PHE Influenza Surveillance graphs

- Influenza activity in the United Kingdom is monitored using a variety of surveillance systems. The National Influenza Report which interprets the data is published weekly.
- National and subnational outputs from the various surveillance systems are grouped according to the following categories:
  - Community influenza surveillance
  - Influenza-like illness GP consultation rates
  - Influenza-confirmed hospitalisations
  - All-cause mortality
  - Microbiological surveillance
  - Influenza vaccination

Respiratory Diseases Department

Centre for Infectious Disease Surveillance and Control
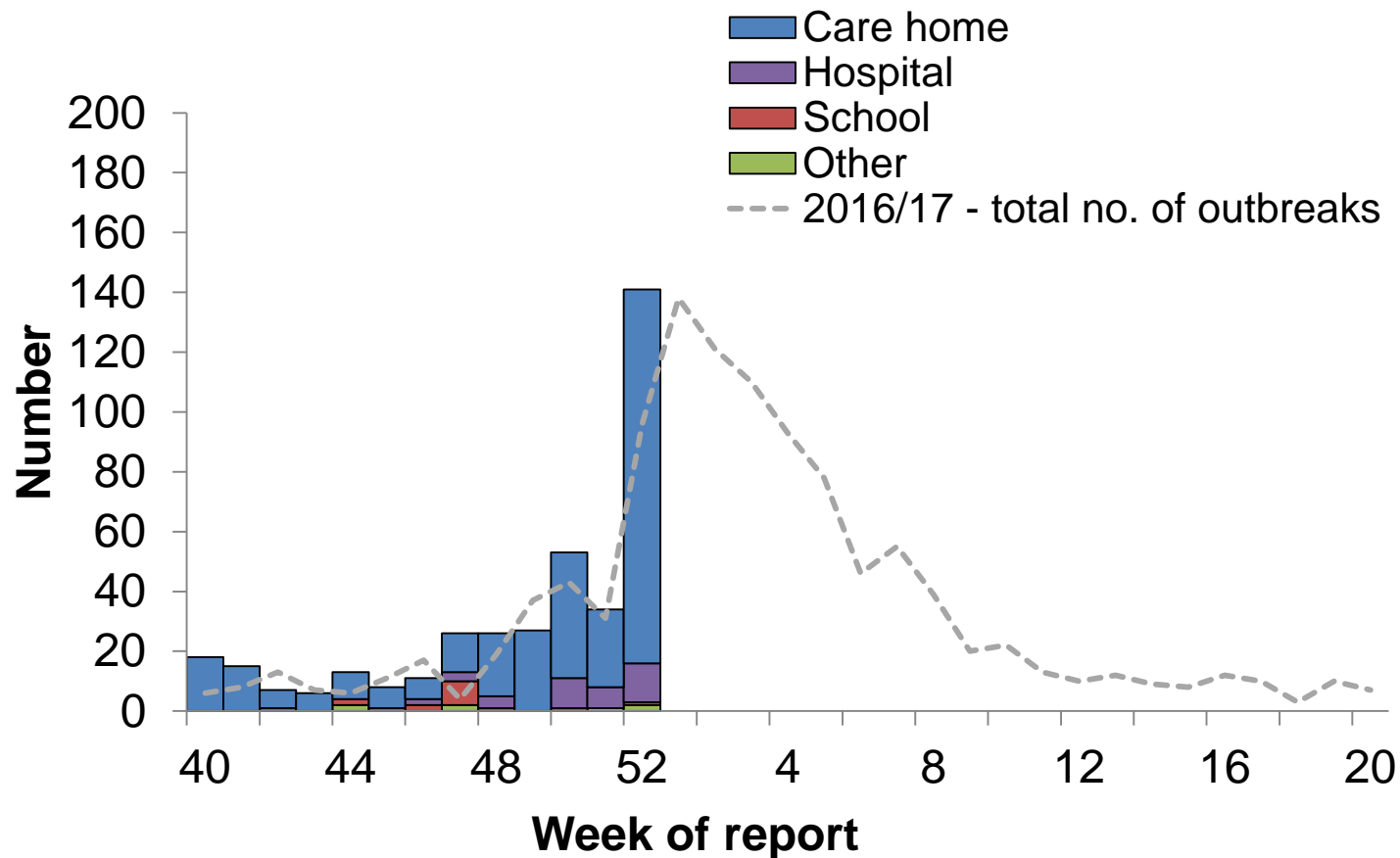
Public Health England

respscidsc@phe.gov.uk

Community influenza surveillance

Number of acute respiratory outbreaks by institution, UK
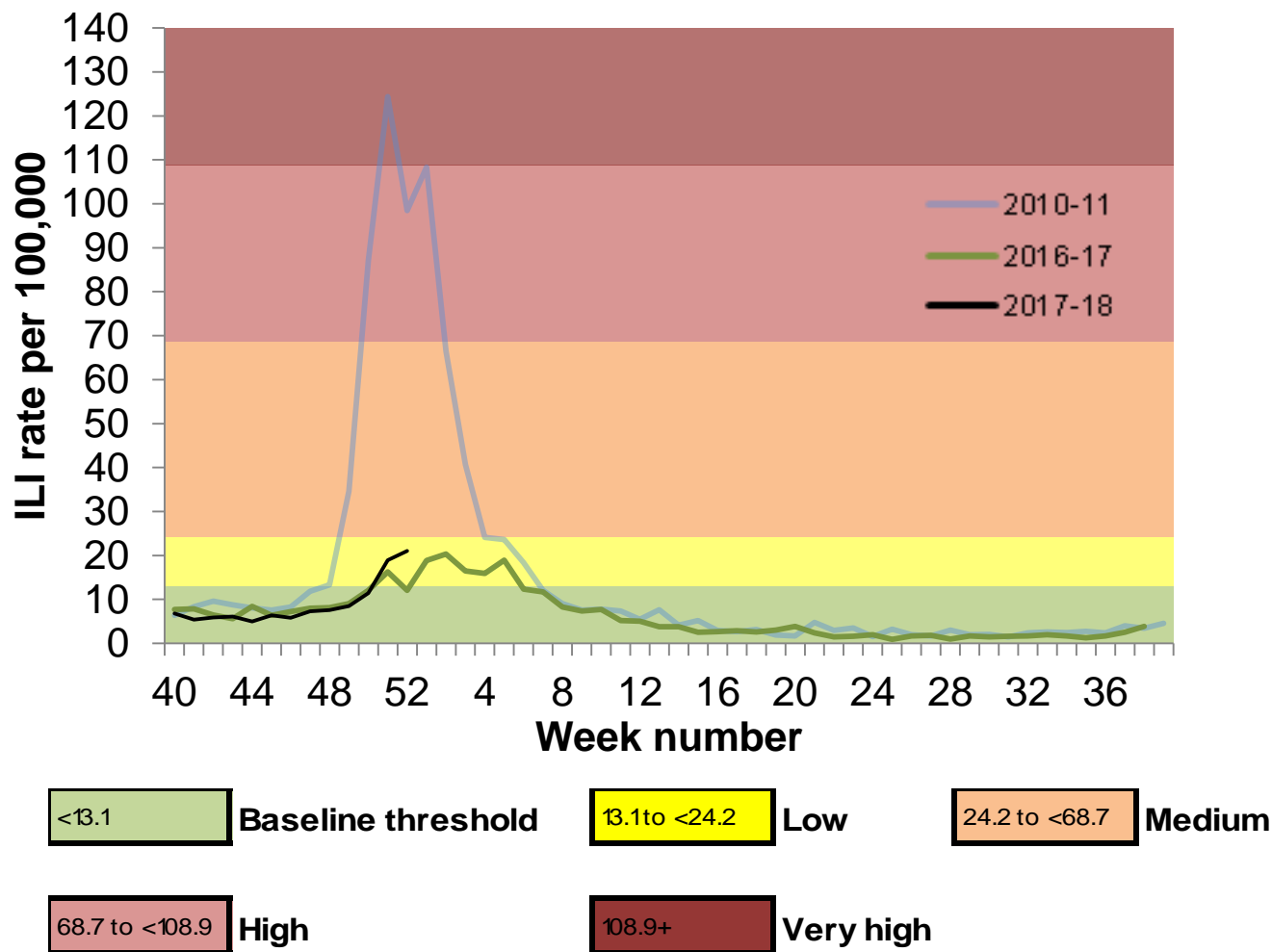
Number of acute respiratory outbreaks by PHE Region

	Outbreaks reported in week 52	Cumulative number of outbreaks since week 40
PHE North of England	31	95
PHE Midlands and East of England	42	116
PHE London	3	13
PHE South of England	52	113

Influenza-like illness GP consultation rates

RCGP ILI consultation rate, England

Public Health England

Legend:
- 2010-11
- 2016-17
- 2017-18

<13.1 **Baseline threshold**	13.1 to <24.2 **Low**	24.2 to <68.7 **Medium**
68.7 to <108.9 **High**	108.9+ **Very high**	

GP ILI consultations in the UK for all ages with MEM thresholds applied

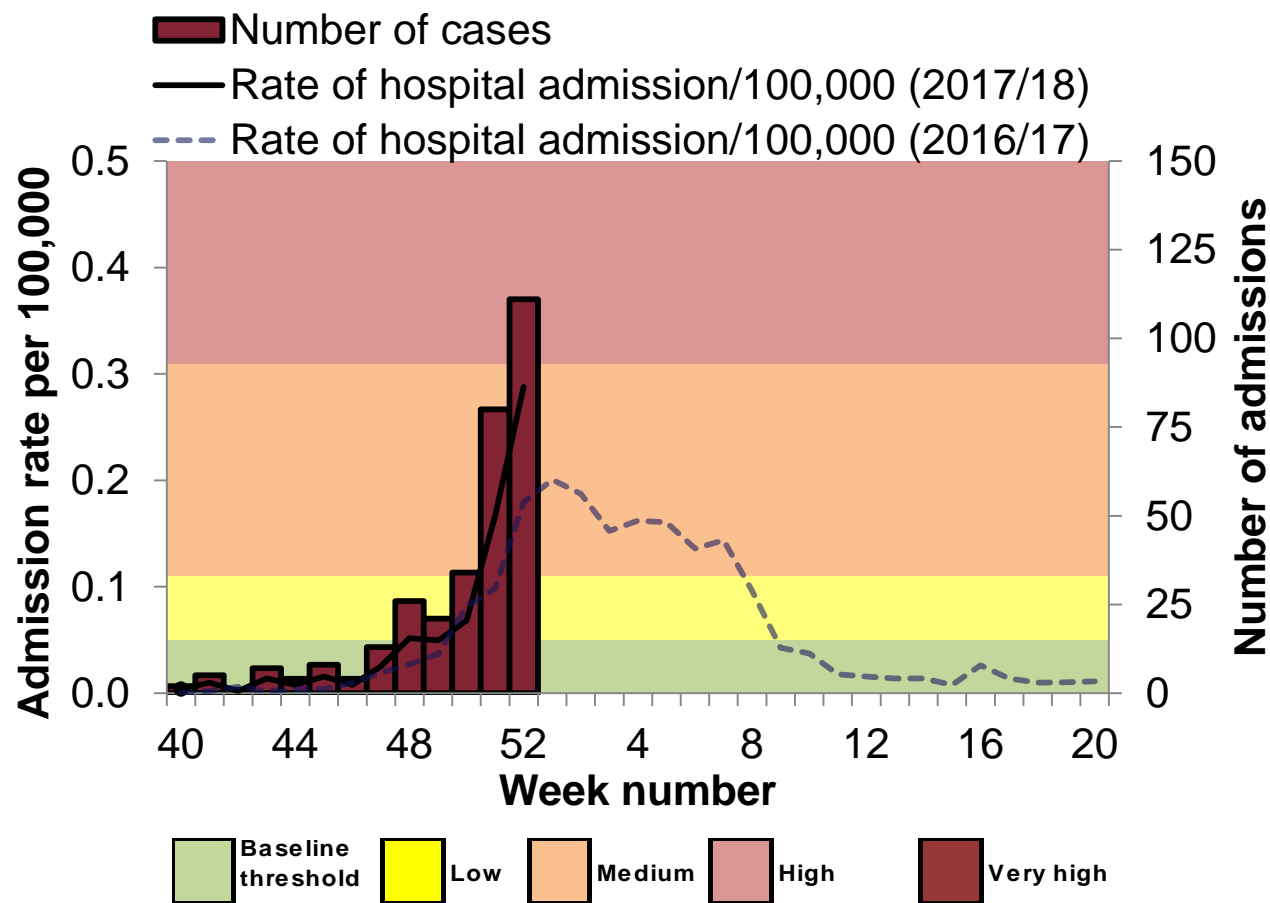| GP ILI consultation rates (all ages)	Week number																
	40	41	42	43	44	45	46	47	48	49	50	51	52	1	2	3	4
England (RCGP)	6.8	5.4	5.9	6.1	5.0	6.4	5.9	7.3	7.6	8.5	11.4	18.9	21.0				
Wales	5.7	6.5	6.6	5.4	5.0	5.4	6.2	6.4	5.9	6.4	8.7	13.2	17.7				
Scotland	10.0	15.3	8.3	10.8	12.4	11.7	10.3	9.1	9.4	18.4	32.5	40.0	46.3				
Northern Ireland	3.4	3.9	3.7	3.3	4.0	3.6	4.5	5.3	4.0	8.2	10.1	20.7	22.7				

The Moving Epidemic Method (MEM) has been adopted by the European Centre for Disease Prevention and Control to calculate thresholds for GP ILI consultations for the start of influenza activity (based on 10 seasons excluding 2009/10), in a standardised approach across Europe. For MEM threshold values for each country, please visit: https://www.gov.uk/guidance/sources-of-uk-flu-data-influenza-surveillance-in-the-uk#clinical-surveillance-through-primary-care .

4 January 2018
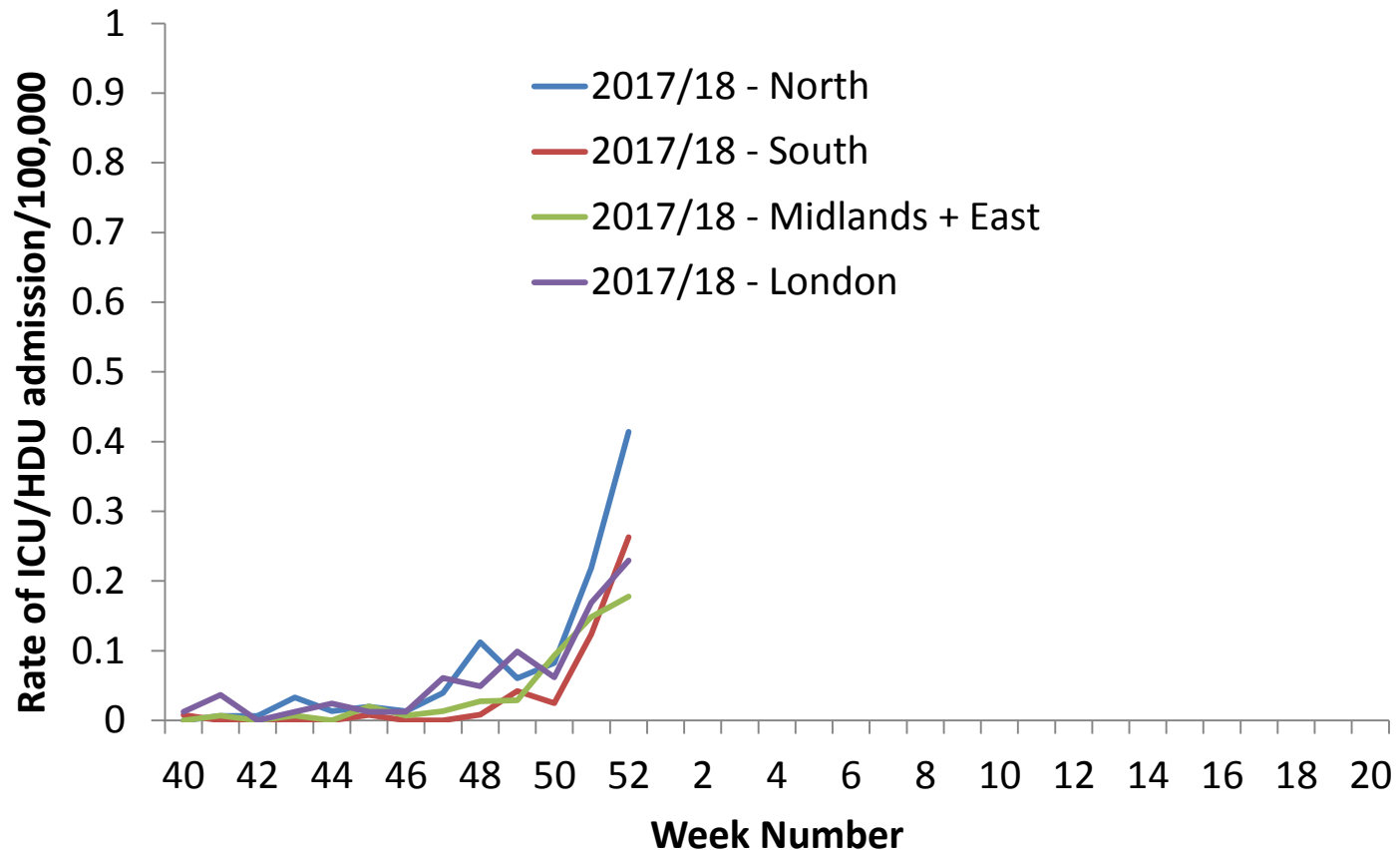
Influenza-confirmed hospitalisations

Weekly ICU/HDU influenza admission rate per 100,000 trust catchment population , England, since week 40 2017

The Moving Epidemic Method (MEM) has been adopted by the European Centre for Disease Prevention and Control to calculate thresholds for ICU/HDU admission rates for the start of influenza activity (based on 6 seasons) in a standardised approach across Europe. For MEM threshold values, please visit: https://www.gov.uk/guidance/sources-of-uk-flu-data-influenza-surveillance-in-the-uk#disease-severity-and-mortality-data
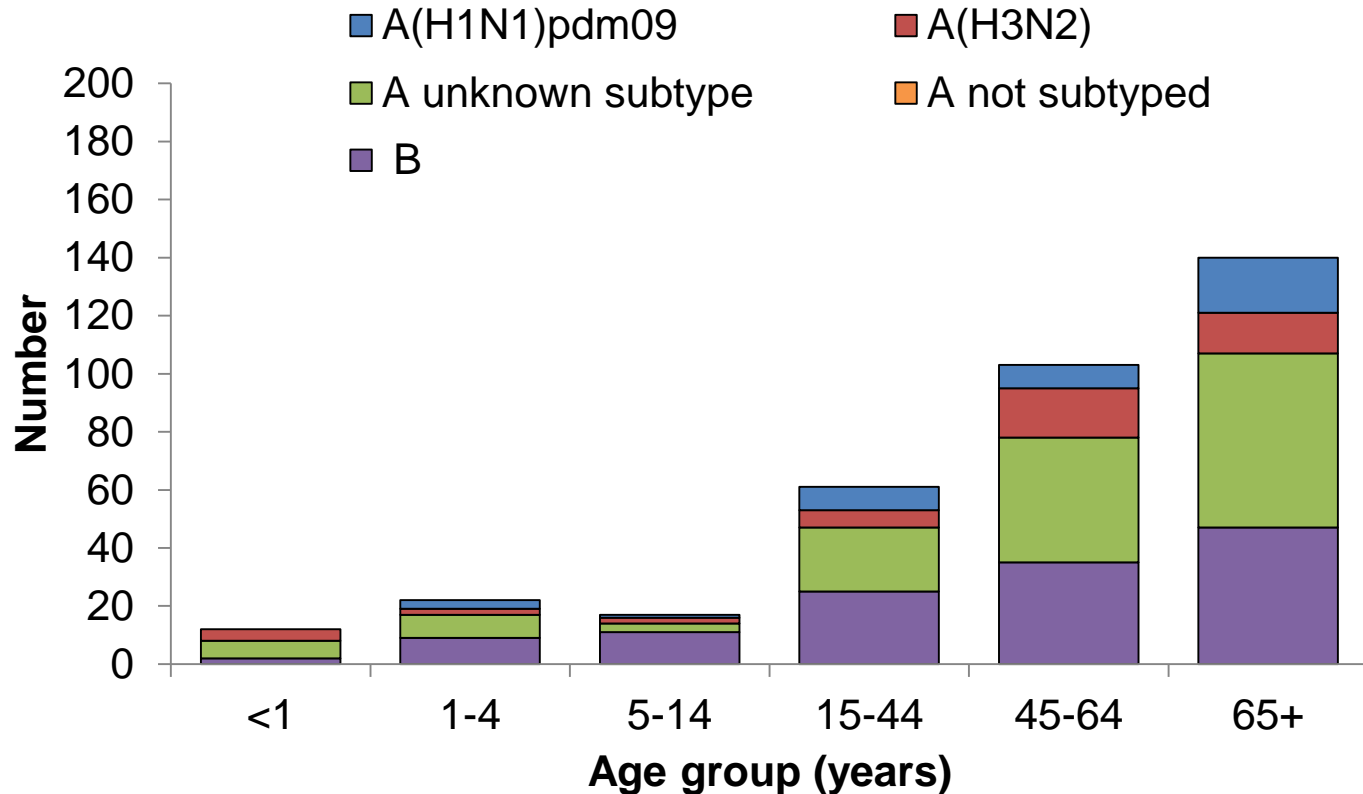
Weekly ICU/HDU influenza admission rate per 100,000 trust catchment population by PHE region, since week 40 2017
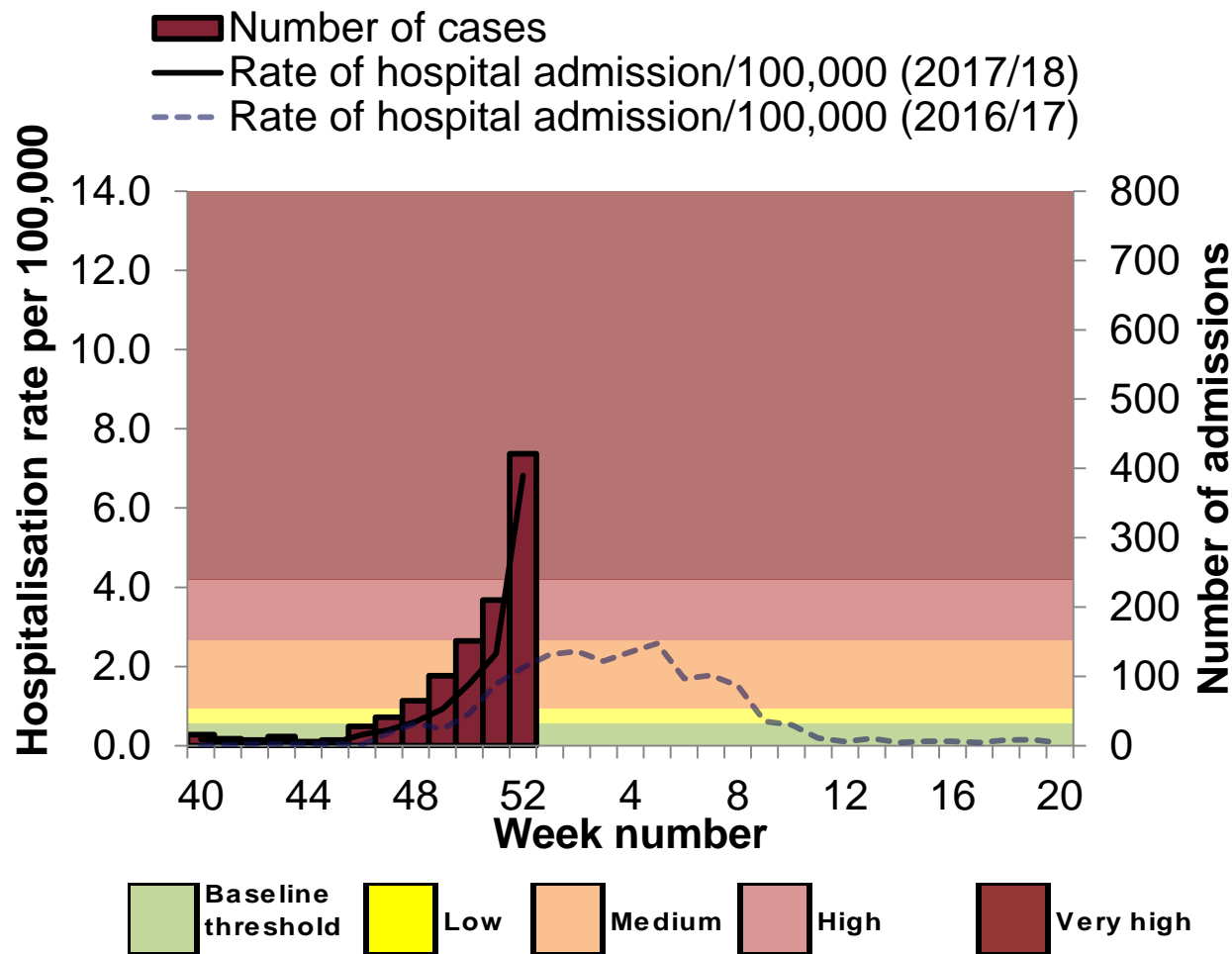
Influenza confirmed ICU admissions (USISS mandatory) by age and influenza subtype, since week 40 2017
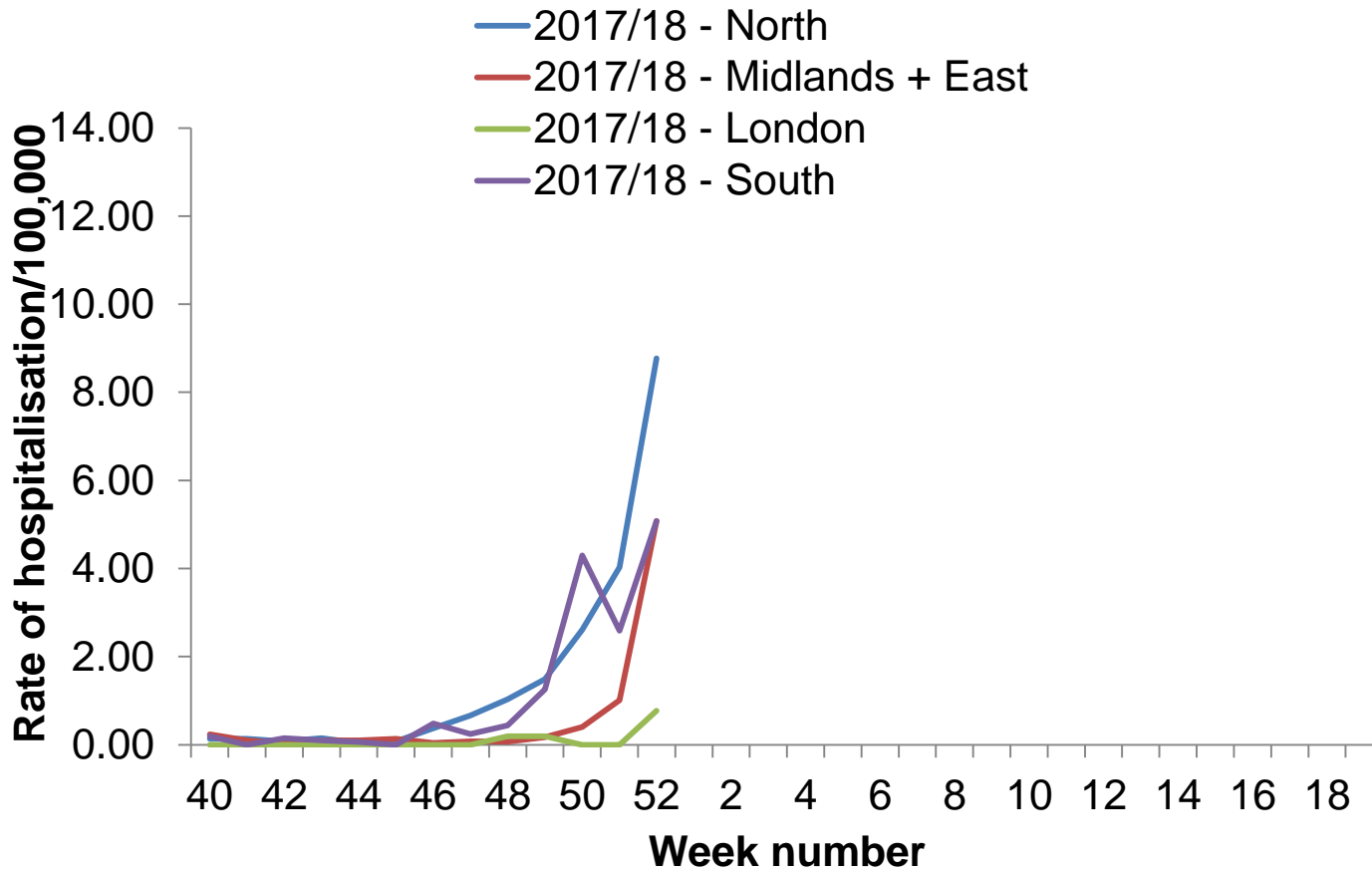
Weekly hospitalised influenza case rate per 100,000 trust catchment population , England, since week 40 2017

The Moving Epidemic Method (MEM) has been adopted by the European Centre for Disease Prevention and Control to calculate thresholds for ICU/HDU admission rates for the start of influenza activity (based on 6 seasons) in a standardised approach across Europe. For MEM threshold values, please visit: https://www.gov.uk/guidance/sources-of-uk-flu-data-influenza-surveillance-in-the-uk#disease-severity-and-mortality-data

4 January 2018

Weekly hospitalised influenza admission rate per 100,000 trust catchment population by PHE region, since week 40 2017

Public Health England

—2017/18 - North
—2017/18 - Midlands + East
—2017/18 - London
—2017/18 - South

Rate of hospitalisation/100,000

14.00
12.00
10.00
8.00
6.00
4.00
2.00
0.00

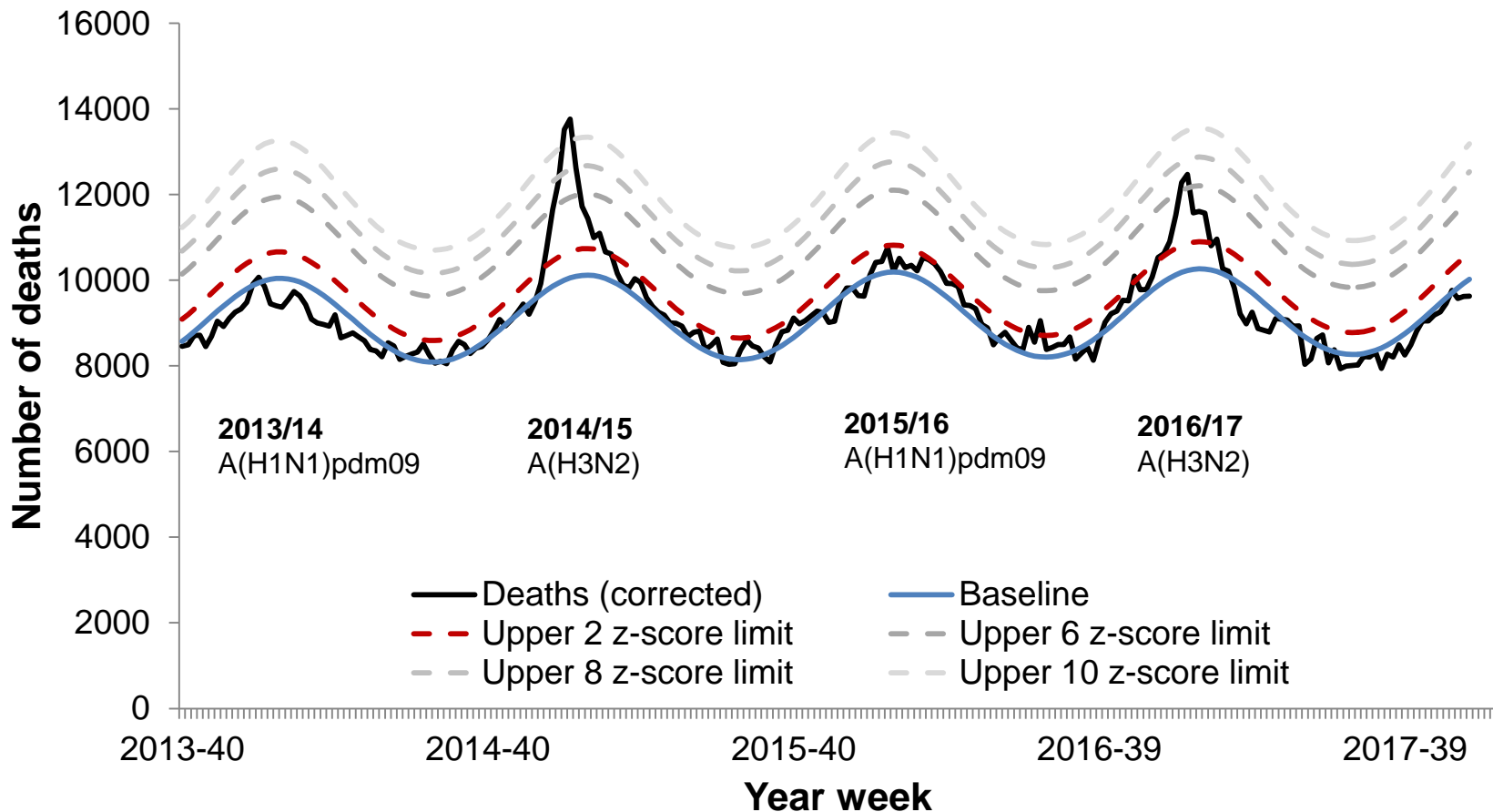Week number: 40 42 44 46 48 50 52 2 4 6 8 10 12 14 16 18

All-cause mortality

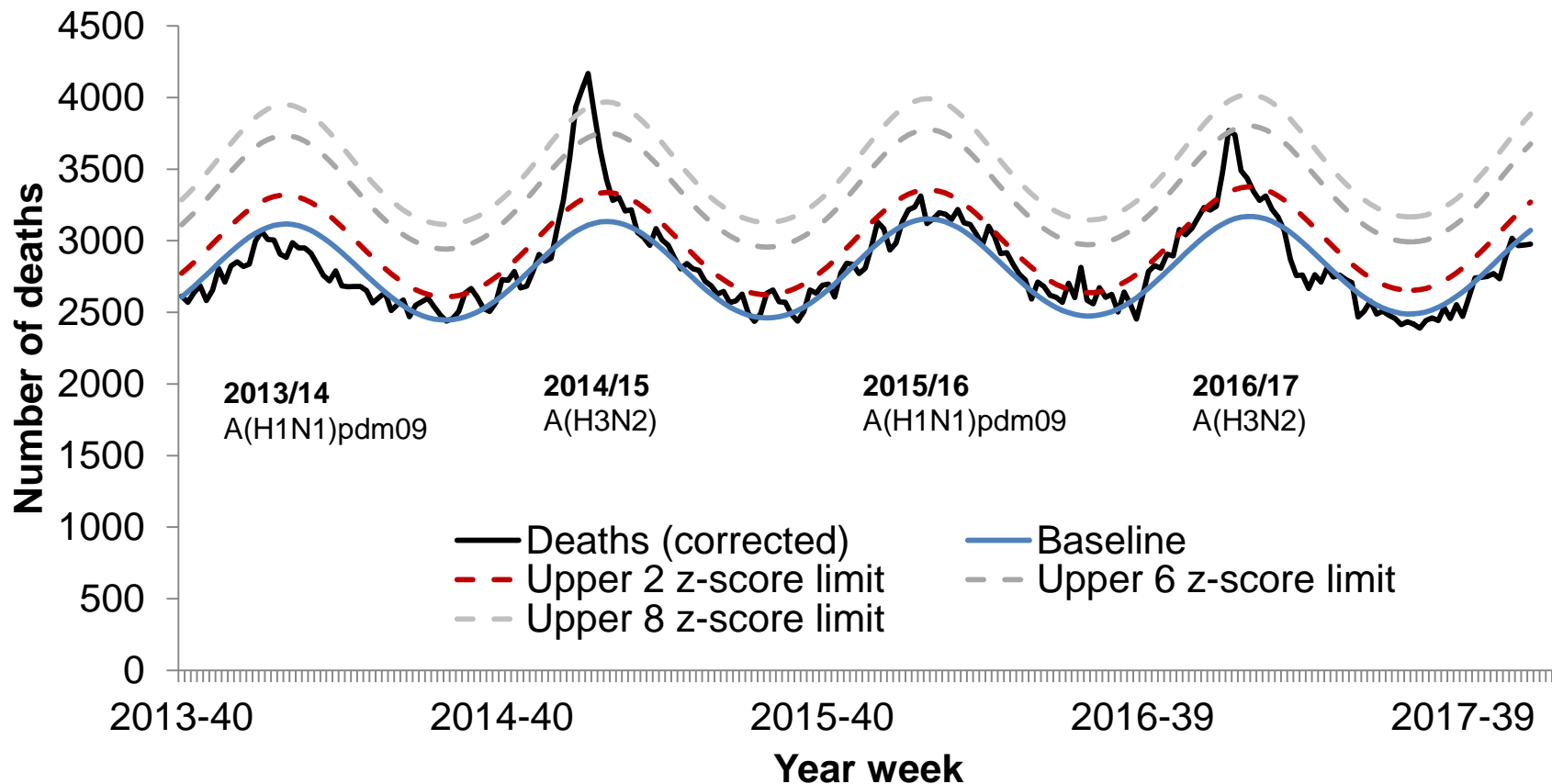# Excess mortality (all causes) by week of death through the EuroMOMO algorithm in all ages, England

This slide has not been updated with week 51 and 52 data as mortality data is currently not available due to the holiday period

Chart — Number of deaths vs. Year week

- **2013/14** A(H1N1)pdm09
- **2014/15** A(H3N2)
- **2015/16** A(H1N1)pdm09
- **2016/17** A(H3N2)

Legend:
- Deaths (corrected)
- Baseline
- Upper 2 z-score limit
- Upper 6 z-score limit
- Upper 8 z-score limit
- Upper 10 z-score limit

X-axis: 2013-40, 2014-40, 2015-40, 2016-39, 2017-39

Excess mortality (all causes) by week of death through the EuroMOMO algorithm in all ages, PHE North of England

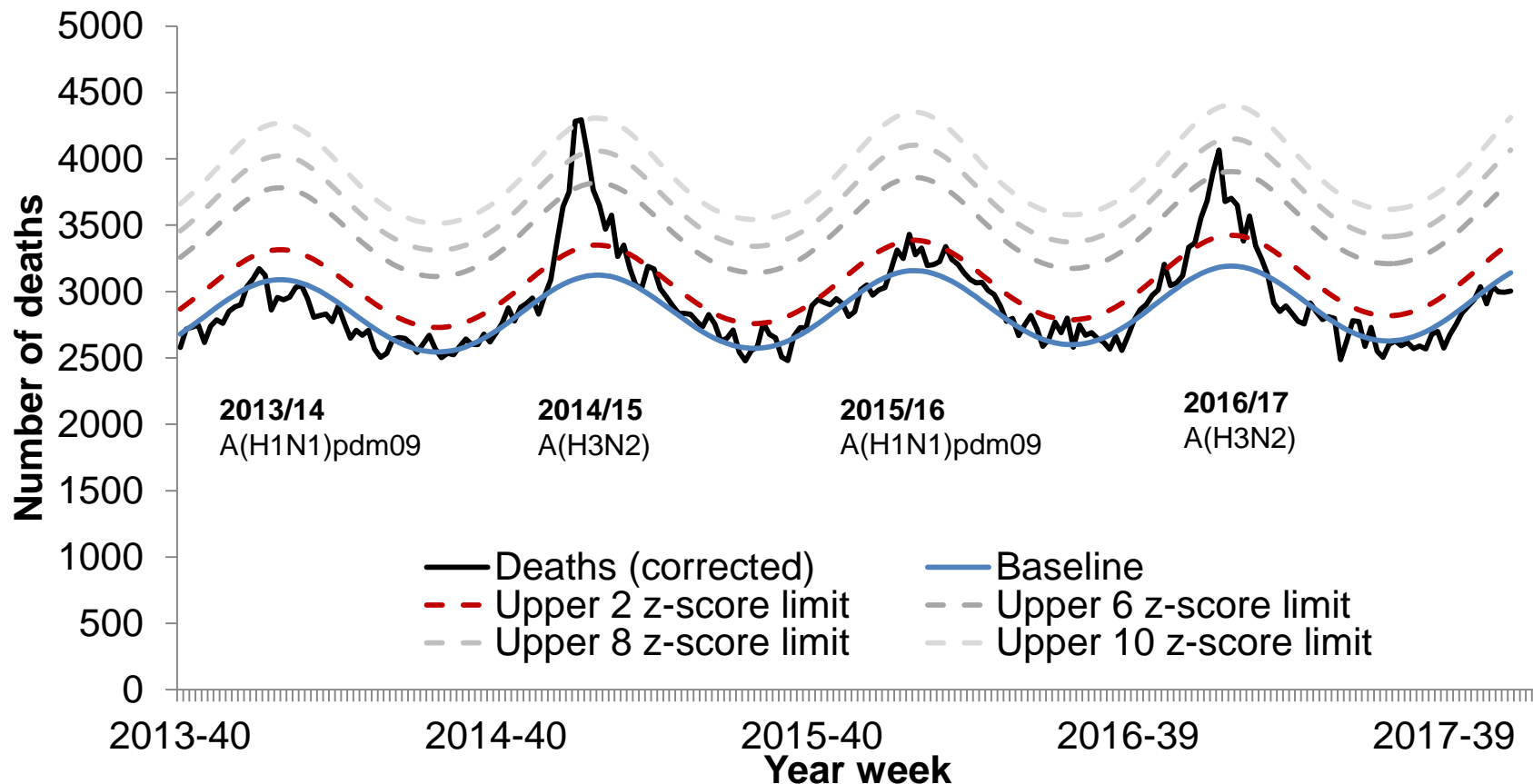This slide has not been updated with week 51 and 52 data as mortality data is currently not available due to the holiday period

2013/14
A(H1N1)pdm09

2014/15
A(H3N2)

2015/16
A(H1N1)pdm09

2016/17
A(H3N2)

Legend:
— Deaths (corrected)
— Baseline
- - Upper 2 z-score limit
- - Upper 6 z-score limit
- - Upper 8 z-score limit

Number of deaths

Year week

Excess mortality (all causes) by week of death through the EuroMOMO algorithm in all ages, PHE Midlands and East of England
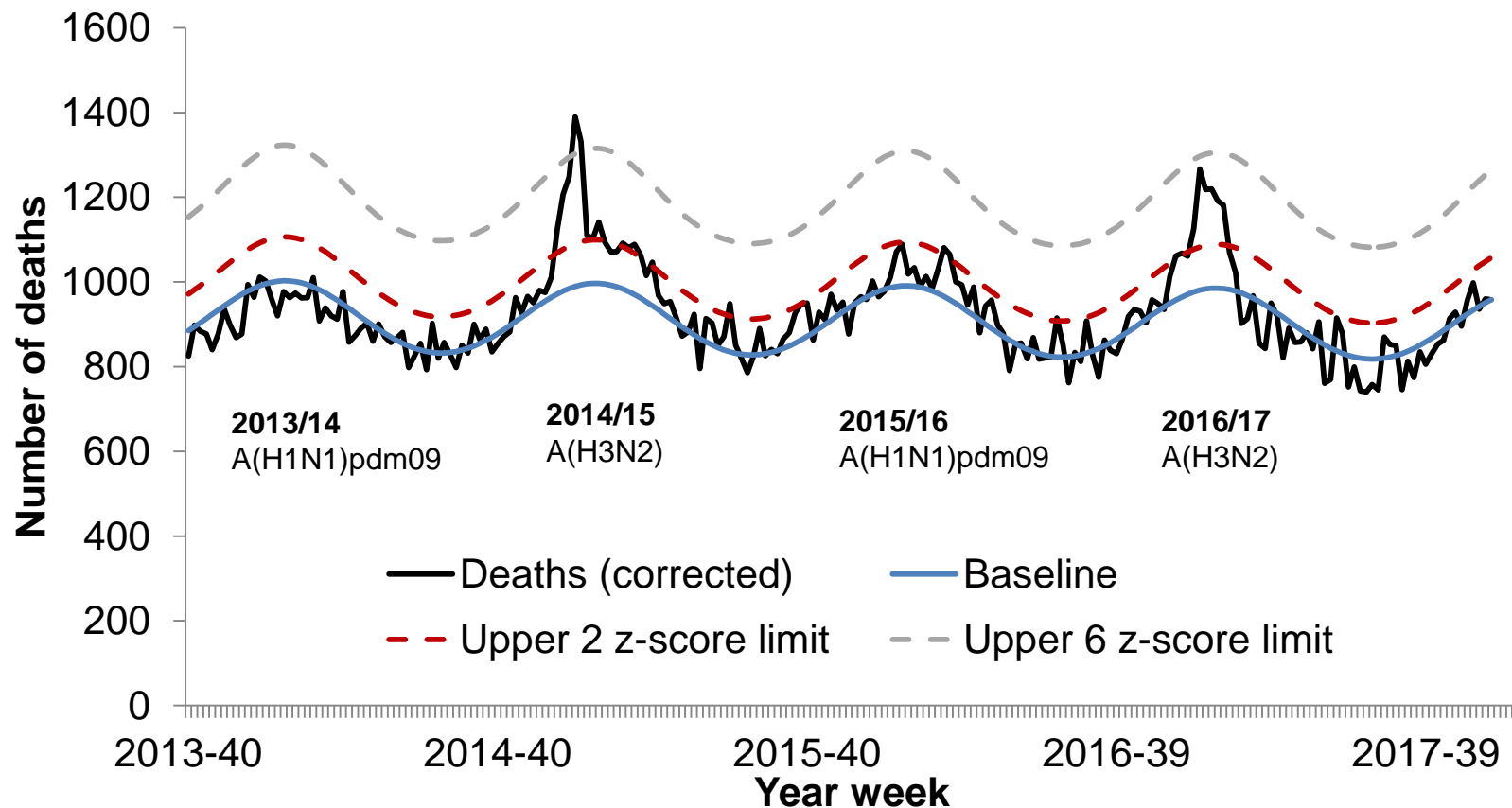
This slide has not been updated with week 51 and 52 data as mortality data is currently not available due to the holiday period

Excess mortality (all causes) by week of death through the EuroMOMO algorithm in all ages, PHE London
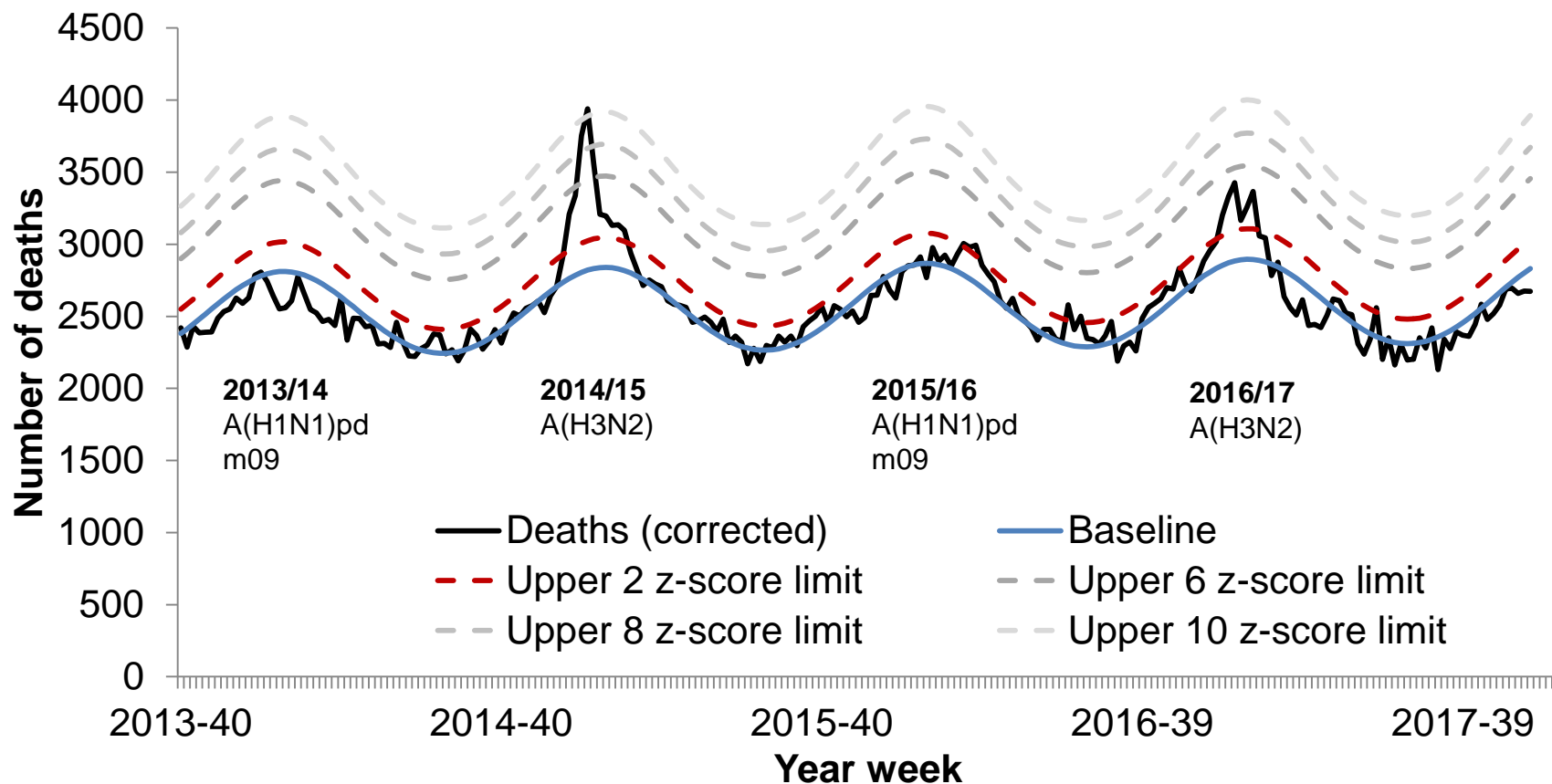
This slide has not been updated with week 51 and 52 data as mortality data is currently not available due to the holiday period

2013/14
A(H1N1)pdm09

2014/15
A(H3N2)

2015/16
A(H1N1)pdm09

2016/17
A(H3N2)

Deaths (corrected) — Baseline
— — Upper 2 z-score limit — — Upper 6 z-score limit

Number of deaths

Year week

Excess mortality (all causes) by week of death through the EuroMOMO algorithm in all ages, PHE South of England

This slide has not been updated with week 51 and 52 data as mortality data is currently not available due to the holiday period

2013/14 A(H1N1)pdm09

2014/15 A(H3N2)

2015/16 A(H1N1)pdm09

2016/17 A(H3N2)

Legend:
- Deaths (corrected)
- Baseline
- Upper 2 z-score limit
- Upper 6 z-score limit
- Upper 8 z-score limit
- Upper 10 z-score limit

Y-axis: Number of deaths (0 to 4500)
X-axis: Year week (2013-40, 2014-40, 2015-40, 2016-39, 2017-39)

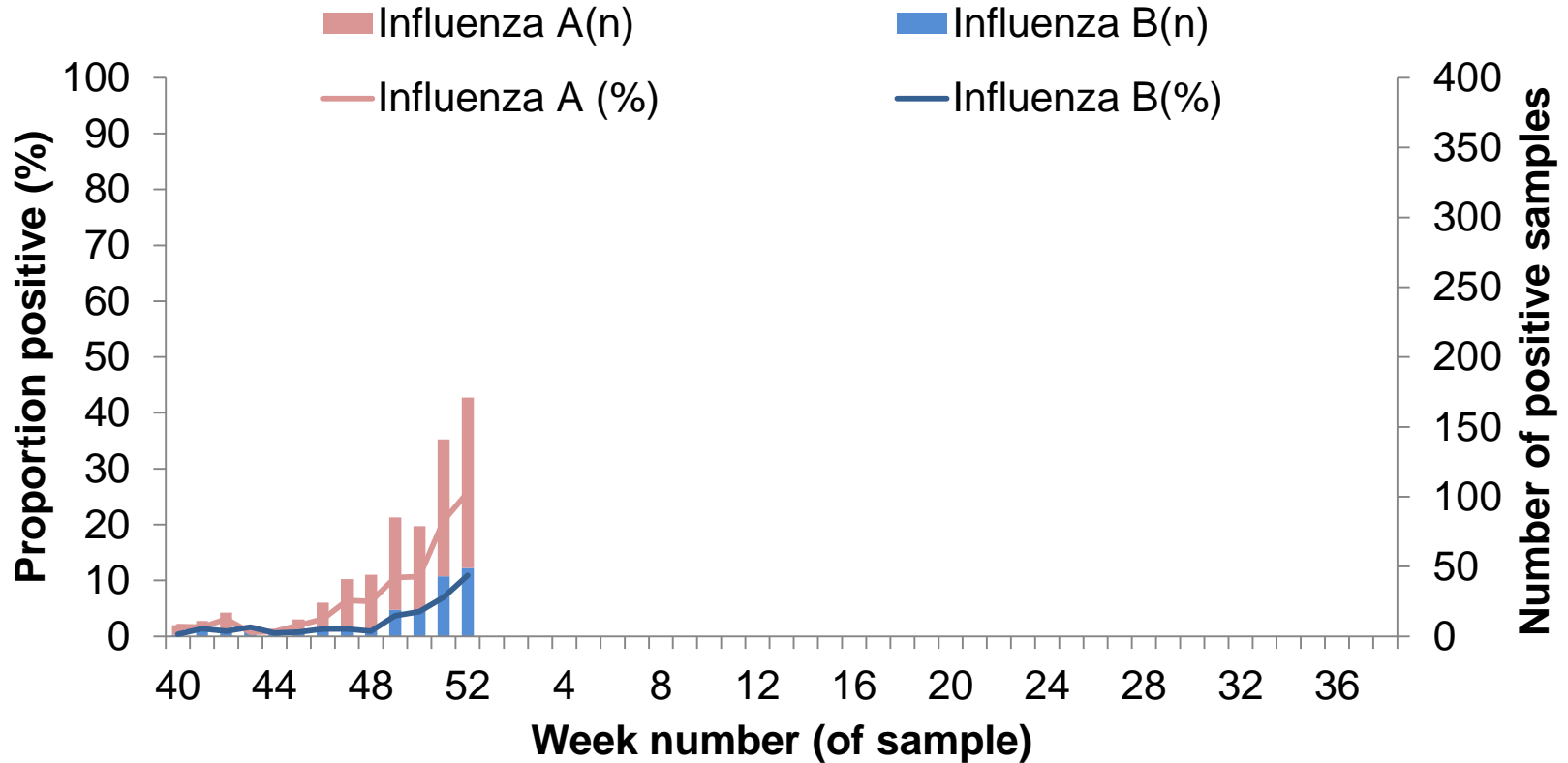# Microbiological surveillance

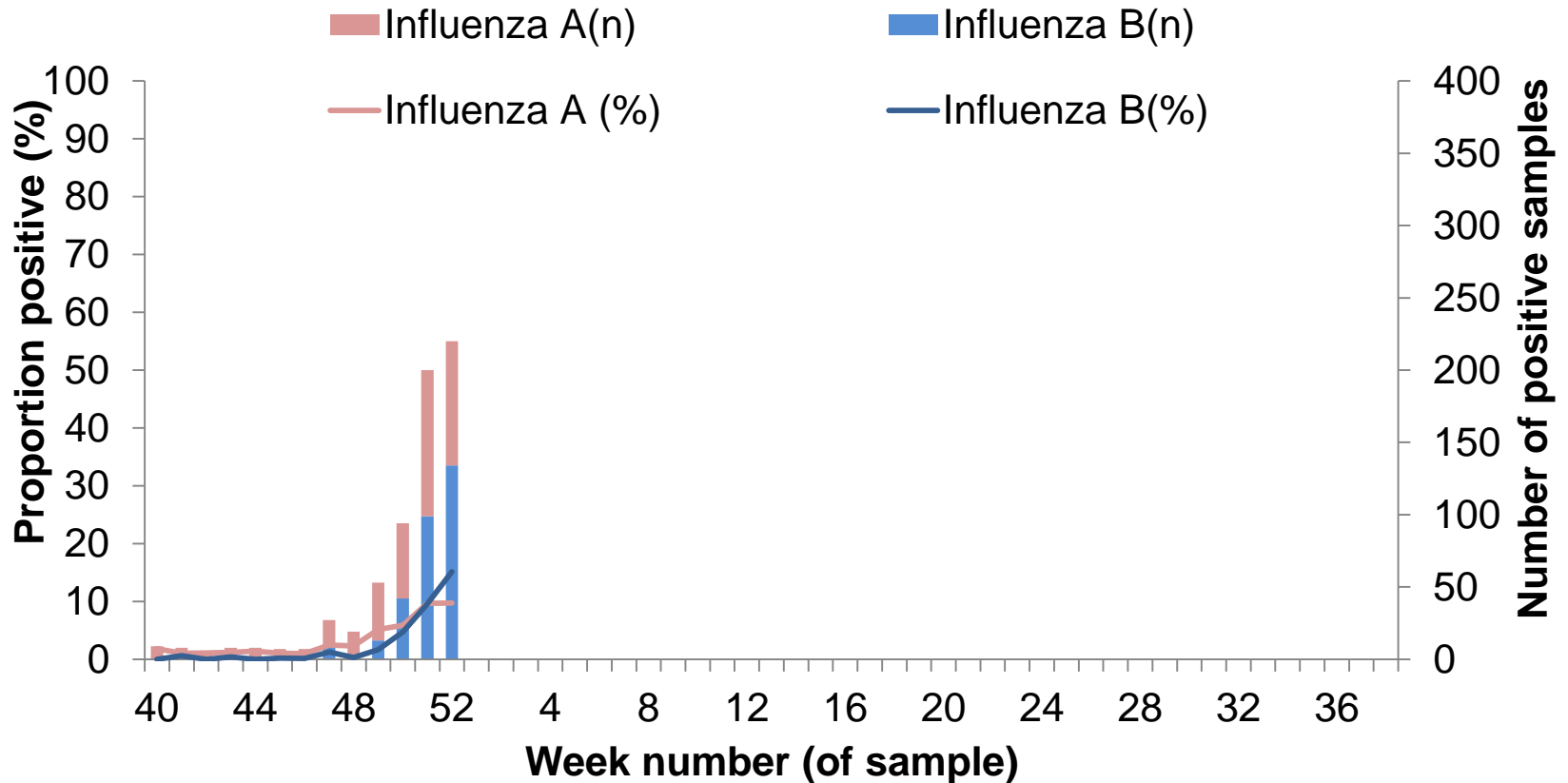DataMart: Number and proportion of samples positive for influenza, by type, England
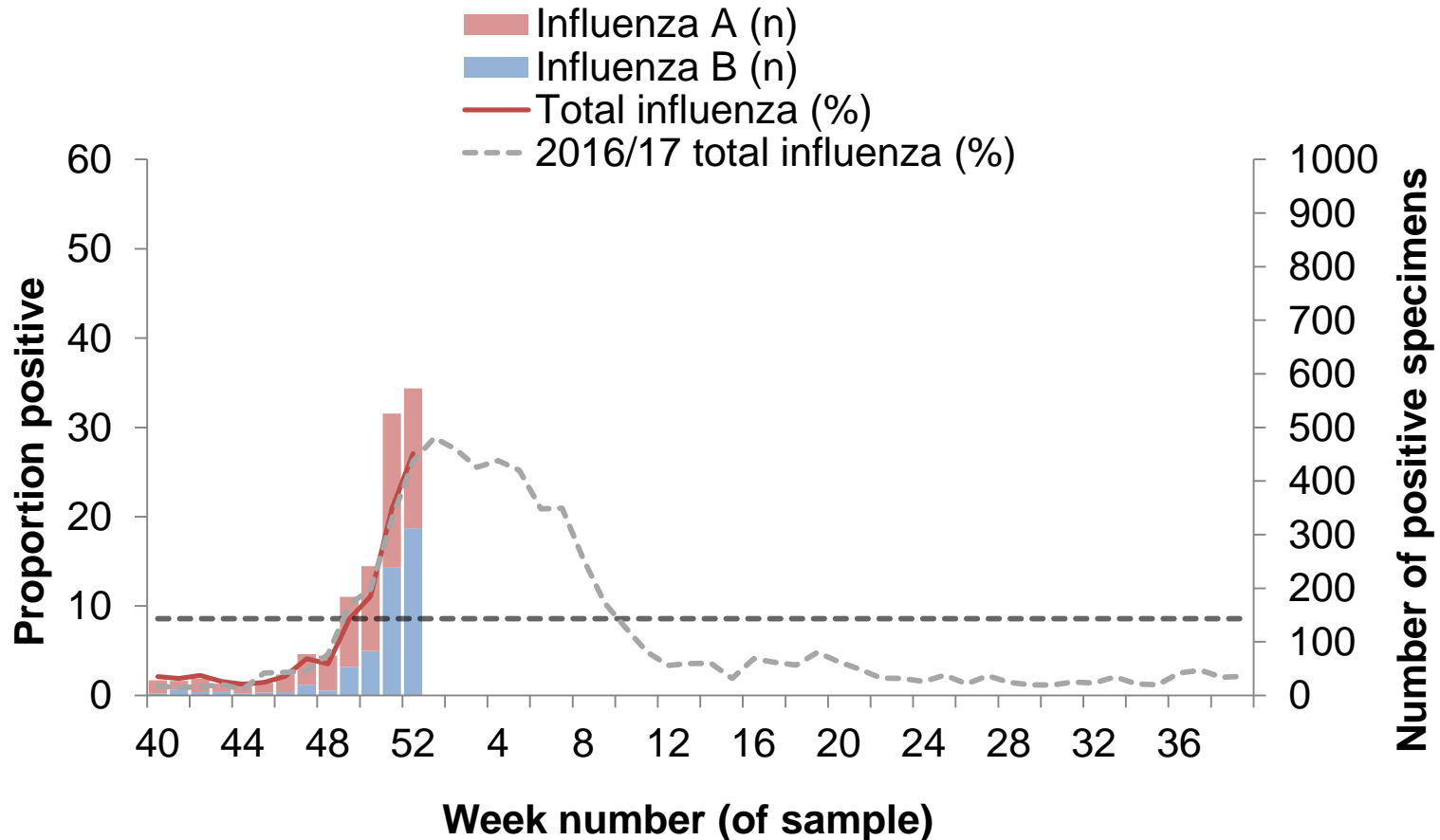
DataMart: Number and proportion of samples positive for influenza, by type, PHE North of England
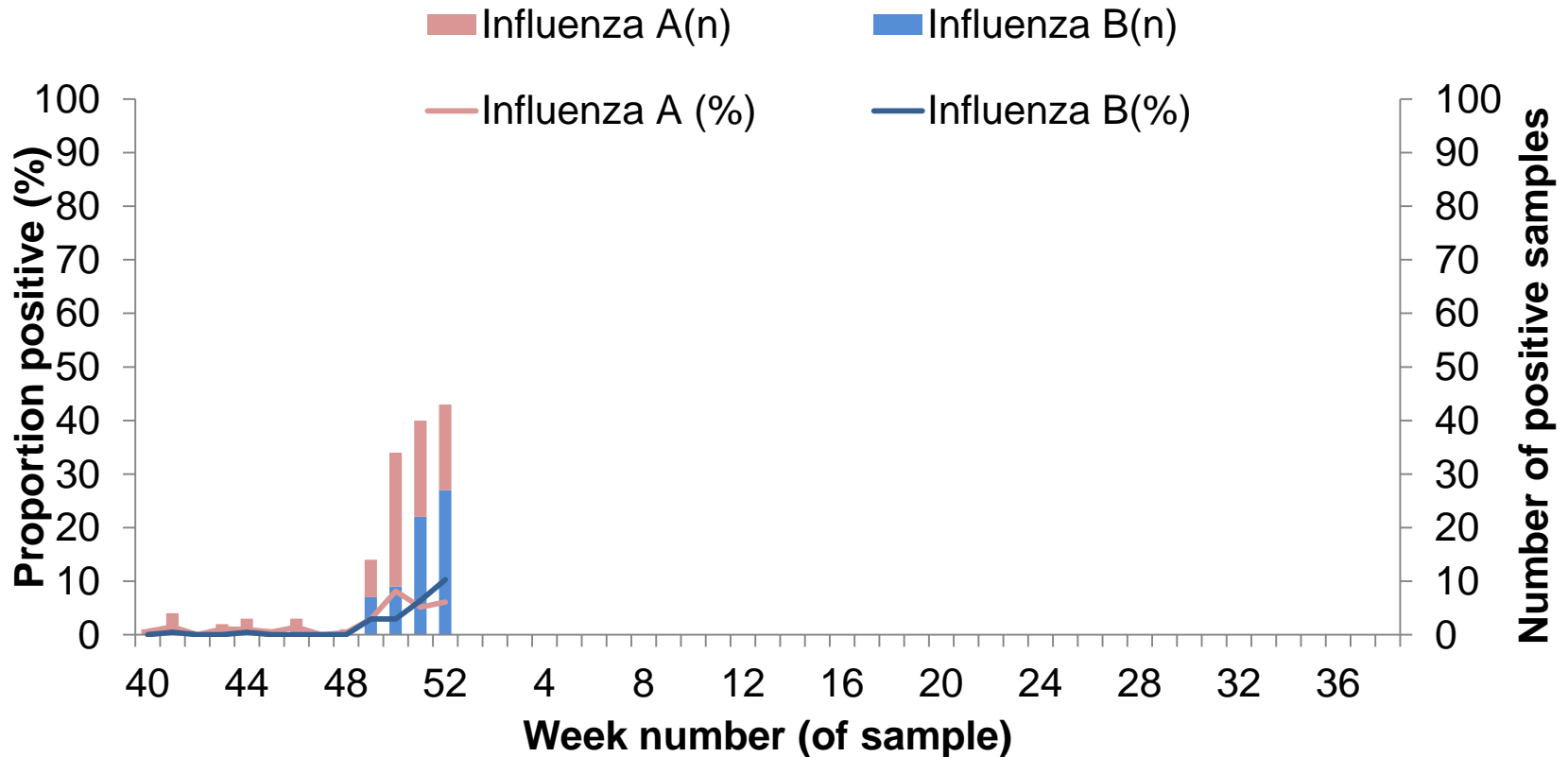
DataMart: Number and proportion of samples positive for influenza, by type, PHE Midlands and East of England
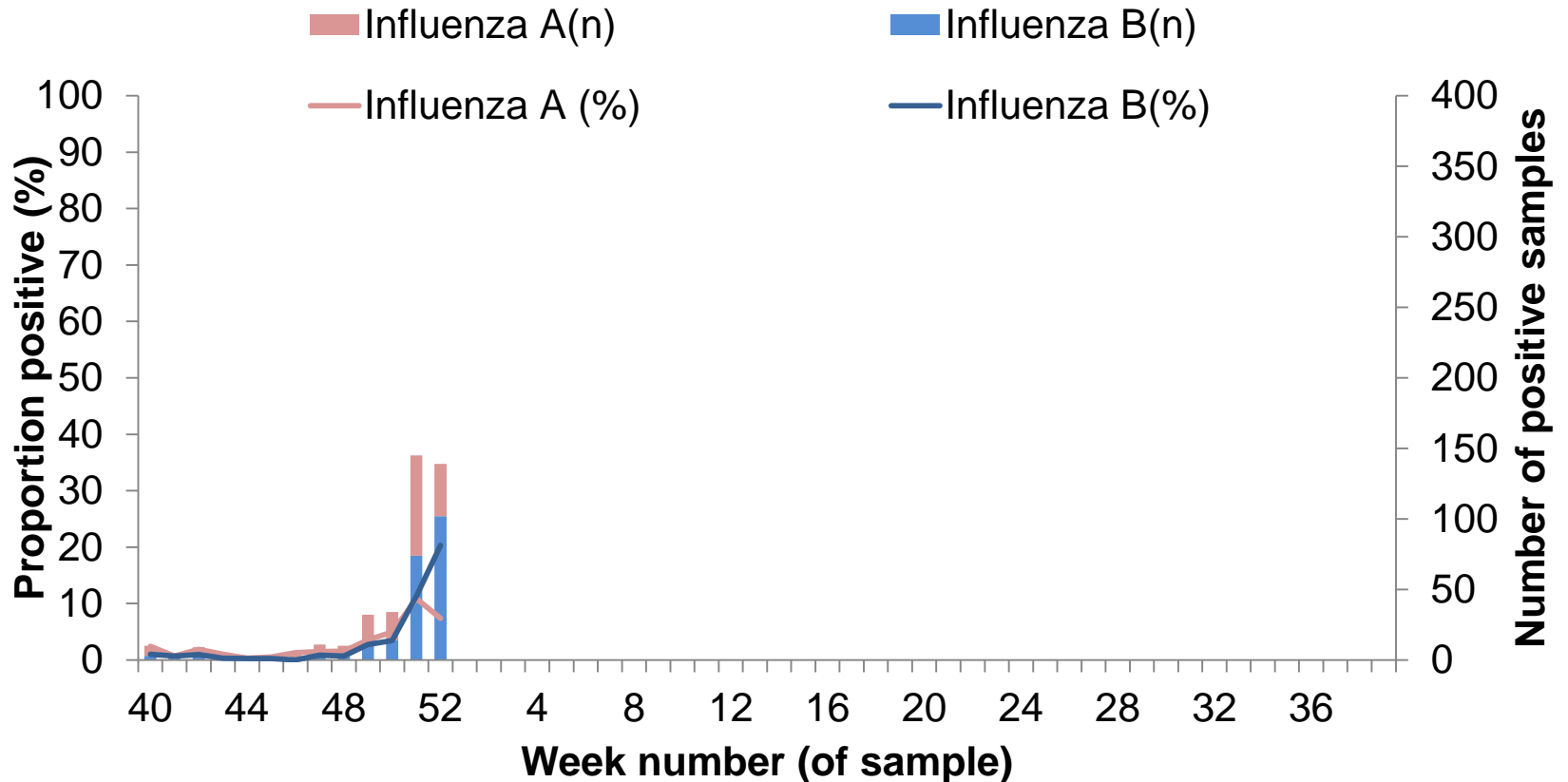
DataMart: Number and proportion of samples positive for influenza, by type, PHE London
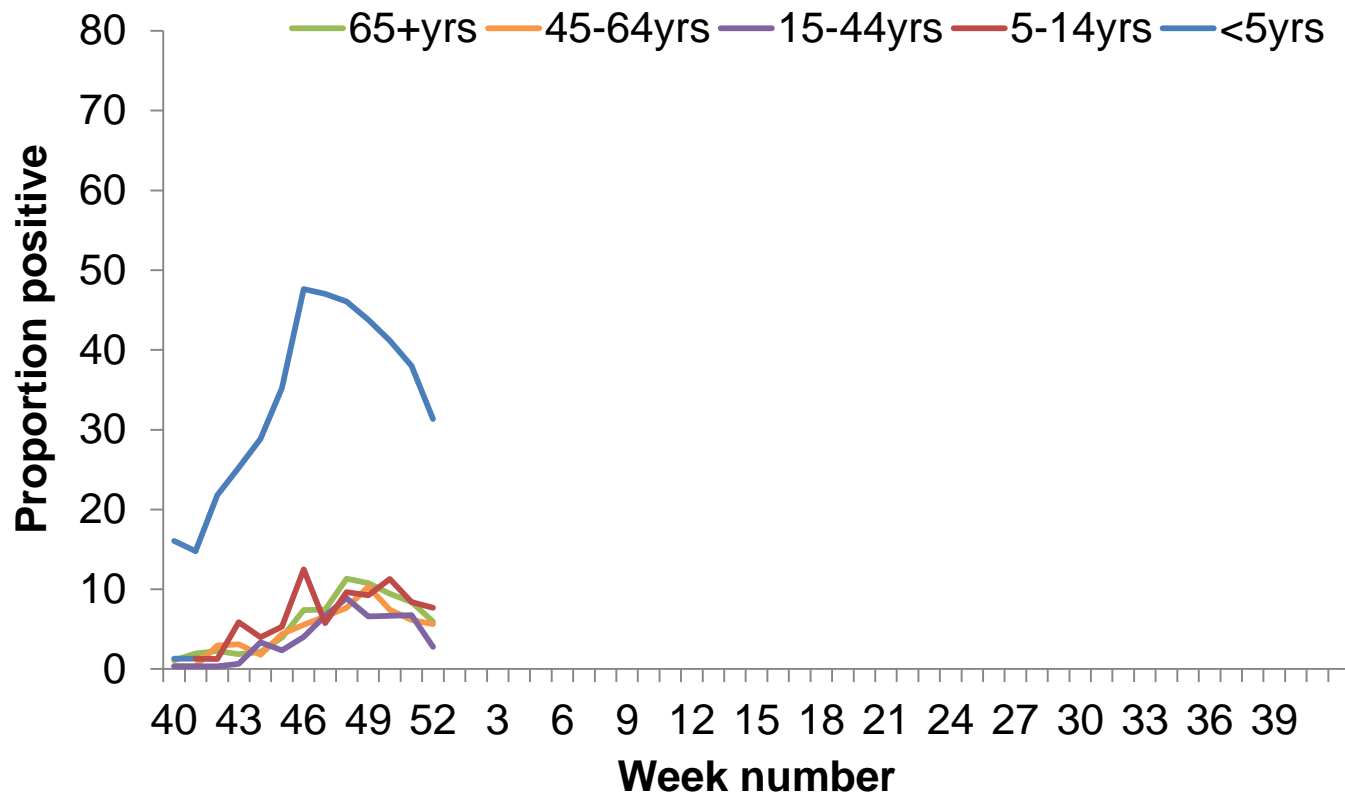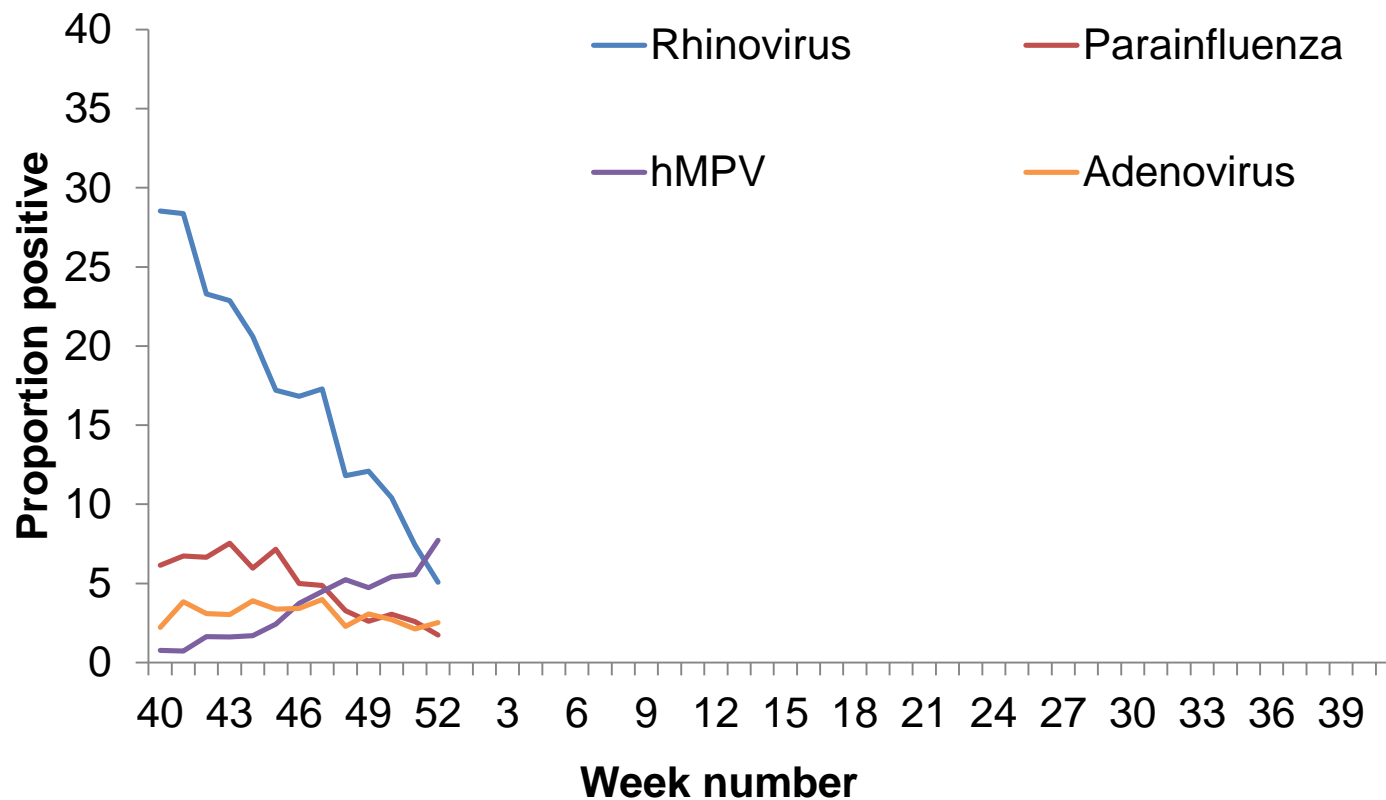
4 January 2018

DataMart: Number and proportion of samples positive for influenza, by type, PHE South of England

Public Health England

Influenza A(n) Influenza B(n)
Influenza A (%) Influenza B(%)

DataMart: Proportion of samples positive for RSV, by age group
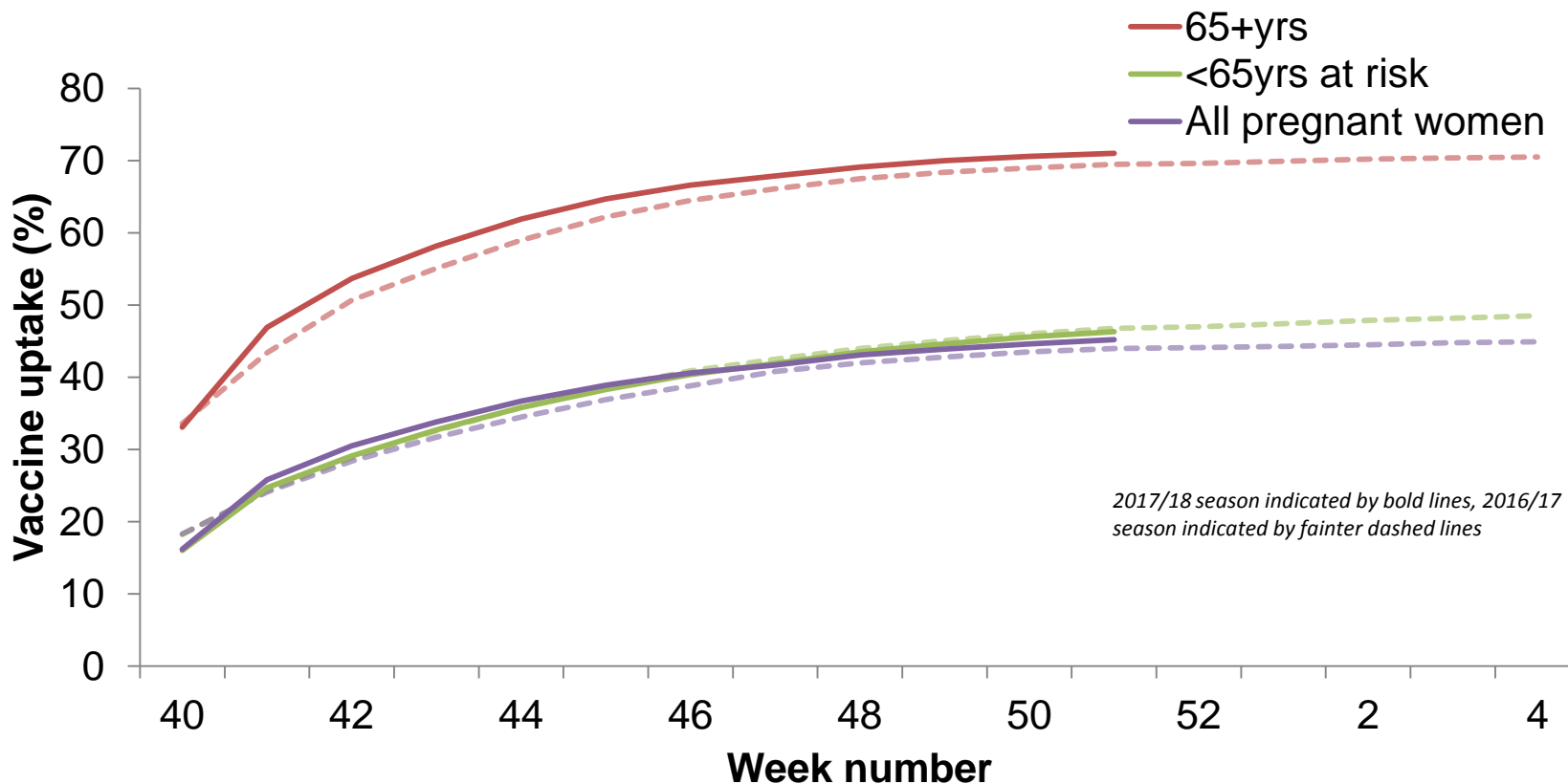
DataMart: Proportion of samples positive for other viruses

Influenza vaccination

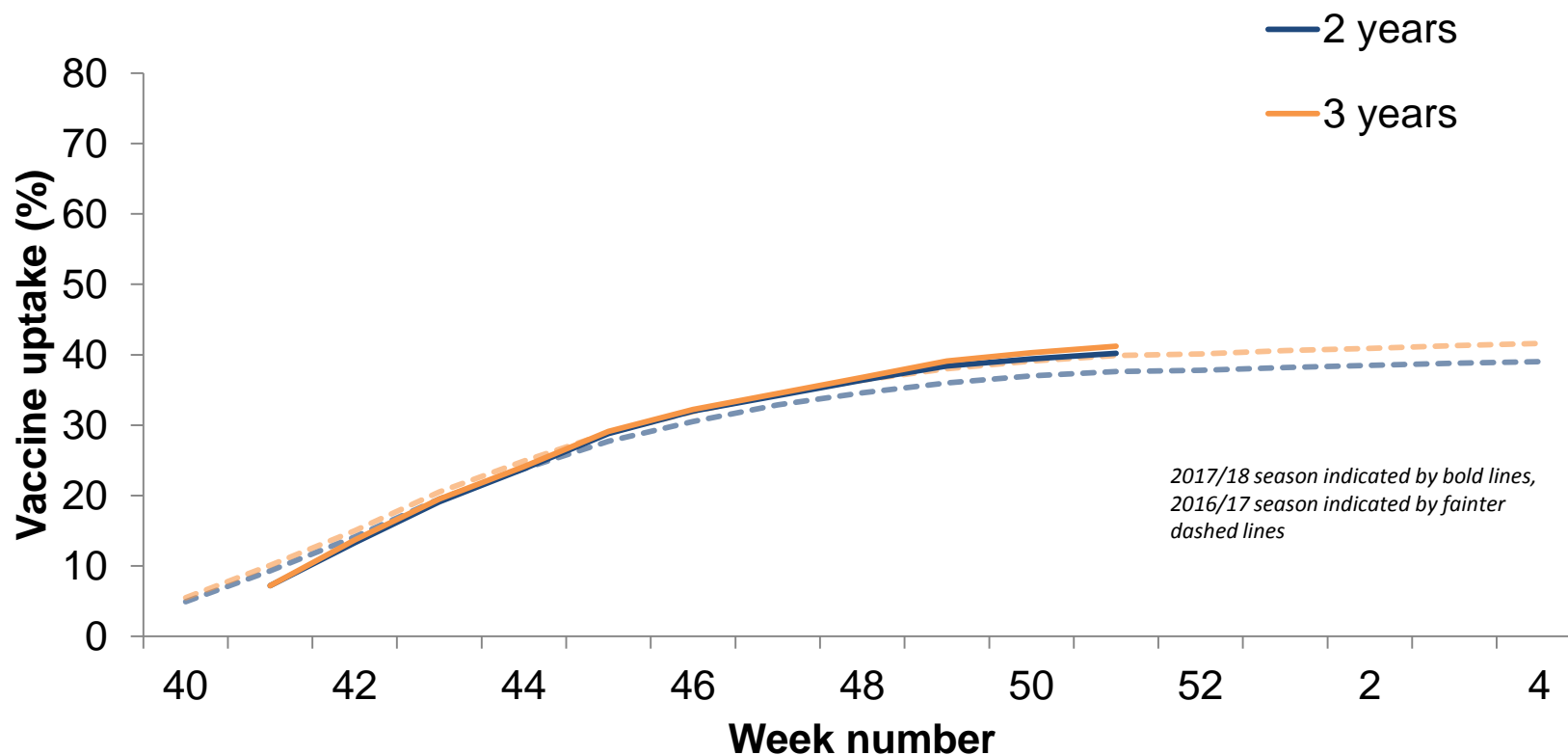# Seasonal influenza vaccine uptake in targeted groups, 2017/18, England

This slide has not been updated with week 52 data as vaccine uptake data is not available due to the holiday period

Legend:
- 65+yrs
- <65yrs at risk
- All pregnant women

2017/18 season indicated by bold lines, 2016/17 season indicated by fainter dashed lines

Seasonal influenza vaccine uptake in targeted groups, 2017/18, England

Public Health England

This slide has not been updated with week 52 data as vaccine uptake data is not available due to the holiday period

2017/18 season indicated by bold lines, 2016/17 season indicated by fainter dashed lines

Legend: —— 2 years —— 3 years

Y-axis: Vaccine uptake (%)
X-axis: Week number

Links

- Sources of UK flu surveillance data:

https://www.gov.uk/sources-of-uk-flu-data-influenza-surveillance-in-the-uk

- Weekly flu report

https://www.gov.uk/government/statistics/weekly-national-flu-reports