

Learning from Flusurvey

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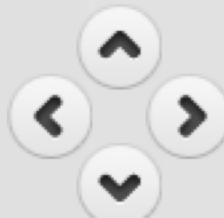
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mathematical
modelling of
infectious diseases**

LONDON
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MEDICINE





Influenzanet

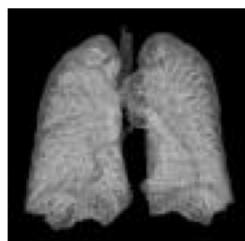
[Show/Hide Influenzanet map](#)

Currently 35163 volunteers from 10 participating countries are contributing to Influenzanet:

[Belgium](#) [Denmark](#) [France](#) [Ireland](#) [Italy](#) [Netherlands](#) [Portugal](#) [Spain](#) [Sweden](#) [United Kingdom](#)[Hide map](#)[Home](#) [News](#) [Results](#) [Method](#) [Data](#) [Publications](#) [Contact](#) [Search](#)

Latest news

Study identifies enzyme that plays crucial role in resistance to influenza



McGill researchers, led by Dr. Maya Saleh of the Department of Medicine, have identified an enzyme, cIAP2 that helps the lungs protect themselves from the flu by giving them the ability to resist tissue damage. [Read more...](#)

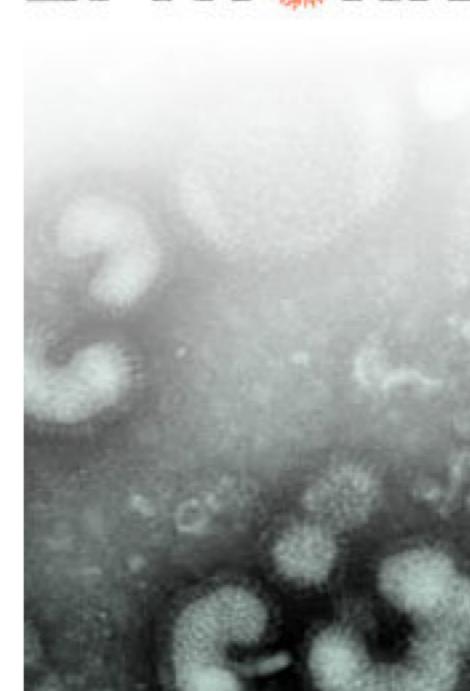
H1N1 pandemic in 2009 killed

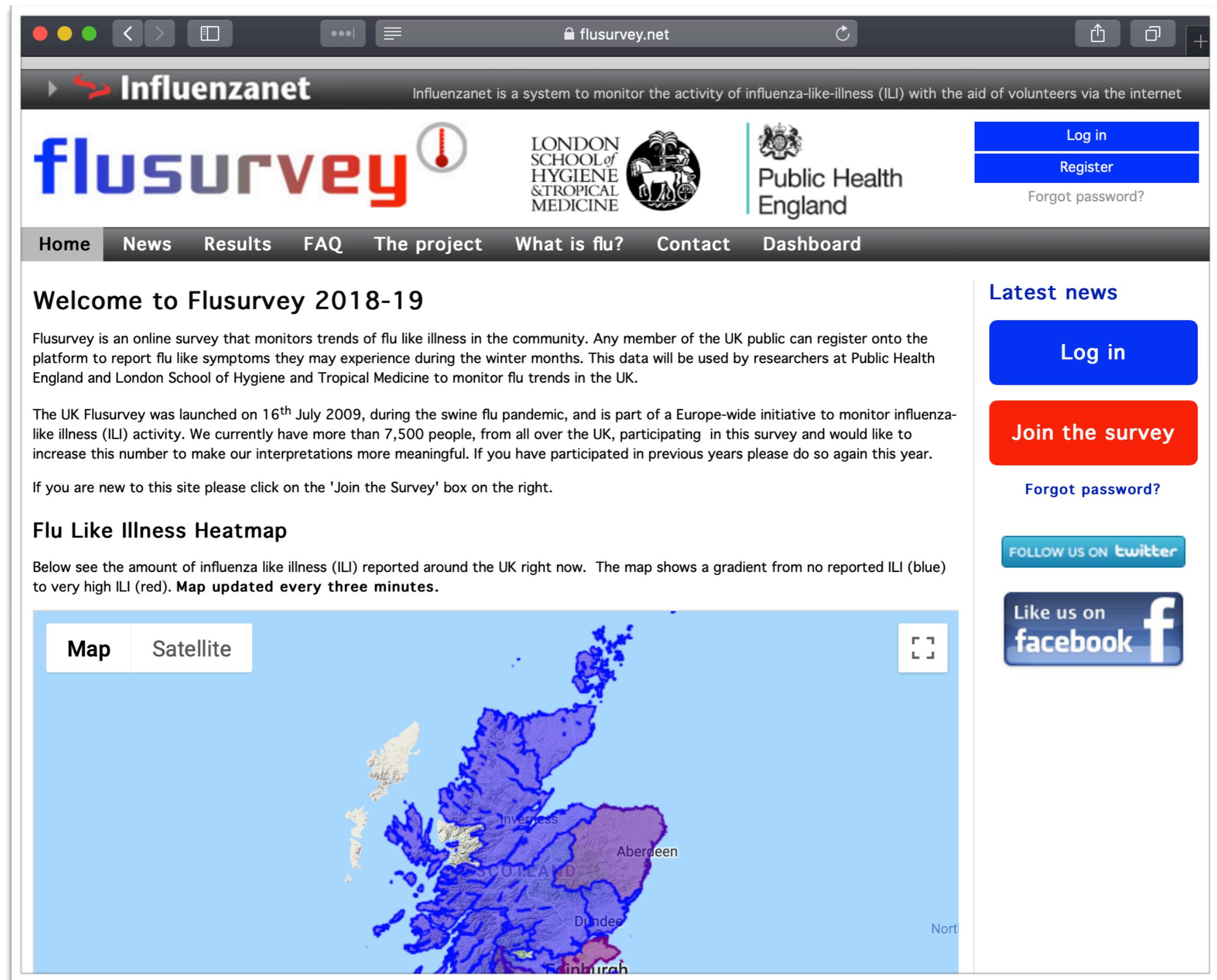
Waiting for trc.taboola.com...

Influenzanet

Influenzanet is a system to monitor the activity of influenza-like-illness (ILI) with the aid of volunteers via the internet. It has been operational in The Netherlands and Belgium (since 2003), Portugal (since 2005), Italy (since 2008) and United Kingdom (since 2009), and the current objective is to implement Influenzanet in more European countries. In contrast with the traditional system of sentinel networks of mainly primary care physicians, Influenzanet obtains its data directly from the population. This creates a fast and flexible monitoring system whose uniformity allows for direct comparison of ILI rates between countries.

Any resident of a country where Influenzanet is implemented can participate by completing an online application form, which contains various medical, geographic and behavioural questions. Participants are reminded weekly to report any symptoms they have experienced since their last visit. The incidence of ILI is determined on the basis of a uniform case definition.



A screenshot of a web browser displaying the Flusurvey.net homepage. The address bar shows the URL flusurvey.net. The page features a header with the Influzenanet logo, a thermometer icon, and logos for the London School of Hygiene & Tropical Medicine and Public Health England. A navigation menu includes Home, News, Results, FAQ, The project, What is flu?, Contact, and Dashboard. On the left, a section titled "Welcome to Flusurvey 2018-19" explains the survey's purpose and history. It mentions the launch in 2009 during the swine flu pandemic and the current participation of over 7,500 people from across the UK. A "Join the Survey" button is located on the right. The right side also contains "Latest news" sections with "Log in" and "Join the survey" buttons, as well as social media links for Twitter and Facebook.

Influzenanet

Influzenanet is a system to monitor the activity of influenza-like-illness (ILI) with the aid of volunteers via the internet

flusurvey

flusurvey.net

London School of Hygiene & Tropical Medicine

Public Health England

Log in

Register

Forgot password?

Home News Results FAQ The project What is flu? Contact Dashboard

Welcome to Flusurvey 2018-19

Flusurvey is an online survey that monitors trends of flu like illness in the community. Any member of the UK public can register onto the platform to report flu like symptoms they may experience during the winter months. This data will be used by researchers at Public Health England and London School of Hygiene and Tropical Medicine to monitor flu trends in the UK.

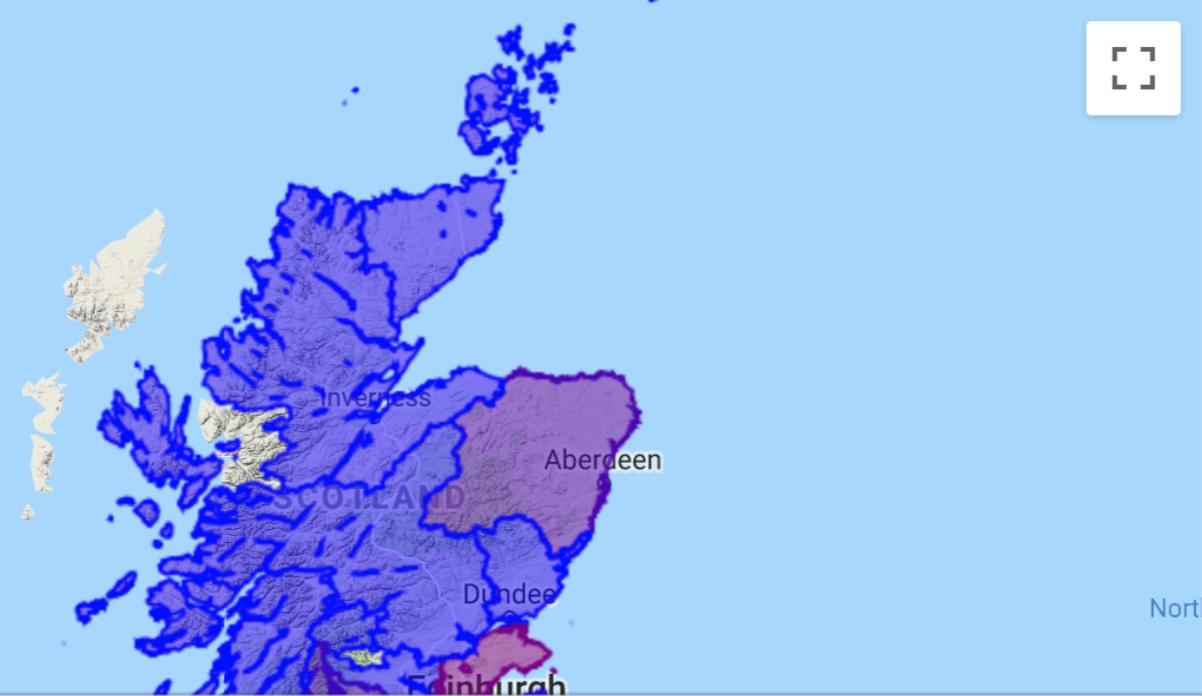
The UK Flusurvey was launched on 16th July 2009, during the swine flu pandemic, and is part of a Europe-wide initiative to monitor influenza-like illness (ILI) activity. We currently have more than 7,500 people, from all over the UK, participating in this survey and would like to increase this number to make our interpretations more meaningful. If you have participated in previous years please do so again this year.

If you are new to this site please click on the 'Join the Survey' box on the right.

Flu Like Illness Heatmap

Below see the amount of influenza like illness (ILI) reported around the UK right now. The map shows a gradient from no reported ILI (blue) to very high ILI (red). **Map updated every three minutes.**

Map Satellite



INVERNESS

ABERDEEN

DUNDEE

EDINBURGH

FOLLOW US ON **twitter**

Like us on **facebook** 

Latest news

Log in

Join the survey

Forgot password?

Beginning of the season

* For whom are you filling in this survey?

- A member of my household
- Myself
- Someone else

* What is your gender?

- Male
- Female

* What is your date of birth (month and year)?

* What is the first part of your home postcode (the part before the space)?

* What is your main activity?

- Paid employment, full time
- Paid employment, part time
- Self-employed (businessman, farmer, tradesman, etc.)
- Attending daycare/school/college/university
- Home-maker (e.g. housewife, househusband)
- Unemployed
- Long-term sick-leave or parental leave
- Retired
- Other

What is the highest level of formal education/qualification that you have?

- I have no formal qualification
- GCSEs, O-levels, CSEs or equivalent
- A-levels or equivalent (e.g. Higher, NVQ Level3, BTEC)
- Bachelor's Degree (BA, BSc) or equivalent
- Higher Degree or equivalent (e.g. Master's Degree, PGCE, PhD, Medical Doctorate, Advanced Professional Award)
- I am still in education

Every week

* Have you had any of the following symptoms since your last visit (or in the past weeks, if this is your first visit)?

- No symptoms
- Fever
- Chills
- Runny or blocked nose
- Sneezing
- Sore throat
- Cough
- Shortness of breath
- Headache
- Muscle/joint pain
- Chest pain
- Feeling tired or exhausted (malaise)
- Loss of appetite
- Coloured sputum/phlegm
- Watery, bloodshot eyes
- Nausea
- Vomiting
- Diarrhoea
- Stomach ache
- Other

When did the first symptoms appear?

- Choose date
- I don't know/can't remember

When did your symptoms end?

- Choose date
- I don't know/can't remember
- I am still ill

Did your symptoms develop suddenly over a few hours?

- Yes
- No
- I don't know/can't remember

When did your fever begin?

- Choose date
- I don't know/can't remember

Did your fever develop suddenly over a few hours?

- Yes
- No
- I don't know

Your latest response:

14-01-2019



No symptoms

Your symptoms history:

In the neighbourhood:

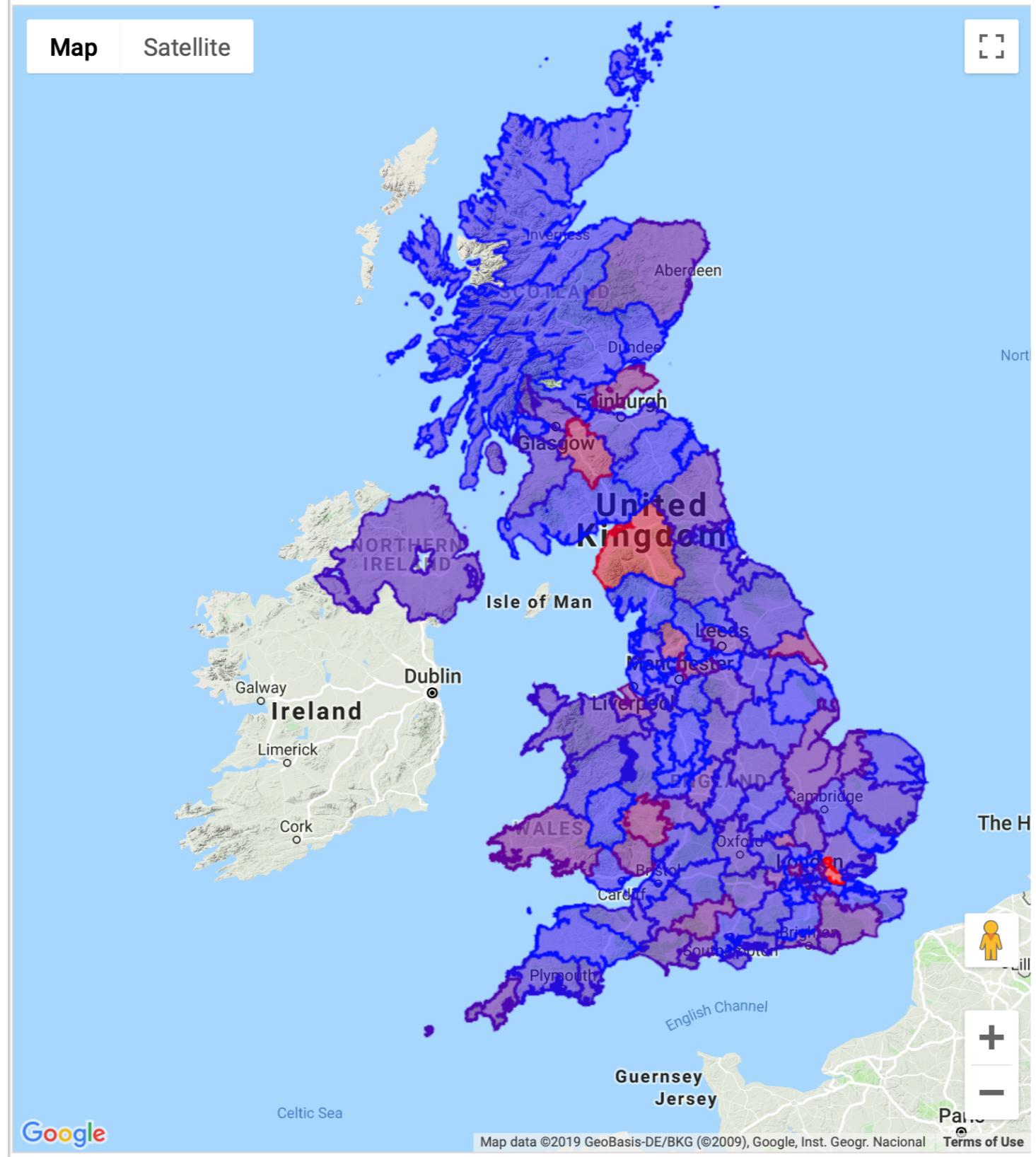
5 How many Flusurvey users are in
your postal code?

6.7 How many Flusurvey users are, on
average, near your postal code?

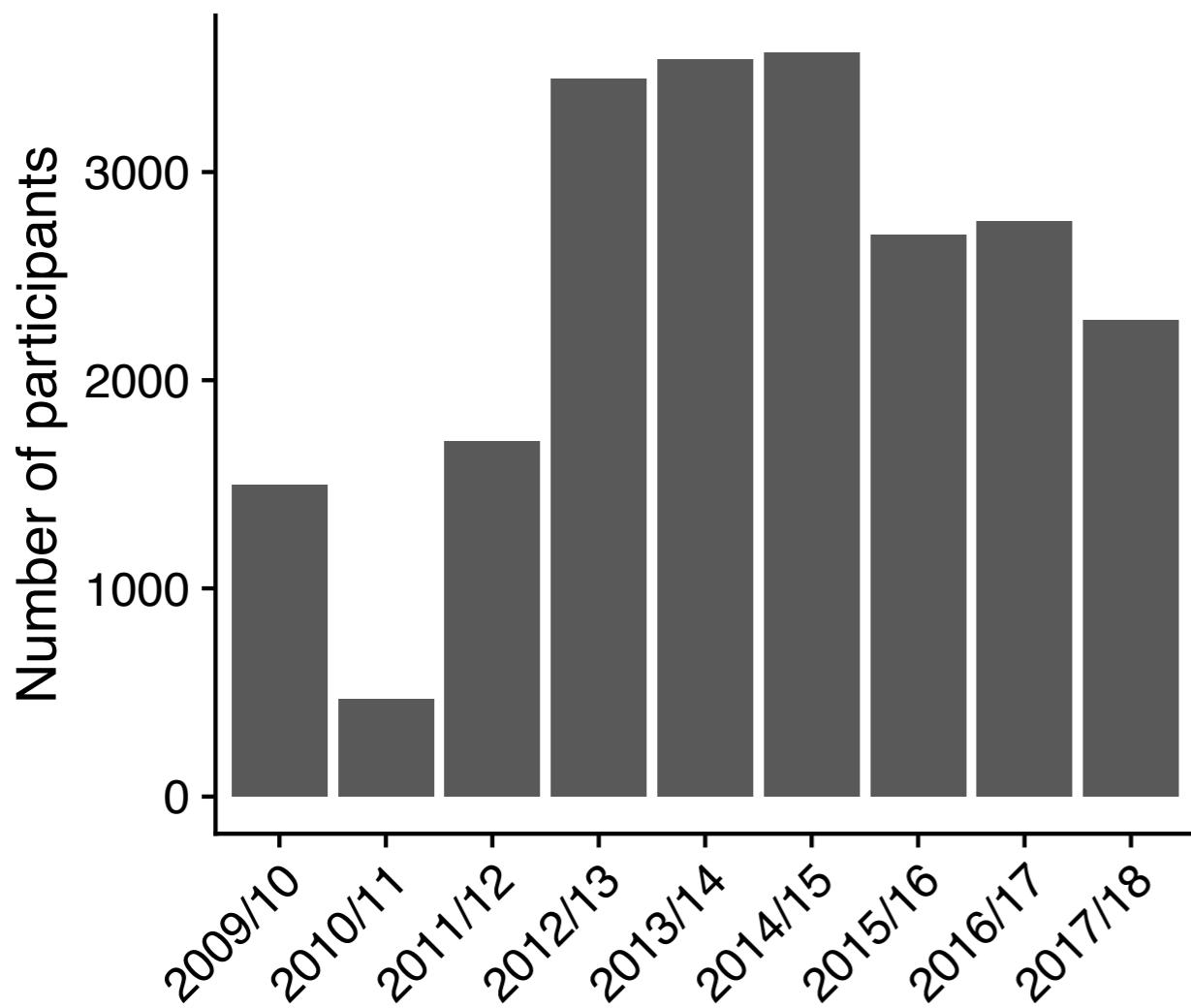
The map shows the percentage of influenza like illness (ILI) cases among active users in the last three weeks for each postal code.
Click on the colored area to read the postal code and the ILI cases percentage.

Flu Like Illness Heatmap

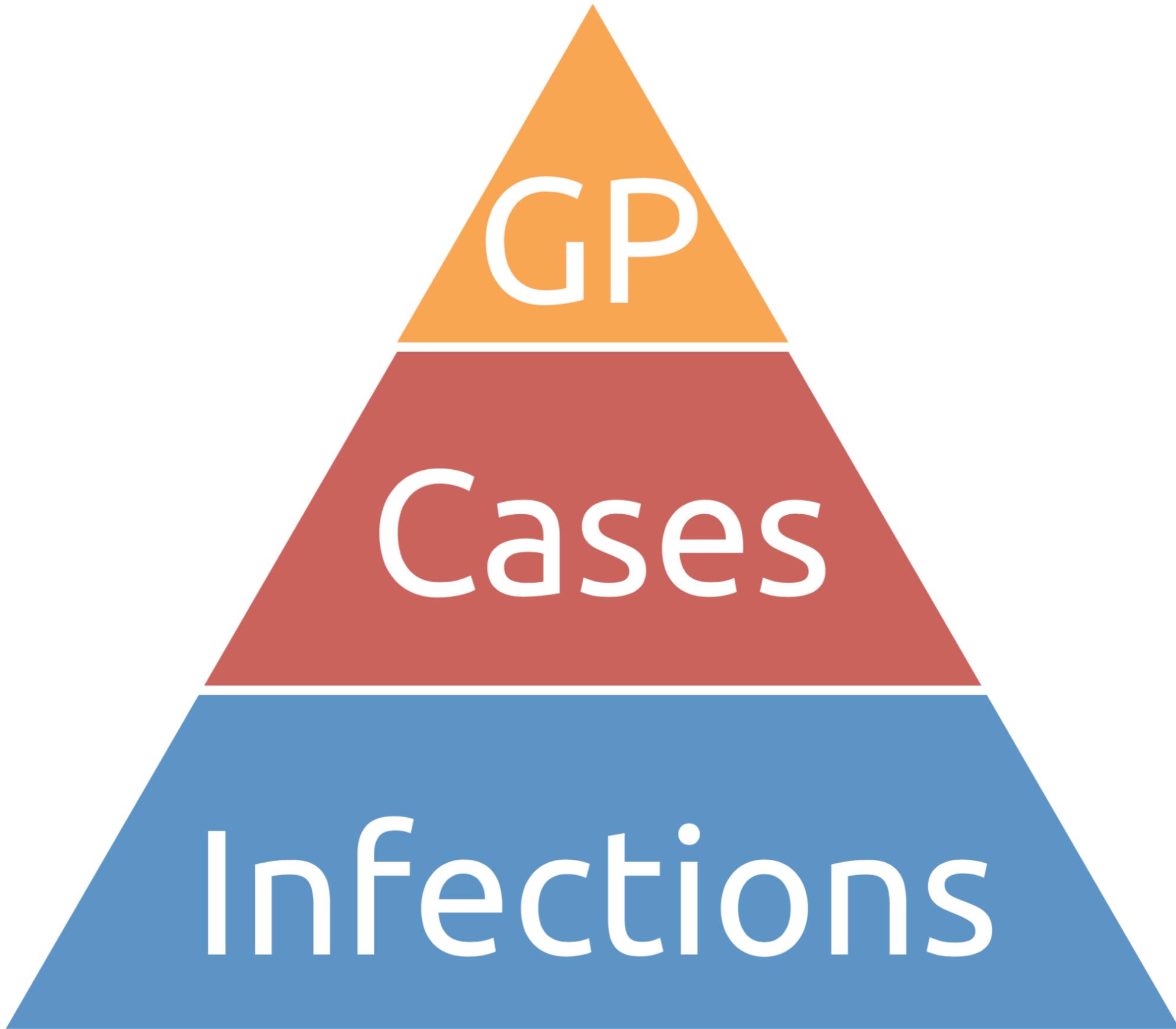
Below see the amount of influenza like illness (ILI) reported around the UK right now. The map shows a gradient from no reported ILI (blue) to very high ILI (red). **Map updated every three minutes.**



Flusurvey participants



Uses of Flusurvey data



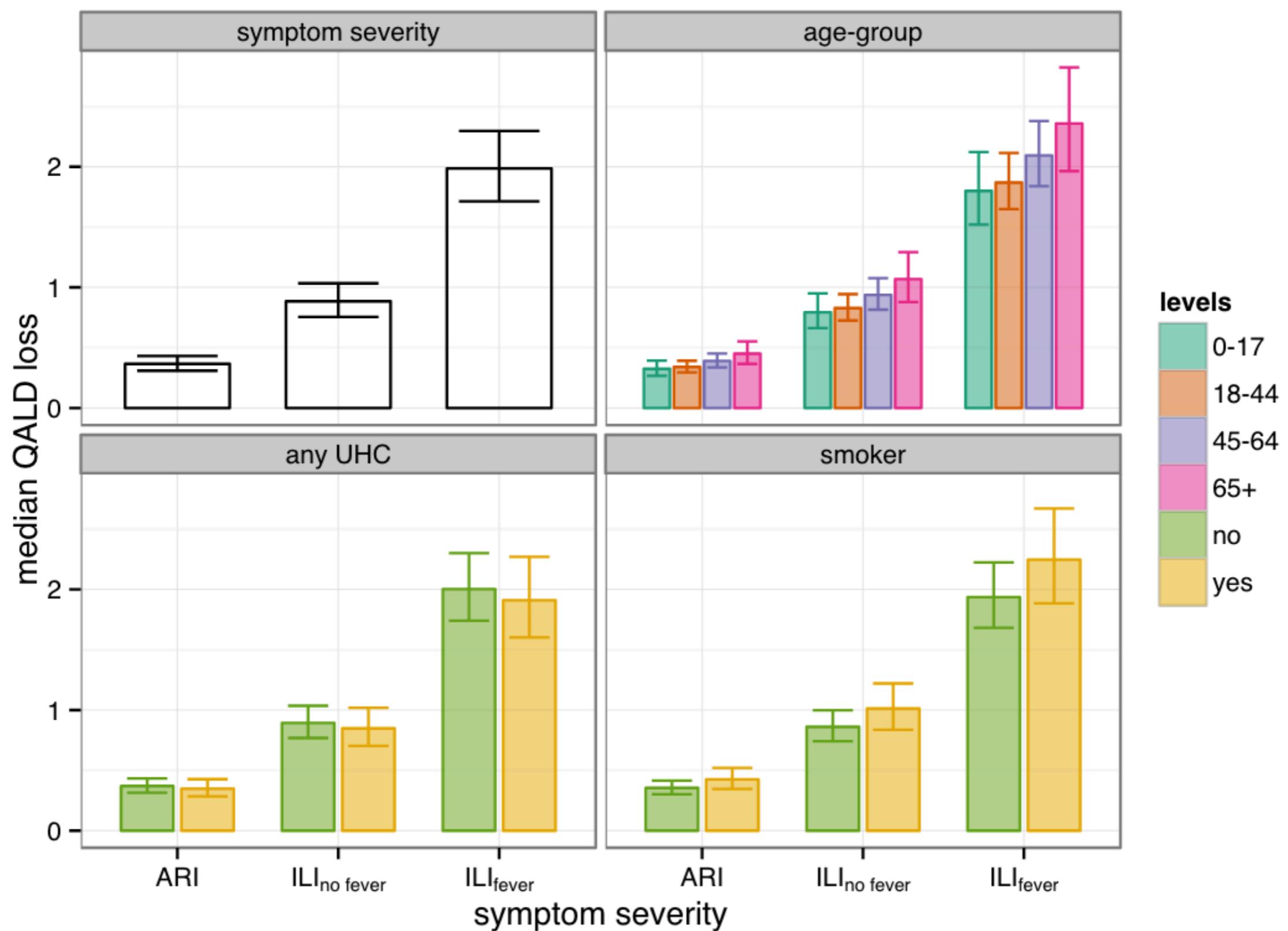
Uses of Flusurvey data

1. Risk factors for ILI

| Variable | OR | P |
|-----------------------------|------|--------|
| Female | 1.52 | 0.03 |
| Unvaccinated | 1.94 | <0.001 |
| 18-24 | 0.95 | 0.80 |
| 25-34 | 1.12 | 0.50 |
| 35-44 | 1.42 | 0.03 |
| 45-64 | 1.51 | 0.007 |
| 65+ | 0.95 | 0.79 |
| Contact with children | 1.47 | <0.001 |
| Live with children | 1.10 | 0.305 |
| Smoker | 1.32 | 0.01 |
| Take public transport | 0.91 | 0.183 |
| Underlying health condition | 1.53 | <0.001 |
| Employment status | 0.92 | 0.066 |

Uses of Flusurvey data

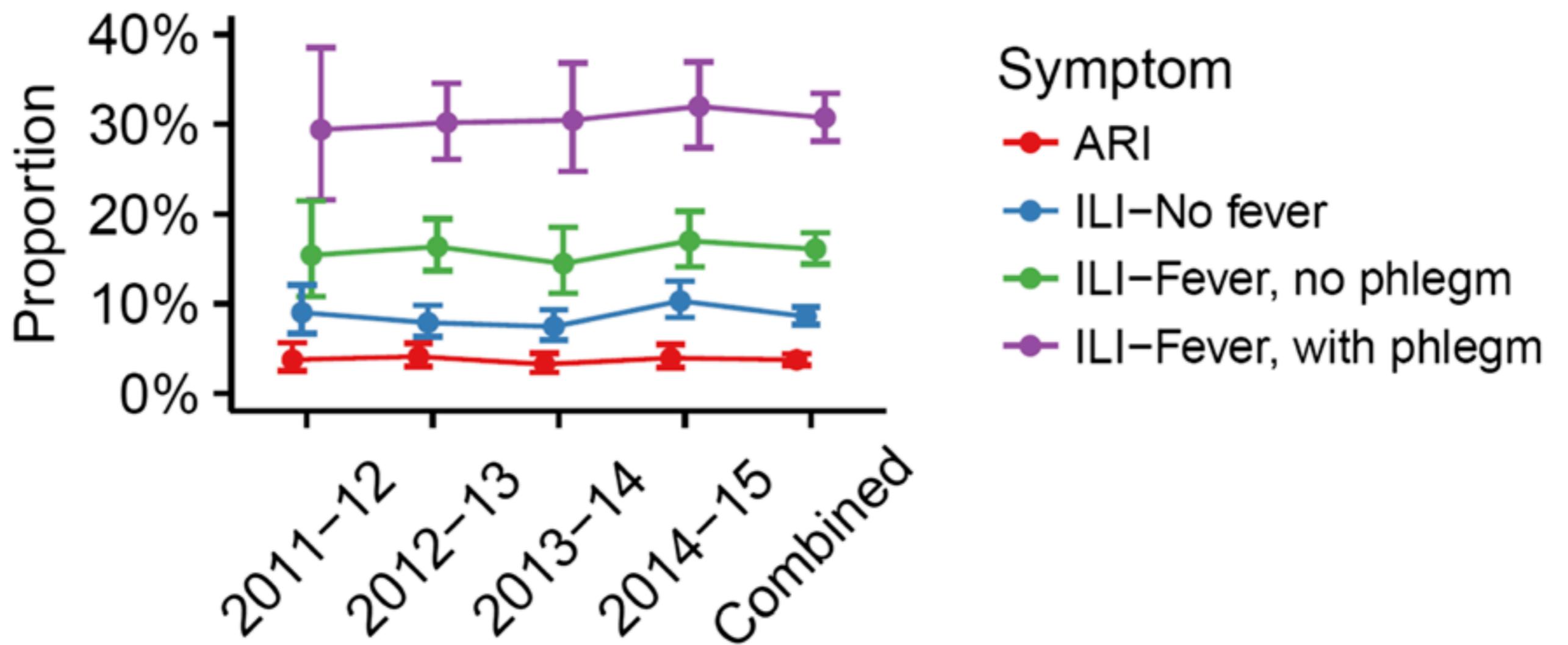
2. Burden



Camacho et al., 2013, Lancet suppl.

Uses of Flusurvey data

3. Behaviour



Contact survey



Breakfast

Travel

Work

Lunch

Work

Travel

Flu is spread via social contacts. Measuring how we meet each other helps understand and predict flu epidemics. Think about the all people you met yesterday and where you met them.

NOTE: If you are filling this in on behalf of someone else, please answer all the questions as if you are that person

How many people did you have conversational contact with yesterday (talking face to face)?

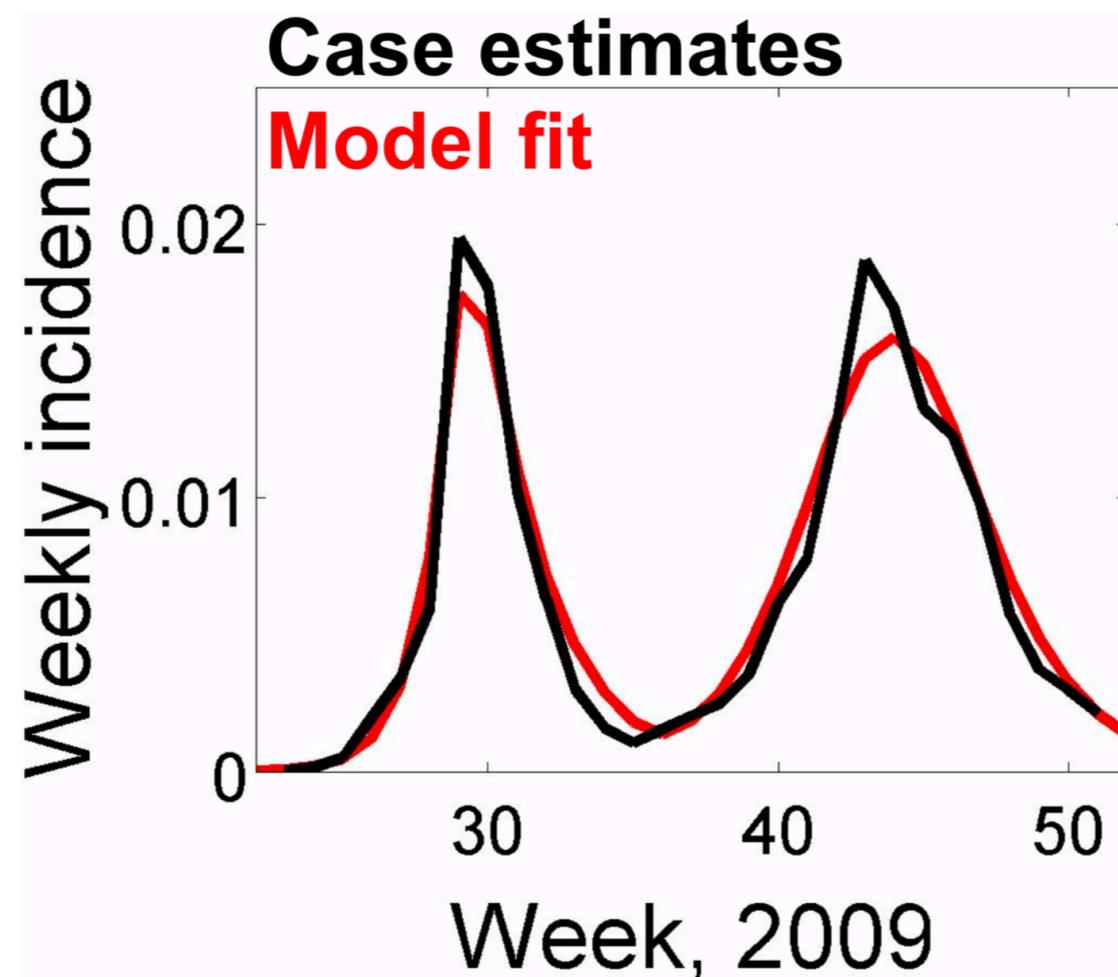
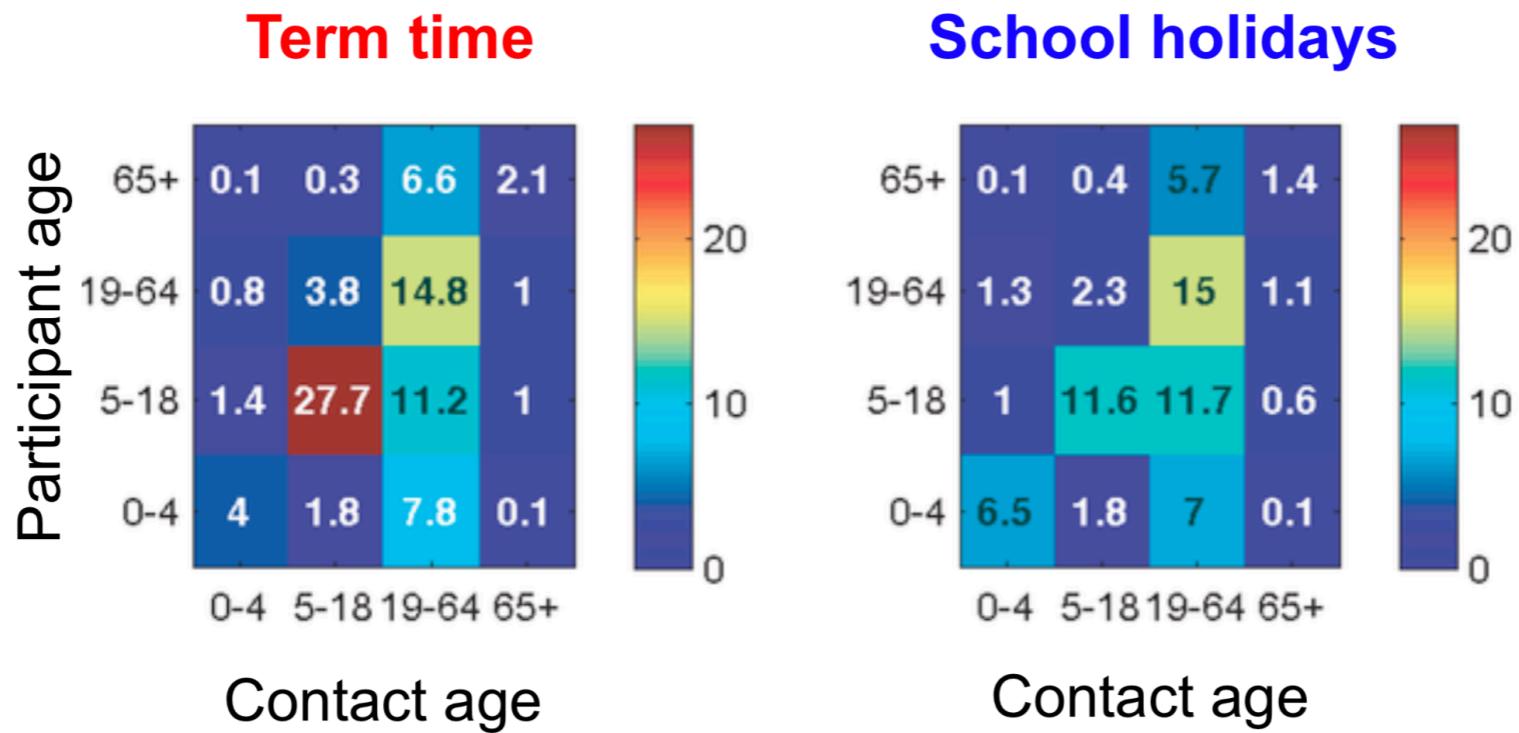


0-4 years 5-18 years 19-44 years 45-64 years 65+ years

| | | | | | |
|-------|---|---|---|---|---|
| Home | 0 | 0 | 0 | 0 | 0 |
| Work | 0 | 0 | 0 | 0 | 0 |
| Other | 0 | 0 | 0 | 0 | 0 |

How many people did you have physical contact with yesterday (skin-to-skin contact, e.g. handshake, kiss)?



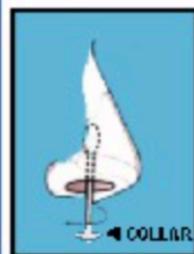


Uses of Flusurvey data

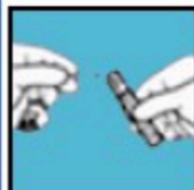
4. Validation

1. Please watch the Nasal Swab instructions video

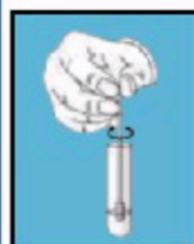
(flusurvey.org.uk/en/virological-swabbing). This paper instruction sheet provides the same information as the video.



2. Take the sterile nasal swab out of its packaging. Carefully insert the dry swab 2.5 cm (or as far as you are comfortable) into one nostril and gently rotate the swab 3 times against the nasal wall.



4. Break off the shaft of the swab and seal the tube tightly.



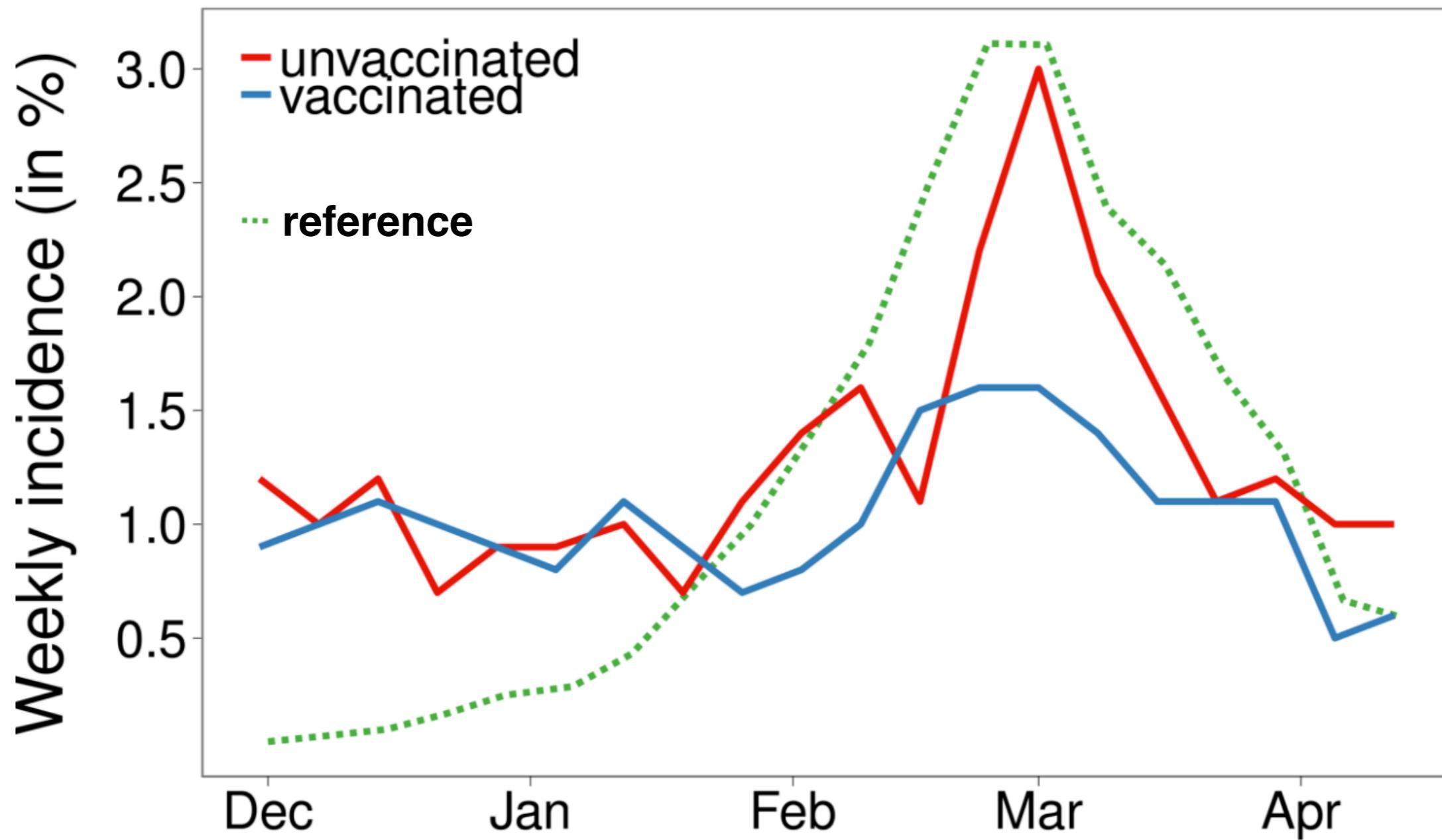
3. Immediately open the tube enclosed with the swab and put the nasal swab into it. Make sure you keep the red liquid in this tube as it preserves the sample until it reaches the lab.

5. Stick the sticker with your details on the small tube. This contains your participant ID so we can identify you.

6. Place this small tube, now sealed with the swab sample inside into the larger tube provided. Screw the lid provided onto this tube. This is to ensure that the samples are protected during transportation.

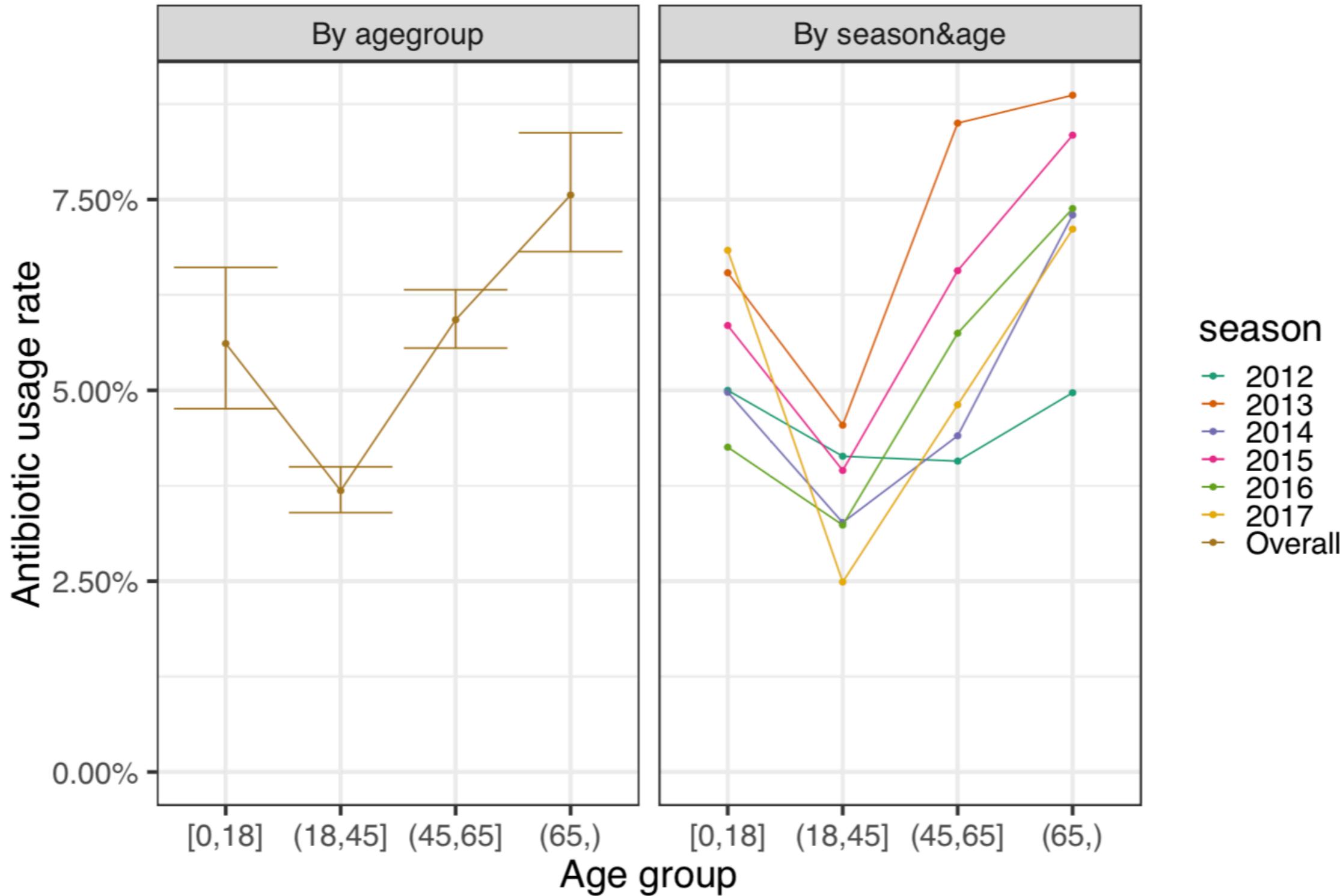
7. Please build the box to return the swab in. Please refer to the instructions provided with the box as to how to do this.

8. Please place the large tube, enclosing the smaller tube, into the box provided. Please enclose the sheet for Public Health England laboratory inside also. Seal the box with the plain sticker provided (or any tape if you prefer). The box has the address already written, and postage has been pre-paid. Please put this box into a post box as soon as you can.



Uses of Flusurvey data

5. Beyond flu



Limitations

- Self-selected sample
- Validation can be challenging

Benefits

- Flexible design
- Opportunity for insights beyond healthcare settings