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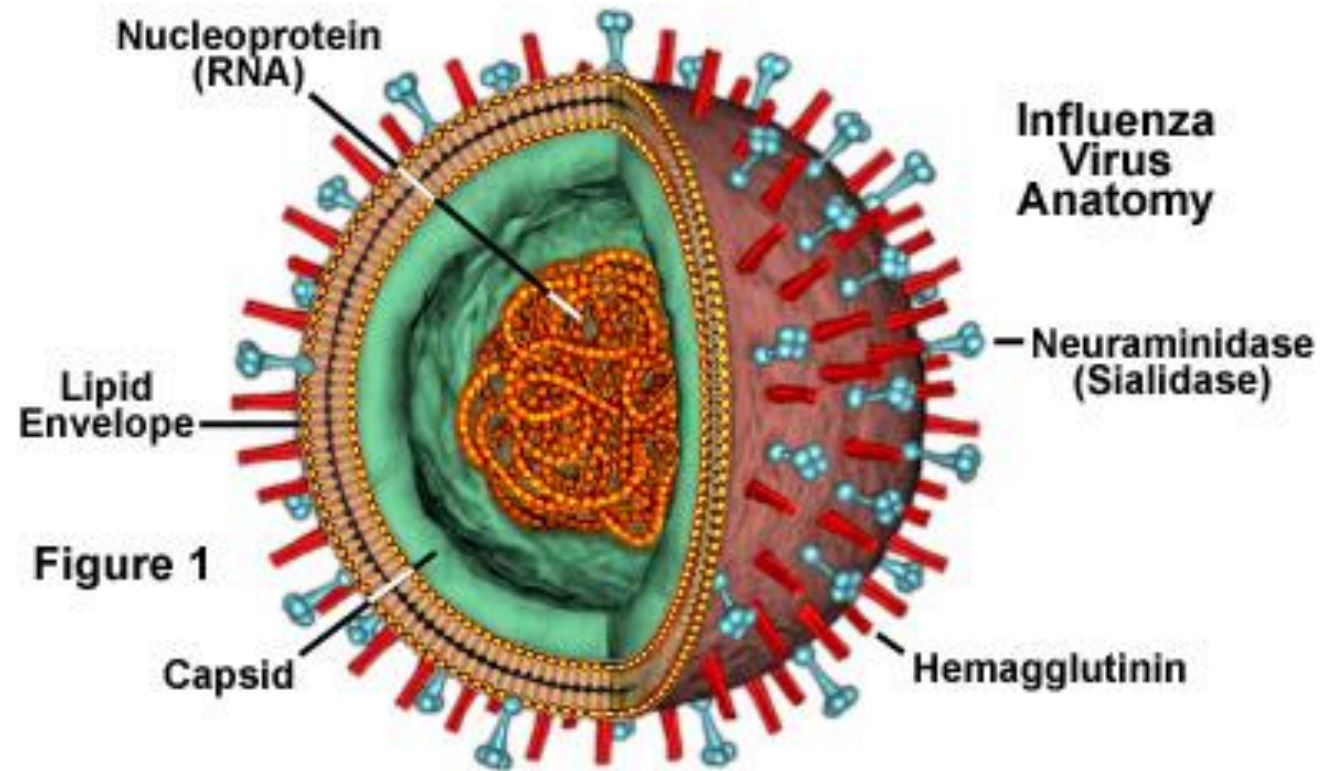
Preparing for the Influenza Season – Information Session for Care Homes and local IPC teams

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This Session will cover....

- Influenza – what it is and why it matters
- Identification of influenza outbreaks in a care home
- Notification to the Y&H Health Protection Team (HPT)
- Actions by the HPT following notification
- Actions by the care home
- A review of care home flu outbreaks across Y&H in 2023/24
- Q and A Session

The Influenza (A) Virus



The Influenza Virus

- RNA virus – have ribonucleic acid (RNA) as genetic material
- Generally have high mutation rates compared to DNA viruses
- Difficult to develop effective vaccines against them
- Reason why seasonal influenza vaccines have to be manufactured yearly
- Mainly Influenza virus A, B and C

The Influenza Virus

- Influenza A is most virulent and causes most severe human disease
- Examples are A H1N1 (Spanish flu 1918 and swine flu 2009 pandemics) and A H5N1 (Avian flu outbreaks UK 2021/22/23)
- Influenza B has only one serotype, is less common, mutates slower than A, easier to acquire immunity against it, does not cause pandemics
- Other examples of RNA viruses are Ebola, common cold, Hepatitis C, measles, polio and SARS-CoV-2 (Covid-19)

WHO-recommended Vaccine Components for Northern Hemisphere 2024/25

- Quadrivalent vaccines should contain the four virus strains below:
 - A (H1N1)pdm09-like virus;
 - A (H3N2)-like virus;
 - B (Victoria lineage)-like virus; and
 - B (Yamagata lineage)-like virus
- Trivalent vaccines should contain the three virus strains below:
 - A (H1N1)pdm09-like virus;
 - A (H3N2)-like virus; and
 - B (Victoria lineage)-like virus;
- Ideally, immunisation should occur between September and early November
- **After immunisation, it takes about 2 weeks for protective levels of antibodies to be produced**

Outbreaks of Influenza-like Illness (ILI)

- **Case Definition:**
 - Oral or tympanic temperature of 37.8C or greater, AND one of the following:
 - acute onset of at least one of the following respiratory symptoms: cough (with or without sputum), hoarseness, nasal discharge or congestion, shortness of breath, sore throat, wheezing, sneezing OR
 - **an acute deterioration in physical or mental ability without other known cause**
 - Alternatively, a laboratory detection of influenza virus would fulfil the definition of a case of influenza.

Outbreaks of ILI

- Two or more cases which meet the clinical case definition of ILI (or alternatively two or more cases of laboratory confirmed Influenza) arising within the same 48-hour period with an epidemiological link to the setting
- An outbreak in a care home could be limited to a wing or a floor or could affect the entire care home

Detection of flu outbreaks



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Outbreaks of influenza (flu) in care homes

Do 2 or more residents or staff have any of the following symptoms within 2 days (48 hours) of one another?



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
- loss or change of taste/smell



Sudden
decline in
physical or
mental ability

If so, you might have an **outbreak** of flu or another infection.



Isolate residents with symptoms, send staff with symptoms home.



Contact your Health Protection Team (HPT) or local infection control team/public health team (follow your local outbreak plan).

The HPT will advise you on:

1. Infection prevention and control, including isolation and cohorting of affected residents
2. Testing for flu, COVID-19 and other viruses
3. Antivirals for flu. Antivirals are most effective when started early.

Important:

All residents and staff should be offered seasonal flu vaccination every year
Appropriate infection control measures should be maintained all year round

Notification to the Y&H Health Protection Team

By Phone:

0300 303 0234

By Email:

yorkshirehumberhpt@ukhsa.gov.uk

HPT Response to Influenza Outbreaks

- Is it an outbreak? Undertake risk assessment
- Data collection
- **Infection control advice – key intervention**
- Send GP letter and flu outbreak poster to care home
- Inform UKHSA lab (Leeds) to send out flu swabs
- Advice Antivirals for treatment/prophylaxis

Minimum data set

- Type, size, layout of care home
- Name, phone number, email address of manager/key contact
- Date reported to HPT
- Onset date in 1st case and last case
- No of residents affected/Total number of residents
- No of staff affected/Total number of staff
- No of virologically confirmed cases
- No of hospitalisations/deaths linked to outbreak
- No of symptomatic/confirmed cases (residents) given antivirals
- No of asymptomatic contacts (residents) given antivirals
- No of symptomatic/confirmed cases (residents) who have received flu vaccine
- No of asymptomatic contacts (residents) who have received flu vaccine

Infection control during an outbreak of influenza

1. Hand hygiene and protective clothing
2. Cleaning and waste disposal
3. Reducing exposure of unaffected residents

Hand hygiene and protective clothing

- ensure that liquid soap and disposable paper towels are available at all sinks
- wash hands thoroughly using liquid soap and water before and after any contact with residents
- provide 70% alcohol hand rub for visitor use and supplementary use by staff
- staff should wear single use surgical face masks, single-use plastic aprons and gloves as appropriate when dealing with affected residents
- dispose of all these as infectious waste

Cleaning and waste disposal

- provide tissues and no-touch bins for used tissue disposal in public areas
- provide tissues and covered sputum pots for affected residents. Dispose of these as infectious waste
- wash residents' clothes, linen and soft furnishings on a regular basis, and keep all rooms clean
- clean surfaces of lockers, tables & chairs, televisions and floors etc frequently
- always clean hoists, lifting aids, baths and showers thoroughly between patients

Reducing exposure of unaffected residents - 1

- consider closing the home (or a section of the home) to new admissions if the HPT confirms an outbreak
- residents should not transfer to other homes/attend external activities
- residents should only attend out-patient or investigation appointments where these are clinically urgent
- care for residents with symptoms in single rooms until fully recovered and for at least 5 days after the symptoms started
- affected residents should remain in their rooms as far as possible
- discourage residents with symptoms from using common areas

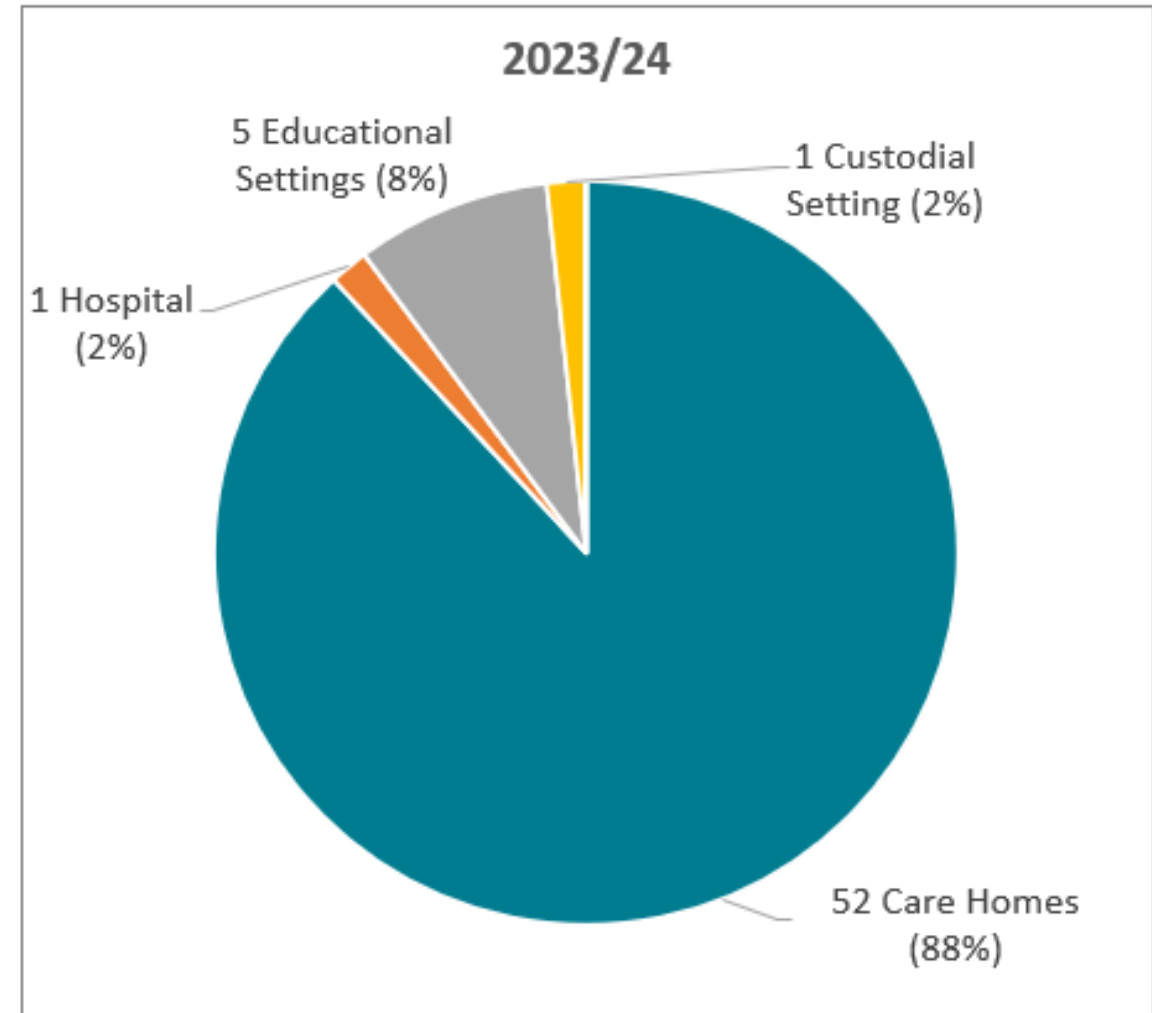
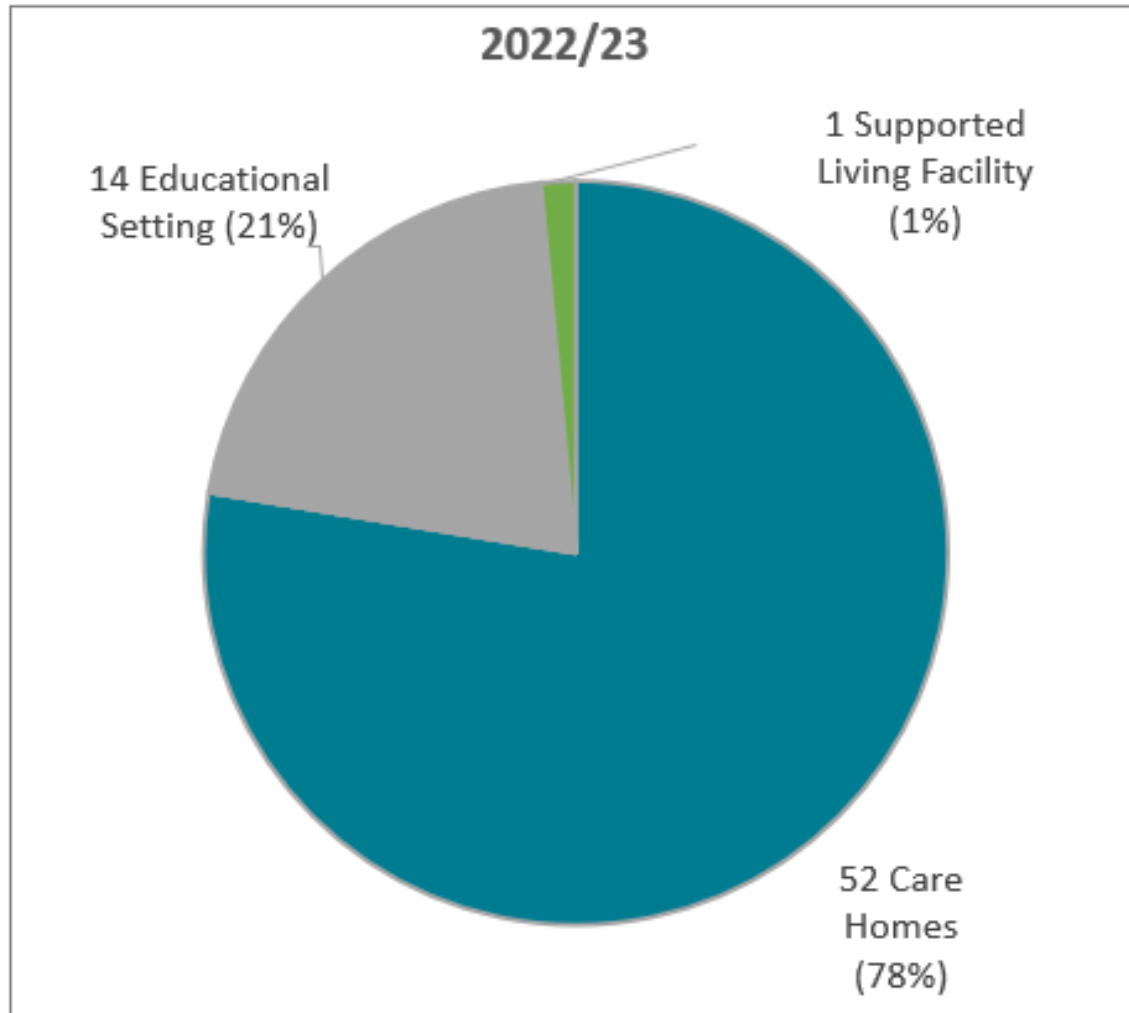
Reducing exposure of unaffected residents - 2

- as far as possible staff should work in different teams: one team caring for affected residents and the other caring for unaffected residents
- agency and temporary staff in contact with residents with symptoms should not work elsewhere (e.g. in a local acute care hospital, or other care home) until 2 days after last exposure
- staff and visitors with symptoms should be excluded from the home until fully recovered
- the elderly, very young and pregnant women, who are at greater risk from the complications of flu, should be discouraged from visiting during an outbreak
- inform visiting health professionals of the outbreak and rearrange non urgent visits to the home, if possible
- inform the hospital in advance if a resident requires urgent attendance at hospital

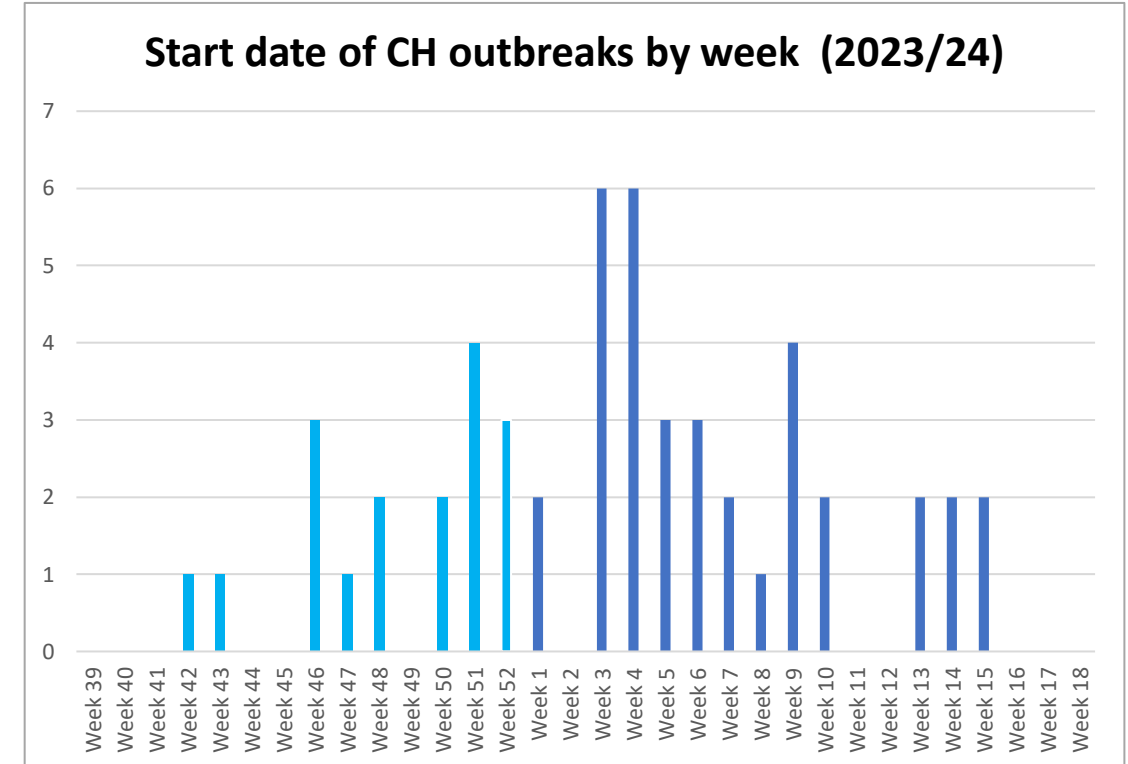
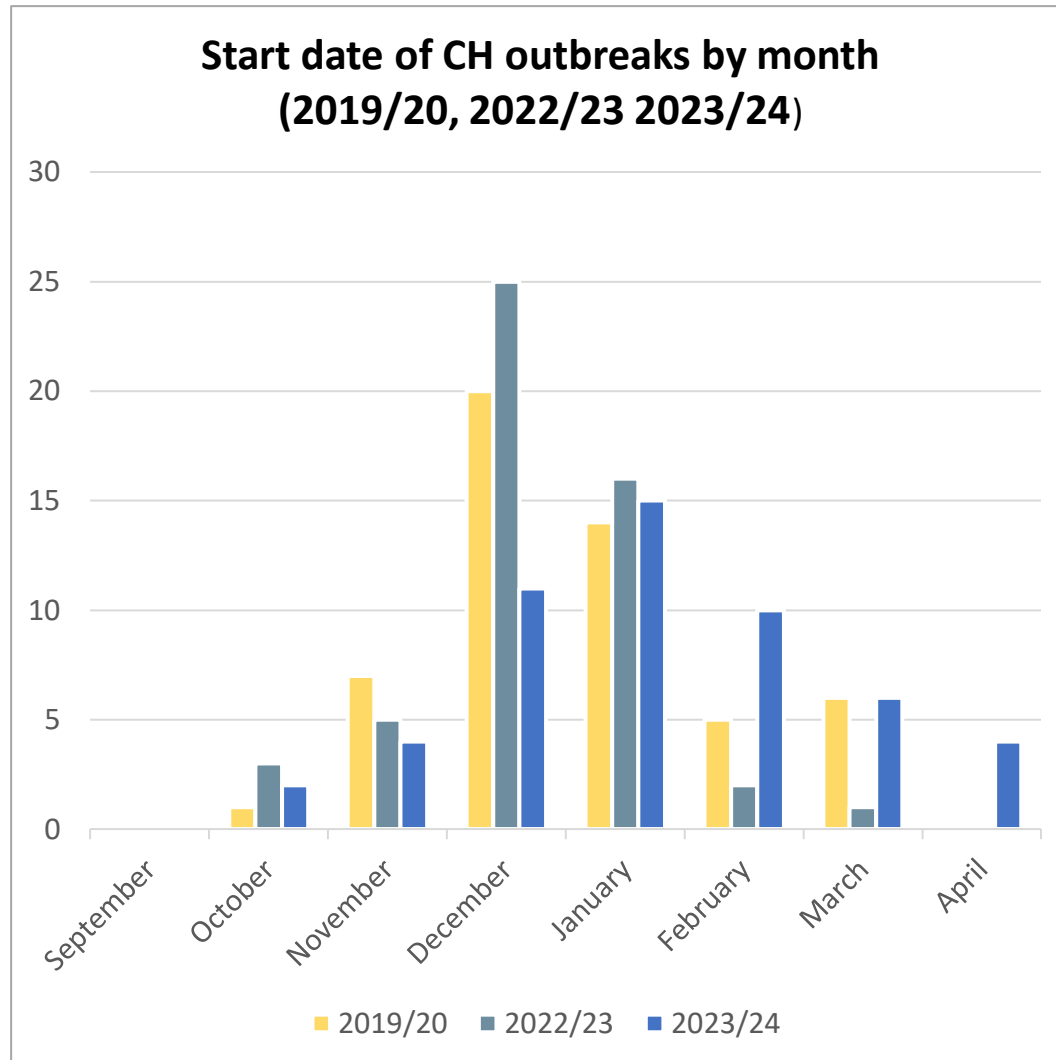
A review of care home flu outbreaks across Y&H in 2023/24

- Please note these are outbreaks that were reported to the HPT, so might be an underestimate of the actual total number of outbreaks across the region.

All ILI Outbreaks in Y&H: Settings

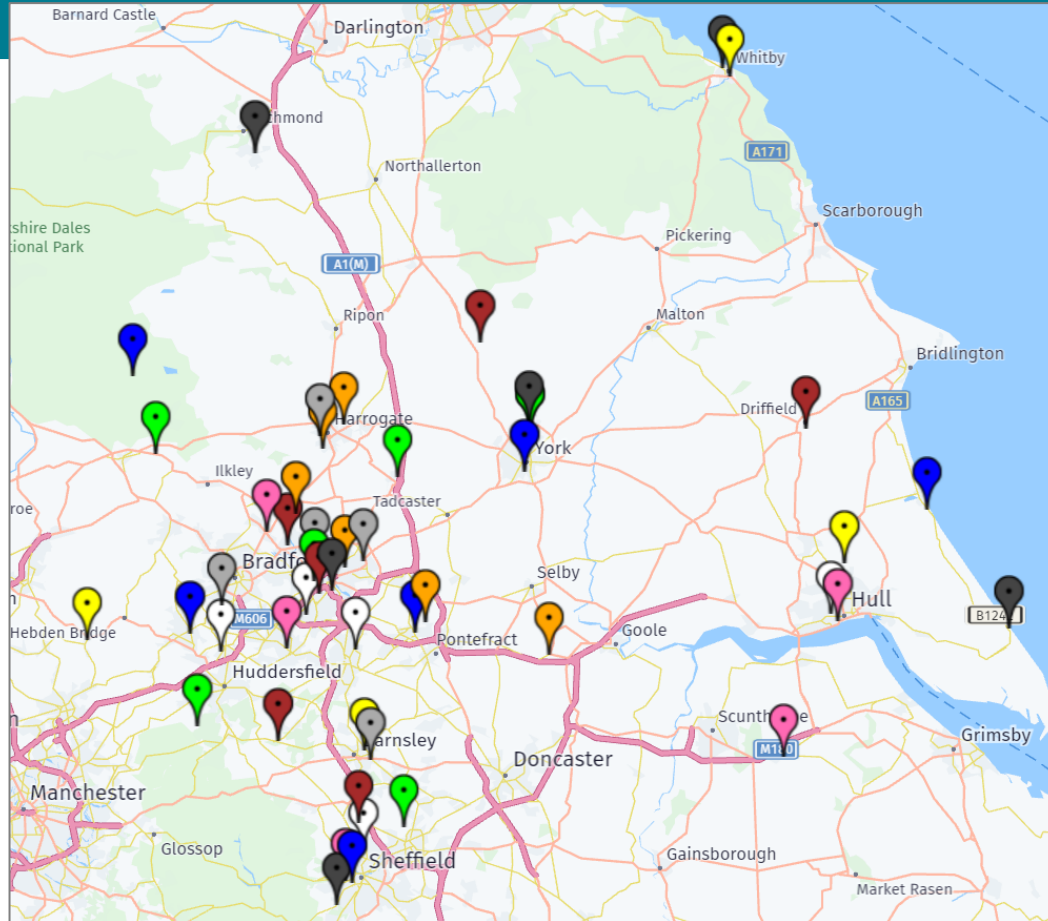


Outbreaks by month / week

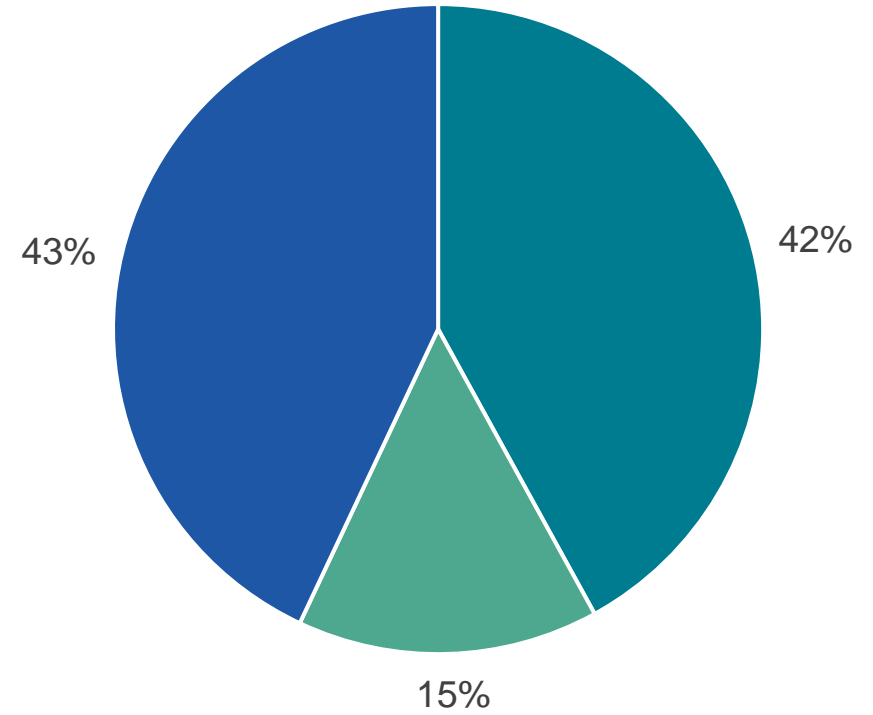


- In 2023/24, the **peak in CH outbreaks** (i.e. the point at which the greatest number of outbreaks started) **occurred in January**, slightly later than seen in 2019/20 and 2022/23 (December).
- Nationally, there was an initial peek in wk 51-52 and subsequent peak in weeks 4-5

Geography



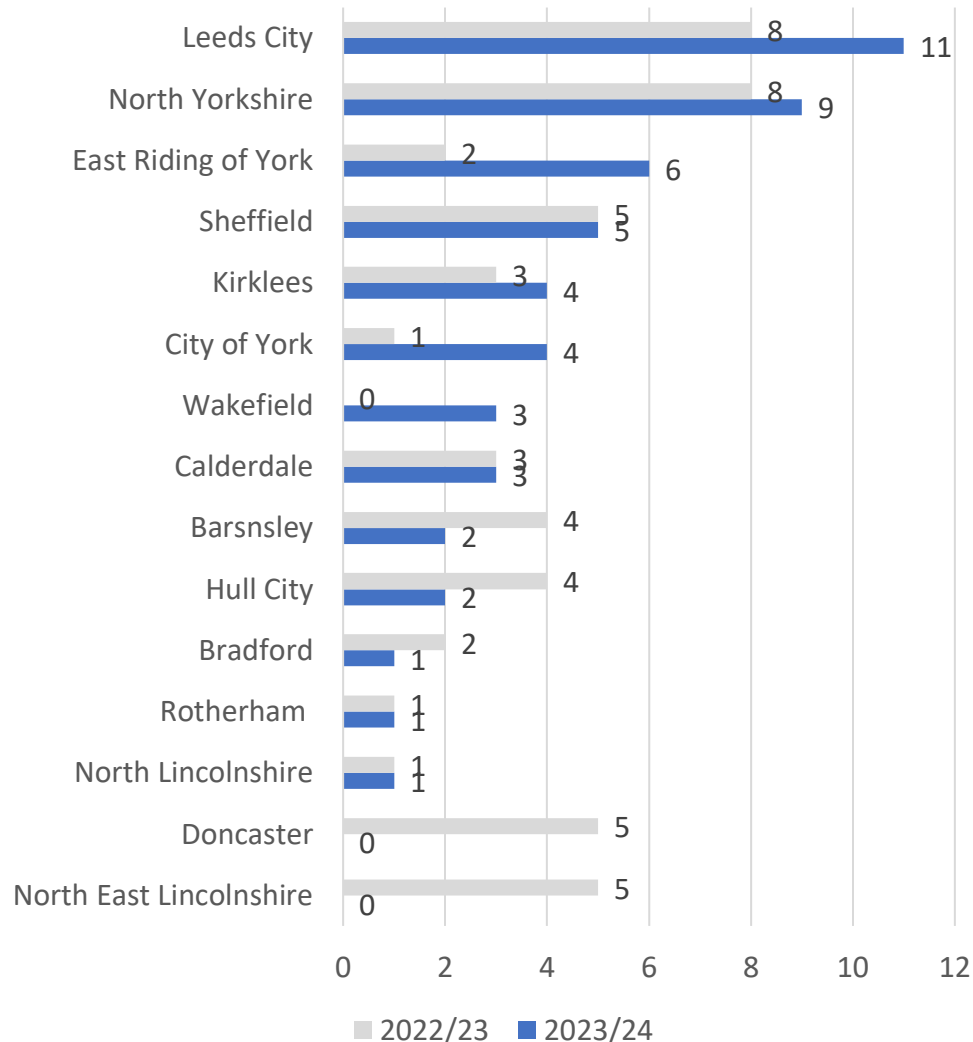
CH Outbreaks by Area (2023/24)



- West Yorkshire
- South Yorkshire
- North Yorkshire and the number

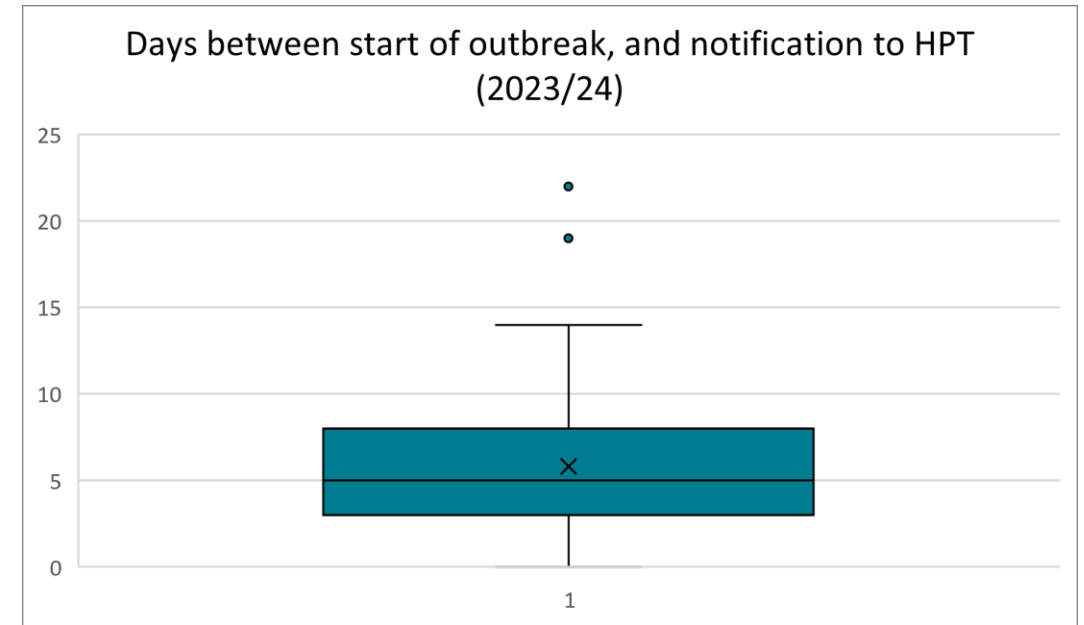
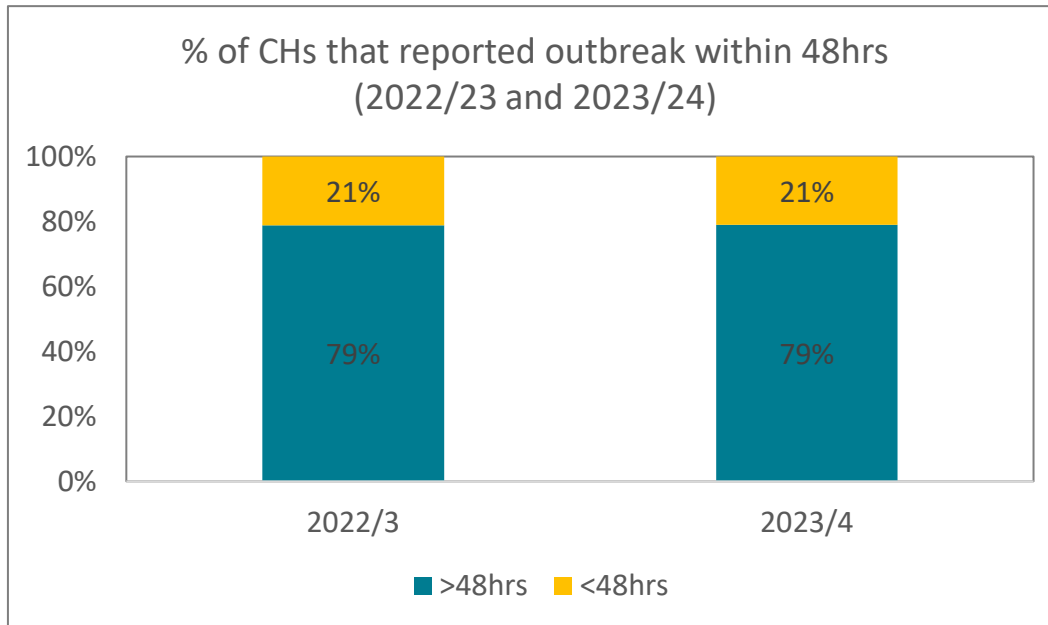
Geography

Outbreaks by LA
(2022/23 and 2023/24)



- In 2023/24 Leeds was the LA with the greatest number of CH outbreaks, followed by the newly established LA or North Yorkshire. These LAs also had the highest number of outbreaks in 2022/23.
- Six LAs (Leeds, N.Yorks, East Riding, Kirklees, York, Wakefield) saw more CH outbreaks this year as compared to last.
- Five LAs (Barnsley, Hull, Bradford, Doncaster, NE Lincs) experienced fewer outbreaks this year compared to last.
- The remaining four LAs (Sheffield, Rotherham, N.Lincs, Calderdale) saw no change

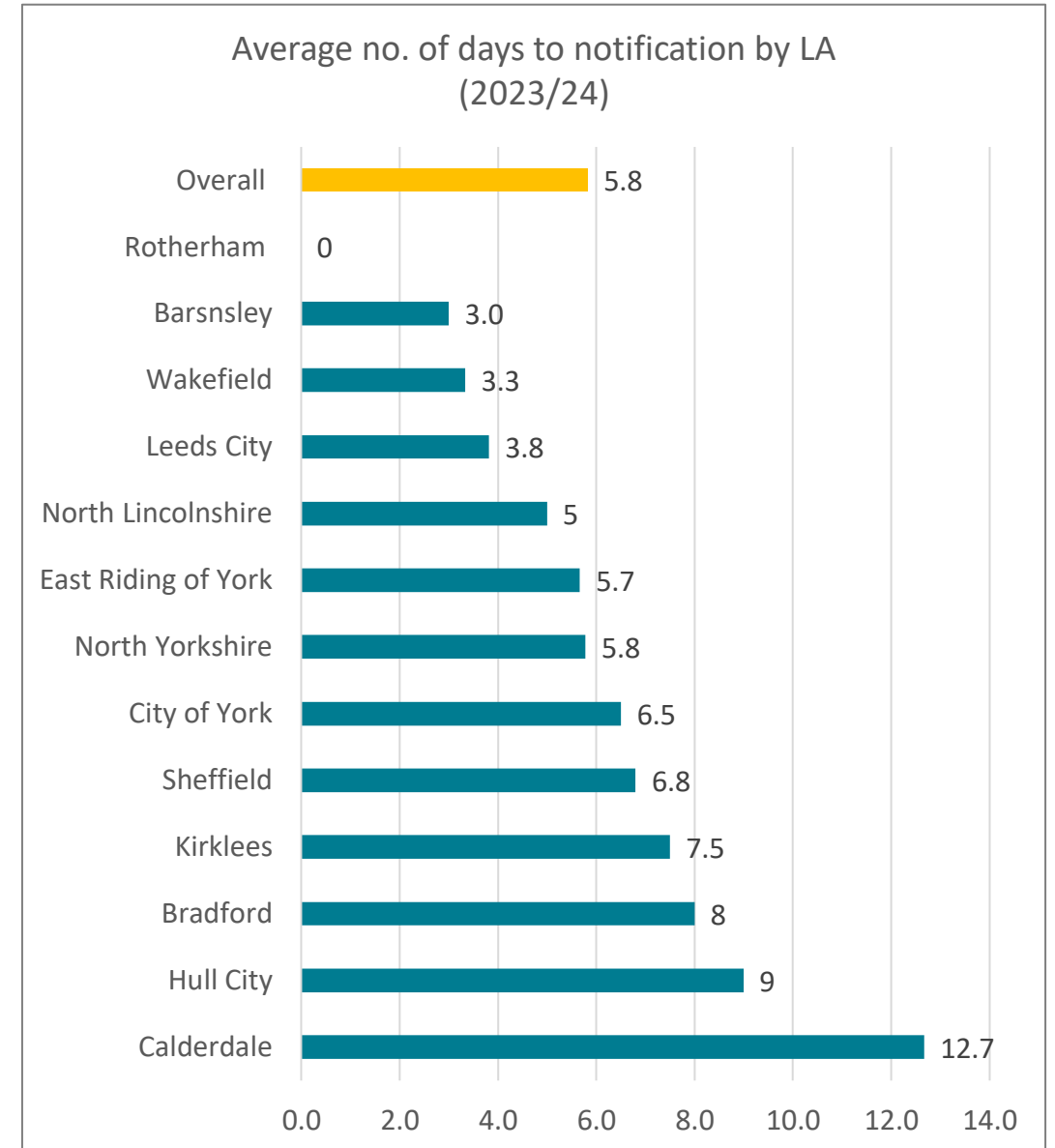
Time to notification: Yorkshire and the Humber



- Work undertaken at the start of the 2023/24 season to reduce time to notification by care homes.
- The time between the start of an outbreak and notification to HPT by the care home, took between 0 and 22 days in 2023/24. The **mean time to notification was 5.8 days**, the median time to notification was 6 days.
- In both 2022/23 and 2023/24, a fifth (**21%**) of outbreaks were notified within 48hrs.

Time to notification: By LA

- The average number of days to notification varied substantially by Local Authority, from a low of 0 in Rotherham, to a high of 12.7 in Calderdale.
- Those LAs with a reporting time greater than the regional average (of 5.8 days) were York, Sheffield, Kirklees, Bradford, Hull and Calderdale.



Antiviral Prescriptions

- Guidance on management of ILIs in Care Homes recommends prompt use of post-exposure prophylaxis among care home residents following a local risk assessment, regardless of influenza vaccination status.
- In 2023/24, ARVs were prescribed in 23% of CH outbreaks (n=12). This is a decrease from 2022/23, when ARVs were prescribed in 38% (n=20) of outbreaks.
- Antivirals are more likely to be prescribed if outbreaks are reported within 48 hours of detection



Average length of outbreak

- The average length of CH outbreaks in 2023/24 was 10.8 days.
- Lab confirmed outbreaks had a longer average duration than non-lab confirmed outbreaks. **This difference was not statistically significant ($P>0.05$)**
- Outbreaks in which ARVs were prescribed lasted longer than those in which no ARVs were prescribed. **This difference was not statistically significant ($P>0.05$)**

	Total	Lab confirmed		ARVs prescribed	
		Lab confirmed	Not lab confirmed	Prescribed	Not prescribed
No. of outbreaks	52	37	15	12	40
Average length of outbreak (days)	10.8	11.3	9.3	13.0	10.1
Range	0-31	2-31	0-16	6-31	0-27


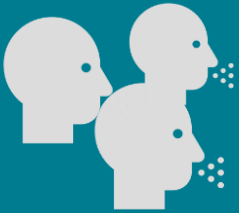


Average length of outbreak by time to notification




	2019/20	2022/23	2023/24	
	Average length	Average length	Average length	95% CI
Reported within 48hrs	11.5 days	7.6 days	5.9 days	4.2 – 7.6
Reported after 48hrs	13.5 days	14.6 days	11.3 days	10.5 – 13.7
Difference	2 days	7 days	5.4 days	

Outbreaks that are reported to the HPT within 48hrs, consistently last for less time than those reported beyond 48hrs.

In 2023/24, outbreaks reported after 48hrs lasted more than 5 days longer. The difference in mean outbreak lengths observed in 2023/24 was statistically significant ($p < 0.05$).

Care home outbreaks: Overview of numbers

	Number of ILI care home outbreaks in 2023/24	52
	Total no. of individuals affected	530
	No. of residents affected	377
	No. of staff affected	153

	% of outbreaks resulting in hospitalisation/s	79%
	No. of individuals hospitalised	102
	% of outbreaks resulting in death/s	23%
	No. of deaths	17
	% of outbreaks in which ARVs were prescribed	23%

Key Points

- Influenza is a serious illness, especially in the elderly in care homes
- It is important to identify care home influenza early and notify the UKHSA Health Protection Team within 48 hours
- In 2023/24, most care home influenza outbreaks (approx. 80%) were notified after 48 hours
- Outbreaks notified after 48 hours lasted almost twice as long as those notified within 48 hours
- Infection control advice and prescription of antivirals are most effective if implemented within 48 hours of the start of an outbreak

Questions