

# WEEKLY RESPIRATORY PATHOGENS SURVEILLANCE REPORT

SOUTH AFRICA WEEK 23 2021

## CONTENTS

|  |       |
|--|-------|
| Surveillance programme description                   | 2     |
| Comments   | 3     |
| Systematic Influenza-like illness (ILI) surveillance | 4-7   |
| Influenza  |       |
| Respiratory syncytial virus                          |       |
| SARS-CoV-2   |       |
| Influenza-like illness (ILI) Viral Watch             | 8-11  |
| Influenza  |       |
| SARS-CoV-2   |       |
| National syndromic surveillance for pneumonia        | 12-16 |
| Influenza  |       |
| Respiratory syncytial virus                          |       |
| SARS-CoV-2   |       |
| Summary of laboratory confirmed SARS-CoV-2 cases     | 17-18 |

## CUMULATIVE DATA FROM



## HIGHLIGHTS: WEEK 23

- RSV activity in both influenza-like illness (ILI) and pneumonia surveillance programmes has slightly increased in this current reporting week (week23) compared to previous week and RSV season has not started yet.

- Seven new cases of influenza - Gauteng (three), North West (two), Eastern Cape (one) and KwaZulu-Natal (one) were detected in week23 in addition to 24 cases reported in the previous weeks. To date, influenza cases have been detected from Gauteng, Western Cape, North West, Eastern Cape and KwaZulu-Natal sentinel surveillance sites. Influenza season has not started.

- From 2 March 2020 to 13 June 2021, a total of 1 468 COVID-19 cases were detected from all surveillance programmes. An increase in number of new positive case has been noted in both ILI and pneumonia surveillance programmes in this reporting week compared to previous week. Of the 1 073 hospitalised COVID-19 cases reported with available data on outcome, 149 (14%) died.

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

WEEK 23 2021

REPORTING PERIOD 4 JANUARY 2021 TO 13 JUNE 2021

## PROGRAMME DESCRIPTIONS

| Programme                 | Influenza-like illness (ILI)  | Viral Watch  | National syndromic surveillance for pneumonia   |
|---------------------------|---|--|---|
| Start year                | 2012  | 1984   | 2009  |
| Provinces*                | KZ<br>NW<br>WC**<br>MP***   | EC<br>FS<br>GP<br>LP<br>MP<br>NC<br>NW<br>WC   | GP<br>KZ<br>MP<br>NW<br>WC  |
| Type of site              | Primary health care clinics   | General practitioners  | Public hospitals  |
| Case definition           | <p><b>ILI:</b> An acute respiratory illness with a temperature (<math>\geq 38^{\circ}\text{C}</math>) and cough, &amp; onset <math>\leq 10</math> days</p> <p><b>Suspected pertussis</b><br/>Any person with an acute cough illness lasting <math>\geq 14</math> days (or cough illness of any duration for children <math>&lt; 1</math> year), without a more likely diagnosis AND one or more of the following signs or symptoms:</p> <ul style="list-style-type: none"> <li>• paroxysms of coughing,</li> <li>• or inspiratory “whoop”,</li> <li>• or post-tussive vomiting</li> <li>• or apnoea in children <math>&lt; 1</math> year;</li> </ul> <p>OR</p> <p>Any person in whom a clinician suspects pertussis</p> <p><b>Suspected SARS-CoV-2</b><br/>Any person presenting with an acute (<math>\leq 14</math> days) respiratory tract infection or other clinical illness compatible with COVID-19<sup>§</sup></p> | <p><b>ILI:</b> An acute respiratory illness with a temperature (<math>\geq 38^{\circ}\text{C}</math>) and cough, &amp; onset <math>\leq 10</math> days</p> <p><b>Suspected SARS-CoV-2</b><br/>Any person presenting with an acute (<math>\leq 14</math> days) respiratory tract infection or other clinical illness compatible with COVID-19<sup>§</sup></p> | <p><b>SRI:</b> Acute (symptom onset <math>\leq 10</math> days) or chronic (symptom onset <math>&gt; 10</math>) lower respiratory tract infection</p> <p><b>Suspected pertussis</b><br/>Any person with an acute cough illness lasting <math>\geq 14</math> days (or cough illness of any duration for children <math>&lt; 1</math> year), without a more likely diagnosis AND one or more of the following signs or symptoms:</p> <ul style="list-style-type: none"> <li>• paroxysms of coughing,</li> <li>• or inspiratory “whoop”,</li> <li>• or post-tussive vomiting</li> <li>• or apnoea in children <math>&lt; 1</math> year;</li> </ul> <p>OR</p> <p>Any person in whom a clinician suspects pertussis.</p> <p><b>Suspected SARS-CoV-2</b><br/>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<br>RSV<br>BP<br>SARS-CoV-2  | INF<br>RSV<br>BP<br>SARS-CoV-2   | INF<br>RSV<br>BP<br>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)

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

WEEK 23 2021

REPORTING PERIOD 2 MARCH 2020 TO 13 JUNE 2021

## COMMENTS

### Influenza

The influenza 2021 season has not started. The first influenza positive case of 2021 was detected in pneumonia surveillance in week 9 of 2021 (week ending on the 07 March 2021). Of the 31 influenza cases detected in surveillance sites in 2021, majority (17, 55%) were influenza B/Victoria.

**ILI programme:** In 2021 to date, specimens from 746 patients meeting ILI case definition were received from 4 ILI sites. Influenza was detected in five (0.4%) patients, of which three (60%) were influenza B(Victoria), one (20%) influenza B(lineage inconclusive) and one (20%) was influenza B(lineage pending results). (Figure 1 and Table 1).

**Viral Watch programme:** During the same period, specimens were received from 96 patients from Viral Watch sites in three of the 8 provinces participating in surveillance. Influenza was detected in seven (7.3%) patients, of which one (14%) was influenza B (Victoria), two (29%) influenza B (lineage inconclusive) and four (57%) were influenza B (lineage pending results). (Figure 5 and Table 4).

**Pneumonia surveillance:** Since the beginning of 2021, specimens from 2 342 patients with severe respiratory illness (SRI) were received from the 6 sentinel sites. Influenza was detected in 13 (0.6%) patients, of which one (8%) was influenza A(H3N2), eight (61%) influenza B (Victoria) and four (31%) were influenza B (pending lineage results). (Figure 9 and Table 7).

In addition, influenza was detected in six (1.4%) specimens, of which five were influenza B (Victoria) and one influenza B (lineage pending results) from 418 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 transmission has been reported from all surveillance programmes, activity remains below seasonal threshold.

**ILI programme:** In 2021 to date, 746 specimens were tested and RSV was detected in specimens of 59 (8%) patients.

**Viral Watch programme:** During the same period, 96 specimens were tested and RSV was detected in specimens of six (6%) patients.

**Pneumonia surveillance:** Since the beginning of 2021, 2 342 specimens were tested and RSV was detected in specimens of 304 (13%) patients.

In addition, RSV was detected in 20 of 418 (5%) 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 (week starting 2 March 2020).

**ILI programme:** From March 2020 to date, specimens from 2 057 patients were tested and SARS-CoV-2 was detected in 342 (17%) patients.

**Viral Watch programme:** From March 2020 to date, specimens were tested from 375 patients and SARS-CoV-2 was detected in 51 (14%) patients.

**Pneumonia surveillance:** From March 2020 to date, specimens from 6 320 patients with severe respiratory illness (SRI) were tested and SARS-CoV-2 was detected in 1 075 (17%) patients.

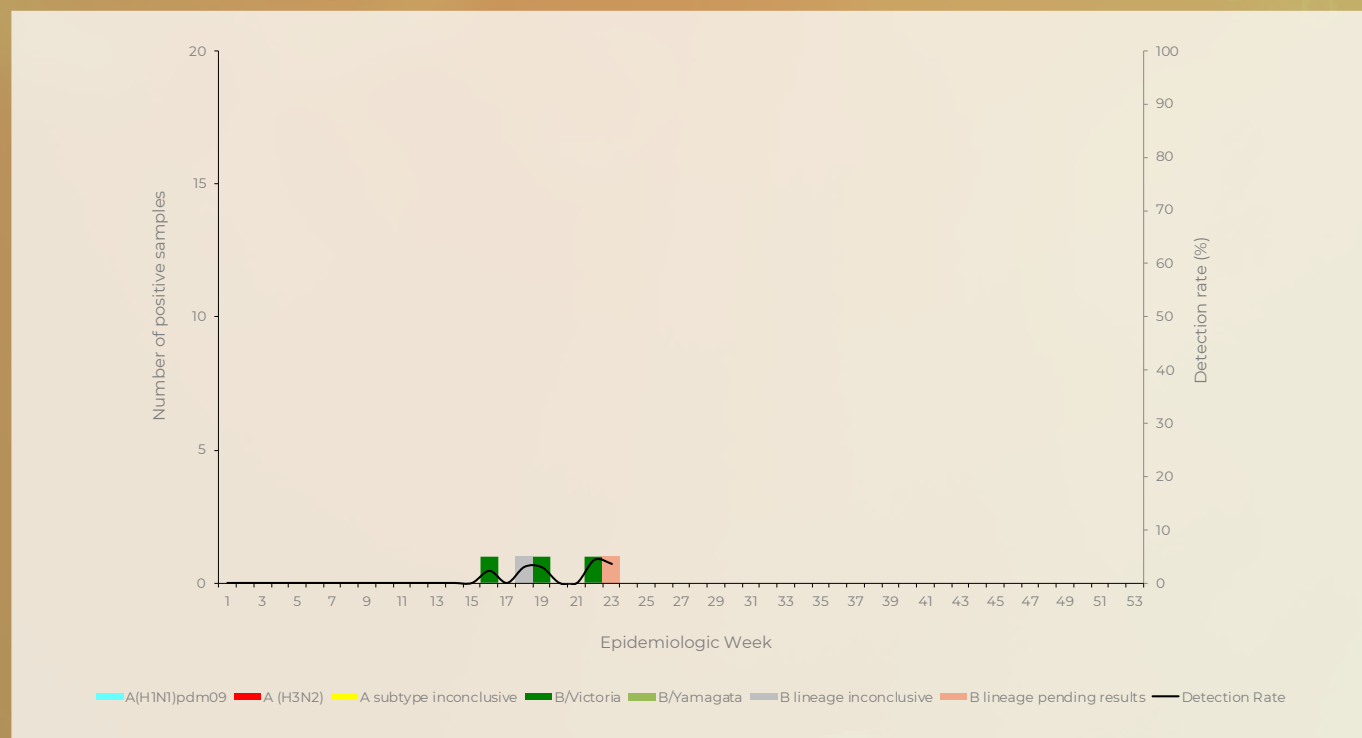
In addition, SARS-CoV-2 was detected in 87 of 610 (14%) specimens from patients who met suspected SARS-CoV-2 case definition but did not meet the pneumonia/ILI surveillance case definitions.

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

WEEK 23 2021

REPORTING PERIOD 4 JANUARY 2021 TO 13 JUNE 2021

## 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 five of 339 (1.5%), of which four were influenza B(Victoria) and one influenza B(lineage pending 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                            | 112           |
| Eastridge (WC)        | 0             | 0        | 0                      | 0          | 0          | 0                      | 0                            | 134           |
| Edendale Gateway (KZ) | 0             | 0        | 0                      | 2          | 0          | 1                      | 0                            | 90            |
| Jouberton (NW)        | 0             | 0        | 0                      | 1          | 0          | 0                      | 1                            | 322           |
| Mitchell's Plain (WC) | 0             | 0        | 0                      | 0          | 0          | 0                      | 0                            | 88            |
| <b>Total:</b>         | <b>0</b>      | <b>0</b> | <b>0</b>               | <b>3</b>   | <b>0</b>   | <b>1</b>               | <b>1</b>                     | <b>746</b>    |

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 five of 339 (1.5%), of which four were influenza B(Victoria) and one influenza B(lineage pending 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 table.

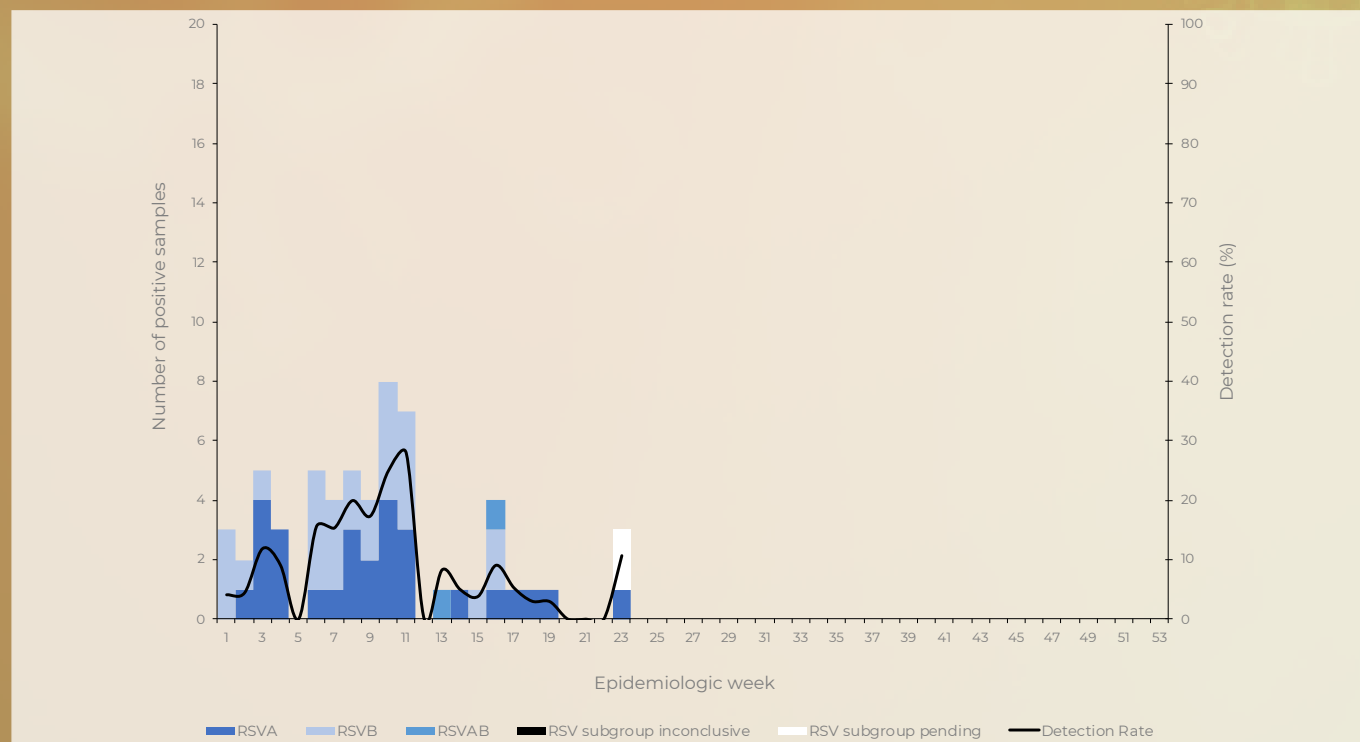
\*\*\*influenza B lineage results are pending

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

WEEK 23 2021

REPORTING PERIOD 4 JANUARY 2021 TO 13 JUNE 2021

## 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 339 (4%) 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                     | 112           |
| Eastridge (WC)        | 12        | 0         | 1        | 0                         | 2                     | 134           |
| Edendale Gateway (KZ) | 1         | 5         | 0        | 0                         | 0                     | 90            |
| Jouberton (NW)        | 2         | 15        | 0        | 0                         | 0                     | 322           |
| Mitchell's Plain (WC) | 2         | 0         | 0        | 0                         | 0                     | 88            |
| <b>Total</b>          | <b>28</b> | <b>27</b> | <b>2</b> | <b>0</b>                  | <b>2</b>              | <b>746</b>    |

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

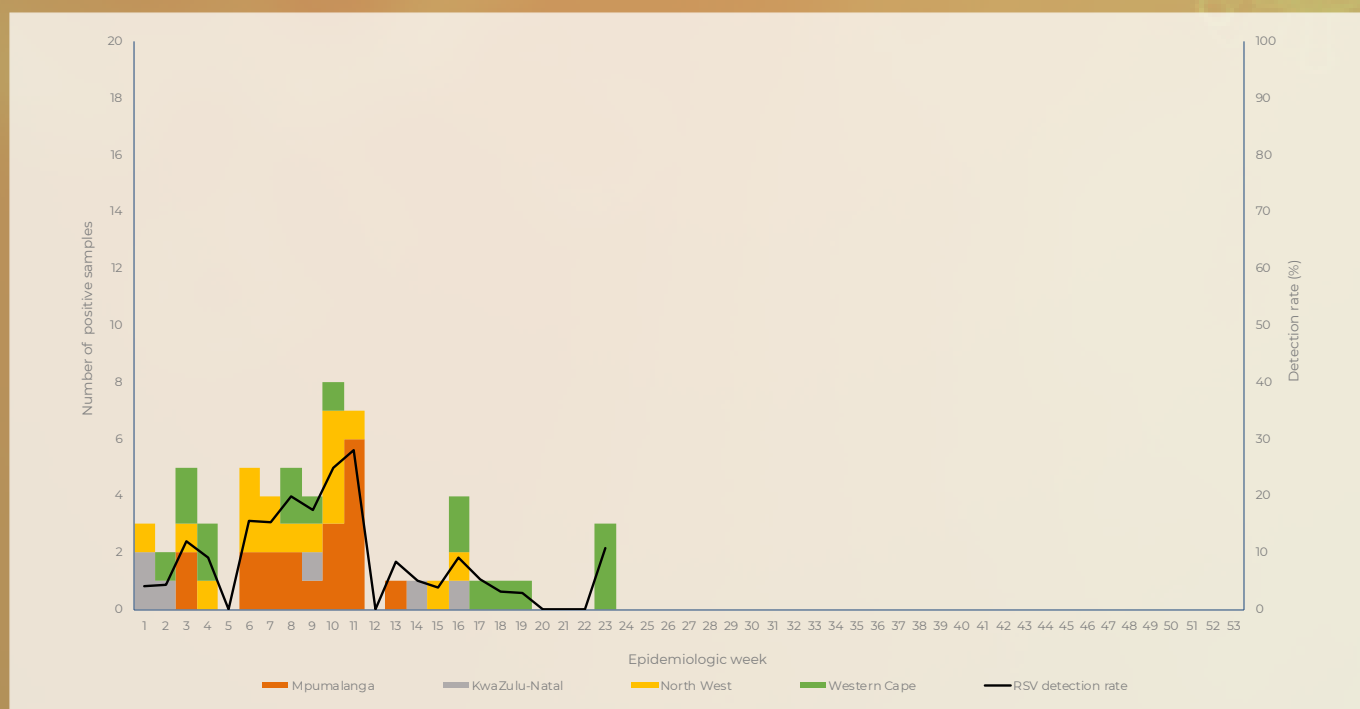
\*\*RSV was detected from 15 of 339 (4%) specimens from patients who met suspected SARS-CoV-2 case definition but did not meet influenza-like illness (ILI) case definition. These are not included in the table.

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

WEEK 23 2021

REPORTING PERIOD 4 JANUARY 2021 TO 13 JUNE 2021

## 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

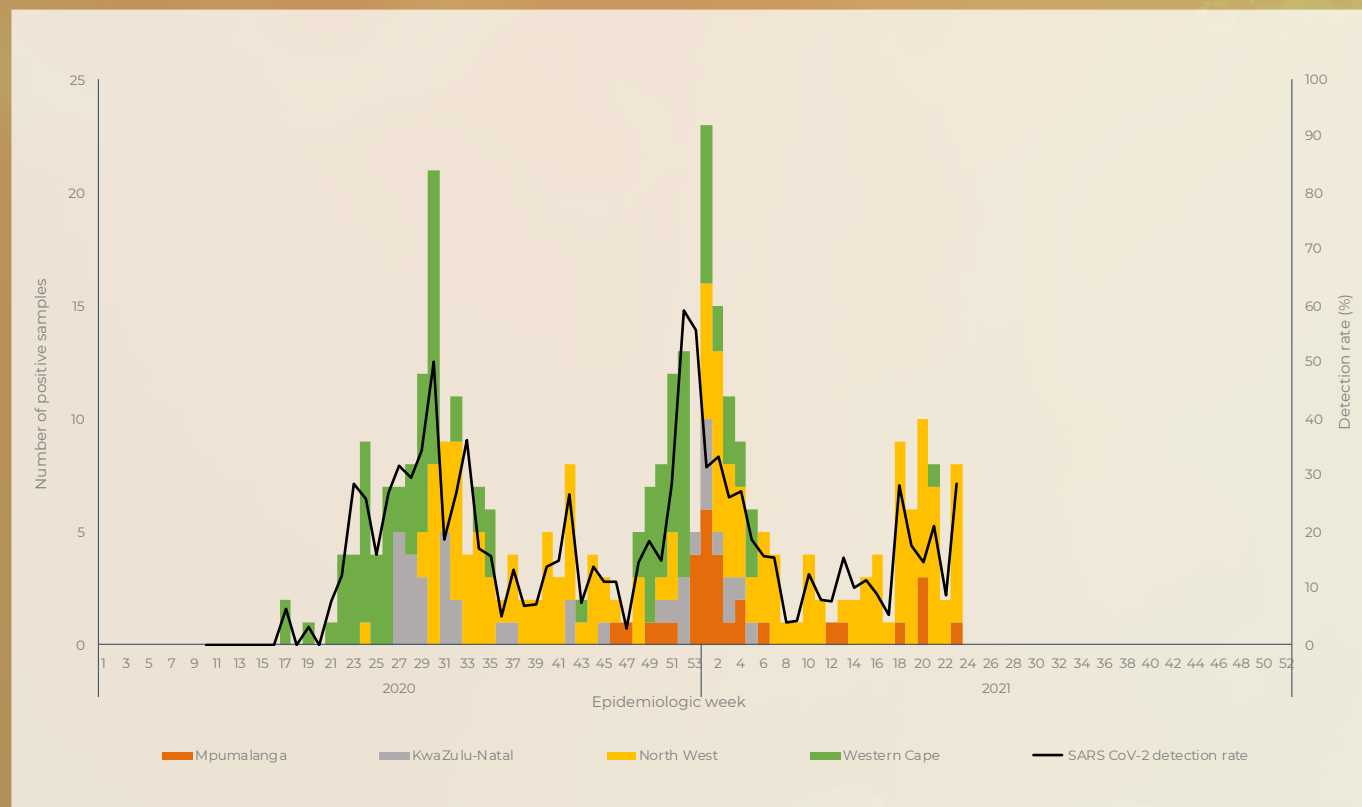
\*RSV was detected from 15 of 339 (4%) specimens from patients who met suspected SARS-CoV-2 case definition but did not meet influenza-like illness (ILI) case definition. These are not included in the epidemiological curve.

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

WEEK 23 2021

REPORTING PERIOD 2 MARCH 2020 TO 13 JUNE 2021

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



**Figure 4.** Number of samples testing positive for SARS-CoV-2\*<sup>p</sup> by province and detection rate by week

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

<sup>p</sup>SARS-CoV-2 was detected in 66 of 469 (14%) 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)        | 30                  | 142                  |
| Eastridge (WC)        | 47                  | 622                  |
| Edendale Gateway (KZ) | 39                  | 231                  |
| Jouberton (NW)        | 160                 | 645                  |
| Mitchell's Plain (WC) | 66                  | 417                  |
| <b>Total:</b>         | <b>342</b>          | <b>2 057</b>         |

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

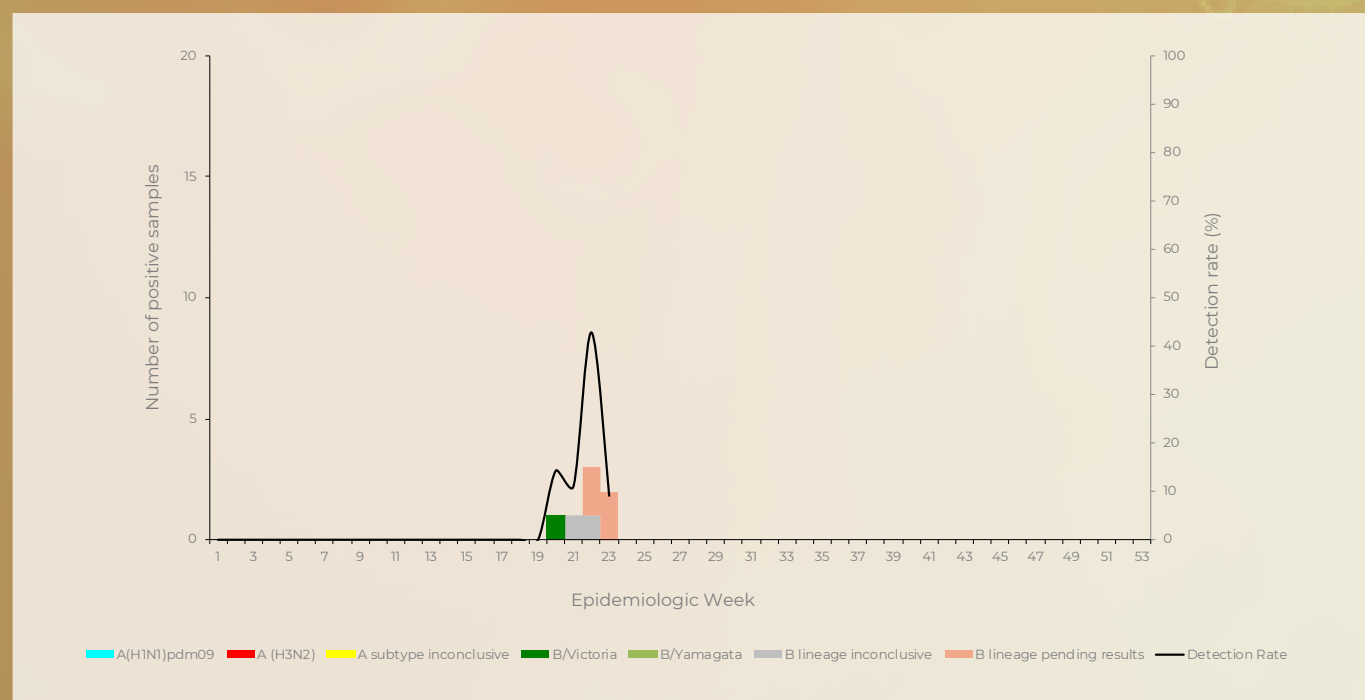
\*\*SARS-CoV-2 was detected in 66 of 469 (14%) specimens from patients who met suspected SARS-CoV-2 case definition but did not meet influenza-like illness (ILI) case definition. These are not included in the table.

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

WEEK 23 2021

REPORTING PERIOD 4 JANUARY 2021 TO 13 JUNE 2021

## 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                      | 0          | 0          | 0                      | 1                          | 1             |
| Free State    | 0             | 0        | 0                      | 0          | 0          | 0                      | 0                          | 0             |
| Gauteng       | 0             | 0        | 0                      | 1          | 0          | 2                      | 3                          | 80            |
| Limpopo       | 0             | 0        | 0                      | 0          | 0          | 0                      | 0                          | 0             |
| Mpumalanga    | 0             | 0        | 0                      | 0          | 0          | 0                      | 0                          | 1             |
| 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                          | 12            |
| <b>Total:</b> | <b>0</b>      | <b>0</b> | <b>0</b>               | <b>1</b>   | <b>0</b>   | <b>2</b>               | <b>4</b>                   | <b>96</b>     |

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.



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

WEEK 23 2021

REPORTING PERIOD 4 JANUARY 2021 TO 13 JUNE 2021

## INFLUENZA-LIKE ILLNESS (ILI) SURVEILLANCE VIRAL WATCH



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

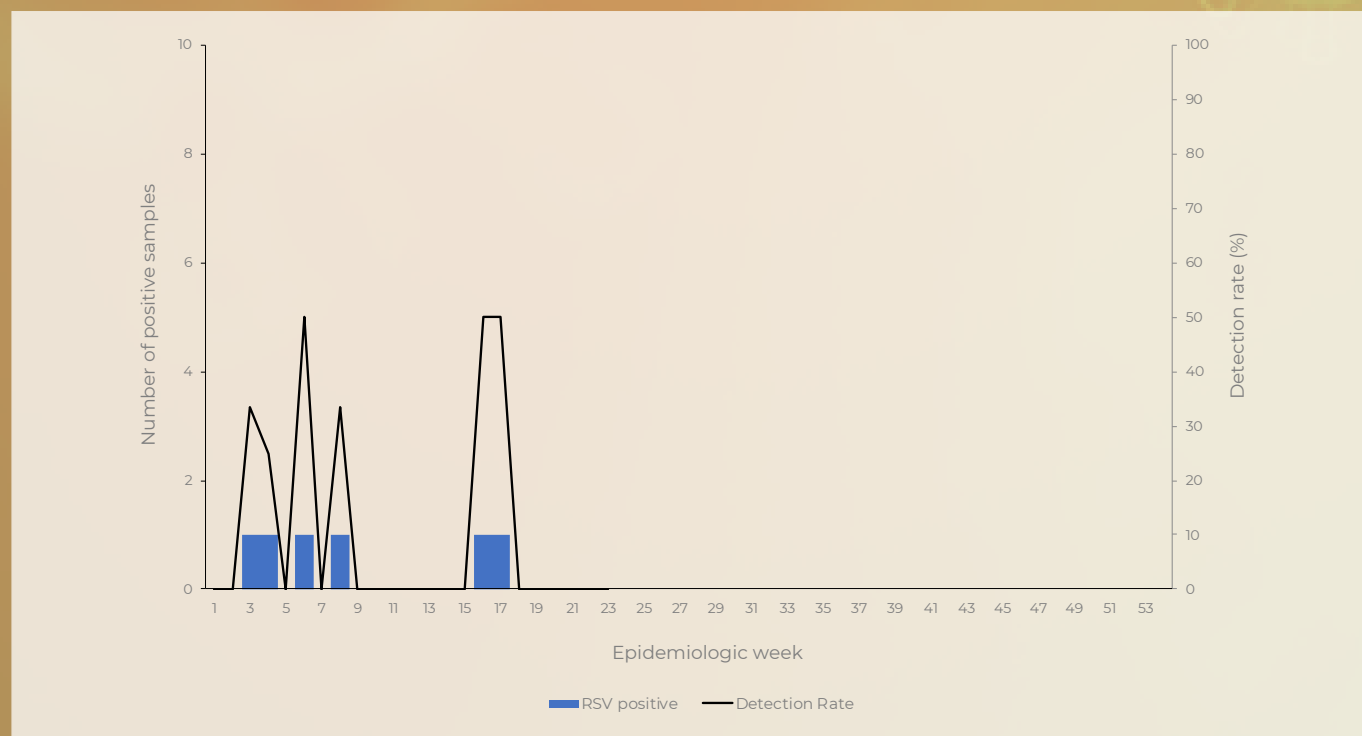
\*Thresholds based on 2010-2019 data

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

WEEK 23 2021

REPORTING PERIOD 4 JANUARY 2021 TO 13 JUNE 2021

## 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

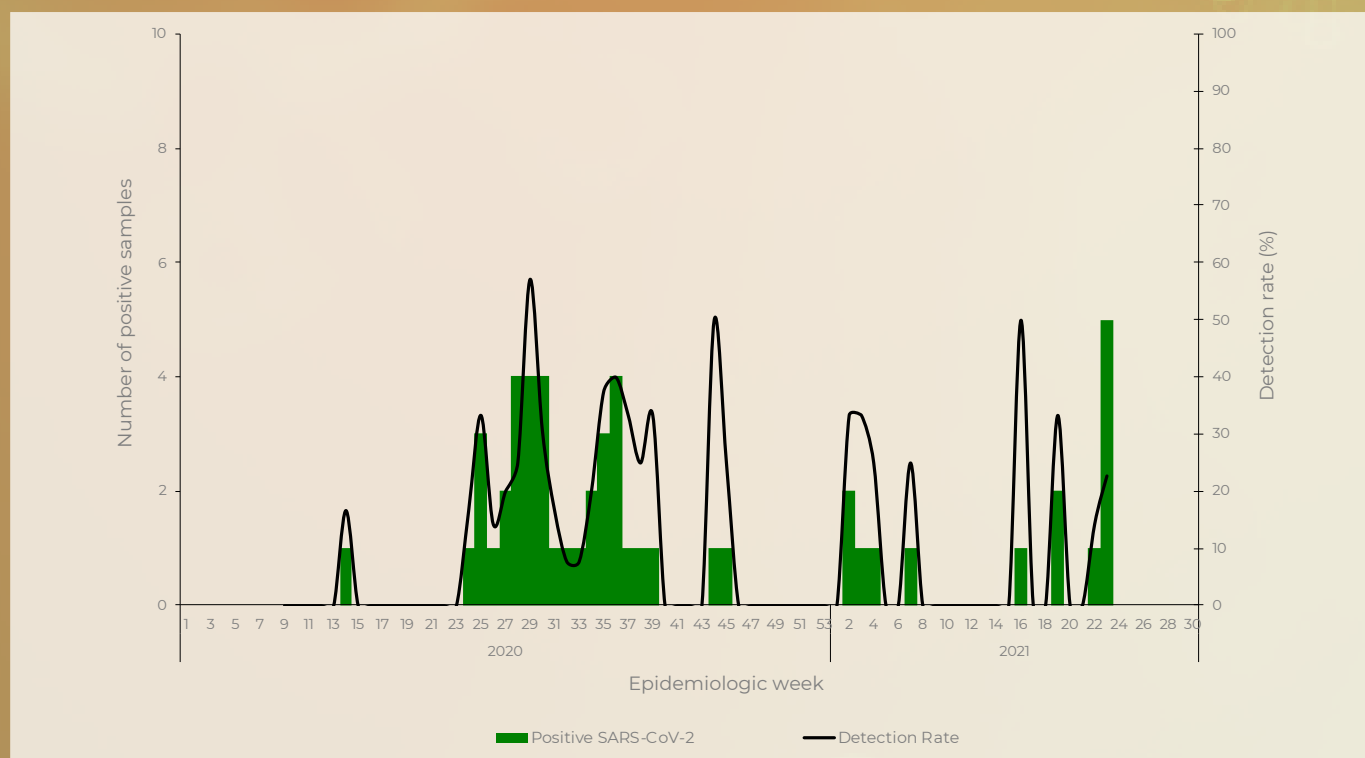
| Province      | RSV positive | Total samples tested |
|---------------|--------------|----------------------|
| Eastern Cape  | 0            | 1                    |
| Free State    | 0            | 0                    |
| Gauteng       | 4            | 80                   |
| Limpopo       | 0            | 0                    |
| Mpumalanga    | 0            | 1                    |
| North West    | 0            | 2                    |
| Northern Cape | 0            | 0                    |
| Western Cape  | 2            | 12                   |
| <b>Total:</b> | <b>6</b>     | <b>96</b>            |

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

WEEK 23 2021

REPORTING PERIOD 2 MARCH 2020 TO 13 JUNE 2021

## 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

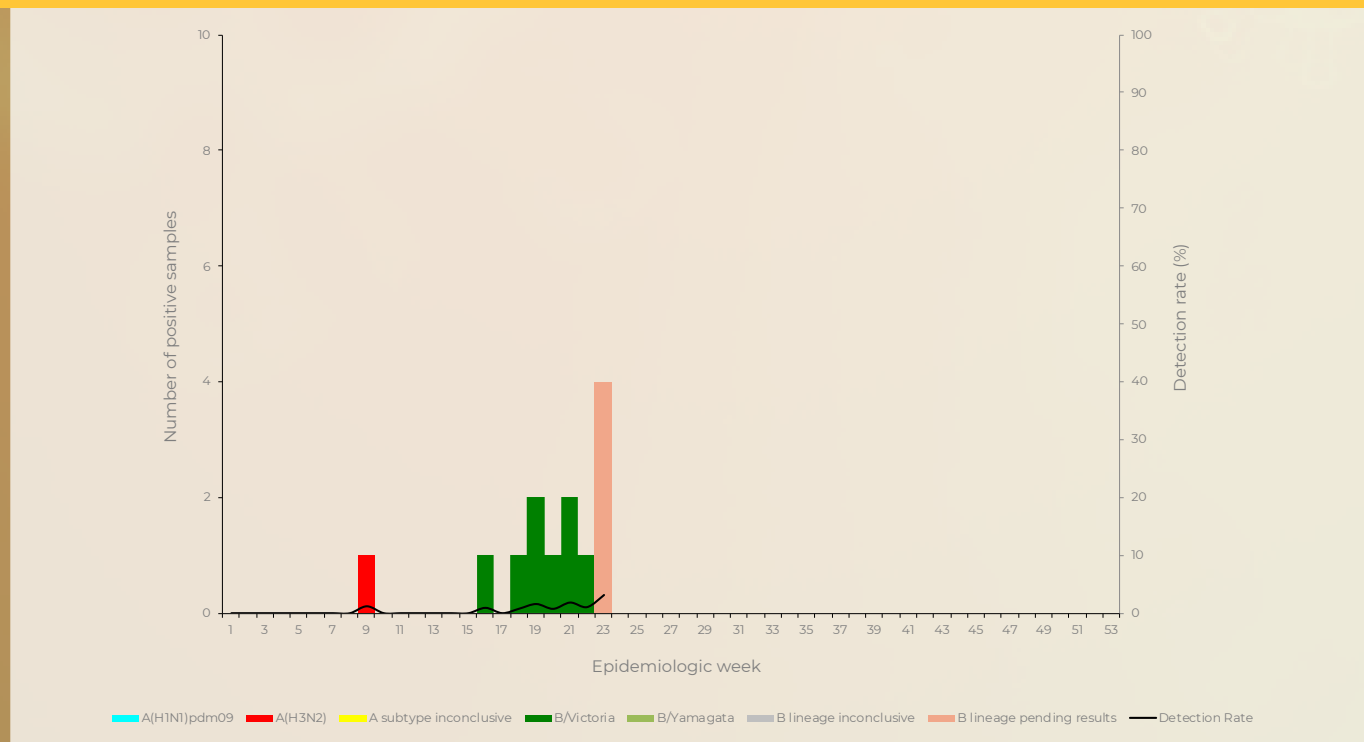
| Hospital (Province) | SARS-CoV-2 positive | Total samples |
|---------------------|---------------------|---------------|
| Eastern Cape        | 1                   | 5             |
| Free State          | 1                   | 14            |
| Gauteng             | 38                  | 240           |
| Limpopo             | 0                   | 2             |
| Mpumalanga          | 1                   | 6             |
| North West          | 0                   | 2             |
| Northern Cape       | 0                   | 2             |
| Western Cape        | 10                  | 104           |
| <b>Total:</b>       | <b>51</b>           | <b>375</b>    |

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

WEEK 23 2021

REPORTING PERIOD 4 JANUARY 2021 TO 13 JUNE 2021

## 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 B(Victoria) was detected from one of 79 (1.3%) 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.

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

| Province                          | A(H1N1)<br>pdm09 | A(H3N2)  | A subtype<br>inconclusive | B/<br>Victoria | B/<br>Yamagata | B lineage<br>inconclusive | B lineage<br>pending<br>results*** | Total<br>samples |
|-----------------------------------|------------------|----------|---------------------------|----------------|----------------|---------------------------|------------------------------------|------------------|
| Edendale (KZ)                     | 0                | 0        | 0                         | 3              | 0              | 0                         | 1                                  | 312              |
| Helen Joseph-Rahima<br>Moosa (GP) | 0                | 0        | 0                         | 5              | 0              | 0                         | 2                                  | 660              |
| Klerksdorp-Tshepong<br>(NW)       | 0                | 0        | 0                         | 0              | 0              | 0                         | 1                                  | 362              |
| Mapulaneng-<br>Matikwana (MP)     | 0                | 0        | 0                         | 0              | 0              | 0                         | 0                                  | 293              |
| Red Cross (WC)                    | 0                | 0        | 0                         | 0              | 0              | 0                         | 0                                  | 347              |
| Mitchell's Plain (WC)             | 0                | 1        | 0                         | 0              | 0              | 0                         | 0                                  | 277              |
| Tintswalo (MP)                    | 0                | 0        | 0                         | 0              | 0              | 0                         | 0                                  | 91               |
| <b>Total:</b>                     | <b>0</b>         | <b>1</b> | <b>0</b>                  | <b>8</b>       | <b>0</b>       | <b>0</b>                  | <b>4</b>                           | <b>2 342</b>     |

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 B(Victoria) was detected from one of 79 (1.3%) 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.

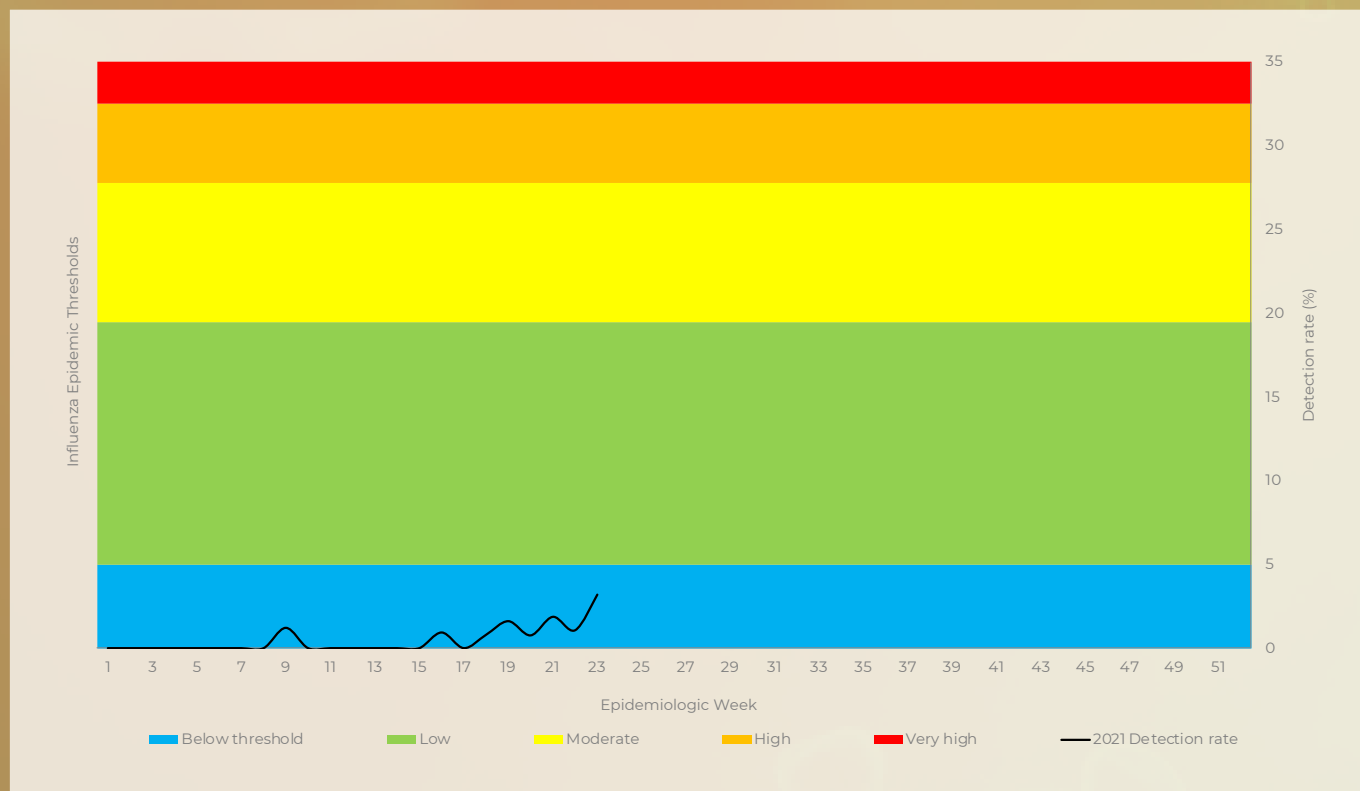
\*\*\*influenza B lineage results are pending

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

WEEK 23 2021

REPORTING PERIOD 4 JANUARY 2021 TO 13 JUNE 2021

## NATIONAL SYNDROMIC SURVEILLANCE FOR PNEUMONIA



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

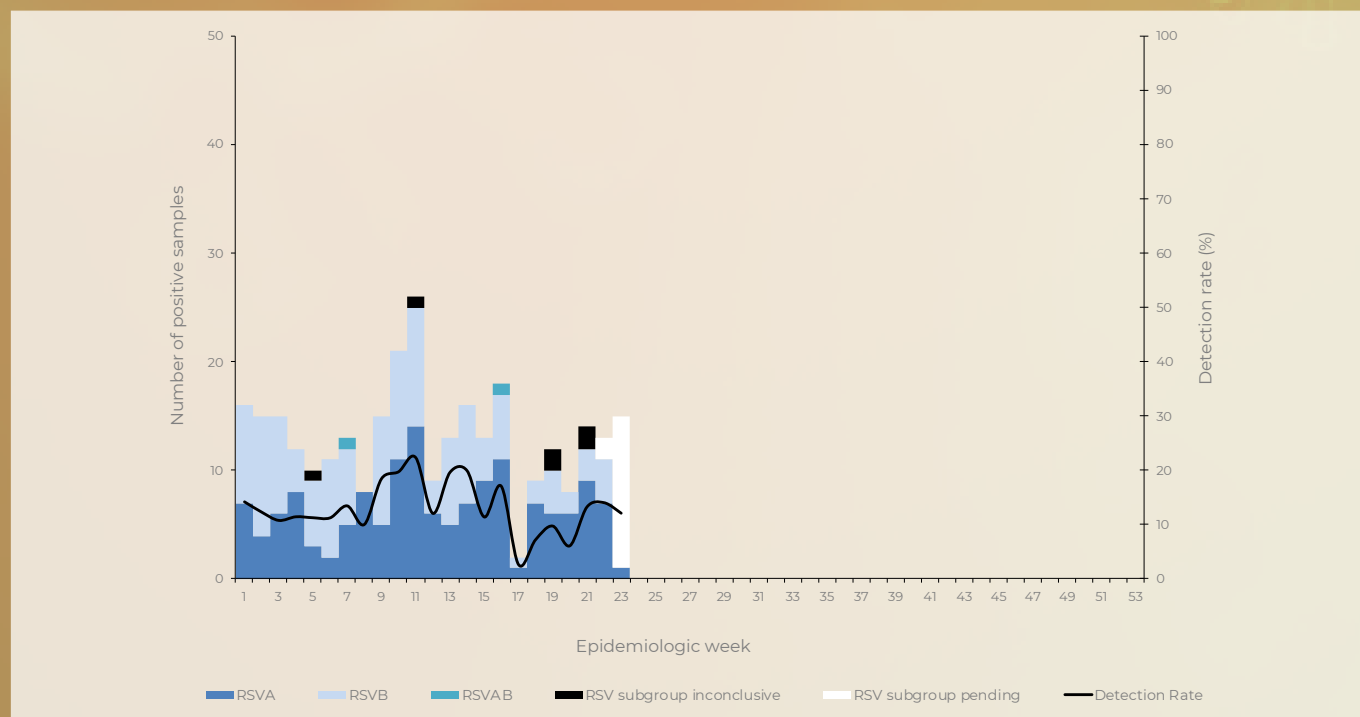
\*Thresholds based on 2010-2019 data

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

WEEK 23 2021

REPORTING PERIOD 4 JANUARY 2021 TO 13 JUNE 2021

## 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 five of 79 (6%) 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          | 25         | 0        | 0                         | 0                     | 312           |
| Helen Joseph-Rahima Moosa (GP) | 34         | 40         | 0        | 0                         | 1                     | 660           |
| Klerksdorp-Tshepong (NW)       | 8          | 40         | 0        | 2                         | 1                     | 362           |
| Mapulaneng-Matikwana (MP)      | 20         | 7          | 1        | 0                         | 0                     | 293           |
| Red Cross (WC)                 | 54         | 14         | 0        | 3                         | 7                     | 347           |
| Mitchell's Plain (WC)          | 17         | 3          | 1        | 1                         | 7                     | 277           |
| Tintswalo (MP)                 | 10         | 3          | 0        | 0                         | 0                     | 91            |
| <b>Total:</b>                  | <b>148</b> | <b>132</b> | <b>2</b> | <b>6</b>                  | <b>16</b>             | <b>2 342</b>  |

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

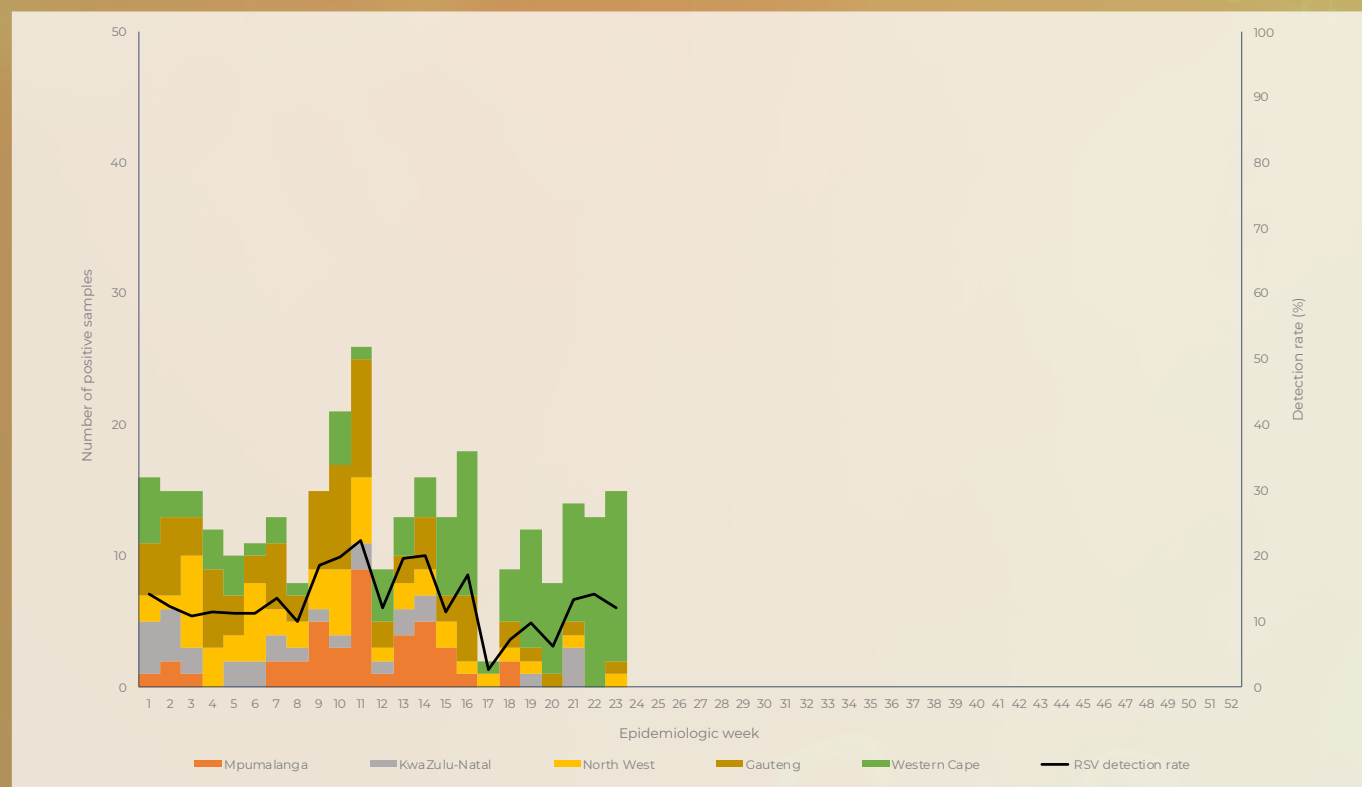
\*\*RSV was detected in five of 78 (6.4%) specimens from patients who met suspected SARS-CoV-2 case definition but did not meet pneumonia (SRI) case definition. These are not included in the table.

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

WEEK 23 2021

REPORTING PERIOD 4 JANUARY 2021 TO 13 JUNE 2021

## NATIONAL SYNDROMIC SURVEILLANCE FOR PNEUMONIA



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

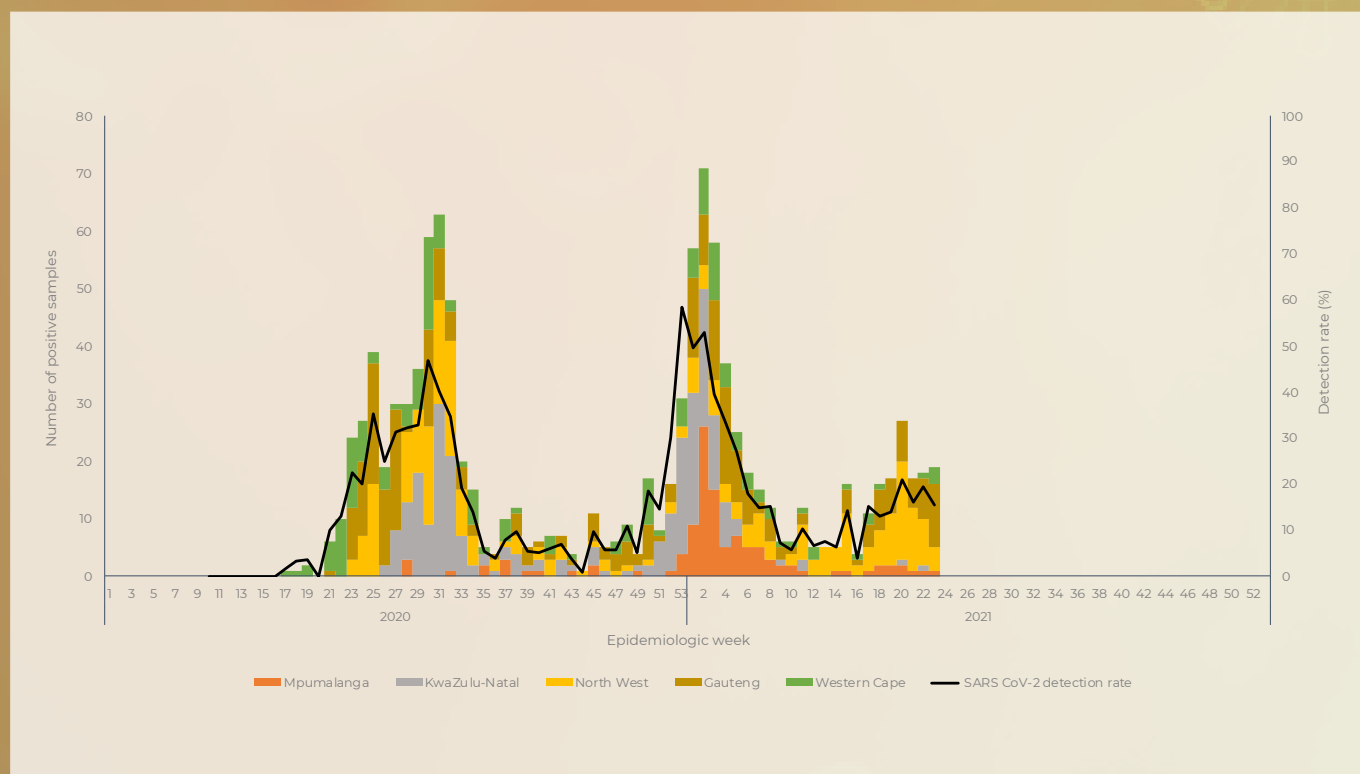
\*RSV was detected in five of 79 (6%) specimens from patients who met suspected SARS-CoV-2 case definition but did not meet pneumonia (SRI) case definition. These are not included in the epidemiological curve.

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

WEEK 23 2021

REPORTING PERIOD 2 MARCH 2020 TO 13 JUNE 2021

## 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 21 of 141 (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)                  | 242                 | 1 133                |
| Helen Joseph-Rahima Moosa (GP) | 287                 | 1 499                |
| Klerksdorp-Tshepong (NW)       | 267                 | 955                  |
| Mapulaneng-Matikwana (MP)      | 99                  | 595                  |
| Red Cross (WC)                 | 43                  | 1 303                |
| Mitchell's Plain (WC)          | 124                 | 744                  |
| Tintswalo (MP)                 | 13                  | 91                   |
| <b>Total:</b>                  | <b>1 075</b>        | <b>6 320</b>         |

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 21 of 141 (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.



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

WEEK 23 2021

REPORTING PERIOD 2 MARCH 2020 TO 13 JUNE 2021

## 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 – 13 June 2021

| Characteristic      | Influenza-like illness (ILI), public-sector, n=342 (%) | Pneumonia, n=1 075 (%) |
|---------------------|--|------------------------|
| <b>Age group</b>    |  |                        |
| 0-9                 | 35/342 (10)  | 71/1075 (7)            |
| 10-19               | 25/342 (8)   | 7/1075 (1)             |
| 20-39               | 145/342 (42)   | 183/1075 (17)          |
| 40-59               | 107/342 (31)   | 394/1075 (37)          |
| 60-79               | 28/342 (8)   | 384/1075 (35)          |
| ≥80                 | 2/342 (1)  | 36/1075 (3)            |
| <b>Sex-female</b>   | 199/342 (58)   | 661/1075 (61)          |
| <b>Province*</b>    |  |                        |
| Gauteng             | N/A  | 287/1075 (27)          |
| KwaZulu-Natal       | 39/342 (11)  | 242/1075 (23)          |
| Mpumalanga**        | 30/342 (9)   | 112/1075 (10)          |
| North West          | 160/342 (47)   | 267/1075 (25)          |
| Western Cape        | 113/342 (33)   | 167/1075 (15)          |
| <b>Race</b>         |  |                        |
| Black               | 234/342 (70)   | 899/1073 (84)          |
| Coloured            | 93/342 (28)  | 122/1073 (11)          |
| Asian/Indian        | 1/342 (<1)   | 32/1073 (3)            |
| Other               | 7/342 (1)  | 20/1073 (2)            |
| <b>Presentation</b> |  |                        |
| Fever               | 331/342 (97)   | 574/1073 (53)          |
| Cough               | 339/342 (99)   | 1037/1073 (97)         |
| Shortness of breath | 111/342 (32)   | 855/1073 (80)          |
| Chest pain          | 144/342 (42)   | 449/1073 (42)          |
| Diarrhoea           | 34/342 (10)  | 69/1073 (6)            |

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

WEEK 23 2021

REPORTING PERIOD 2 MARCH 2020 TO 13 JUNE 2021

| Characteristic               | Influenza-like illness (ILI), public-sector, n=342 (%) | Pneumonia, n=1 075 (%) |
|------------------------------|--|------------------------|
| <b>Underlying conditions</b> |  |                        |
| Hypertension                 | 12/342 (4)   | 124/1073 (12)          |
| Cardiac                      | 0/342 (0)  | 8/1073 (1)             |
| Lung disease                 | 0/342 (0)  | 1/1073 (<1)            |
| Diabetes                     | 7/342 (2)  | 224/1073 (21)          |
| Cancer                       | 0/342 (0)  | 7/1073 (1)             |
| Tuberculosis                 | 2/342 (1)  | 29/1073 (3)            |
| HIV-infection                | 50/342 (15)  | 220/1073 (21)          |
| Other ***                    | 8/342 (2)  | 82/1073 (8)            |
| <b>Management</b>            |  |                        |
| Oxygen therapy               | 2/342 (1)  | 780/1073 (73)          |
| ICU admission                | N/A  | 26/1073 (2)            |
| Ventilation                  | N/A  | 30/1073 (3)            |
| <b>Outcome***</b>            |  |                        |
| Died                         | 0/342 (0)  | 149/1073 (14)          |

\*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 149 patients who died, one was in <20 age group, 15 in the 20-39 year age group, 43 in the 40-59 year age group, and 90 were ≥60 years; 96/149 (64%) were female. All except six were known to have underlying medical conditions.