

30 October 2024

Commissioning Letter: Respiratory and infectious disease surveillance including vaccine effectiveness 2024/2025

Dear RSC network practice,

Thank you for being part of the Oxford-Royal College of General Practitioners (RCGP) Research and Surveillance Centre (RSC) network. This is our 58th season of disease surveillance including assessing vaccine effectiveness, in collaboration with the UK Health Security Agency (UKHSA). The RSC now has over 2,000 general practices kindly sharing data.

In the past year, we were able to respond to urgent UKHSA requirements for more information about the rise in measles, pertussis (whooping cough) alongside our usual surveillance of flu, COVID-19 and respiratory syncytial virus (RSV). Practices in the North East and Yorkshire responded quickly to the first detection of a rare swine influenza variant in a human in the UK.

Our “Coding is caring” campaign aims to achieve excellent data quality from practices – coding the presenting problem and recording vaccine exposure are key. Please code cases of acute respiratory infections (ARI) as specifically as possible (see Figure 1, page 5). Please code influenza-like-illness or a specific likely diagnosis e.g. exacerbation of asthma, bronchitis, sinusitis.

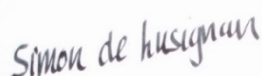
Please code influenza, COVID-19 and RSV vaccines and immunisations into the patient’s computerised medical record. Please record brand and batch.

If you are a virology sampling practice, please code an ARI diagnosis with every sample taken. Additional payments are available to sampling practices with high rates of ARI coding. Please only collect virology samples from patients where symptom onset is within the last 10 days. Please make sure lab forms and sample bottles are labelled with matching information. Samples taken beyond 10 days or with incomplete information will no longer be tested.

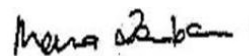
Across the network, we aim to collect up to 1,000 virology samples per week from October to March and up to 500 per week from April to September. For serology, we aim to collect 375 per week (1,500 per month). However, our focus is on more samples from people under 18 years of age. Please let us know if your practice has a paediatric phlebotomy clinic.

For questions or queries, please contact our Practice Liaison Team:
practiceenquiries@phc.ox.ac.uk.

Yours faithfully,



Simon de Lusignan
Director, Oxford-RCGP RSC
simon.delusignan@phc.ox.ac.uk



Maria Zambon
Head of Influenza and RSV, UKHSA
maria.zambon@ukhsa.gov.uk

1. Introduction – scope of RSC activity, legal basis of data sharing

How RSC data are used

The Oxford-Royal College of General Practitioners (RCGP) Research and Surveillance Centre (RSC) has been the primary source for disease surveillance in England since 1967. Over 2,000 general practices volunteer to share pseudonymised (de-identified) patient data with us. These data provide valuable information that support national health policy decisions and public health priorities. Our focus is on disease outbreaks (especially respiratory illnesses), vaccine effectiveness, staff workloads, and understanding NHS winter pressures.

Many RSC practices also participate in virology and serology sampling. This provides critical information on circulating respiratory viruses (e.g. flu, SARS-CoV-2, RSV) and is used by the UK Health Security Agency (UKHSA) to measure disease exposure, immune response and vaccine effectiveness. This information is also used for NHS planning and provides the World Health Organisation (WHO) key data to support global vaccine strain selection. We provide a publicly available online [Virology Dashboard](#), visualising viruses circulating from RSC virology sampling practices (see Appendix A).

Using clinically coded data, we also produce a Weekly Communicable and Respiratory Disease Report, comprising 40 monitored conditions, which is publicly available at [RCGP Public Health Data](#). Data reported by UKHSA is available at [National flu and COVID-19 surveillance reports](#). We also provide data to [UKHSA's Syndromic Surveillance system](#), conduct gastroenteritis surveillance, and responsive surveillance to meet public health needs.

Legal basis for surveillance and practice Data Sharing Agreements (DSA)

The legal basis for our surveillance is [The Health Service \(Control of Patient Information\) Regulations 2002 – Regulation 3](#). This same legal framework was widely used in the pandemic. The role of the RSC is endorsed annually by the UKHSA Caldicott Guardian under Regulation 7.

The University of Oxford hosts the Oxford-RCGP Clinical Informatics Digital Hub (ORCHID). The ORCHID database is compliant with relevant legislation, University of Oxford Policy and meets [NHS England's Data Security and Protection \(DSP\) Toolkit requirements](#). Organisation code: EE133863-MSD-NDPCHS. Date published that standards met: 24th June 2024.

Full details regarding the legal basis for our work are outlined in our ORCHID Data Sharing Agreement (DSA) which practices sign upon joining the RSC. For further details, including how to report any concerns regarding data or a data breach, please see the [ORCHID Privacy Notices](#). For fair processing and patient awareness we ask that practices add our logo to their website with brief information that practice data are used for surveillance. See Appendix B.

Data are only used for surveillance, quality improvement, research and education (SQuIRE) purposes. Patients who have opted out of data sharing will not have their data processed for quality improvement, research and education.

To join the RSC, please complete our [Join the Oxford RCGP RSC Network](#) form.

For questions, contact our Practice Liaison Team: practiceenquiries@phc.ox.ac.uk
Further information is available at: <https://orchid.phc.ox.ac.uk/surveillance>

2. All RSC network practices – “Coding is caring” – data quality priorities

Diagnosis coding - especially acute respiratory infections (ARI)

Wherever possible we ask RSC network practices to code clinical data into their computerised medical record system rather than free text. Our surveillance uses coded data. We only extract very limited free text e.g. pathology laboratory results and prescription instructions.

For virology sampling practices, please code an ARI diagnosis with every sample taken (see Figure 1). This helps us identify patterns in how patients present with different viruses and protects vulnerable patients.

Focus on respiratory syncytial virus (RSV)

In September 2024, the government introduced two new respiratory syncytial virus (RSV) vaccination programmes: for older adults aged 75 and older, and pregnant women (to protect infants). We ask that practices to please code newly available respiratory syncytial virus (RSV) immunisations and pay special attention to coding respiratory illnesses in symptomatic patients aged 75+ and new-borns who are at highest risk for developing severe illness with RSV (see Figure 1). If your practice is a virology sampling practice, please also collect a virology sample from patients presenting with ARI.

Recording flu vaccination given off-site

The RSC provides important information on the number of people who have received the flu vaccine each year, which supports analysis on flu vaccine effectiveness. Many flu vaccines given off-site, like the live attenuated influenza vaccine (LAIV) nasal spray (<18s), are not automatically coded back into the patient’s medical record, which limits the quality of our data. We ask all practices to check flu vaccines are coded into their practices systems, including brand and batch number.

Key changes this year – virology surveillance

Virology samples will only be tested if samples are collected within 10 days of symptom onset and the information on the lab form and sample bottle matches.

Samples taken beyond 10 days or with incomplete information will no longer be tested.

Samples will no longer be tested for seasonal coronaviruses. Samples will continue to be tested for human rhinovirus/enterovirus but for surveillance purposes only. Results for rhinovirus/enterovirus will not be shared with the practice but are visible on the [Virology Dashboard](#). See page 6 for a list of viruses being tested for 2024/2025.

In most cases, results will be reported within 10 days. However, in some cases where large numbers of samples have been received, samples will be batched and results may not be reported for several weeks.

3. Virology sampling – “Sampling is informing” – critical information

Eligibility

- Anyone with symptoms of any acute respiratory infection (ARI) (see Figure 1)
- Virology samples must be collected within 10 days of symptoms starting
- Samples taken beyond 10 days from symptom onset will not be tested
- Please do not take samples from patients who have received a Live Attenuated Influenza Vaccine (LAIV) in the last 14 days

Consent

Patients give verbal consent for sampling. A patient information leaflet (PIL) is available.

Virology sampling pathways

Practices can use in-practice kits or text patients details for ordering a test kit to their home (TakeATestUK service).

Please code the most likely diagnosis for the acute respiratory infection (ARI) – see Figure 1

In line with World Health Organisation (WHO) recommendations, ARI is our main indicator to signal respiratory conditions alongside influenza-like illness (ILI). Our ARI indicator is composed of diagnosis codes entered at the practice that are then categorised into our key conditions of interest:

- Influenza like illness (ILI)
- Exacerbations of chronic lung disease (e.g. asthma and COPD)
- Lower respiratory infections (LRTI, e.g. acute bronchitis, pneumonia, etc.)
- Upper respiratory infections (URTI, e.g. sinusitis, laryngitis etc.)

We ask all practices to please code, on the balance of probability/clinical judgement, what you think the likely diagnosis is. We recommended coding this under ‘problem title’.

Coding a specific diagnosis helps provide an early signal for potential disease outbreaks. In our virology sampling practices half of people coded as ILI have influenza and around 40% of children under the age of 5 years coded with acute bronchitis or bronchiolitis have RSV.

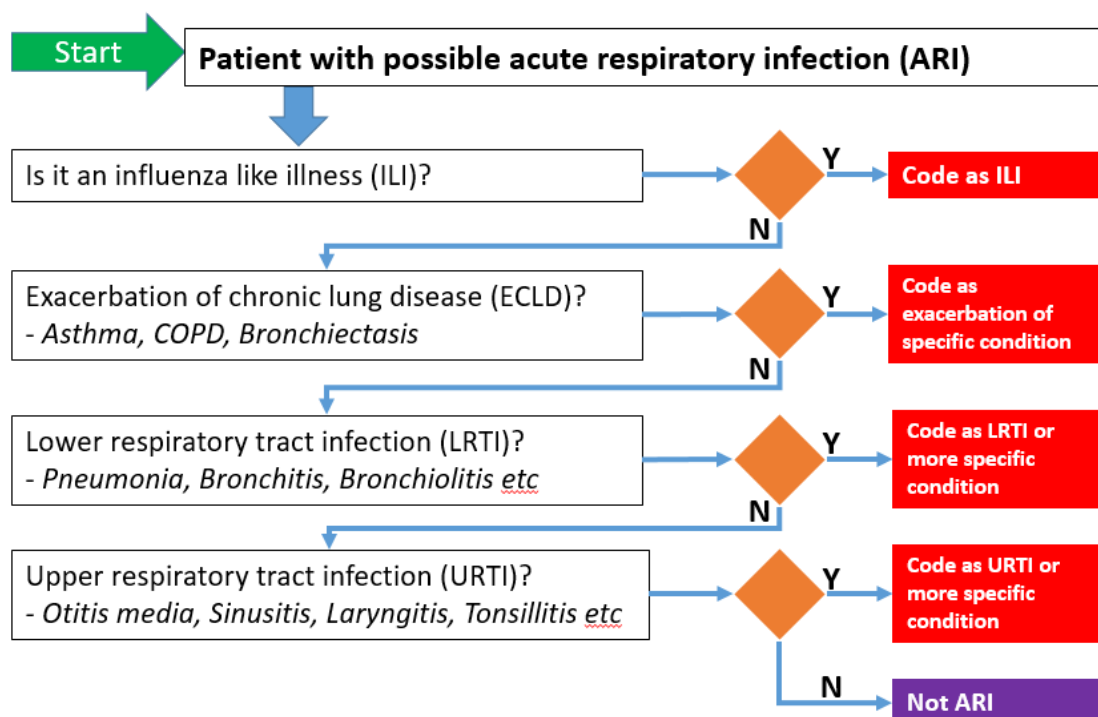


Figure 1: RSC recommendations for coding ARI from people presenting to primary care

For ILI, we recommend using the RSC’s definition:

- An acute respiratory infection (ARI)
- With measured or clinically plausible temperature $\geq 38^{\circ}\text{C}$ (other than in older people who can have infections without a fever)
- Cough
- Systemic upset such as headache or myalgia
- Sudden onset and in the absence of a more plausible diagnosis.

Coding key signs and symptoms

If there is opportunity during your consultation, we encourage all practices to code the following signs and symptoms. This information helps us to assess the severity of disease.

Key symptom/ history data to code:

1	Fever
2	Cough (it’s okay to code more specific information e.g. productive cough)
3	Shortness of breath
4	Wheeze

Key signs/ examination data to code:

1	Measured temperature (ear is our preferred measurement)
2	Peripheral oxygen saturation, where available in adults
3	Pulse rate
4	Respiratory rate
	+ Any important examination findings

Ensuring data is complete – helps to reduce extra work

Missing information on lab forms and mismatched samples creates extra work for lab staff and for staff at your practice.

The lab form must contain: patient details, date of onset and date you took the swab.

The sample tube must have a minimum of 2 patient identifiers that matches lab form e.g. patient name, date of birth and/or NHS number.

Samples with incomplete lab forms or mismatched sample tubes cannot be tested.

To support practices in addressing this issue, reports will be issued automatically by the lab highlighting the problem.

Target numbers

Please aim for 20 samples per week.

Please sample across different age bands but especially under 18s and over 65s.

Payments

Practice reimbursement is £12.50 per virology.

An additional 'bonus' payment will be provided to practices where there are high rates of ARI diagnosis coding.

Results

Results are sent to the practice. Some self-testing results will be sent to patients via mobile.

Practices will receive results for:

- SARS-CoV-2
- Influenza A and B
- RSV A and B
- hMPV
- Adenovirus

Samples will be tested for human rhinovirus/enterovirus but for surveillance purposes only. Results for rhinovirus/enterovirus will not be shared with the practice but are visible on the [Virology Dashboard](#).

These samples are used for surveillance purposes and may not be processed in real-time. In most cases, results will be reported within 10 days. However, in some cases where large numbers of samples have been received, samples will be batched and results may not be reported for several weeks.

4. Serology sampling – “Sampling is informing” – critical information

Eligibility

- Anyone attending a routine blood test, all ages, but prioritise people under 30 years (particularly those under 18)
- Please do not send known HIV or Hepatitis C positive samples

Consent

Patients give verbal consent for sampling. A patient information leaflet (PIL) is available.

Serology sampling pathways

We supply adult serology in-practice kits containing BD Vacutainer serum bottles.

Please use your own serum bottle if using Monovette.

Suitable tubes must be serum tubes. They must not contain EDTA or Lithium Heparin.

- BD Vacutainer: Red or gold topped serum tubes are suitable
- Monovette: White topped serum tubes only are suitable

Lab forms must be completed fully and the collection tube labelled with matching patient details.

Target numbers

We ask practices to aim for between 5-20 samples per week. Our emphasis is on samples from younger people.

Taking samples from younger age groups

If you are taking samples from children, we would prefer if practices submit samples using paediatric serum tubes (draw volume: 1.2 mL). However, these must be serum bottles that have been approved by our serology lab.

If you use the adult serum bottles supplied and part-fill please ensure at least 4mL is collected.

Payments

Practice reimbursement reflects the importance of sampling in younger age groups:

- £30 per sample form 0-8 year olds
- £11 per sample from 9-17 year olds
- £5.50 per sample from 18 and over year olds

Results

No results are given to patients or the practice.

5. Further Opportunities

Enhanced Data Analytics Platform (EDAP) Pilot

A pilot project is underway to assess the potential for the RSC data to be held within the UKHSA's EDAP. This project is aligned with the "Data Saves Lives" policy, which sets out how data should be held through a small number of Secure Data Environments. This pilot project will initially involve a small number of RSC member practices to test the potential capabilities of EDAP and the RSC data.

Electronic test requests for surveillance

We are working with local laboratories to incorporate our virology and serology sampling to existing test request processes. Once live, practices will be able to make surveillance requests from within their clinical system and samples will be collected by their local lab. The local lab will then automatically send the sample to our virology and serology labs for testing. Virology results will be sent back to the local lab for dissemination to the practice. We have already set up electronic test requests for stool sampling in select practices as part of The Third Study of Infectious Intestinal Disease in the UK (IID3). For more information, please contact: dominc.dunn@phc.ox.ac.uk

Patient Participation Groups (PPGs)

We are keen to engage with members of your PPG and other members of the public who are interested in surveillance. Our aims are to help improve the transparency of how data is used and its importance in enabling surveillance, and to promote patient engagement and acceptability of sampling. If you would like to involve your PPG in our work, or would like us to present at your PPG please get in touch: practiceenquiries@phc.ox.ac.uk

Acute respiratory infection (ARI) hubs (pilot)

As the winter season approaches, we will be looking to collaborate with interested ARI hubs to support with virology sampling surveillance.

PharmacyFirst (pilot)

With more patients being referred to pharmacies for conditions related to an acute respiratory infection (e.g. acute otitis media, sinusitis, and sore throat), we are also interested in potential collaborations with participating pharmacies to support with virology sampling surveillance.

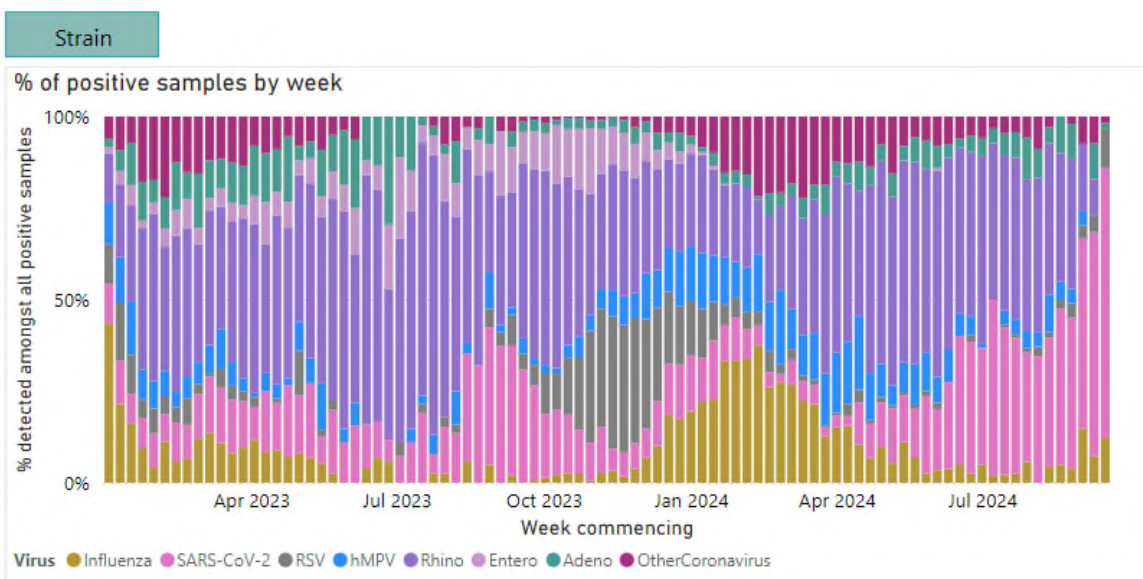
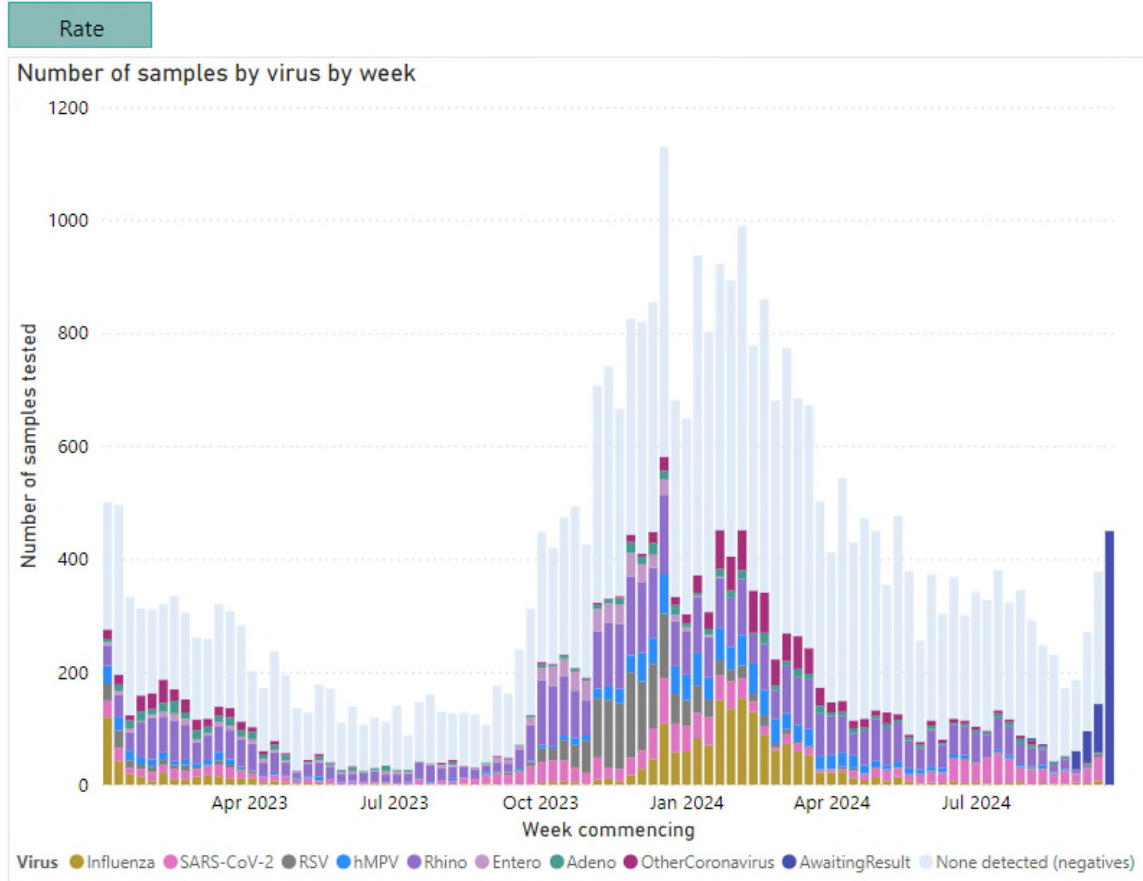
6. Communications

We have four regular newsletters:

- Sampling Is Informing (Tuesdays): For weekly insights on our monitored conditions
- Director's Message (Fridays): For important updates to all RSC network practices
- Monthly Newsletter: For training and study opportunities
- Public and Patient Involvement (PPI) Newsletter

Appendix A

The online [RSC Virology Dashboard](#) visualises viruses circulating from RSC virology sampling practices. Practice-specific dashboards are available to RSC network practices.



Appendix B

Information that practice data are used for surveillance – please display on your practice website and in practice waiting room

UK Health Security Agency RC GP RESEARCH & SURVEILLANCE CENTRE UNIVERSITY OF OXFORD ORCHID Oxford–Royal College of General Practitioners CLINICAL INFORMATICS DIGITAL HUB

This practice takes part in disease surveillance

We are one of over 2000 practices in England contributing data to protect public health and support direct patient care

What is disease surveillance?
Disease surveillance uses data from health records to continuously monitor infections and diseases in the community.

Why is this data collected?
This data is collected to support public health. It is used by the UK Health Security Agency (UKHSA) to detect disease outbreaks and pandemics, and evaluate vaccine effectiveness. It is also used for ethically approved research.

What data is being collected?
Pseudonymised data is being collected. Pseudonymisation means that information that identifies an individual is removed and replaced with a code number. It may be linked with other NHS data for analysis, including hospital episode statistics. It is not possible to identify an individual after it has been pseudonymised.

Who is coordinating surveillance?
Surveillance is co-ordinated by the Oxford-Royal College of General Practitioners (RCGP) Research and Surveillance Centre (RSC). Pseudonymised data is extracted by information service providers Magentus Software and Egton Medical Information Systems (EMIS). Data is processed within the private and secure ORCHID database at the University of Oxford.

What about GDPR?
Oxford-RCGP RSC are compliant with all current legislation including GDPR and work within the governance frameworks of NHS England and the Medical Research Council.

How does this affect me?
Providing pseudonymised data does not affect patients, their care, or privacy. However, if you no longer wish to allow your information to be used, please speak to your GP.

Contact Us
Email: practiceenquiries@phc.ox.ac.uk
Further information is available through the QR code:|



<https://orchid.phc.ox.ac.uk/surveillance>
Patient Information Leaflet Version 07-October-2024