

WEEKLY RESPIRATORY PATHOGENS SURVEILLANCE REPORT

SOUTH AFRICA WEEK 32 2021

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CUMULATIVE DATA FROM



HIGHLIGHTS: WEEK 32

- RSV activity remains below seasonal threshold in both influenza-like illness (ILI) and pneumonia surveillance programmes.

- Four new cases of influenza from Gauteng (n=2) and one each from North West and Western Cape were detected in week 32. To date, 66 influenza cases have been detected from Gauteng, Western Cape, North West, Eastern Cape, Mpumalanga and KwaZulu-Natal sentinel surveillance sites. The influenza season has not started.

- From 2 March 2020 to 15 August 2021, a total of 2 499 COVID-19 cases were detected from all surveillance programmes. An increase in detection rate has been noted in ILI programme in this reporting week (week32), whereas in pneumonia surveillance there is a decline. Of the 1 504 hospitalised COVID-19 cases reported with available data on outcome, 245 (16%) died.

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PROGRAMME DESCRIPTIONS

| Programme | Influenza-like illness (ILI) | Viral Watch | National syndromic surveillance for pneumonia |
|---------------------------|---|--|---|
| Start year | 2012 | 1984 | 2009 |
| Provinces* | KZ NW WC** MP*** | EC FS GP LP MP NC NW WC | GP KZ MP NW WC |
| Type of site | Primary health care clinics | General practitioners | Public hospitals |
| Case definition | <p>ILI: An acute respiratory illness with a temperature ($\geq 38^{\circ}\text{C}$) and cough, & onset ≤ 10 days</p> <p>Suspected pertussis Any person with an acute cough illness lasting ≥ 14 days (or cough illness of any duration for children < 1 year), without a more likely diagnosis AND one or more of the following signs or symptoms:</p> <ul style="list-style-type: none"> • paroxysms of coughing, • or inspiratory “whoop”, • or post-tussive vomiting • or apnoea in children < 1 year; <p>OR</p> <p>Any person in whom a clinician suspects pertussis</p> <p>Suspected SARS-CoV-2 Any person presenting with an acute (≤ 14 days) respiratory tract infection or other clinical illness compatible with COVID-19[§]</p> | <p>ILI: An acute respiratory illness with a temperature ($\geq 38^{\circ}\text{C}$) and cough, & onset ≤ 10 days</p> <p>Suspected SARS-CoV-2 Any person presenting with an acute (≤ 14 days) respiratory tract infection or other clinical illness compatible with COVID-19[§]</p> | <p>SRI: Acute (symptom onset ≤ 10 days) or chronic (symptom onset > 10) lower respiratory tract infection</p> <p>Suspected pertussis Any person with an acute cough illness lasting ≥ 14 days (or cough illness of any duration for children < 1 year), without a more likely diagnosis AND one or more of the following signs or symptoms:</p> <ul style="list-style-type: none"> • paroxysms of coughing, • or inspiratory “whoop”, • or post-tussive vomiting • or apnoea in children < 1 year; <p>OR</p> <p>Any person in whom a clinician suspects pertussis.</p> <p>Suspected SARS-CoV-2 Any person admitted with a physician-diagnosis of suspected COVID-19 and not meeting SRI case definition.</p> |
| Specimens collected | Oropharyngeal & nasopharyngeal swabs | Throat and/or nasal swabs or Nasopharyngeal swabs | Oropharyngeal & nasopharyngeal swabs |
| Main pathogens tested**** | INF RSV BP SARS-CoV-2 | INF RSV BP SARS-CoV-2 | INF RSV BP SARS-CoV-2 |

Epidemic Threshold

Thresholds are calculated using the Moving Epidemic Method (MEM), a sequential analysis using the R Language, available from: <http://CRAN.R-project.org/web/package=mem> designed to calculate the duration, start and end of the annual influenza epidemic. MEM uses the 40th, 90th and 97.5th percentiles established from available years of historical data to calculate thresholds of activity. Thresholds of activity for influenza and RSV are defined as follows: Below seasonal threshold, Low activity, Moderate activity, High activity, Very high activity. For influenza, thresholds from outpatient influenza like illness (Viral Watch Programme) are used as an indicator of disease transmission in the community and thresholds from pneumonia surveillance are used as an indicator of impact of disease.

* EC: Eastern Cape; FS: Free State; GP: Gauteng; KZ: KwaZulu-Natal; LP: Limpopo; MP: Mpumalanga; NC: Northern Cape; NW: North West; WC: Western Cape

**Started in 2019

***Started in November 2020

****INF: influenza virus; RSV: respiratory syncytial virus; BP: *Bordetella pertussis*; SARS-CoV-2: severe acute respiratory syndrome coronavirus 2

§Symptoms include ANY of the following respiratory symptoms: cough, sore throat, shortness of breath, anosmia (loss of sense of smell) or dysgeusia (alteration of the sense of taste), with or without other symptoms (which may include fever, weakness, myalgia, or diarrhoea)

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COMMENTS

Influenza

The influenza 2021 season has not started. Since the first influenza positive case of 2021 was detected in pneumonia surveillance in week 9 of 2021 (week ending on the 07 March 2021), sporadic cases have been reported from week 16 to date. Of the 66 influenza cases detected in surveillance sites in 2021, the majority (n=52, 79%) were influenza B/Victoria.

ILI programme: In 2021 to date, specimens from 1 140 patients meeting ILI case definition were received from 4 ILI sites. Influenza was detected in nine (1%) patients, of which six (67%) were influenza B (Victoria), two (22%) were influenza B (lineage inconclusive) and one (11%) was influenza B (pending lineage results) (Figure 1 and Table 1).

Viral Watch programme: In 2021 to date, specimens were received from 161 patients from Viral Watch sites in 5 of the 8 provinces participating in surveillance. Influenza was detected in nine (6%) patients, of which five (56%) were influenza B (Victoria), and four (44%) influenza B (lineage inconclusive) (Figure 5 and Table 4).

Pneumonia surveillance: Since the beginning of 2021, specimens from 3 846 patients with severe respiratory illness (SRI) were received from the 6 sentinel sites. Influenza was detected in 35 (1%) patients, of which one (3%) was influenza A(H3N2), 30 (86%) influenza B (Victoria) and four (11%) were influenza B (pending lineage results). (Figure 9 and Table 7).

In addition, influenza was detected in 14 (2%) specimens, 11 (79%) were influenza B (Victoria) and 3 (21%) influenza B (pending lineage results) from 614 patients who met suspected SARS-CoV-2 case definition but did not meet the pneumonia/ILI surveillance case definitions.

Respiratory syncytial virus

In 2021 to date, RSV detection has been reported from all surveillance programmes, activity remains below seasonal threshold.

ILI programme: In 2021 to date, 1 140 specimens were tested and RSV was detected in specimens of 72 (6%) patients.

Viral Watch programme: In 2021 to date, 161 specimens were tested and RSV was detected in specimens of six (4%) patients.

Pneumonia surveillance: Since the beginning of 2021, 3 846 specimens were tested and RSV was detected in specimens of 388 (10%) patients.

In addition, RSV was detected in 21 of 614 (3%) specimens from patients who met suspected SARS-CoV-2 case definition but did not meet the pneumonia/ILI surveillance case definitions.

SARS-CoV-2 (Severe acute respiratory syndrome coronavirus 2)

Testing for SARS-CoV-2 was initiated in all three surveillance programmes in week 10 of 2020 (week starting 2 March 2020).

ILI programme: From March 2020 to date, specimens from 2 451 patients were tested and SARS-CoV-2 was detected in 495 (20%) patients.

Viral Watch programme: From March 2020 to date, specimens were tested from 440 patients and SARS-CoV-2 was detected in 83 (19%) patients.

Pneumonia surveillance: From March 2020 to date, specimens from 7 862 patients with severe respiratory illness (SRI) were tested and SARS-CoV-2 was detected in 1 762 (22%) patients.

In addition, SARS-CoV-2 was detected in 159 of 817 (19%) specimens from patients who met suspected SARS-CoV-2 case definition but did not meet the pneumonia/ILI surveillance case definitions.

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INFLUENZA-LIKE ILLNESS (ILI) SURVEILLANCE PRIMARY HEALTH CARE CLINICS

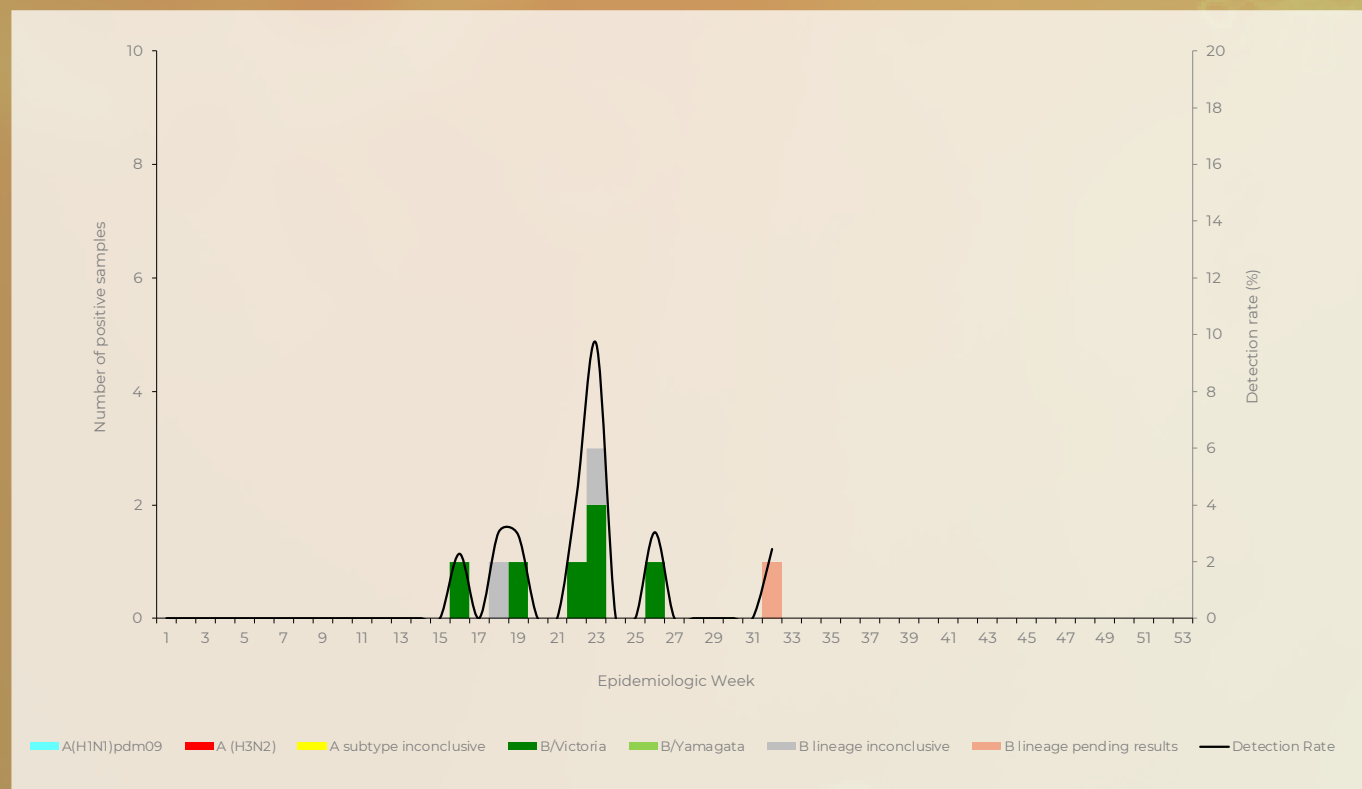


Figure 1. Number of positive samples* by influenza subtype and lineage** and detection rate*** by week

*Specimens from patients with influenza-like illnesses at 5 sentinel sites in 4 provinces

**Influenza was detected from 11 of 495 (2%). 10 (91%) were influenza B(Victoria) and one (9%) was influenza B (pending lineage results) from patients who met suspected SARS-CoV-2 case definition but did not meet Influenza-like illness (ILI) case definition. These are not included in the epidemiological curve.

***Only reported for weeks with >10 specimens submitted

Inconclusive: insufficient viral load in sample and unable to characterise further

B lineage pending results: means influenza B results for lineage are pending

Table 1. Cumulative number of influenza subtype and lineage** and total number of samples tested by clinic and province

| Clinic (Province) | A(H1N1) pdm09 | A(H3N2) | A subtype inconclusive | B/Victoria | B/Yamagata | B lineage inconclusive | B lineage pending results*** | Total samples |
|-----------------------|---------------|----------|------------------------|------------|------------|------------------------|------------------------------|---------------|
| Agincourt (MP) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 159 |
| Eastridge (WC) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 173 |
| Edendale Gateway (KZ) | 0 | 0 | 0 | 3 | 0 | 2 | 0 | 134 |
| Jouberton (NW) | 0 | 0 | 0 | 3 | 0 | 0 | 1 | 549 |
| Mitchell's Plain (WC) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 125 |
| Total: | 0 | 0 | 0 | 6 | 0 | 2 | 1 | 1140 |

KZ: KwaZulu-Natal; NW: North West; WC: Western Cape; MP: Mpumalanga

Inconclusive: insufficient viral load in sample and unable to characterise further

**Influenza was detected from 11 of 495 (2%). 10 (91%) were influenza B(Victoria) and one (9%) was influenza B (pending lineage results) from patients who met suspected SARS-CoV-2 case definition but did not meet Influenza-like illness (ILI) case definition.

***influenza B lineage results are pending

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INFLUENZA-LIKE ILLNESS (ILI) SURVEILLANCE PRIMARY HEALTH CARE CLINICS

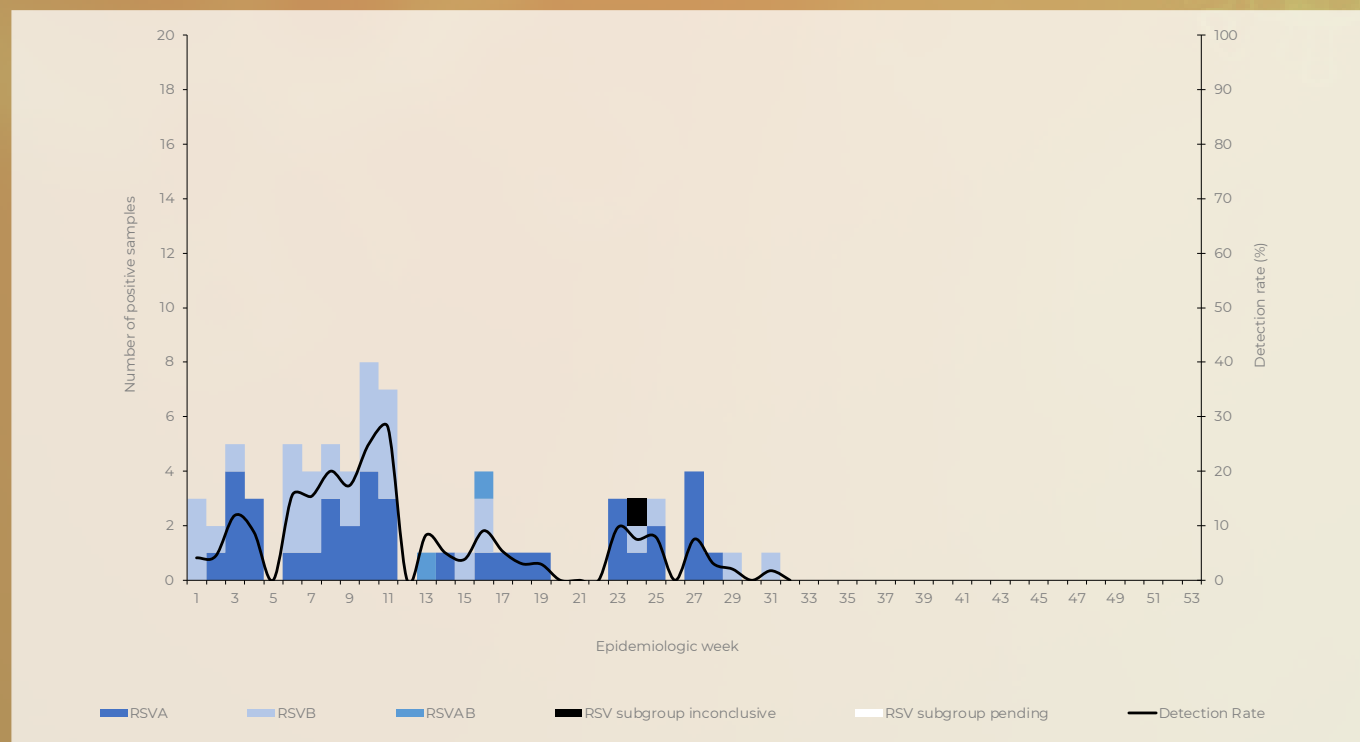


Figure 2. Number of samples testing positive for respiratory syncytial virus** by subgroup and detection rate by week

Inconclusive: insufficient viral load in sample and unable to characterise further

RSV AB: Both RSV A and B subgroup identified

RSV subgroup pending: means RSV results for subgroups are pending

**RSV was detected from 15 of 495 (3%) specimens from patients who met suspected SARS-CoV-2 case definition but did not meet influenza-like illness (ILI) case definition. These are not included in the epidemiological curve.

Table 2. Cumulative number of respiratory syncytial virus subgroups** identified and total number of samples tested by clinic and province

| Clinic (Province) | RSVA | RSVB | RSVAB | RSV subgroup inconclusive | RSV subgroup pending* | Total samples |
|-----------------------|-----------|-----------|----------|---------------------------|-----------------------|---------------|
| Agincourt (MP) | 11 | 7 | 1 | 0 | 0 | 159 |
| Eastridge (WC) | 22 | 1 | 1 | 0 | 0 | 173 |
| Edendale Gateway (KZ) | 1 | 6 | 0 | 0 | 0 | 134 |
| Jouberton (NW) | 2 | 17 | 0 | 1 | 0 | 549 |
| Mitchell's Plain (WC) | 2 | 0 | 0 | 0 | 0 | 125 |
| Total | 38 | 31 | 2 | 1 | 0 | 1 140 |

KZ: KwaZulu-Natal; NW: North West; WC: Western Cape; MP: Mpumalanga

Inconclusive: insufficient viral load in sample and unable to characterise further

RSV AB: Both RSV A and B subgroup identified

*RSV results for subgroups are pending

**RSV was detected from 15 of 495 (3%) specimens from patients who met suspected SARS-CoV-2 case definition but did not meet influenza-like illness (ILI) case definition. These are not included in the table.

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INFLUENZA-LIKE ILLNESS (ILI) SURVEILLANCE PRIMARY HEALTH CARE CLINICS

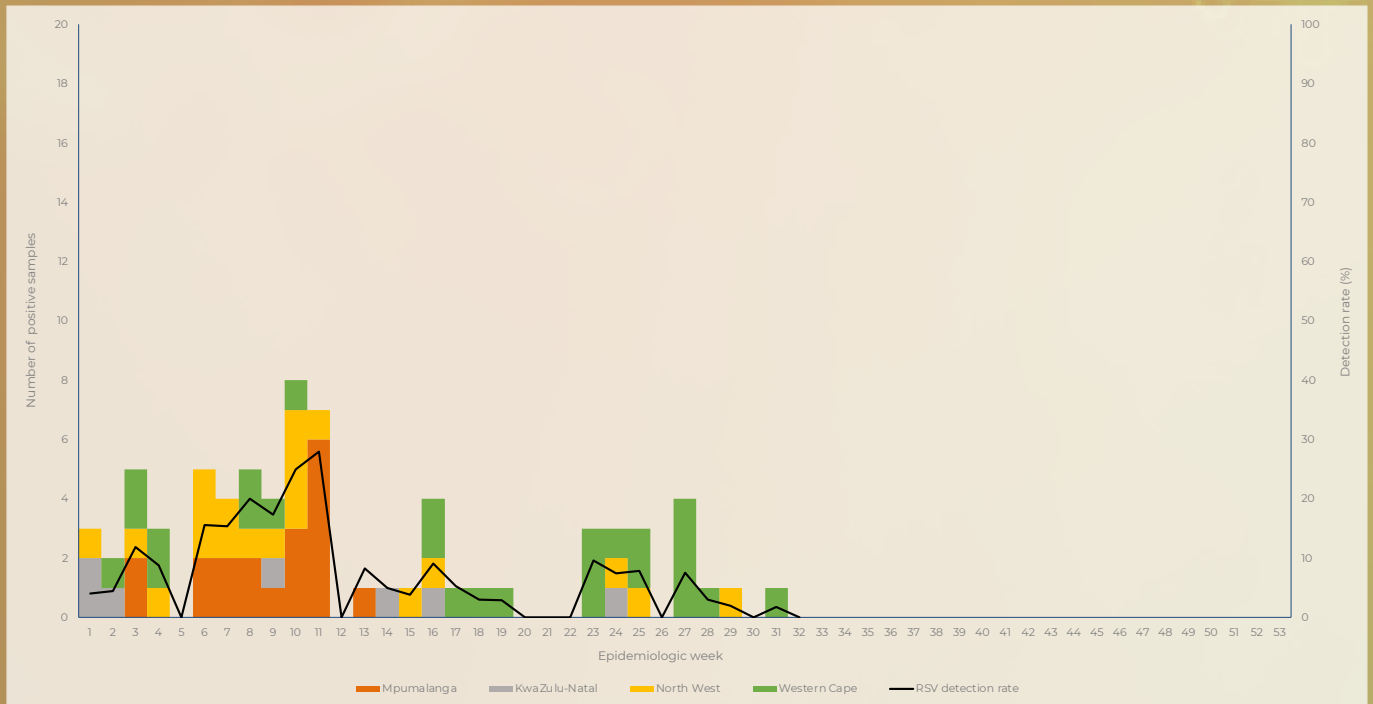


Figure 3. Number of samples testing positive for respiratory syncytial virus* by province and detection rate by week

*RSV was detected from 15 of 495 (3%) specimens from patients who met suspected SARS-CoV-2 case definition but did not meet influenza-like illness (ILI) case definition. These are not included in the epidemiological curve.

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INFLUENZA-LIKE ILLNESS (ILI) SURVEILLANCE PRIMARY HEALTH CARE CLINICS

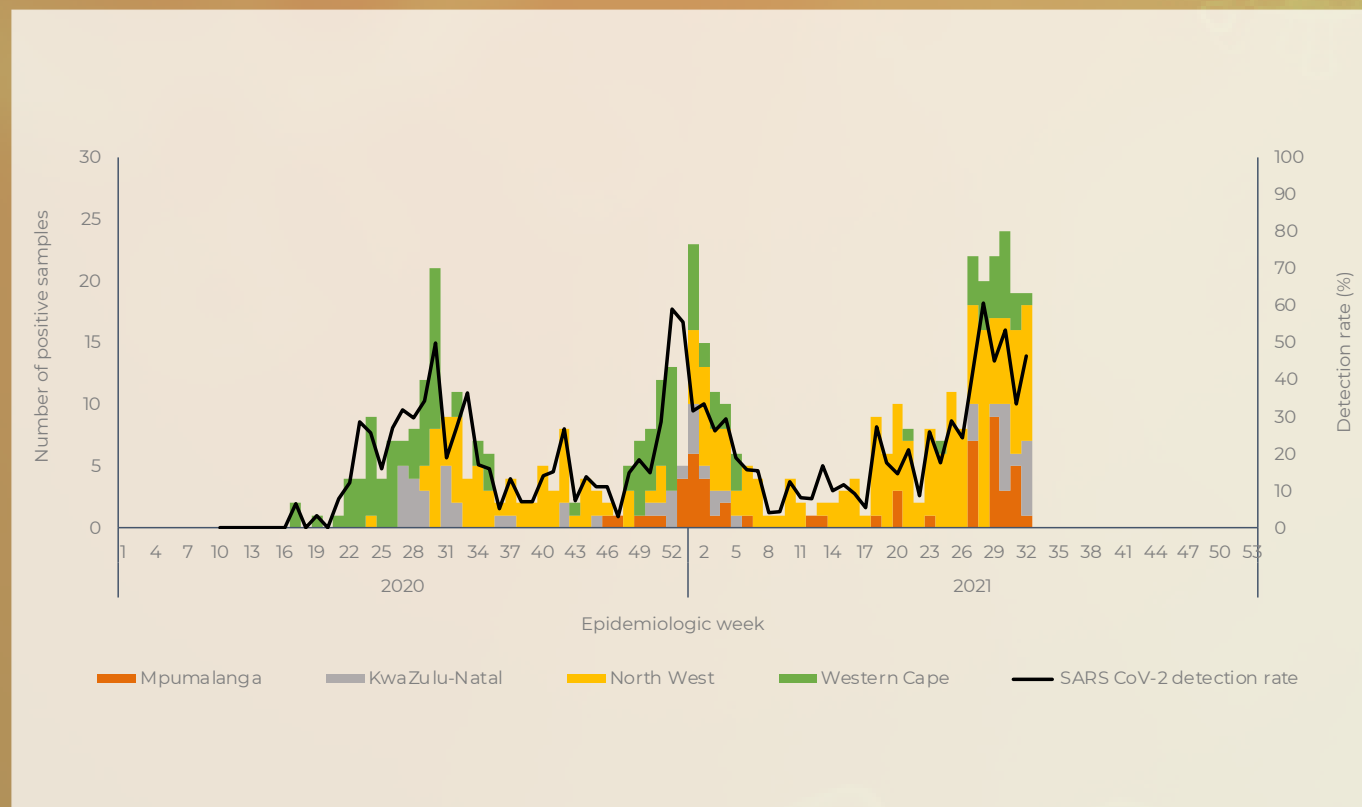


Figure 4. Number of samples testing positive for SARS-CoV-2*[‡] by province and detection rate by week

*Specimens from patients with influenza-like illnesses at 5 sentinel sites in 4 provinces

[‡]SARS-CoV-2 was detected in 131 of 627 (21%) specimens from patients who met suspected SARS-CoV-2 case definition but did not meet influenza-like illness (ILI) case definition. These are not included in the epidemiological curve.

Table 3. Cumulative number of SARS-CoV-2** identified and total number of samples tested by clinic and province

| Clinic (Province) | SARS-CoV-2 positive | Total samples tested |
|-----------------------|---------------------|----------------------|
| Agincourt (MP) | 55 | 189 |
| Eastridge (WC) | 54 | 682 |
| Edendale Gateway (KZ) | 57 | 277 |
| Jouberton (NW) | 245 | 849 |
| Mitchell's Plain (WC) | 84 | 454 |
| Total: | 495 | 2 451 |

KZ: KwaZulu-Natal; NW: North West; WCP: Western Cape; MP: Mpumalanga (started enrolling on the 10th November 2020)

**SARS-CoV-2 was detected in 131 of 627 (20%) specimens from patients who met suspected SARS-CoV-2 case definition but did not meet influenza-like illness (ILI) case definition. These are not included in the table.

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INFLUENZA-LIKE ILLNESS (ILI) SURVEILLANCE VIRAL WATCH

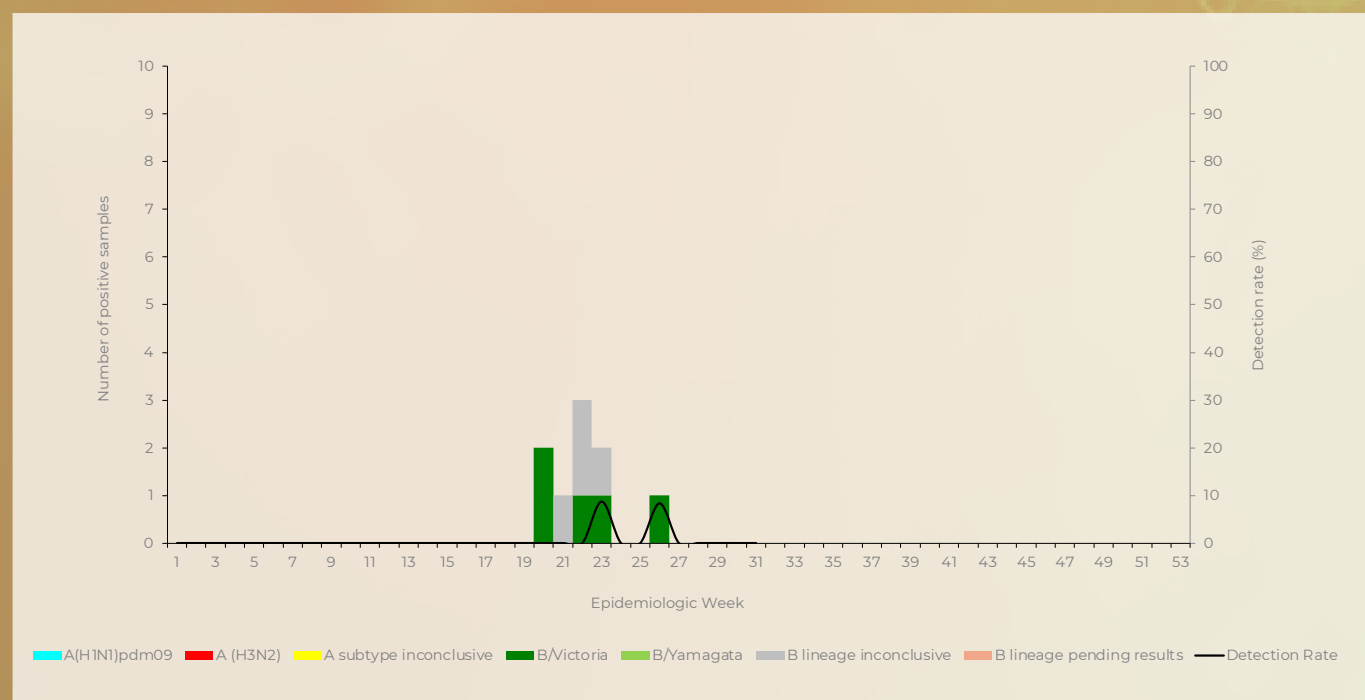


Figure 5. Number of positive samples* by influenza subtype and lineage and detection rate** by week

*Specimens from patients with Influenza-like illnesses at 92 sentinel sites in 8 provinces

** Only reported for weeks with >10 specimens submitted

Inconclusive: insufficient viral load in sample and unable to characterise further

Table 4. Cumulative number of influenza subtype and lineage and total number of samples tested by province

| Province | A(H1N1) pdm09 | A(H3N2) | A subtype inconclusive | B/ Victoria | B/ Yamagata | B lineage inconclusive | B lineage pending results* | Total samples |
|---------------|---------------|----------|------------------------|-------------|-------------|------------------------|----------------------------|---------------|
| Eastern Cape | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 |
| Free State | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Gauteng | 0 | 0 | 0 | 4 | 0 | 4 | 0 | 137 |
| Limpopo | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Mpumalanga | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| North West | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| Northern Cape | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Western Cape | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 19 |
| Total: | 0 | 0 | 0 | 5 | 0 | 4 | 0 | 161 |

Inconclusive: insufficient viral load in sample and unable to characterise further

From 04 January 2021 to date, no patients were tested for influenza at the time of entry into South Africa following travel abroad.

Patients known to have acquired influenza abroad are not included in the table or epidemiological curve.

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INFLUENZA-LIKE ILLNESS (ILI) SURVEILLANCE VIRAL WATCH



Figure 6. ILI surveillance (Viral Watch) percentage influenza detections and epidemic thresholds*

*Thresholds based on 2010-2019 data

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INFLUENZA-LIKE ILLNESS (ILI) SURVEILLANCE VIRAL WATCH

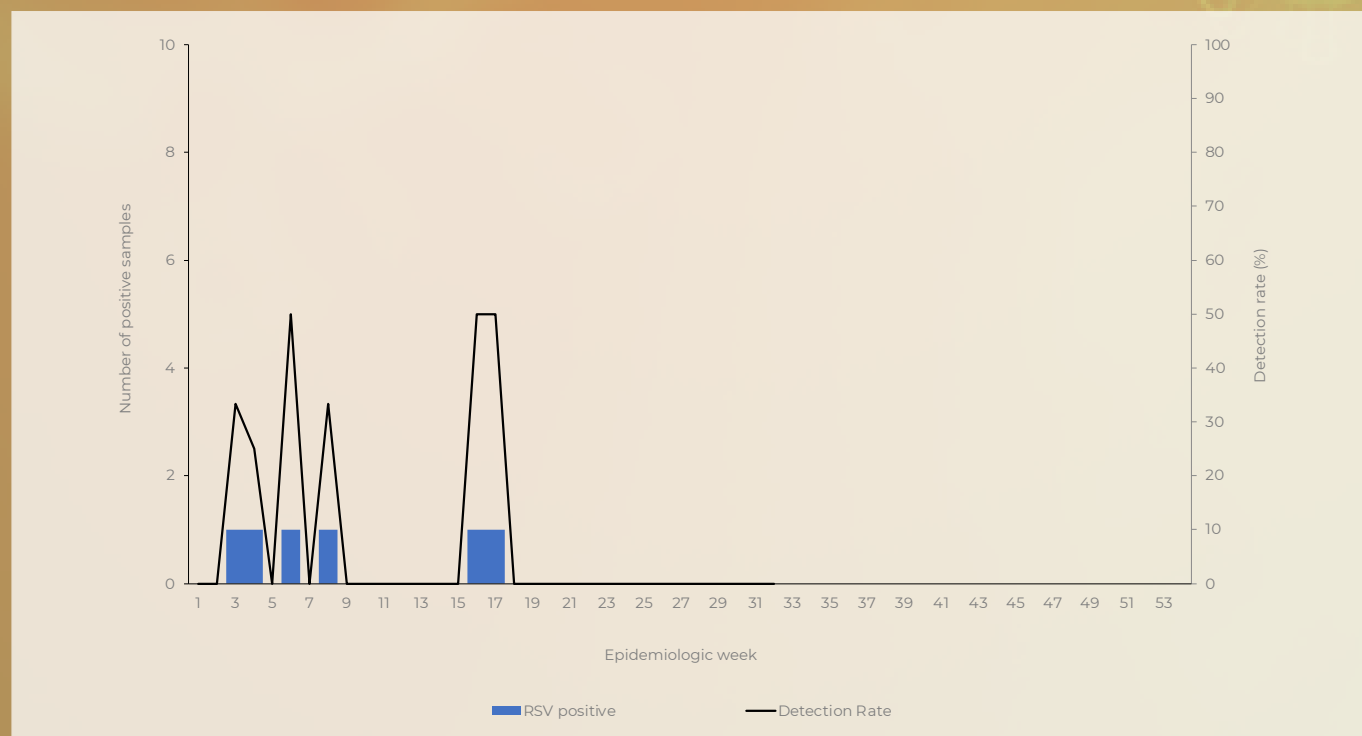


Figure 7. Number of samples testing positive for RSV*, and detection rate by week

*Specimens from patients with Influenza-like illnesses at 92 sentinel sites in 8 provinces

Table 5. Cumulative number of RSV positive cases identified and total number of samples tested by province

| Province | RSV positive | Total samples tested |
|---------------|--------------|----------------------|
| Eastern Cape | 0 | 1 |
| Free State | 0 | 0 |
| Gauteng | 4 | 137 |
| Limpopo | 0 | 0 |
| Mpumalanga | 0 | 2 |
| North West | 0 | 2 |
| Northern Cape | 0 | 0 |
| Western Cape | 2 | 19 |
| Total: | 6 | 161 |

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INFLUENZA-LIKE ILLNESS (ILI) SURVEILLANCE VIRAL WATCH

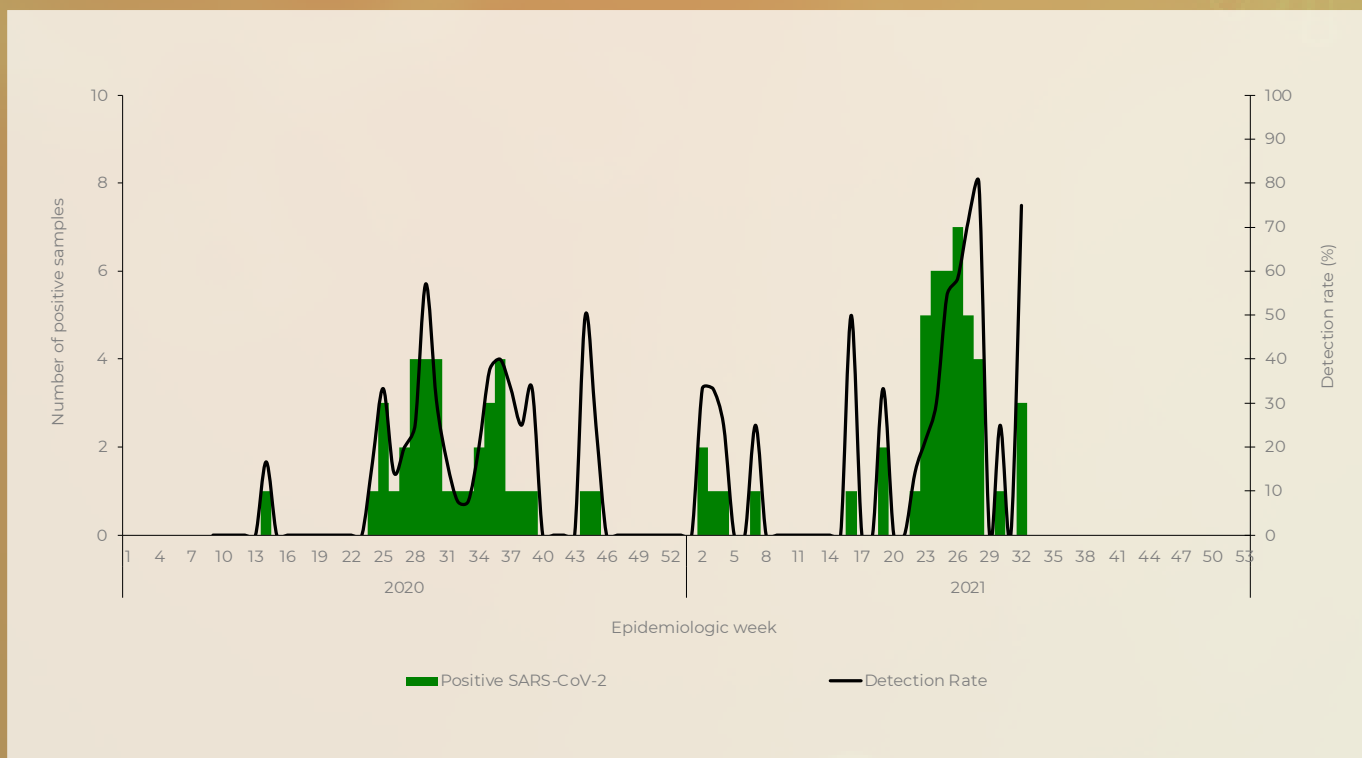


Figure 8. Number of samples testing positive for SARS-CoV-2*, and detection rate by week

*Specimens from patients with Influenza-like illnesses at 92 sentinel sites in 8 provinces

Table 6. Cumulative number of SARS-CoV-2 identified and total number of samples tested by province

| Hospital (Province) | SARS-CoV-2 positive | Total samples |
|---------------------|---------------------|---------------|
| Eastern Cape | 1 | 5 |
| Free State | 1 | 14 |
| Gauteng | 65 | 297 |
| Limpopo | 0 | 2 |
| Mpumalanga | 1 | 7 |
| North West | 0 | 2 |
| Northern Cape | 0 | 2 |
| Western Cape | 15 | 111 |
| Total: | 83 | 440 |

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NATIONAL SYNDROMIC SURVEILLANCE FOR PNEUMONIA

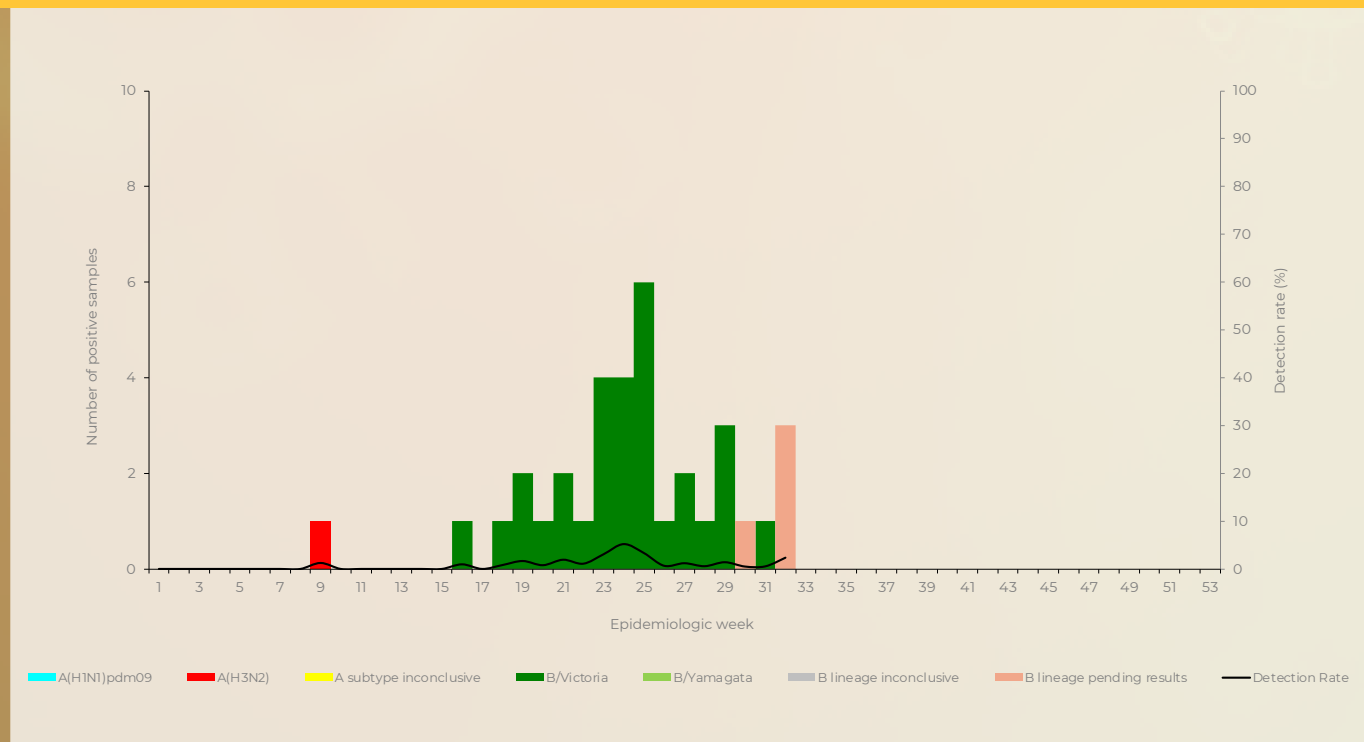


Figure 9. Number of positive samples* by influenza subtype and lineage** and detection rate*** by week

*Specimens from patients hospitalised with pneumonia at 7 sentinel sites in 5 provinces

**Influenza was detected in three (3%) of 119 specimens from patients who met suspected SARS-CoV-2 case definition but did not meet pneumonia (SRI) case definition. One (33%) was influenza B (Victoria) and two (77%) were influenza B (pending lineage results). These are not included in the epidemiological curve.

***Only reported for weeks with >10 specimens submitted

Inconclusive: insufficient viral load in sample and unable to characterise further

B lineage pending results: influenza B results for lineage are pending

Table 7. Cumulative number of identified influenza subtype and lineage** and total number of samples tested by hospital

| Province | A(H1N1) pdm09 | A(H3N2) | A subtype inconclusive | B/Victoria | B/Yamagata | B lineage inconclusive | B lineage pending results*** | Total samples |
|--------------------------------|---------------|----------|------------------------|------------|------------|------------------------|------------------------------|---------------|
| Edendale (KZ) | 0 | 0 | 0 | 8 | 0 | 0 | 0 | 573 |
| Helen Joseph-Rahima Moosa (GP) | 0 | 0 | 0 | 13 | 0 | 0 | 2 | 1015 |
| Klerksdorp-Tshepong (NW) | 0 | 0 | 0 | 3 | 0 | 0 | 1 | 642 |
| Mapulaneng-Matikwana (MP) | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 407 |
| Red Cross (WC) | 0 | 0 | 0 | 4 | 0 | 0 | 1 | 501 |
| Mitchell's Plain (WC) | 0 | 1 | 0 | 0 | 0 | 0 | 0 | 550 |
| Tintswalo (MP) | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 158 |
| Total: | 0 | 1 | 0 | 30 | 0 | 0 | 4 | 3 846 |

GP: Gauteng; KZ: KwaZulu-Natal; NW: North West; MP: Mpumalanga (Tintswalo started enrolling on the 10th Feb 2021); WC: Western Cape
Inconclusive: insufficient viral load in sample and unable to characterise further

**Influenza was detected in three (3%) of 119 specimens from patients who met suspected SARS-CoV-2 case definition but did not meet pneumonia (SRI) case definition. One (33%) was influenza B (Victoria) and two (77%) were influenza B (pending lineage results). These are not included in the table.

***influenza B lineage results are pending

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NATIONAL SYNDROMIC SURVEILLANCE FOR PNEUMONIA

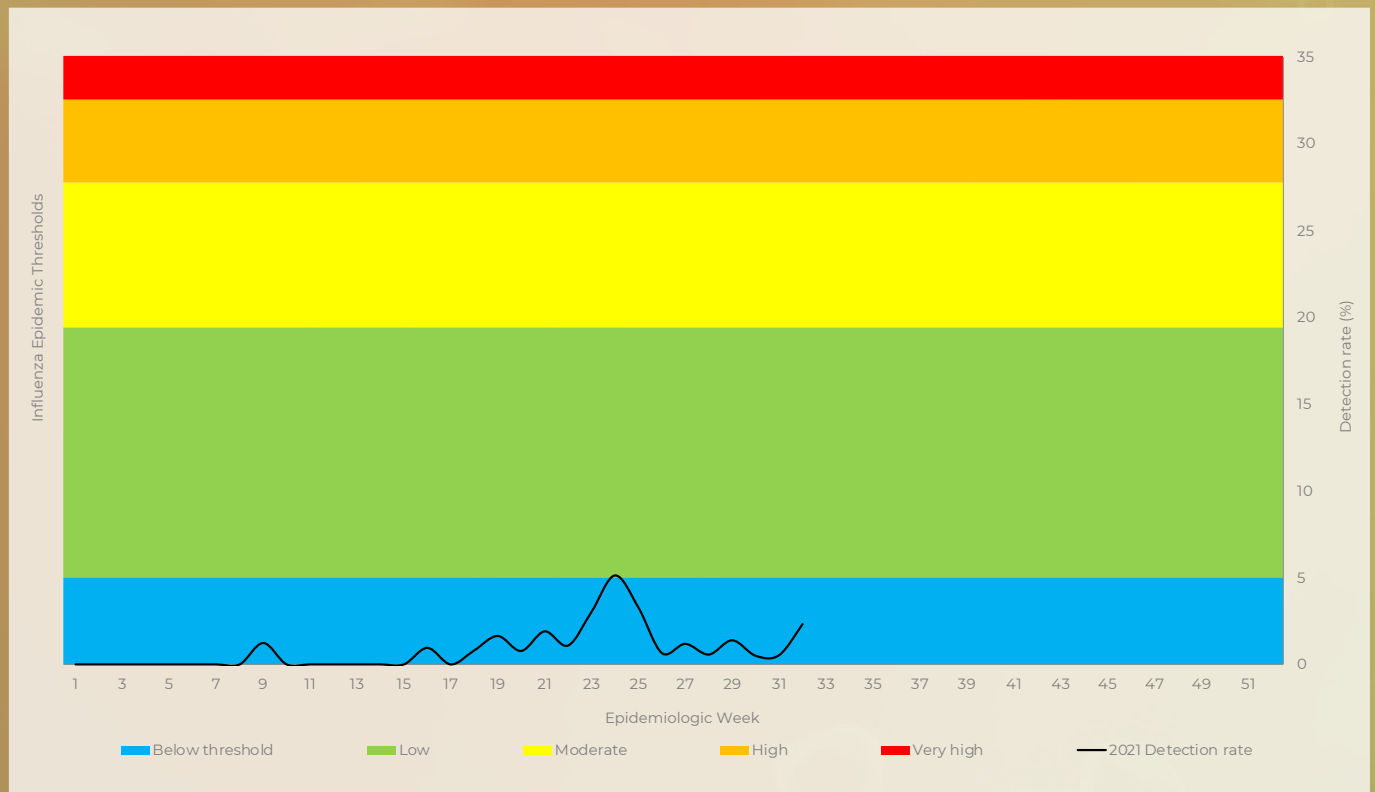


Figure 10. National syndromic surveillance for pneumonia percentage influenza detections and epidemic thresholds*

*Thresholds based on 2010-2019 data

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NATIONAL SYNDROMIC SURVEILLANCE FOR PNEUMONIA

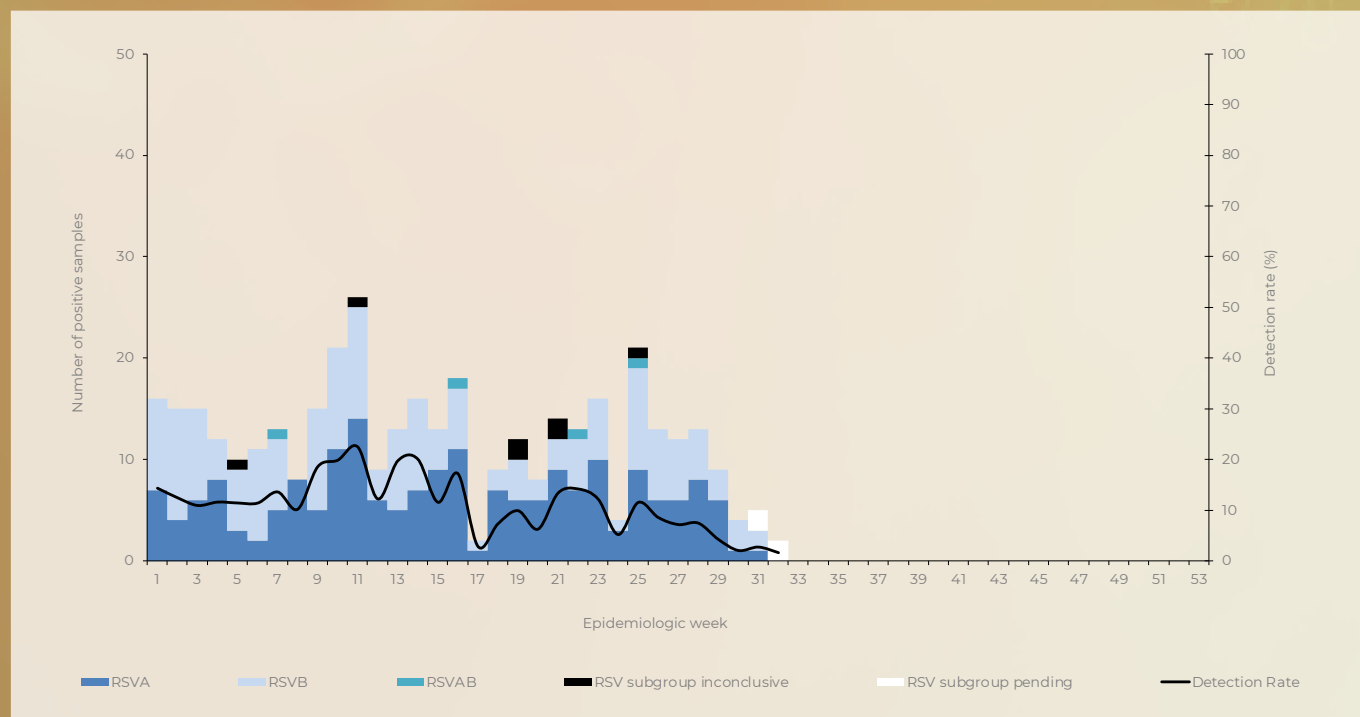


Figure 11. Number of samples testing positive for respiratory syncytial virus* by subgroup and detection rate by week

Inconclusive: insufficient viral load in sample and unable to characterise further

RSV AB: Both RSV A and B subgroup identified

RSV subgroup pending: means RSV results for subgroups are pending

*RSV was detected in six of 119 (5%) specimens from patients who met suspected SARS-CoV-2 case definition but did not meet pneumonia (SRI) case definition. These are not included in the epidemiological curve.

Table 8: Cumulative number of respiratory syncytial virus** subgroups identified and total number of samples tested by hospital

| Hospital (Province) | RSVA | RSVB | RSVAB | RSV subgroup inconclusive | RSV subgroup pending* | Total samples |
|--------------------------------|------------|------------|----------|---------------------------|-----------------------|---------------|
| Edendale (KZ) | 5 | 29 | 0 | 0 | 0 | 573 |
| Helen Joseph-Rahima Moosa (GP) | 37 | 42 | 0 | 0 | 0 | 1015 |
| Klerksdorp-Tshepong (NW) | 8 | 44 | 0 | 2 | 0 | 642 |
| Mapulaneng-Matikwana (MP) | 20 | 7 | 1 | 0 | 0 | 407 |
| Red Cross (WC) | 81 | 41 | 2 | 4 | 4 | 501 |
| Mitchell's Plain (WC) | 36 | 10 | 1 | 1 | 0 | 550 |
| Tintswalo (MP) | 10 | 3 | 0 | 0 | 0 | 158 |
| Total: | 197 | 176 | 4 | 7 | 4 | 3 846 |

GP: Gauteng; KZ: KwaZulu-Natal; NW: North West; MP: Mpumalanga (Tintswalo started enrolling on the 10th Feb 2021); WC: Western Cape

Inconclusive: insufficient viral load in sample and unable to characterise further

RSV AB: Both RSV A and B subgroup identified

*RSV results for subgroups are pending

**RSV was detected in six of 119 (5%) specimens from patients who met suspected SARS-CoV-2 case definition but did not meet pneumonia (SRI) case definition. These are not included in the table.

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NATIONAL SYNDROMIC SURVEILLANCE FOR PNEUMONIA

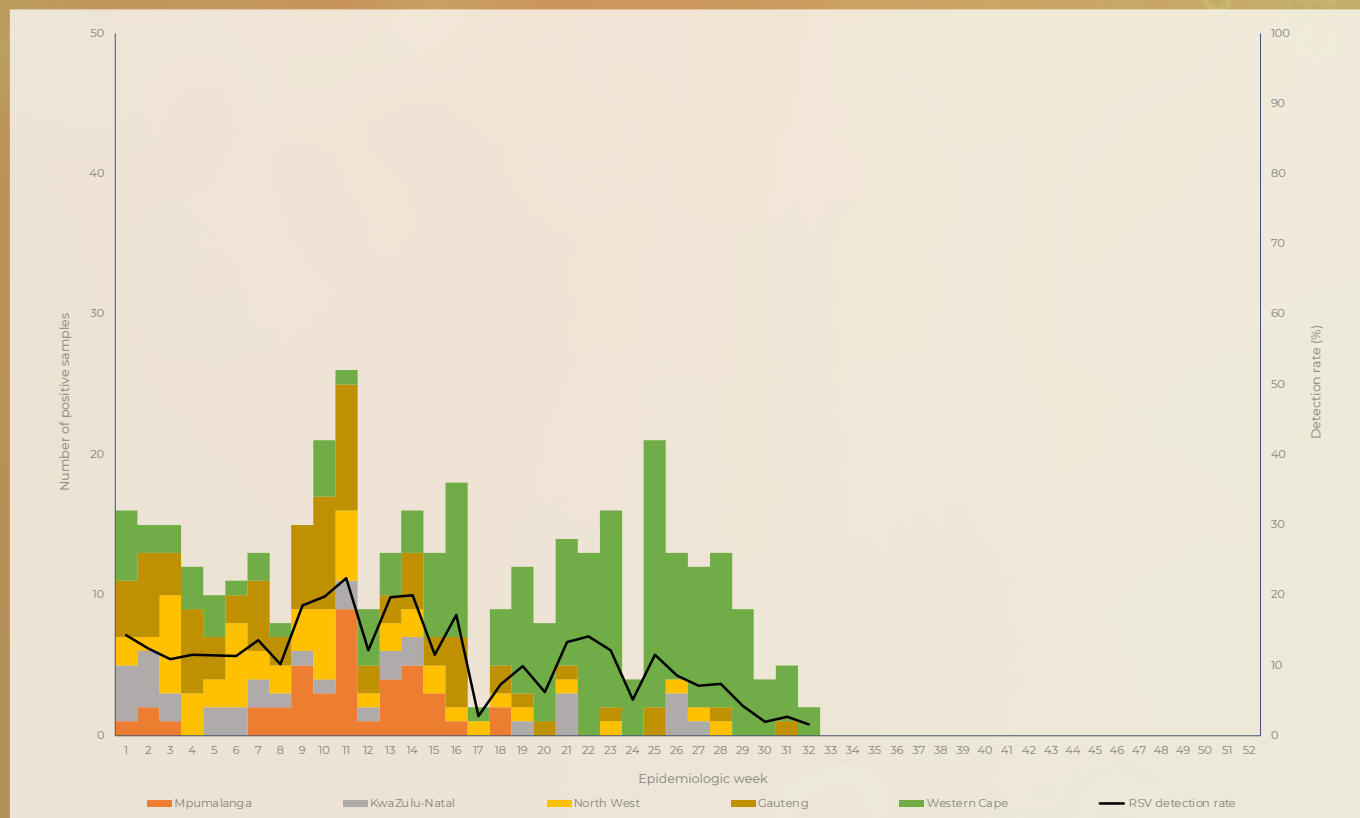


Figure 12. Number of samples testing positive for respiratory syncytial virus* by province and detection rate by week

*RSV was detected in six of 119 (5%) specimens from patients who met suspected SARS-CoV-2 case definition but did not meet pneumonia (SRI) case definition. These are not included in the epidemiological curve.

INFLUENZA, RESPIRATORY SYNCYTIAL VIRUS AND SARS-CoV-2 SURVEILLANCE REPORT

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NATIONAL SYNDROMIC SURVEILLANCE FOR PNEUMONIA

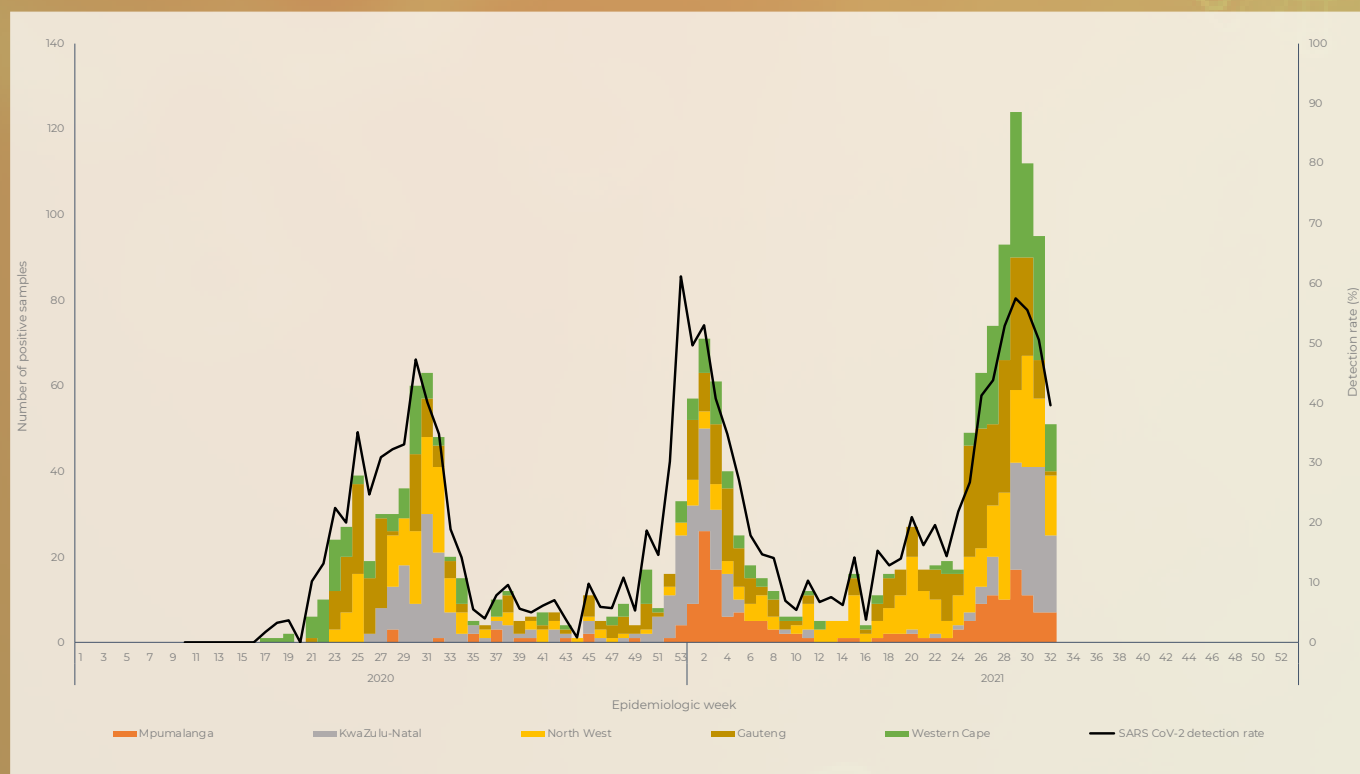


Figure 13. Number of samples testing positive for SARS-CoV-2** by province and detection rate by week

*Specimens from patients hospitalised with pneumonia at 7 sentinel sites in 5 provinces

**SARS-CoV-2 was detected in 28 of 190 (15%) specimens from patients who met suspected SARS-CoV-2 case definition but did not meet pneumonia (SRI) case definition. These are not included in the epidemiological curve.

Table 9. Cumulative number of identified SARS-CoV-2** and total number of samples tested by hospital

| Hospital (Province) | SARS-CoV-2 positive | Total samples tested |
|--------------------------------|---------------------|----------------------|
| Edendale (KZ) | 369 | 1 398 |
| Helen Joseph-Rahima Moosa (GP) | 461 | 1 860 |
| Klerksdorp-Tshepong (NW) | 407 | 1 249 |
| Mapulaneng-Matikwana (MP) | 152 | 709 |
| Red Cross (WC) | 54 | 1 465 |
| Mitchell's Plain (WC) | 276 | 1 023 |
| Tintswalo (MP) | 43 | 158 |
| Total: | 1 762 | 7 862 |

GP: Gauteng; KZ: KwaZulu-Natal; NW: North West; MP: Mpumalanga (Tintswalo started enrolling on the 10th Feb 2021); WC: Western Cape

**SARS-CoV-2 was detected in 28 of 190 (15%) specimens from patients who met suspected SARS-CoV-2 case definition but did not meet pneumonia (SRI) case definition. These are not included in the table.

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SUMMARY OF LABORATORY CONFIRMED SARS-COV-2 CASES

Table 10. Characteristics of laboratory-confirmed cases of COVID-19, enrolled in influenza-like illness (ILI) and pneumonia surveillance programmes, South Africa, 02 March 2020 – 15 August 2021

| Characteristic | Influenza-like illness (ILI), public-sector, n=626 (%) | Pneumonia, n=1 790 (%) |
|---------------------|--|------------------------|
| Age group | | |
| 0-9 | 47/626 (8) | 119/1790 (7) |
| 10-19 | 42/626 (7) | 11/1790 (1) |
| 20-39 | 290/626 (46) | 309/1790 (17) |
| 40-59 | 198/626 (32) | 670/1790 (37) |
| 60-79 | 47/626 (7) | 612/1790 (34) |
| ≥80 | 2/626 (<1) | 69/1790 (4) |
| Sex-female | 378/626 (60) | 1085/1790 (61) |
| Province* | | |
| Gauteng | N/A | 462/1790 (26) |
| KwaZulu-Natal | 96/626 (15) | 373/1790 (21) |
| Mpumalanga** | 75/626 (12) | 218/1790 (12) |
| North West | 313/626 (50) | 407/1790 (23) |
| Western Cape | 142/626 (23) | 330/1790 (18) |
| Race | | |
| Black | 459/618 (74) | 1396/1753 (80) |
| Coloured | 129/618 (21) | 259/1753 (15) |
| Asian/Indian | 4/618 (1) | 44/1753 (2) |
| White | 20/618 (3) | 35/1753 (2) |
| Other | 6/618 (1) | 19/1753 (1) |
| Presentation | | |
| Fever | 491/618 (79) | 844/1753 (48) |
| Cough | 600/618 (97) | 1682/1753 (96) |
| Shortness of breath | 209/618 (34) | 1382/1753 (79) |
| Chest pain | 254/618 (41) | 706/1753 (40) |
| Diarrhoea | 4/618 (8) | 106/1753 (6) |

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| Characteristic | Influenza-like illness (ILI), public-sector, n=626 (%) | Pneumonia, n=1 790 (%) |
|------------------------------|--|------------------------|
| Underlying conditions | | |
| Hypertension | 17/618 (3) | 248/1753 (14) |
| Cardiac | 2/618 (<1) | 44/1753 (3) |
| Lung disease | 0/618 (0) | 2/1753 (<1) |
| Diabetes | 14/618 (2) | 353/1753 (20) |
| Cancer | 1/618 (<1) | 10/1753 (1) |
| Tuberculosis | 8/618 (1) | 41/1753 (2) |
| HIV-infection | 109/618 (18) | 371/1753 (21) |
| Other *** | 12/618 (2) | 90/1753 (5) |
| Management | | |
| Oxygen therapy | 8/618 (1) | 1 215/1753 (69) |
| ICU admission | N/A | 36/1753 (2) |
| Ventilation | N/A | 43/1753 (2) |
| Outcome*** | | |
| Died | 0/601 (0) | 245/1504 (16) |

*ILI surveillance not conducted in Gauteng province

**Mpumalanga (ILI site started enrolling on the 10th November 2020 and an additional SARI site started enrolling on the 10th February 2021)

***Chronic lung, liver and kidney disease, organ transplant, pregnancy, malnutrition, obesity, tracheostomy, prematurity, seizure, stroke, anaemia, asplenia, burns, Systemic lupus erythematosus, seizures

****Outcome includes patients who are still hospitalised, have been discharged or referred, and those who died

Note: Children may be over-represented amongst hospitalised patients due to the inclusion of a large paediatric hospital in Cape Town.

Of the 245 patients who died, two were in <20 age group, 19 in the 20-39 year age group, 72 in the 40-59 year age group, and 152 were ≥60 years; 140/245 (57%) were female.

Of the 810 hospitalised cases with COVID19 vaccine status, 52 (6%) received vaccine. 5 (10%) received Johnson & Johnson, 44 (85%) received the first dose of Pfizer-BioNTech and 3 (6%) Astra Zeneca. Cases age varied from 35 years to >60 years old. Majority of these cases were aged >60 years old (40/52, 77%) with 60% (31/52) females overall. During their hospitalization 58% (30/52) received oxygen, 25% (13/52) were admitted in ICU, 12% (6/52) were HIV infected.