR EDUCATION SETTING



THOSE UNWELL , OR WITH HIGH TEMPERATURE SHOULD STAY AT HOME AND AVOID CONTACT WITH OTHER PEOPLE



THEY CAN GO BACK TO SCHOOL, OR CHILDCARE, AND RESUME NORMAL ACTIVITIES WHEN THEY ARE AFEBRILE & WELL ENOUGH TO ATTEND



# Who am I?



Anosmia

Worsening shortness of breath

Fever

Feeling tired/exhausted

New,  
continuous  
cough

Delirium, particularly in those with  
dementia

Blocked or runny nose



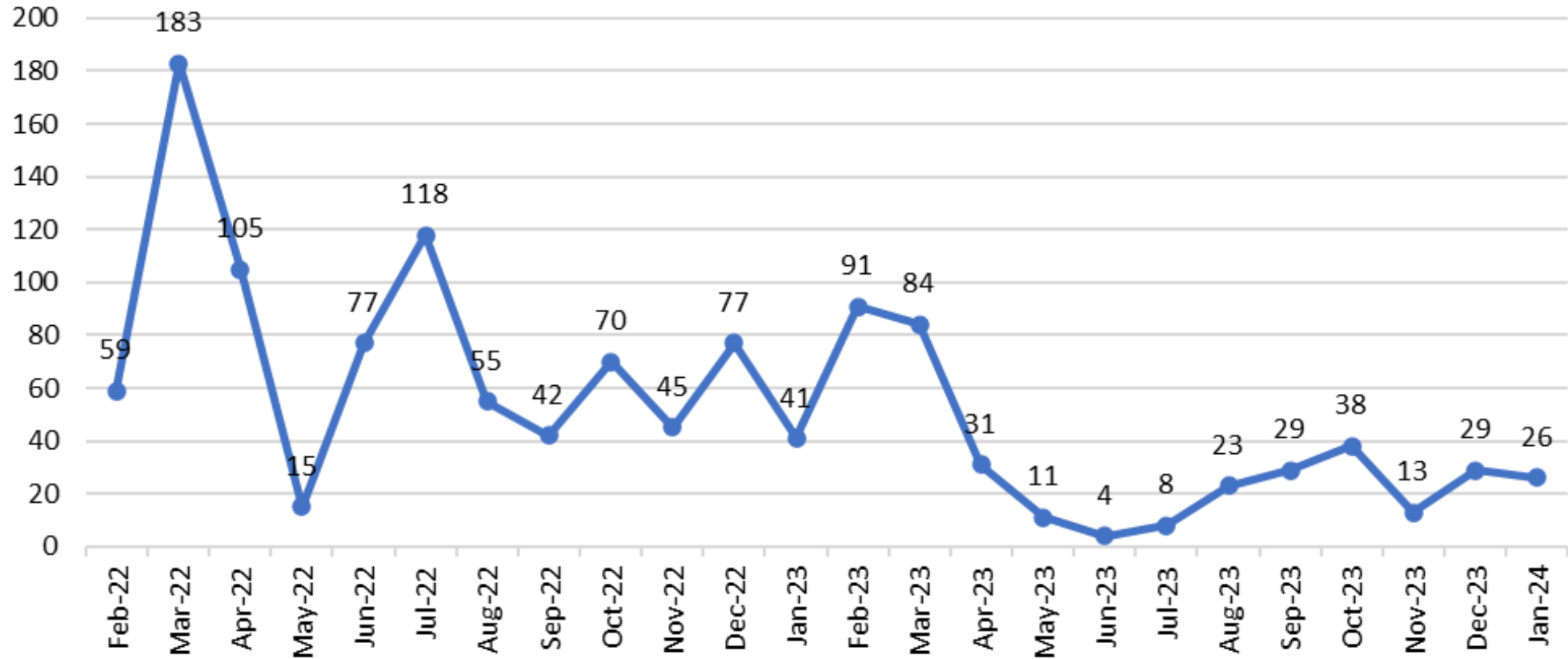


# Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2)

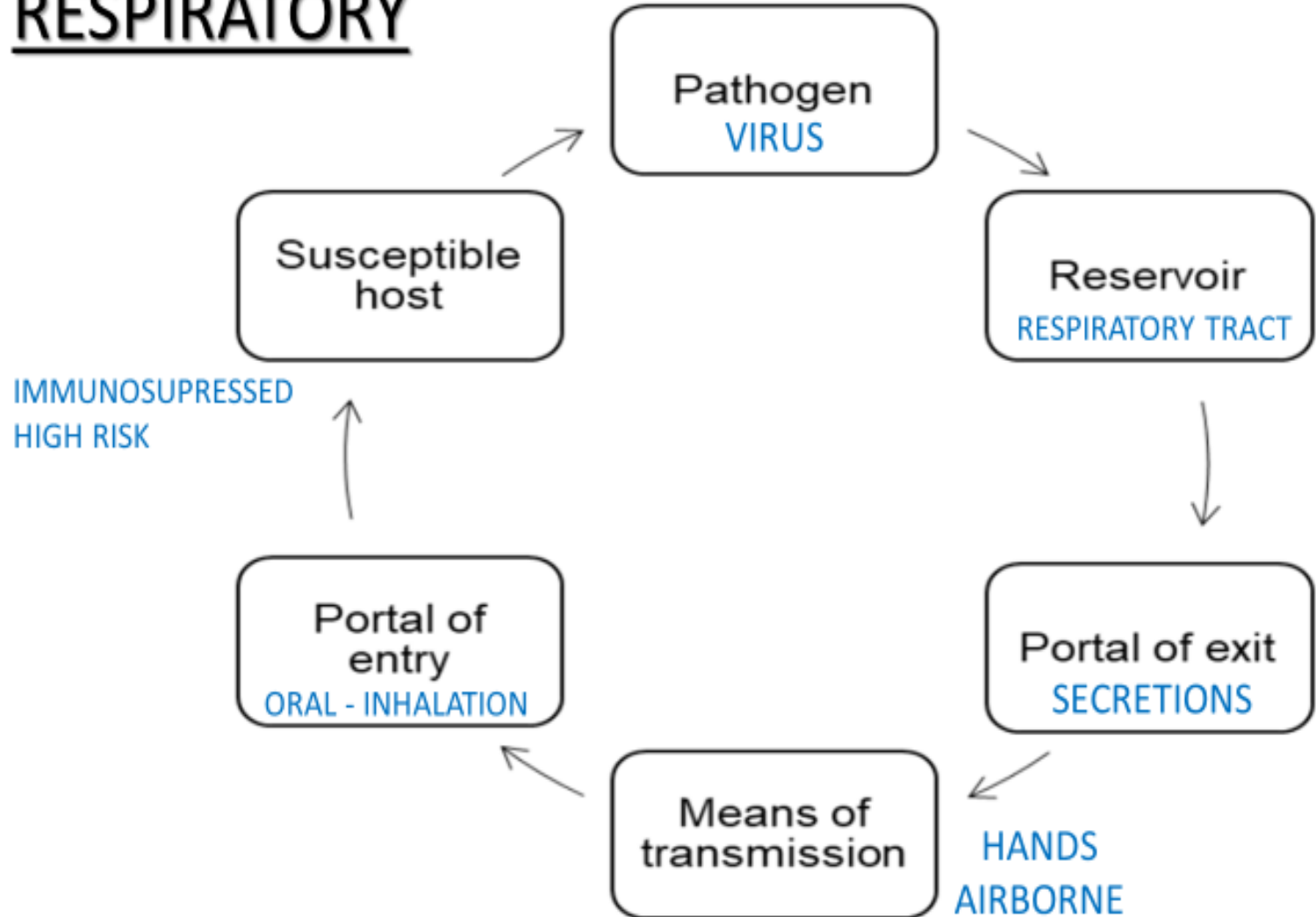
- **Transmission:** The disease is primarily transmitted from person to person via respiratory particles however indirect transmission may occur through contact with surfaces contaminated with the virus (fomite transmission)
- **Incubation period:** The average incubation period is between 3 and 6 days, with a range from 1 to 14 days
- **Infectious period** The infectious period begins around 2 days before symptom onset to 10 days after. People are most infectious during their symptomatic period, usually in the first 3 days
- **Common Symptoms:** but are not limited to, new persistent onset of cough and fever, Anosmia (loss of smell/taste), and flu-like symptoms
- **Exclusion period:** Minimum of 5 days after the test was taken until feeling well (if tested positive for COVID)
- **Symptomatic residents:** should be cared for in single rooms and any symptomatic staff should isolate at home
- **Prevention :** Vaccine if meet criteria, good respiratory etiquette, ventilation,
- **High-risk groups/ Eligibility;** downs syndrome, certain types of cancer, Chronic kidney disease stage 4 or 5, HIV, Certain autoimmune or inflammatory conditions, organ recipient



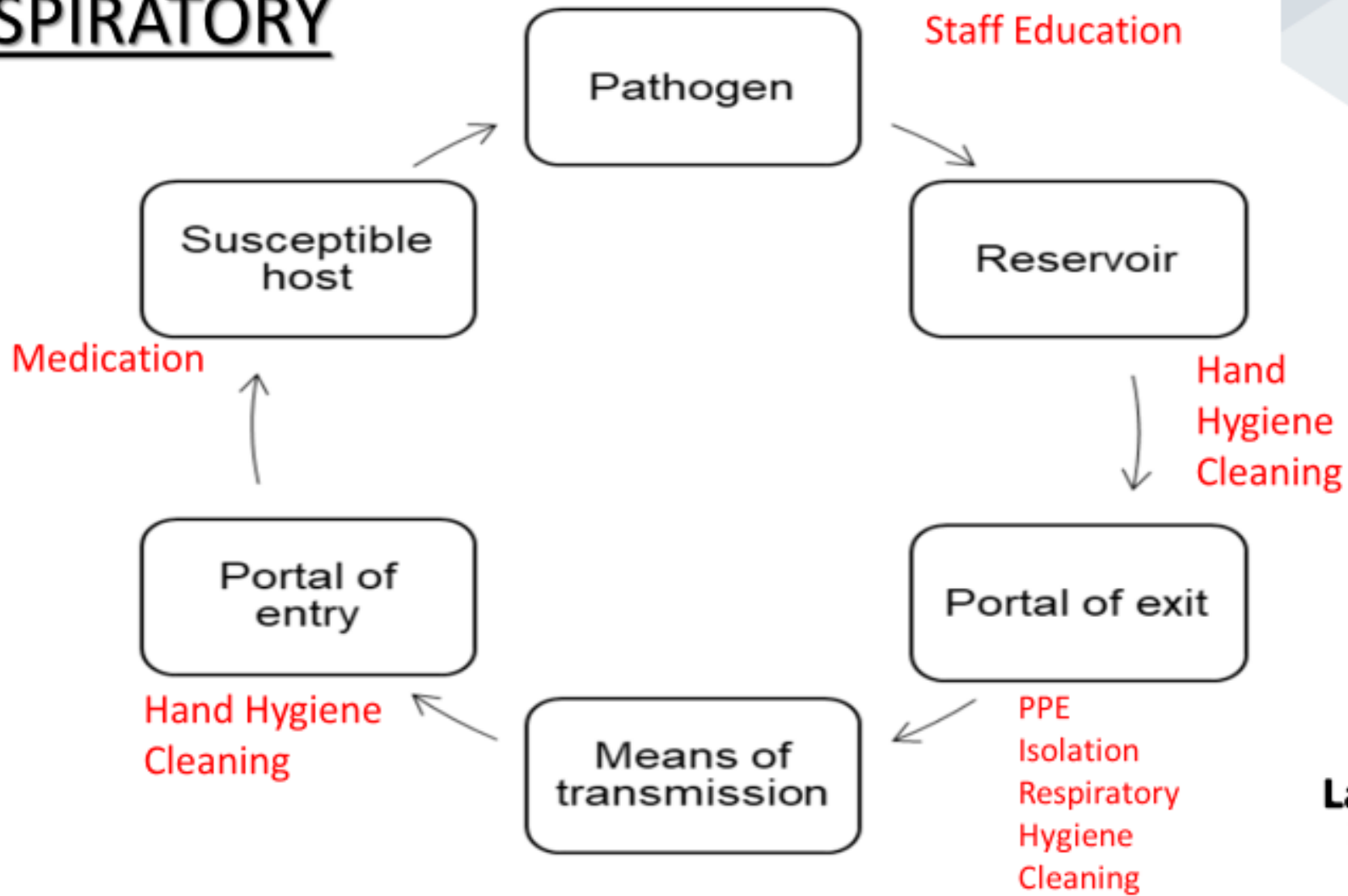
## Covid outbreaks 2022-24



# RESPIRATORY



# RESPIRATORY



The IPC team no longer have a telephone number, but the team can be contacted via email:

[infectionprevention@lancashire.gov.uk](mailto:infectionprevention@lancashire.gov.uk)

Our service hours are currently Monday to Friday 08:00 – 17:00.

Out of hours IPC advice can be obtained from UKSHA Cumbria and Lancashire Health Protection Team: Out of hours 0151 434 4819.



[lancashire.gov.uk](http://lancashire.gov.uk)



Do 2 or more residents or staff have the following symptoms?

Fever of 37.8°C or above

New onset or acute worsening of one or more of these symptoms:

- cough
- hoarseness
- runny nose or congestion
- shortness of breath
- sore throat
- wheezing
- sneezing
- chest pain

Sudden decline in physical or mental ability

If you notice 2 or more residents or staff meeting these criteria, occurring within 14 days, in the same area of the care home **you might have an outbreak**. Consider influenza or COVID-19 as an alternative diagnosis in residents with suspected chest infection or fever or cough

Individuals who are eligible for COVID-19 treatments and who have symptoms of a respiratory infection should take an LFD test immediately and follow the guidance for people eligible for COVID-19 treatments.

Irrespective of LFD results, call and notify the UKHSA Cumbria & Lancashire (C&L) Health Protection Team Monday – Friday 9am – 5pm 0344 225 0562

UKHSA C&L Health Protection Team can arrange testing for other respiratory viruses if appropriate e.g. flu A, flu B, RSV

Antivirals for flu may also be arranged after risk assessment by IPC/UKHSA, but are most effective if given with 48 hrs of symptom onset.

# Testing in Care Homes

- ARI Two or more symptomatic cases/positive tests, within 14 days in residents or staff should be risk assessed by your local UKHSA HPT. They will use this information to undertake a local risk assessment, which will then determine what testing is required and UKHSA HPT will activate the appropriate testing pathway.
- Covid -19 testing
  - **Only** service user's that are at *higher risk* of getting COVID-19 **and** who are displaying *respiratory symptoms* should test (LFD)
  - **Only** staff that are at *higher risk* of getting COVID-19 and who are displaying *respiratory symptoms* should test (LFD)



# Key Actions for Care Home Management During an ARI Outbreak

- Ensure there is a named ARI co-ordinator on every shift.
- Maintain adequate PPE supplies.
- Maintain accurate records of residents with ARI symptoms
- Ensure regular symptom checks for all residents and staff in line with routine care practices
- Display appropriate signage across the home. As a minimum, this should include:
  - a. Notice of outbreak at all entrances including exclusion information for anyone (staff or visitors) displaying symptoms.
  - b. Infection control notices outside rooms of symptomatic residents
- Adhere to all [infection prevention and control measures](#), including stringent hand and respiratory hygiene for staff, residents and visitors, enhanced cleaning across all affected units of the home, particularly focusing on frequently touched sites or points
- Increase the frequency of infection control audits to weekly.
- [Limit close contact with other people](#) especially during an outbreak, or when spending prolonged periods of time with a vulnerable individual. This can help reduce your risk of catching or spreading any ARI



# Key Actions for Care Home Management During an ARI Outbreak

## Visiting:

- Inform visitors that there is an outbreak of respiratory illness in the care home
- Visitors should not enter the care home if they are feeling unwell, especially if they have any symptoms that suggest other possible infections such as cough, high temperature, diarrhoea or vomiting
- Keep visitors, who are visiting an affected resident, to the minimum number that is required for the resident's welfare
- Visiting health staff such as GPs or District Nurses can continue to visit the care home but must be informed of the outbreak and advised about personal protective equipment and other control measures e.g., hand washing as necessary
- Other visiting professionals (social workers, physiotherapists etc.) should also be informed so they can make their own risk assessment of whether they should visit

Consider closure of the home to new admissions, supported by a risk assessment and discussion with IPC/HPT and social care commissioners and hospital discharge team





# Cohorting Considerations

- Cohorting is where a group of residents, with the same infection or exposure, are housed together in the same room or unit. This can be an effective infection prevention and control strategy for the care of large numbers of unwell people where it is not possible or safe to use single room isolation. It can also be effective in units where there are Walking with purpose residents who may struggle to maintain isolation.
- Residents with **suspected influenza** should **not** be cohorted with residents with **confirmed influenza or confirmed COVID-19**.
- Residents with **suspected COVID-19** should **not** be cohorted with residents with **confirmed COVID-19 or confirmed influenza**.
- Where possible, suspected or confirmed ARI residents should not be cohorted next to **immunocompromised residents**.

Separate staff should be allocated to cohort areas to prevent wider infection spread across the home. Consider using staff vaccinated against influenza at least 14 days beforehand to care for symptomatic patients with suspected influenza. IPC and PPE guidance should be followed, regardless of vaccination status

**ALWAYS consider whether residents have any other potentially transmissible conditions before cohorting cases of the same ARI together**



# Basic Infection Prevention Messages

- Hand hygiene
- Respiratory and cough hygiene
- Facilitates
- PPE
- Cleaning
- Ventilation
- Waste



# Short Video to Demonstrate Respiratory Hygiene

- <https://www.youtube.com/watch?v=fzW3gmoqzF8>



# CATCH IT

Germs spread easily. Always carry tissues and use them to catch your cough or sneeze.



# BIN IT

Germs can live for several hours on tissues. Dispose of your tissue as soon as possible.



# KILL IT

Hands can transfer germs to every surface you touch. Clean your hands as soon as you can.



**NHS**

## Respiratory Etiquette Hygiene

# Declaring an Outbreak Over

- Any respiratory outbreak should not be declared over until no new symptomatic cases or positive results have occurred in residents or staff for a minimum of 5 days after onset of symptoms in the last case.
- If there are risk factors for the prolonged infectiousness of cases remaining symptomatic e.g. residents with long-term conditions or impaired immune systems (see section 2.1), infection control measures, including isolation, should be maintained for longer than 5 days until residents have fully recovered, with no on-going fever or respiratory symptoms.
- Please notify the IPC team when outbreak has ended, and a deep clean of the setting has been completed; [infectionprevention@lancashire.gov.uk](mailto:infectionprevention@lancashire.gov.uk)



# Scenario

Resident John staff have observed is not himself, headache, malaise. On examination he has a temperature of 38.C, and you have noticed a cough for last 24 hours. What would you do?



The next day, John's cough is now productive, and he doesn't want to get out of bed. John spends a lot of time with Bill who has dementia & is also coughing and developed a temperature Bill also known to have diabetes and severe immunocompromised. What should you do?



# What is group A Streptococcal Disease (iGAS)?

Group A Streptococcus is a bacterium often found in the throat and on the skin.

- How its spread? Streptococci survive in throats and on your hands for long enough to allow easy spread between people through sneezing and skin contact. People may carry group A streptococci in the throat or in the skin and have no symptoms of illness. This is known as colonization. Illnesses that can be caused by GAS Most GAS infections are relatively mild illnesses such as sore throat (strep throat) or a skin infection such as impetigo. On rare occasions, these bacteria can cause other severe and even life-threatening infections.
- Invasive Group A Streptococcal disease (iGAS) Sometimes life-threatening disease may occur when bacteria gets into parts of the body where bacteria usually are not found, such as the blood stream and deeper layers of the skin. These infections are termed as invasive Group A Streptococcal disease. Two of the most severe, but rare, forms of IGAS disease are necrotizing fasciitis and Streptococcal Toxic shock syndrome.





- Why does IGAS group A streptococcal disease occur? Invasive GAS infections occur when the bacteria get past the defences of the person who is infected. This may occur when a person has sores or other breaks in the skin that allow the bacteria to get into the tissue, or when the person's ability to fight off the infection is decreased because of chronic illness or an illness that affects their immune system
- Early signs and symptoms of invasive group A streptococcal disease
- High fever
- Severe muscle aches
- Localised skin and muscle tenderness
- Redness at the site of a wound



It causes a diverse range of skin, soft tissue and respiratory tract infections, including:

- tonsillitis
- pharyngitis
- scarlet fever
- impetigo
- erysipelas
- cellulitis
- pneumonia



# Short Video to Explain iGas

- <https://www.youtube.com/watch?v=9FVaCWgPRRo>



# Reporting

- Single Case
- Contacts following a single case in a nursing home should be managed according to the algorithm below. In addition: Rule out additional cases Review of Infection Control measures and Provide GAS information leaflet<sup>3</sup> Ensure iGAS isolate sent for typing
- Two or more cases
- An Outbreak Control Team should be convened if two or more cases have been reported – UKSHA will lead

## Review

- number of cases
- intervals
- epidemiological links
- fatality rate
- Consider response:
  - targeted prophylaxis
  - mass prophylaxis
- UKSHA will devise a communications strategy and ensure iGAS isolates sent for typing

Isolation in a single room with en-suite facilities is recommended for all patients who are known to have GAS/IGAS infection until they have received 24 hours treatment with an appropriate antibiotic

GAS is a common bug found on skin or throat.  
Invasive Group A Strep – infection in blood stream.

Handwashing/Environmental cleaning

If GAS is not treated you can remain infectious for up to 21 days.

Full PPE

Treatment for IGAS - Antibiotics

IGAS may occur through sores or breaks in the skin that allows bacteria to get into the tissue or blood stream (this happened through the leg ulcer in the scenario)



# Other consequences of iGAS infection

- **Toxic Shock syndrome**
- Bacteria release toxins – causes pyrexia, nausea dizziness and confusion.
- **Necrotising fasciitis**
- Infection of the fascia, which can cause severe pain, swelling and redness of the affected area that can spread very quickly
- Require antibiotics as soon as possible



# Scenario

A District Nurse completes a number of visits in a local care home. Three residents all have leg ulcers which the District Nurse washes and redresses. The same District Nurse visited the Care Home Monday, Wednesday and Friday consecutively for 3 weeks. All the residents were in the lounge on all occasions when they had their legs washed and dressed.

- After 3 weeks one of the residents started with symptoms including high temperature, redness around the wound on his leg and feeling dizzy. The Care Home spoke to the GP and they arranged for antibiotics to be prescribed due to possible infection in the wound.
- A couple of days after the initial case, two residents with leg ulcers started with similar symptoms but also developed rapid breathing. The Care Home decided to ring an ambulance and both the residents were taken to hospital.
- In hospital, the wounds looked infected and were swabbed to see if there was any infection. The wound swabs were both positive for the same bacterium. Bloods were taken from each resident and the results showed the same infection was now in the blood stream.



- This infection was reported to UK Health Security Agency (UKHSA) as per protocol. Following screening questions with the residents and care home they declared an outbreak. The Care Home implemented outbreak restrictions, enhanced cleaning and swabbing was arranged for any symptomatic residents or staff with sore throats and high temperatures.
- UKHSA organised for typing to be completed on the residents wound swabs who were in hospital. The typing (whole genome sequencing) highlighted the 2 residents in hospital in fact had the same typing. This means the DNA sequence of the organism is the exact the same, therefore the infection must have been from the same source.
- Following the outbreak the district nursing teams continued to visit certain patients in the care home but a number of different nurses were coming in. UKHSA decided to swab all the staff at the Care Home along with the staff from the District Nurse team to see if any of the professionals were the carrier of this infection.





- Following the swabbing it was found a district nurse was colonised with the infection, had no symptoms and was a “carrier” of the infection. However, as a carrier you can still spread the infection.
- This infection is spread by being in close contact with someone carrying the infection. It can spread through coughs and sneezes and being in contact with open sores on the body and by sharing needles.
- It was concluded the district nurse had spread the infection to 3 of the residents when completing the leg ulcer wounds and this had gone invasively into 2 residents and caused them to be very unwell. They were treated with antibiotics and did make a full recovery.



# WHO Break the Chain of Infection

- <https://www.youtube.com/watch?v=CmaA00M4kNI>



# Five principles of cleaning



## National colour coding scheme

For cleaning materials and equipment in primary care medical and dental premises

All practices are recommended to adopt the national colour code for cleaning materials (see below). All cleaning items, e.g., cloths (reusable and disposable), mops, buckets, aprons and gloves, should be colour coded.

<b>Red</b> Sanitary areas including sinks in sanitary areas	<b>Blue</b> General areas, e.g., waiting rooms and consulting rooms (including sinks in general areas)
<b>Green</b> Kitchens	<b>Yellow</b> Treatment and minor operation rooms

# Colour coding equipment

All care home facilities are recommended to adopt the national colour coding scheme for cleaning materials. All cleaning items, e.g. cloths, mops, buckets, aprons, should be colour coded.



# Decontamination of cleaning equipment

- Cleaning equipment also needs to be clean to avoid cross contamination
- Equipment must be cleaned and dried between use  
(mop buckets, cleaning trolleys)
- Mop heads and cloths must be laundered daily or disposed of daily
- Cleaning carts should have separation between clean and dirty areas
- They should never have supplies of clothing, laundry or food and drink
- They should be thoroughly cleaned at the end of the day or shift
- They should be stored safely when not in use

**All Mop buckets should be stored clean, dry and, inverted Mop handles should be stored on a wall bracket.**



# Post Infection Review Forms (PIR)

- Enable settings to understand the cause of the outbreak
- Identify factors that may have been the contributed to the outbreak
- Help to identify any parts of the resident's care pathway which may have contributed to the infection to prevent a similar occurrence
- Look into how the outbreak was managed, what was managed well and what improvements could be made
- Enables lessons to be learnt and recommendations for improvement
- The PIR form is a resource for Providers and NOT a monitoring tool



# The role of the IPC Champion within the care home

To support the service in ensuring good Infection Prevention and Control (IPC) practices are adopted and maintained.

To help create and maintain an environment which will reduce the risk of infection.

Encourage and teach the fundamentals of IPC within their colleagues



# References

- <https://www.nhs.uk/conditions/scabies/>
- UKHSA guidance on the management of scabies cases and outbreaks in long-term care facilities and other closed settings - GOV.UK ([www.gov.uk](http://www.gov.uk))
- <https://cks.nice.org.uk/topics/scabies/management/management-of-scabies/>
- <https://www.lancashire.gov.uk/practitioners/health-and-social-care/infection-prevention-and-control/outbreak-management-and-covid-19-coronavirus/scabies/>
- Invasive group A streptococcal disease: managing close contacts - GOV.UK ([www.gov.uk](http://www.gov.uk))





# Any Questions



# Outbreak Management forum evaluation form

