Weekly Report on Severe Acute Respiratory Infection (SARI), Week 41 2024 (week ending 13/10/2024)

This report includes data on SARI hospitalised cases, aged 15 years and older who were admitted to St. Vincent's University Hospital (SVUH), Dublin, up to week 41 2024.
Please note that this report pertains to one hospital site only, data are not nationally representative. Therefore, caution is advised when interpreting rates and trends outlined in this report, as these may fluctuate due to the low case numbers.

Key points

Week 41 2024 (week ending 13/10/2024):

- **Number of cases:** 14 SARI cases admitted to the SARI hospital site, compared to 15 cases in week 40 2024 (6.7% decrease).
- **Incidence rate per hospital catchment population:** 4.4 per 100,000 population aged 15 years and older, compared to 4.7 per 100,000 in week 40 2024.
- **Incidence rate per emergency hospitalisations:** 45.0 per 1,000, compared to 44.4 per 1,000 in week 40 2024 (1.4% increase).
- **Age profile:** Seven (50.0%) of SARI cases aged ≥65 years; Median age: 66 years; IQR: 55-73 years.
- **Underlying medical conditions:** 13 (92.9%) SARI cases reported having underlying medical conditions.
- **PCR testing:** Of those tested, one (7.1%) tested positive for SARS-CoV-2; none tested positive for influenza or RSV.

Last four weeks (weeks 38 - 41 2024)

- **Number of cases:** 57 SARI cases admitted to the SARI hospital site.
- **Age profile:** 33 (57.9%) of SARI cases aged ≥65 years. Median age: 68 years; IQR: 54-80 years.
- **Underlying medical conditions:** 52 (91.2%) SARI cases reported having underlying medical conditions.
- **PCR testing:** Of those tested, 10 (17.9%) tested positive for SARS-CoV-2; one (1.8%) tested positive for influenza AH3; and none tested positive for RSV.
- **SARS-CoV-2 whole genome sequencing (WGS):** *There is typically a lag time of 1-3 weeks between a case being notified, selected for sequencing and sequencing being completed.*
  Among those sequenced (n=9), 7 (77.8%) were identified as KP.3 (VOI) and 2 (22.2%) were identified as recombinant variant XEC (VUM).

Season 2024/2025 to date (weeks 40 2024 - 41 2024)

Collection of discharge data is a manual process, there is a significant lag time between discharge and data collection. Vaccination data is available approximately one week after cases are notified.

- **Number of cases:** 29 SARI cases admitted to the SARI hospital site.
- **PCR testing:** Of those tested, three (10.7%) tested positive for SARS-CoV-2; none tested positive for influenza or RSV.
- **Vaccination status:** Vaccination data are not yet available on SARI cases admitted during the current 2024/2025 season.
- **ICU admissions:** No SARI cases were reported as admitted to ICU
- **Outcome:** No SARI deaths were reported

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Background

Severe acute respiratory infection (SARI) is of major relevance to public health worldwide. Surveillance of SARI is essential to monitor the (co-) circulation of respiratory pathogens and to assess disease severity. Data collected as part of SARI surveillance can provide important early warning information in the context of respiratory disease outbreaks and pandemics. SARI data can also be used as a platform to measure vaccine and antiviral effectiveness and impact. The objectives of SARI surveillance are:

- To describe the number and incidence of SARI cases by aetiology, time, place and person
- To describe and monitor trends, intensity of activity and severity of SARI infections
- To identify groups at risk of severe disease
- To detect unusual and unexpected events
- To assess the SARI burden of disease in the participating hospital
- To assess and monitor vaccine effectiveness

Methods

SARI surveillance was implemented in one tertiary care adult hospital: St. Vincent's University Hospital (SVUH), Dublin. Surveillance commenced on the 5th of July 2021. The SARI surveillance system includes people who are aged 15 years or older.

Case definition

SARI cases are identified from new admissions through the Emergency Department, based on clinical symptoms. Patients that develop SARI during their admission, or are admitted through alternate routes, are not included.

Clinical SARI case:

The European Centre for Disease Prevention and Control (ECDC) clinical SARI case definition is used for SARI surveillance in Ireland since week 34 2021:

- ECDC SARI definition: A hospitalised[1] person with acute respiratory infection, with at least one of the following symptoms: cough, fever, shortness of breath OR sudden onset of anosmia, ageusia or dysgeusia with onset of symptoms within 14 days prior to hospital admission.

[1] Hospitalised for at least 24 hours

Denominator data

Denominator data for the hospital catchment area are based on the Census of Population, 2022. The hospital catchment data were prepared and provided by the Health Intelligence Unit (HIU) of the Health Service Executive (HSE) and were extracted from Health Atlas Ireland on 15/12/2023.

Weekly denominator data on all-cause hospital admissions, through the Emergency Department, are provided by the SVUH Statistics Department.

Laboratory testing

SARS-CoV-2, influenza, and RSV PCR testing is carried out on admission.

SARI samples that are positive for SARS-CoV-2 and that have a cycle threshold (Ct) value <25 are referred for whole genome sequencing (WGS). All WGS testing was performed in the NVRL up to week 44 2022. The molecular laboratory in SVUH has been identified as a spoke WGS testing site as part of the national SARS-CoV-2 WGS surveillance programme. From week 45 2022, SARI WGS testing has been performed on-site at SVUH.

Samples that are PCR positive for influenza are sent to the National Virus Reference Laboratory (NVRL) for influenza typing/subtyping/genetic and antigenic characterisation.

Data collection and reporting

Clinical data are collected and managed using REDCap electronic data capture tools hosted at University College Dublin. Laboratory data are extracted from APEX, the laboratory information management system (LIMS), using IBM Cognos software hosted at SVUH.

Case-based data are reported by SVUH to the HSE Health Protection Surveillance Centre (HPSC) on a weekly basis. Data are also reported by HPSC to ECDC via The European Surveillance System (TESSy) on weekly basis as part of European level SARI surveillance.

COVID-19 vaccination data are obtained from the National COVID-19 Vaccination Management System (COVAX) and linked to SARI cases by the HSE-Integrated Information Service (IIS), where data are available.

The influenza season

The influenza surveillance season runs from week 40 (early October) to week 20 (end of May). During this time, seasonal viruses usually circulate at higher levels, compared to the summer period (weeks 21 to 39). The seasonal comparisons used in this report refer to the influenza surveillance season.

Reference dates

SARI Surveillance

05/07/2021 (Week 27 2021) – commencement of SARI surveillance project

Vaccination campaigns

27/09/2021 (Week 39 2021) – rollout of the first COVID-19 booster vaccination campaign
22/04/2022 (Week 16 2022) – rollout of the second COVID-19 booster vaccination campaign
03/10/2022 (Week 40 2022) – rollout of the Autumn 2022 COVID-19 booster vaccination campaign
28/04/2023 (Week 17 2023) – rollout of the Spring 2023 COVID-19 booster vaccination campaign
02/10/2023 (Week 40 2023) – rollout of the Autumn 2023 COVID-19 booster vaccination campaign
22/04/2024 (Week 17 2024) – rollout of the Spring 2024 COVID-19 booster vaccination campaign
30/09/2024 (Week 40 2024) – rollout of the Autumn 2024 COVID-19 booster vaccination campaign

Seasons

04/10/2021 (Week 40 2021) - start of the 2021/2022 season
03/10/2022 (Week 40 2022) - start of the 2022/2023 season
02/10/2023 (Week 40 2023) - start of the 2023/2024 season
30/09/2024 (Week 40 2024) - start of the 2024/2025 season

Week number refers to the week of hospital admission. Weeks are from Monday to Sunday, as per the ISO week[2].

[2] Monday to Sunday (ISO week) used as per ECDC/WHO/International reporting protocol.

Results

Data were extracted from the HPSC SARI surveillance database on **18/10/2024**. Data are provisional and subject to ongoing review, validation and update. As a result, figures presented in this report may differ from previously published figures.

SARI cases and incidence rates

In total, 29 SARI cases were admitted to St. Vincent's University Hospital (SVUH) during the current season (weeks 40 2024 - 41 2024), 37 SARI cases were admitted during the same period in the 2023/2024 season (weeks 40 2023 - 41 2023).

In week 41 2024:

- 14 SARI cases were reported, a 6.7% decrease compared to 15 SARI cases reported in week 40 2024 (Figure 1)
- The SARI incidence rate was 4.4 per 100,000 hospital catchment population aged 15 years and older, compared to the rate of 4.7 per 100,000 in week 40 2024.
- The incidence rate per emergency hospitalisations was 45 per 1,000 emergency admissions, a 1.4% increase compared to the rate of 44.4 per 1,000 emergency admissions in week 40 2024.

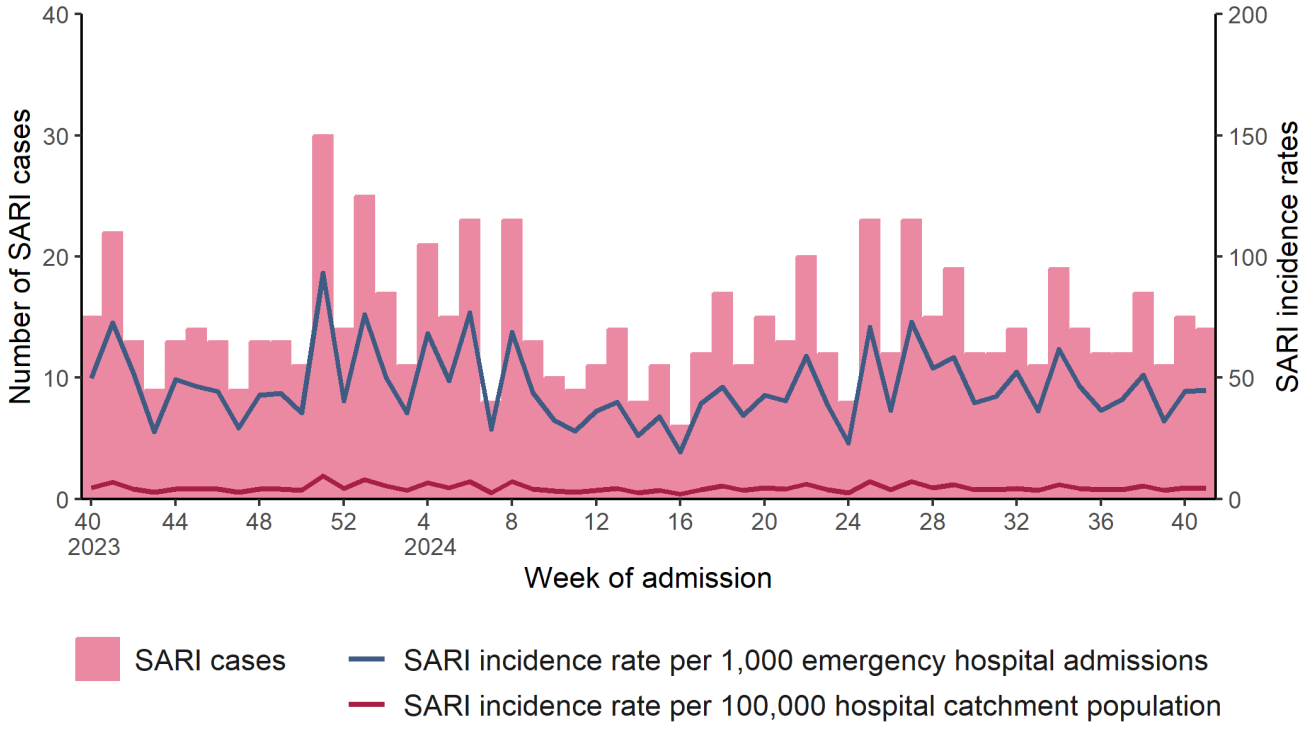

Figure 1: Number and incidence of SARI hospitalised cases (emergency admissions) by week of hospital admission, week 40 2023 to week 41 2024 (n=777)

Demographics

In week 41 2024, of the 14 SARI cases reported:

- Females accounted for a higher proportion of SARI cases, n= 8 (57.1%) (Table 1)
- Median age of SARI cases admitted was 66 years (interquartile range: 55-73 years)
- Age-specific incidence rate amongst those aged 65 years and older was 11.2 per 100,000 compared to 15.9 per 100,000 in week 40 2024.

The incidence rate per 100,000 hospital catchment population by age group is shown in Figure 2.

Table 1: Number and proportion of SARI cases by sex and age, for the current week, last four weeks (weeks 38 - 41 2024), current 2024/2025 season (weeks 40 2024 - 41 2024) and the previous 2023/2024 season (weeks 40 2023 - 41 2023)

Season	Current week	Last four weeks	Current season	Previous season
	W41 2024	W38 2024-W41 2024	W40 2024–W41 2024	W40 2023–W41 2023
All SARI cases	**N = 14[1]**	**N = 57[1]**	**N = 29[1]**	**N = 37[1]**
Gender				
Female	8 (57.1%)	28 (49.1%)	17 (58.6%)	21 (56.8%)
Male	6 (42.9%)	29 (50.9%)	12 (41.4%)	16 (43.2%)
Age (years)				
Mean	65	66	65	77
Median	66	68	68	79
IQR	55 - 73	54 - 80	54 - 75	71 - 87
Range	46 - 83	27 - 95	28 - 95	37 - 96
Age groups (years)				
15-24	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
25-34	0 (0.0%)	2 (3.5%)	1 (3.4%)	0 (0.0%)
35-44	0 (0.0%)	5 (8.8%)	1 (3.4%)	1 (2.7%)
45-54	4 (28.6%)	8 (14.0%)	6 (20.7%)	3 (8.1%)
55-64	3 (21.4%)	9 (15.8%)	4 (13.8%)	1 (2.7%)
65-74	4 (28.6%)	12 (21.1%)	9 (31.0%)	8 (21.6%)
75-84	3 (21.4%)	15 (26.3%)	6 (20.7%)	11 (29.7%)
85+	0 (0.0%)	6 (10.5%)	2 (6.9%)	13 (35.1%)

[1]n (%)

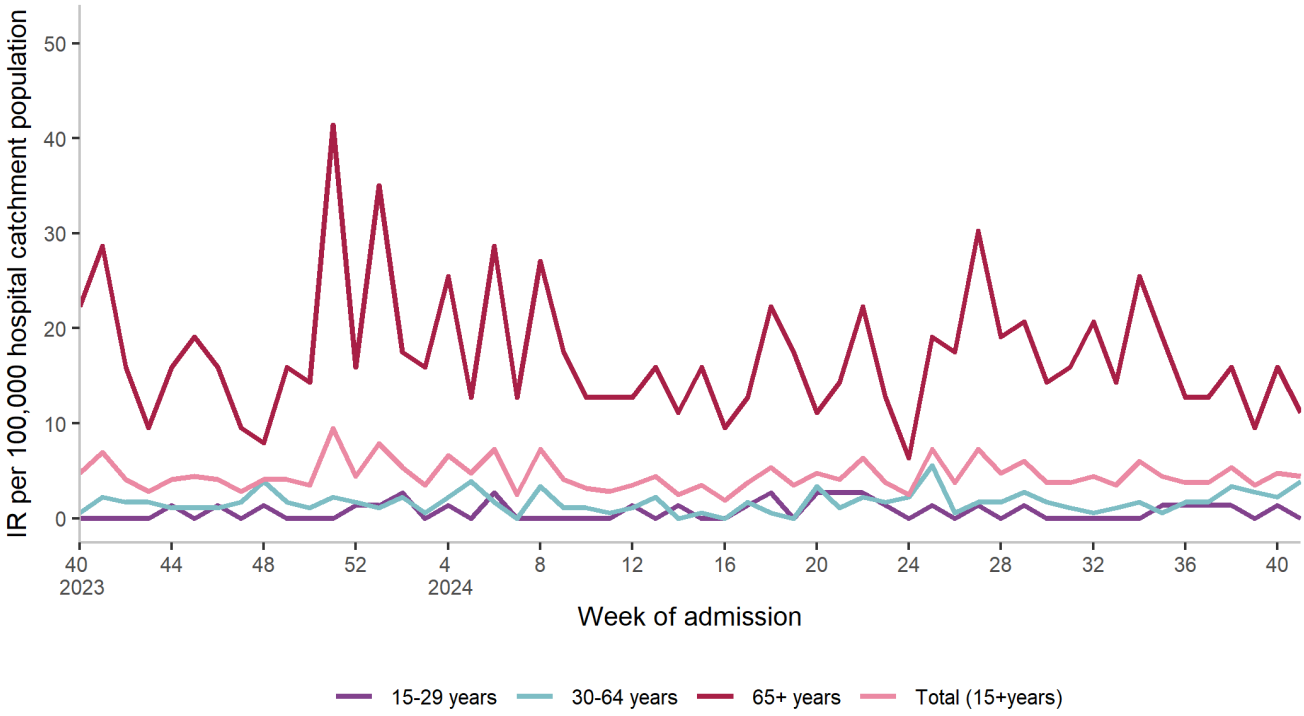

Figure 2: SARI incidence rate per 100,000 hospital catchment population by age group and week of hospital admission, from week 40 2023 to week 41 2024 (n=777)

Underlying medical conditions and risk factors

The number and proportion of individuals with underlying medical conditions, where known, among those that reported having underlying medical conditions are displayed in Table 2.

Weekly proportions can be based on small numbers and vary from week to week, caution is therefore advised when interpreting changes in weekly proportions.

SARI cases could be reported with one or more underlying medical conditions, only cases where underlying medical conditions are reported are included in Table 2.

Table 2: Number and proportion of SARI cases with underlying medical conditions (among those who reported having underlying medical conditions), reported on hospital admission, for the current week, last four weeks (weeks 38 - 41 2024), current 2024/2025 season (weeks 40 2024 - 41 2024) and the previous 2023/2024 season (weeks 40 2023 - 41 2023)

Period	Current week	Last four weeks	Current season	Previous season
Weeks	W41 2024	W38 2024-W41 2024	W40 2024-W41 2024	W40 2023-W41 2023
Total cases	**N = 13[1]**	**N = 52[1]**	**N = 26[1]**	**N = 34[1]**
Heart disease	3 (23.1%)	12 (23.1%)	6 (23.1%)	15 (44.1%)
Hypertension	3 (23.1%)	16 (30.8%)	7 (26.9%)	9 (26.5%)
Lung disease	3 (23.1%)	14 (26.9%)	10 (38.5%)	10 (29.4%)
Cancer	2 (15.4%)	10 (19.2%)	6 (23.1%)	4 (11.8%)
Neurological disease	0 (0.0%)	5 (9.6%)	0 (0.0%)	7 (20.6%)
Asthma	2 (15.4%)	7 (13.5%)	4 (15.4%)	4 (11.8%)
Diabetes	2 (15.4%)	5 (9.6%)	3 (11.5%)	3 (8.8%)
Kidney disease	2 (15.4%)	4 (7.7%)	3 (11.5%)	3 (8.8%)
Intellectual disability	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
Immunocompromised	1 (7.7%)	4 (7.7%)	2 (7.7%)	0 (0.0%)
Obesity	0 (0.0%)	2 (3.8%)	1 (3.8%)	0 (0.0%)
Cystic fibrosis	1 (7.7%)	1 (1.9%)	1 (3.8%)	0 (0.0%)
Dementia[2]	2 (15.4%)	5 (9.6%)	3 (11.5%)	0 (0.0%)
Rheumatological disease[2]	3 (23.1%)	6 (11.5%)	4 (15.4%)	0 (0.0%)
Liver disease[2]	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
Asplenia[2]	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
Down syndrome[2]	0 (0.0%)	1 (1.9%)	0 (0.0%)	0 (0.0%)
Long COVID[2]	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
Tuberculosis[2]	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
Other chronic conditions[3]	6 (46.2%)	32 (61.5%)	17 (65.4%)	15 (44.1%)

[1] n (%)
[2] Data collection for these underlying medical conditions began in week 49 2023.
[3] Data reported on other chronic conditions may include some of the chronic conditions listed above, these data are under review and may change over time.

Symptoms

Information on clinical symptoms, either at or prior to hospital admission, was reported for all SARI cases. The most common symptoms reported were cough and shortness of breath (Table 3).

Table 3: Number and proportion of SARI cases with clinical symptoms, either at or prior to hospital admission, for the current week, last four weeks (weeks 38 - 41 2024), current 2024/2025 season (weeks 40 2024 - 41 2024) and the previous 2023/2024 season (weeks 40 2023 - 41 2023)

Period	Current week	Last four weeks	Current season	Previous season
Weeks	W41 2024	W38 2024-W41 2024	W40 2024-W41 2024	W40 2023-W41 2023
Total cases	**N = 14[1]**	**N = 57[1]**	**N = 29[1]**	**N = 37[1]**
Cough	12 (85.7%)	45 (78.9%)	23 (79.3%)	25 (67.6%)
Shortness of breath	11 (78.6%)	47 (82.5%)	23 (79.3%)	27 (73.0%)
Fever	4 (28.6%)	27 (47.4%)	12 (41.4%)	15 (40.5%)
General deterioration	7 (50.0%)	17 (29.8%)	10 (34.5%)	20 (54.1%)
Malaise	2 (14.3%)	6 (10.5%)	3 (10.3%)	3 (8.1%)
Headache	1 (7.1%)	2 (3.5%)	1 (3.4%)	3 (8.1%)
Muscular pain	1 (7.1%)	4 (7.0%)	2 (6.9%)	4 (10.8%)
Sore throat	1 (7.1%)	2 (3.5%)	2 (6.9%)	2 (5.4%)
Ageusia	0 (0.0%)	0 (0.0%)	0 (0.0%)	1 (2.7%)
Anosmia	0 (0.0%)	0 (0.0%)	0 (0.0%)	1 (2.7%)
Dysgeusia	0 (0.0%)	0 (0.0%)	0 (0.0%)	1 (2.7%)
Sepsis[3]	0 (0.0%)	0 (0.0%)	0 (0.0%)	1 (25.0%)
Acute confusion[3]	2 (14.3%)	5 (8.8%)	2 (6.9%)	0 (0.0%)
Vomiting[3]	0 (0.0%)	3 (5.3%)	2 (6.9%)	0 (0.0%)
Nausea[3]	1 (7.1%)	6 (10.5%)	4 (13.8%)	0 (0.0%)
Diarrhoea[3]	0 (0.0%)	1 (1.8%)	0 (0.0%)	0 (0.0%)
Apnoea[3]	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)

[1] n (%)
[2] SARI cases could be reported with one or more clinical symptoms
[3] Data collection for these symptoms began in week 49 2023.

Severe clinical course during hospitalisation

Information on the clinical course during hospitalisation is only available after discharge, and there may be a delay between discharge and data collection, due to the manual data collection methods required. SARI cases could be reported with one or more complications, among those for whom discharge information is available the most common complication reported was pneumonia (Table 4).

Data collection is ongoing for those not yet discharged from hospital.

Table 4: Number and proportion of SARI cases by complication, for the last four weeks (weeks 38 - 41 2024), the previous 2023/2024 season (weeks 40 2023 - 41 2023), and cases admitted between week 40 2023 and week 41 2024

Season(s)	Last four weeks	Same four weeks, previous season	2023/2024 season
Week/Year	**W38 2024-W41 2024**	**W38 2023-W41 2023**	**W40 2023-W39 2024**
Total discharged cases	**N = 1[1]**	**N = 54[1]**	**N = 597[1]**
Pneumonia	1 (100.0%)	11 (20.4%)	154 (25.8%)
ARDS	0 (0.0%)	5 (9.3%)	17 (2.8%)
Sepsis	0 (0.0%)	4 (7.4%)	30 (5.0%)
Multiorgan failure	0 (0.0%)	0 (0.0%)	7 (1.2%)
Myocarditis	0 (0.0%)	0 (0.0%)	1 (0.2%)
Encephalitis	0 (0.0%)	0 (0.0%)	0 (0.0%)
Bronchiolitis	0 (0.0%)	0 (0.0%)	0 (0.0%)
Acute kidney injury[2]	0 (0.0%)	0 (0.0%)	44 (7.4%)
Heart failure[2]	0 (0.0%)	1 (1.9%)	27 (4.5%)
Secondary bacterial infection[2]	0 (0.0%)	0 (0.0%)	12 (2.0%)
Other complications[3]	0 (0.0%)	15 (27.8%)	121 (20.3%)
No complications	0 (0.0%)	25 (46.3%)	274 (45.9%)

[1] n (%)
[2] Data collection for these complications began in week 49 2023.
[3] Data reported on “other complications” may include some of the complications listed above, these data are under review and may change over time.

Table 5: Number and proportion of SARI cases by respiratory support and ICU admission, for the last four weeks (weeks 38 - 41 2024), the previous 2023/2024 season (weeks 40 2023 - 41 2023), and cases admitted between week 40 2023 and week 41 2024

Season(s)	Last four weeks	Same four weeks, previous season	2023/2024 season
Week/Year	W38 2024-W41 2024	W38 2023-W41 2023	W40 2023–W39 2024
Respiratory support status known	**N = 1**	**N = 54**	**N = 594**
No respiratory support	1 (100.0%)	14 (25.9%)	191 (32.2%)
Low-flow oxygen therapy[1]	0 (0.0%)	0 (0.0%)	126 (21.2%)
Non-invasive ventilation[2]	0 (0.0%)	40 (74.1%)	266 (44.8%)
Invasive ventilation	0 (0.0%)	0 (0.0%)	11 (1.9%)
ICU status known	**N = 8**	**N = 54**	**N = 615**
ICU/invasive ventilated[3]	0 (0.0%)	1 (1.9%)	22 (3.6%)
Admitted to ICU	0 (0.0%)	1 (1.9%)	22 (3.6%)
Admitted and discharged	0 (0.0%)	1 (1.9%)	20 (3.3%)
ICU length of stay (days)			
Mean	-	-	9
Median		-	6
Interquartile range	-	-	2 - 9
Range	-	-	1 - 43

[1] Category introduced on 22/04/2024 (Week 17 2024), prior to this it was included under non-invasive ventilation
[2] Non-invasive ventilation includes high flow oxygen therapy, non-invasive positive pressure ventilation and for cases discharged before week 17 2024, low flow oxygen therapy
[3] Refers to SARI cases which were either admitted to ICU and/or received invasive ventilation

Laboratory testing for SARS-CoV-2, Influenza and RSV

PCR testing:

SARI cases are tested by PCR for SARS-CoV-2, influenza and RSV on admission.

In week 41 2024:

- SARS-CoV-2 PCR testing was carried out on all SARI cases, one (7.1%) tested positive, compared to two (14.3%) SARS-CoV-2 positive cases in week 40 2024.
- Influenza PCR testing was carried out on all SARI cases, none tested positive for influenza. The last influenza positive SARI case was admitted in week 38 2024.
- Respiratory syncytial virus (RSV) PCR testing was carried out on all SARI cases, none tested positive for RSV. The last RSV positive SARI case was admitted in week 6 2024.

The weekly positivity rate of SARI cases for the three acute respiratory pathogens are presented in Figure 3. Table 6 displays the number and proportion of SARI cases tested by PCR and positive for SARS-CoV-2, influenza and RSV, and the type/subtype for all influenza PCR positive test results.

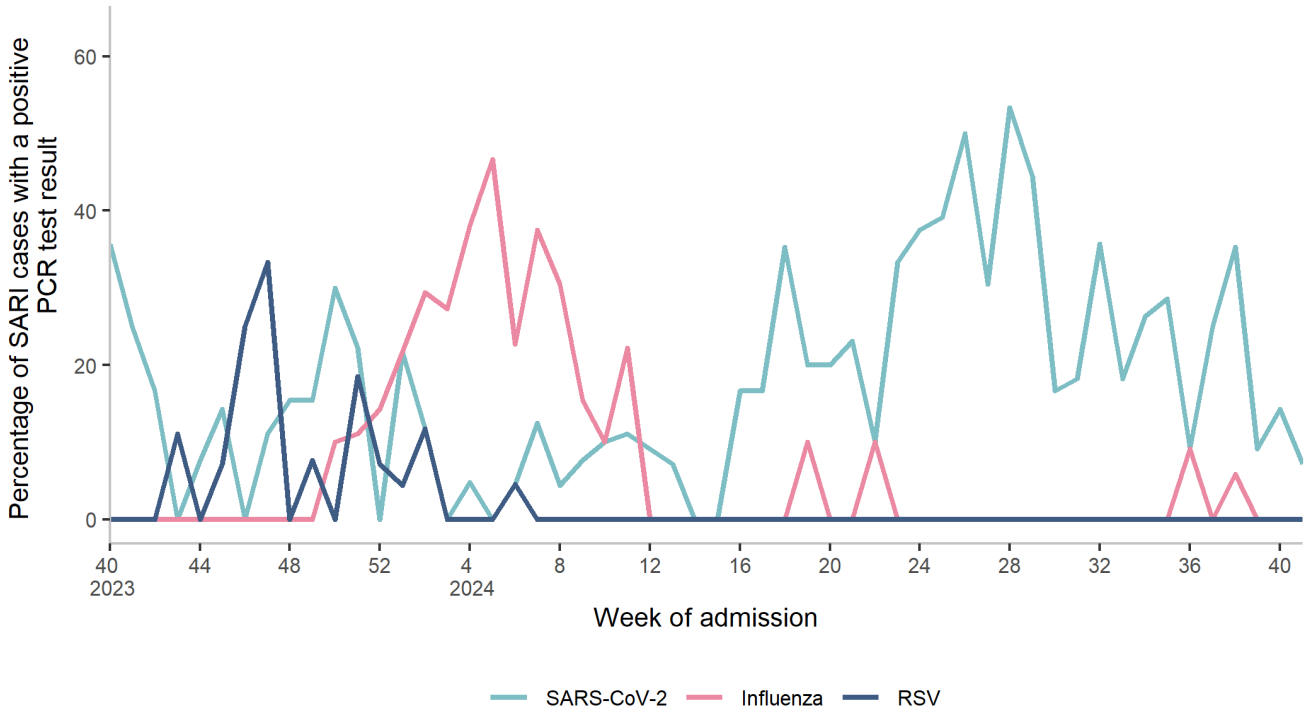

Figure 3: Percentage of SARI cases with a positive laboratory test result for SARS-CoV-2, influenza and RSV by week, from week 40 2023 to week 41 2024.

Table 6: Number of positive SARS-CoV-2, influenza, and RSV SARI cases, influenza type/subtype for the current week, previous two weeks (week 40 2024, week 39 2024), current 2024/2025 season (weeks 40 2024 - 41 2024), and the previous 2023/2024 season (weeks 40 2023 - 41 2023)

Period	Individual weeks			Current season	Previous season
Weeks	**W41 2024**	**W40 2024**	**W39 2024**	**W40 2024 - W41 2024**	**W40 2023 - W41 2023**
SARS-CoV-2					
Total tested	14	14	11	28	34
Positive	1 (7.1%)	2 (14.3%)	1 (9.1%)	3 (10.7%)	10 (29.4%)
RSV					
Total tested	14	14	11	28	34
Positive	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
Influenza					
Total tested	14	14	11	28	34
Positive	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
Influenza AH3	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
Influenza A (H1)pdm09	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
Influenza A (not subtyped)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
Influenza B (Victoria)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
Influenza B (unspecified)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)	0 (0.0%)

Genomic analysis

SARS-CoV-2

There is typically a lag time of 1-3 weeks between a case being notified, selected for sequencing and sequencing being completed. The WGS data presented is up to week 40 2024

Sequencing results have been received for 128 SARI cases admitted between week 40 2023 and week 40 2024 (Figure 4).

Among SARS-CoV-2 positive SARI cases admitted during the current season, for whom WGS data are available (n=2), all were KP.3 variants.

Among cases admitted in the last four weeks (weeks 38 - 41 2024), for which sequencing results have been received (n=9), seven (77.8%) were identified as KP.3 (VOI) and two (22.2%) were identified as recombinant variant XEC (VUM).

Further information on SARI variants is available in the appendix (Table A1). For further information on circulating variants in Ireland, see the COVID-19 virus variants reports on the HPSC website[3].

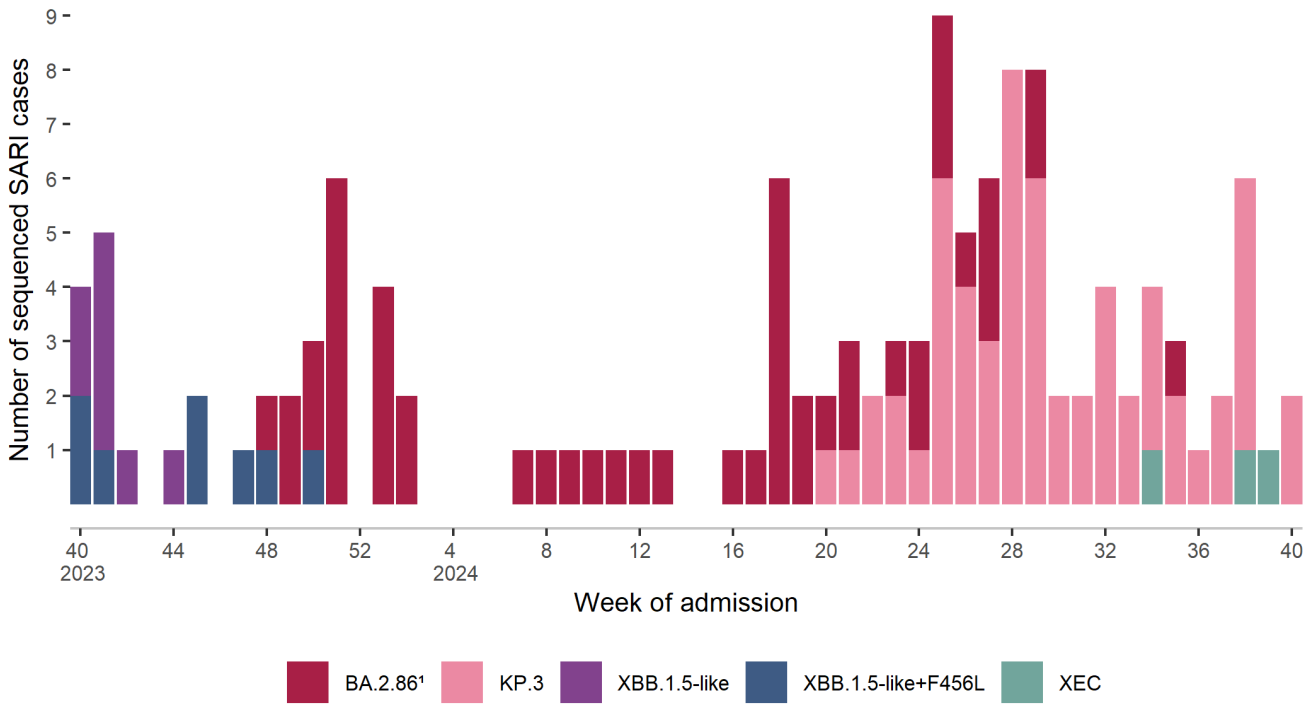

Figure 4: Number of SARI cases sequenced and reported, by week of hospitalisation, week 40 2023 to week 40 2024 (n=128)

[1] Includes sub-lineage JN.1, excludes lineages KP.3
Note: As described by the ECDC, 'XBB.1.5-like' and 'XBB.1.5-like + F456L' refer to groupings of lineages that share sets of spike protein mutations

[3] https://www.hpsc.ie/a-z/respiratory/coronavirus/novelcoronavirus/surveillance/summaryofcovid-19virusvariantsinireland/

Outcome

Collection of discharge data is a manual process, therefore there is a significant lag time between patient discharge and data collection.

Discharge data is not yet available on cases admitted during the current 2024/2025 season (week 40-41 2024)

Table 7: Number and proportion of discharged SARI cases by outcome and hospital length of stay, for the last four weeks (weeks 38 - 41 2024), the previous 2023/2024 season (weeks 40 2023 - 41 2023), and cases admitted between week 40 2023 and week 41 2024

Season(s)	Last four weeks	Same four weeks, previous season	2023/2024 season
Week/Year	W38 2024-W41 2024	W38 2023-W41 2023	W40 2023 - W39 2024
Known outcome	**N = 1**	**N = 54**	**N = 597**
Discharged alive	1 (100%)	49 (90.7%)	546 (91.5%)
Transferred[1]	0 (0.0%)	0 (0.0%)	5 (0.8%)
Died in hospital	0 (0.0%)	5 (9.3%)	46 (7.7%)
Hospital length of stay (days)			
Mean	-	12	10
Median	-	5	5
Interquartile range	-	3 - 19	3 - 12
Range	-	1 - 58	1 - 117

[1] Transferred to another hospital

Vaccination status

Vaccination data are not yet available on SARI cases admitted during the 2024/2025 season (weeks 40-41 2024)

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This report was produced by the SARI surveillance team at HPSC, using R studio software.

Technical notes

1. SARI case
   - A SARI case refers to an individual patient episode of care.
2. Vaccination status[4].
   - For the purposes of SARI surveillance, vaccination status of cases is as follows:

Vaccinated COVID case: A confirmed case of COVID-19 who received any dose of a COVID-19 vaccine, ≥14 days before onset of symptoms.

Unvaccinated COVID-19 case: A confirmed case of COVID-19 who did not receive any dose of a COVID-19 vaccine i.e. was never vaccinated.

Time since vaccination: For a **vaccinated** COVID-19 case, this is the time between the date of last dose vaccination and the date of symptom onset and categorised as <180 days or ≥180 days since vaccination.

Vaccinated influenza case: A confirmed case of influenza will be considered as vaccinated against influenza if they received one dose of the influenza vaccine as part of the current season's influenza vaccination campaign ≥14 days before onset of symptoms.

Unvaccinated influenza case: A confirmed case of influenza will be considered as unvaccinated if they did not receive an influenza vaccine as part of the current season's influenza vaccination campaign or if they were vaccinated after onset of symptoms.

Vaccine status unknown: The SARI patient is reported on the SARI hospital clinical questionnaire having received either a COVID-19 and/or influenza vaccine, however there is no identifiable linked record of vaccination on the National Immunisation system. Vaccination status is reported as unknown, until verified on the National Immunisation system.

[4] Refer to www.hse.ie for further information on the COVID-19 vaccination rollout

Appendix

Table A1

Number of SARI cases sequenced and reported by Pango lineage and week of admission, for the last four weeks (weeks 38 - 41 2024), and the percentage difference in prevalence compared to the previous four-week period (weeks 34 2024 - 37 2024)

Pangolin lineage	Number of cases W38 2024-W41 2024	% last 4 weeks	Number of cases W34 2024-W37 2024	% previous 4 weeks	% difference[1]
KP.3.1.1	7	77.8	6	60	17.8
XEC	2	22.2	1	10	12.2
KP.3.2.4	0	0.0	1	10	-10.0
KP.3.3	0	0.0	1	10	-10.0
MB.1.1	0	0.0	1	10	-10.0
Total	9		10		

[1] Red indicates >=5% increase; green indicates >=5% decrease