

WEEKLY RESPIRATORY PATHOGENS SURVEILLANCE REPORT



NATIONAL INSTITUTE FOR
COMMUNICABLE DISEASES

Division of the National Health Laboratory Service

SOUTH AFRICA WEEK 38 2021

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CUMULATIVE DATA FROM



HIGHLIGHTS: WEEK 38

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

- 11 new cases of influenza from North West (n=2), Gauteng (n=8) and Mpumalanga (n=1) surveillance sites were detected in week 38. To date, 123 influenza cases have been detected from Gauteng, Western Cape, North West, Eastern Cape, Mpumalanga and KwaZulu-Natal sentinel surveillance sites. The detection rate rose above 10% for the first time in 2021. However, the influenza season has not yet started.

- From 2 March 2020 to 26 September 2021, a total of 2 862 COVID-19 cases were detected from all surveillance programmes. A sustained decline in detection rate has been noted in both pneumonia surveillance programme (from week30) and ILI programme (from week35). Of the 1 911 hospitalised COVID-19 cases reported with available data on outcome, 322 (17%) 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 detection rate rose above 10% for the first time in 2021. 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 123 influenza cases detected in surveillance sites in 2021, the majority (n=83, 67%) were influenza B/Victoria.

ILI programme: In 2021 to date, specimens from 1 382 patients meeting ILI case definition were received from 4 ILI sites. Influenza was detected in 28 (2%) patients, of which one (4%) influenza A(H1N1)pdm09, two (7%) influenza A(H3N2), one (4%) influenza A(inconclusive), 18 (64%) were influenza B(Victoria), three (11%) influenza B (lineage inconclusive) and three (11%) influenza B (pending lineage results). (Figure 1 and Table 1).

Viral Watch programme: In 2021 to date, specimens were received from 179 patients from Viral Watch sites in 5 of the 8 provinces participating in surveillance. Influenza was detected in nine (5%) 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 4 680 patients with severe respiratory illness (SRI) were received from the 6 sentinel sites. Influenza was detected in 70 (1%) patients, of which five (7%) were influenza A(H1N1)pdm09, eight (11%) influenza A(H3N2), seven (10%) influenza A (pending subtype results), 44 (63%) influenza B (Victoria), one (1%) was influenza B (lineage inconclusive) and five (7%) were influenza B (pending lineage results). (Figure 9 and Table 7).

In addition, influenza B (Victoria) was detected in 16 of 722 (2%) 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, 1 382 specimens were tested and RSV was detected in specimens of 73 (5%) patients.

Viral Watch programme: In 2021 to date, 179 specimens were tested and RSV was detected in specimens of six (3%) patients.

Pneumonia surveillance: Since the beginning of 2021, 4 680 specimens were tested and RSV was detected in specimens of 204 (8%) patients.

In addition, RSV was detected in 21 of 722 (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 2 693 patients were tested and SARS-CoV-2 was detected in 560 (21%) patients.

Viral Watch programme: From March 2020 to date, specimens were tested from 458 patients and SARS-CoV-2 was detected in 84 (18%) patients.

Pneumonia surveillance: From March 2020 to date, specimens from 8 694 patients with severe respiratory illness (SRI) were tested and SARS-CoV-2 was detected in 2 029 (23%) patients.

In addition, SARS-CoV-2 was detected in 189 of 925 (20%) 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

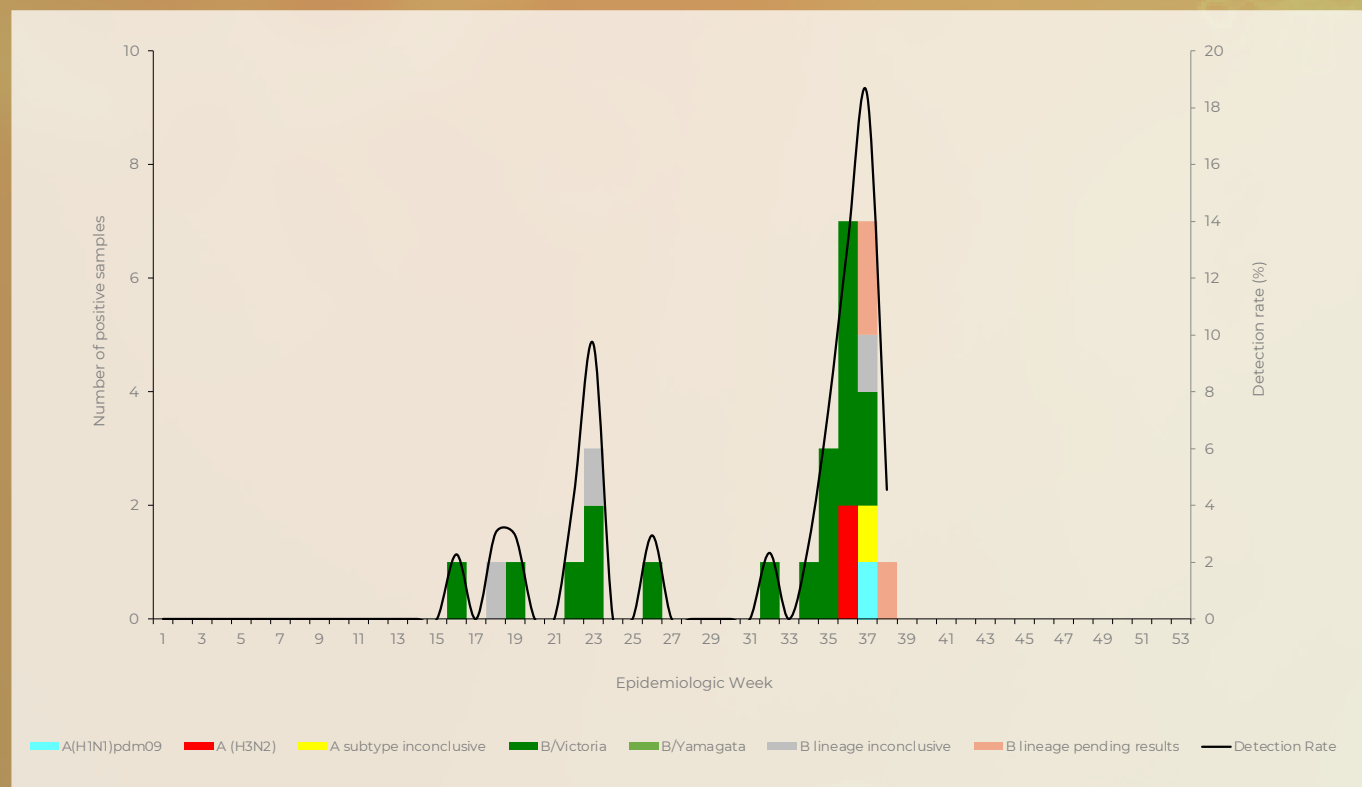


Figure 1. Number of positive samples* by influenza subtype and lineage** and detection rate*** by week

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

**Influenza was detected from 12 of 562 (2%), all were influenza B(Victoria) 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	182
Eastridge (WC)	0	2	0	5	0	0	0	211
Edendale Gateway (KZ)	0	0	0	4	0	2	0	166
Jouberton (NW)	1	0	1	9	0	1	1	662
Mitchell's Plain (WC)	0	0	0	0	0	0	2	161
Total:	1	2	1	18	0	3	3	1 382

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

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

**Influenza B Victoria was detected from 12 of 562 (2%) 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

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

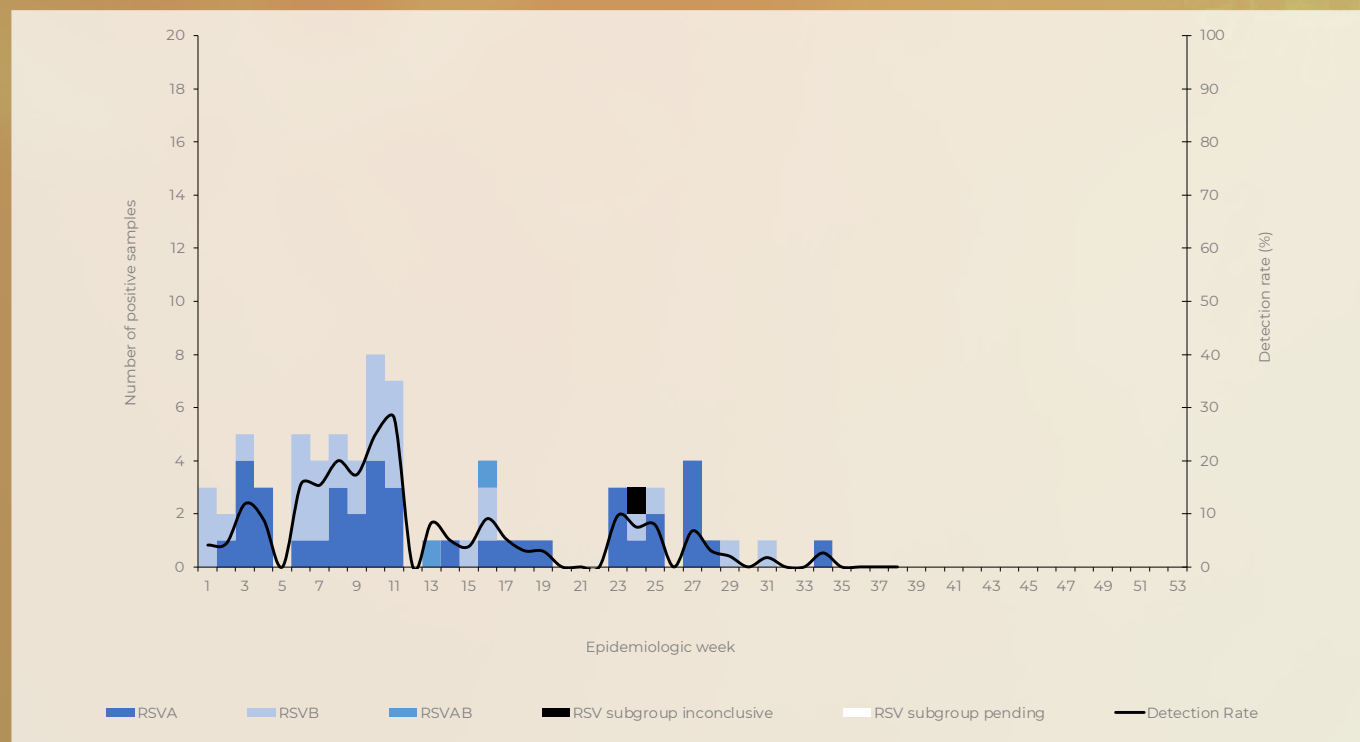


Figure 2. Number of samples testing positive for respiratory syncytial virus** by subgroup and detection rate by week

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 562 (3%) 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	182
Eastridge (WC)	23	1	1	0	0	211
Edendale Gateway (KZ)	1	6	0	0	0	166
Jouberton (NW)	2	17	0	1	0	662
Mitchell's Plain (WC)	2	0	0	0	0	161
Total	39	31	2	1	0	1 382

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 562 (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

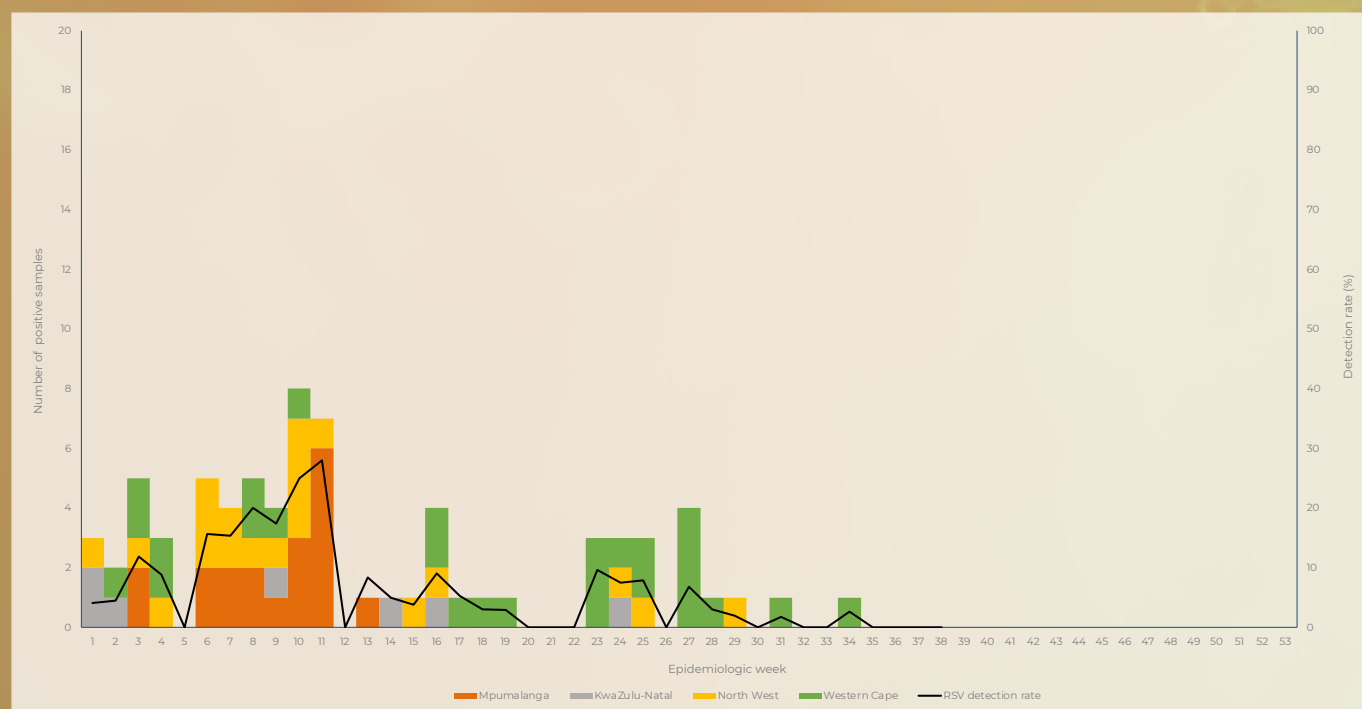


Figure 3. Number of samples testing positive for respiratory syncytial virus* by province and detection rate by week

*RSV was detected from 15 of 562 (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

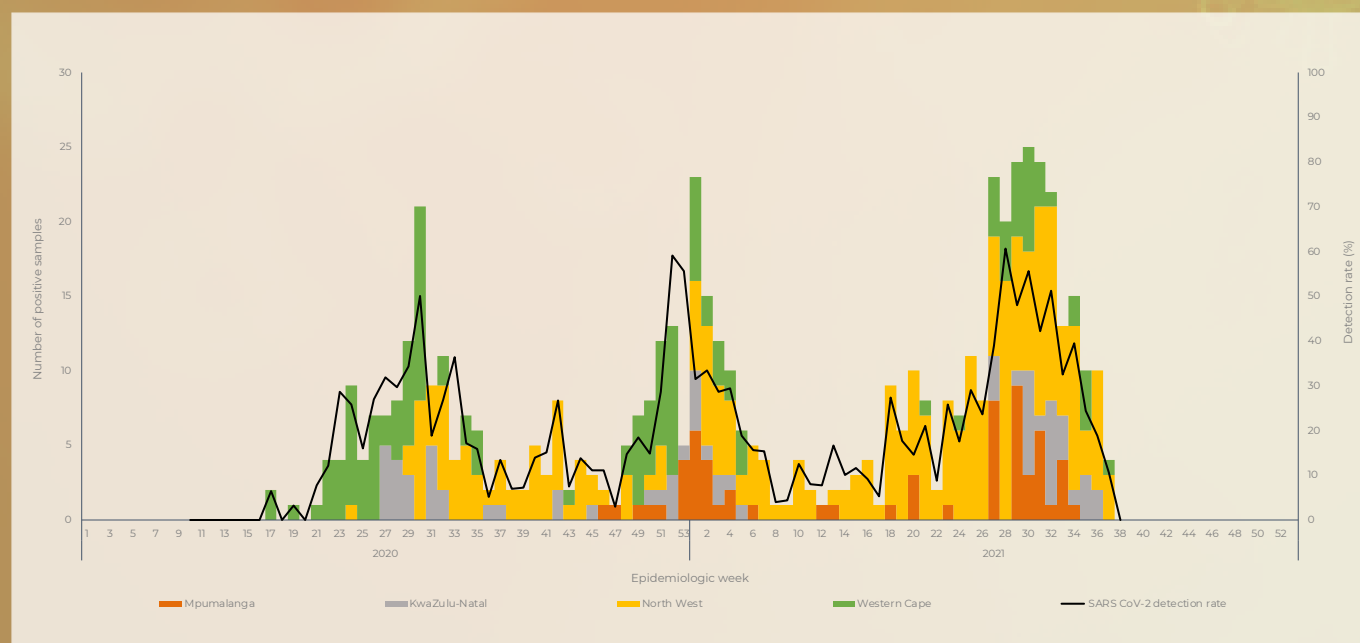


Figure 4. Number of samples testing positive for SARS-CoV-2*[§] by province and detection rate by week

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

[§]SARS-CoV-2 was detected in 148 of 694 (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)	62	212
Eastridge (WC)	59	700
Edendale Gateway (KZ)	67	309
Jouberton (NW)	286	982
Mitchell's Plain (WC)	86	490
Total:	560	2 693

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

**SARS-CoV-2 was detected in 148 of 694 (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 table.

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INFLUENZA-LIKE ILLNESS (ILI) SURVEILLANCE VIRAL WATCH

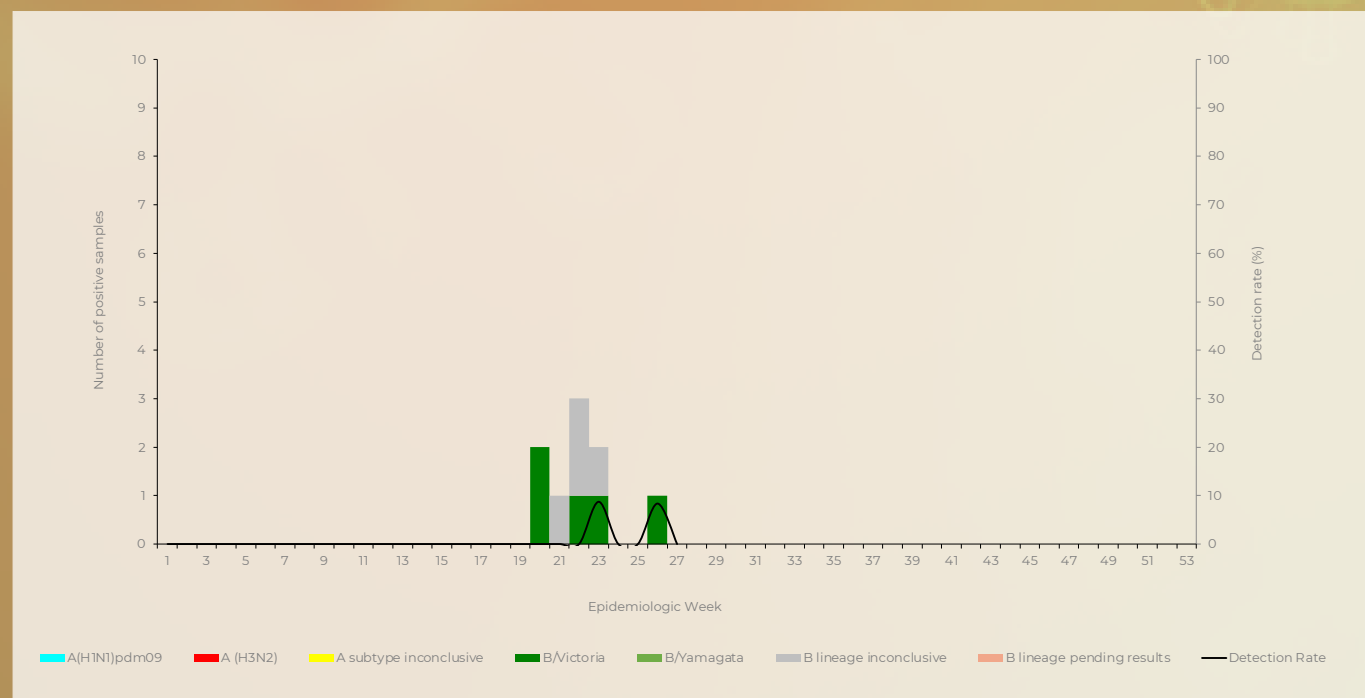


Figure 5. Number of positive samples* by influenza subtype and lineage and detection rate** by week

*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	145
Limpopo	0	0	0	0	0	0	0	0
Mpumalanga	0	0	0	0	0	0	0	3
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	28
Total:	0	0	0	5	0	4	0	179

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

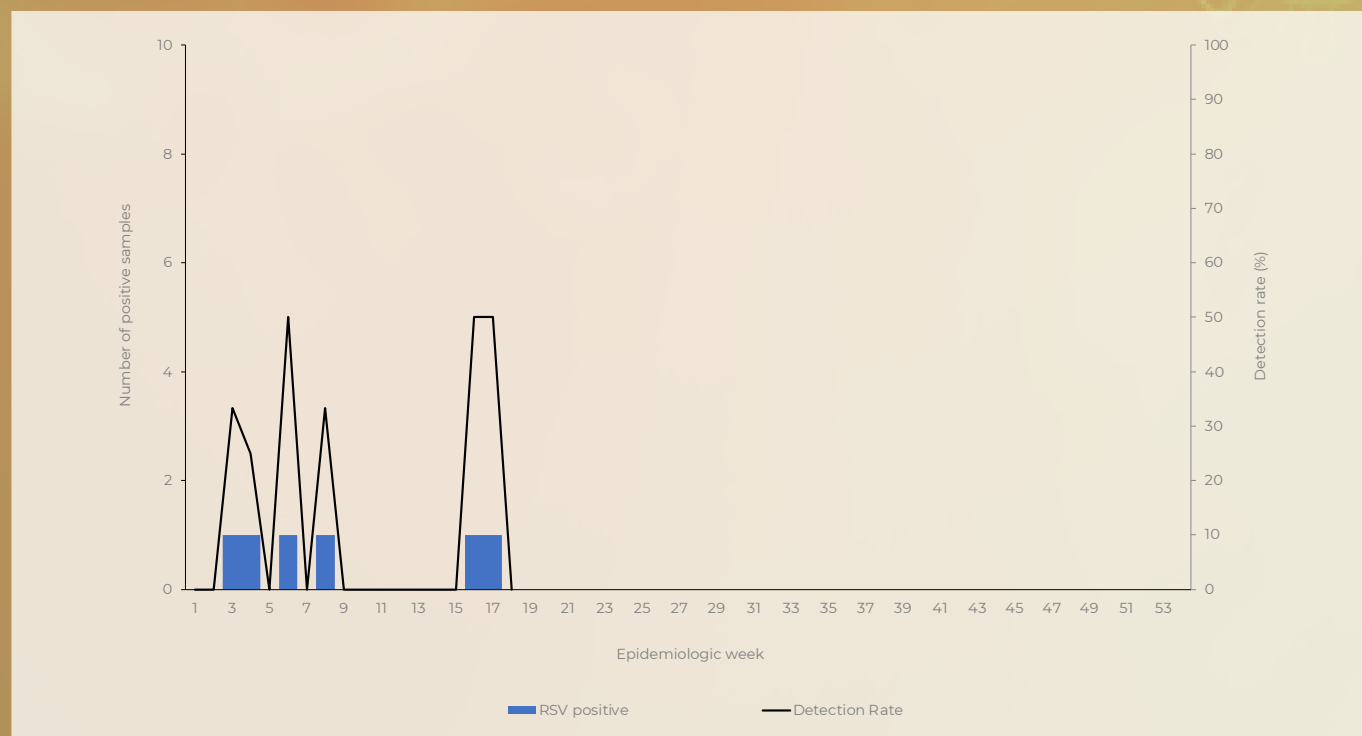


Figure 7. Number of samples testing positive for RSV*, and detection rate by week

*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	145
Limpopo	0	0
Mpumalanga	0	3
North West	0	2
Northern Cape	0	0
Western Cape	2	28
Total:	6	179

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INFLUENZA-LIKE ILLNESS (ILI) SURVEILLANCE VIRAL WATCH

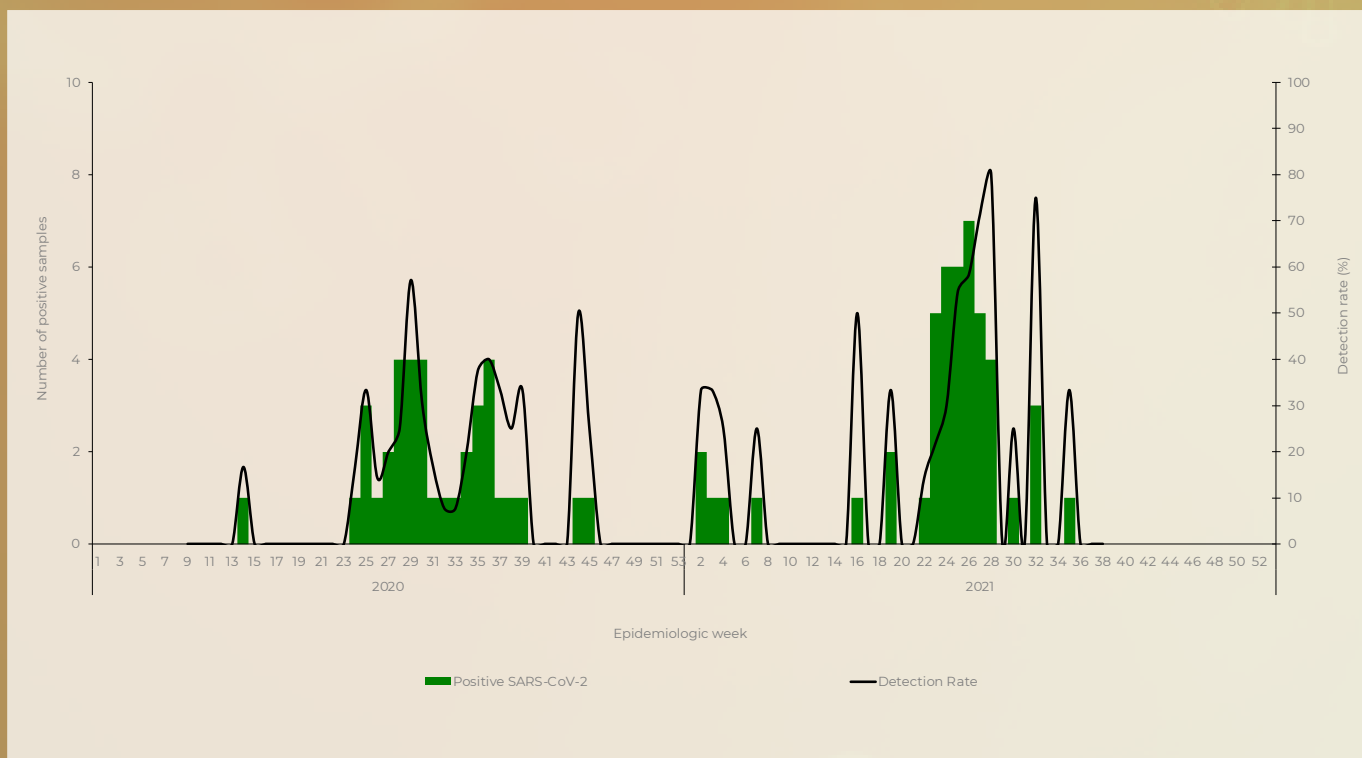


Figure 8. Number of samples testing positive for SARS-CoV-2*, and detection rate by week

*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	305
Limpopo	0	2
Mpumalanga	1	8
North West	0	2
Northern Cape	0	2
Western Cape	16	120
Total:	84	458

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NATIONAL SYNDROMIC SURVEILLANCE FOR PNEUMONIA

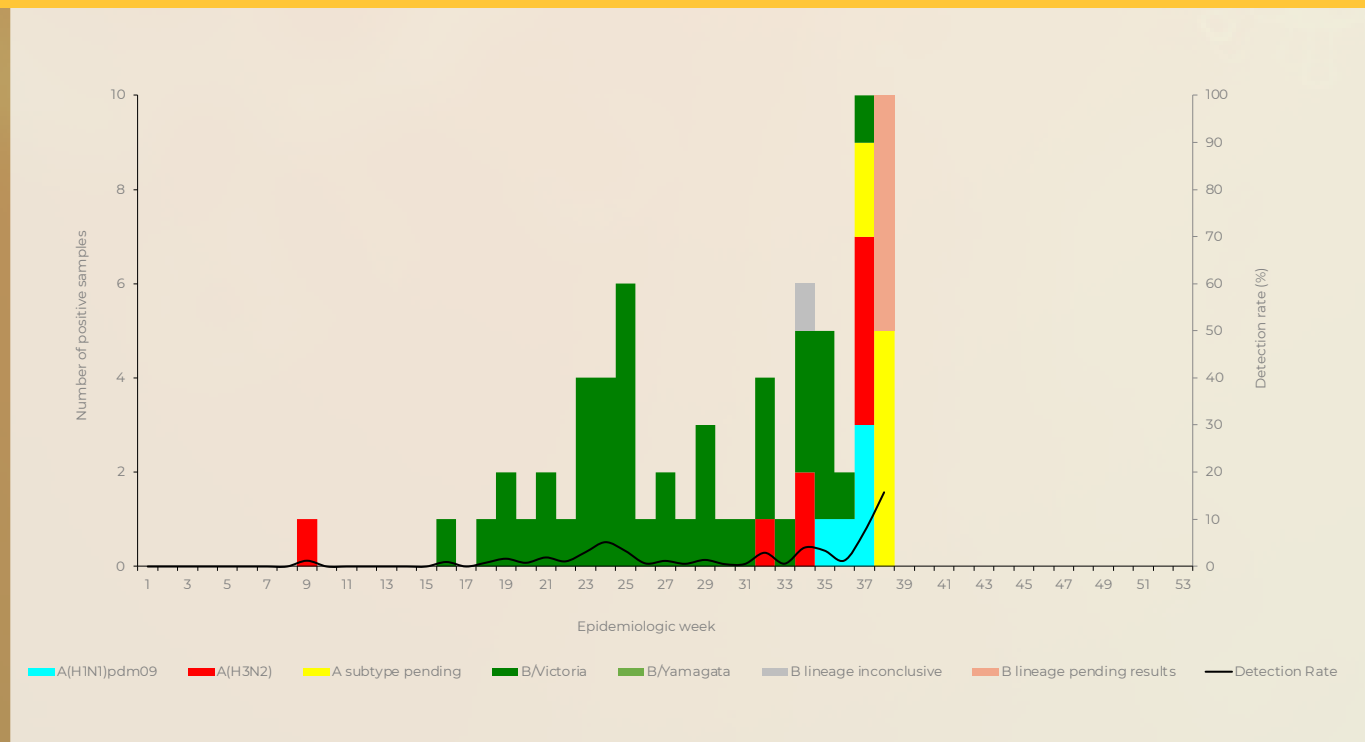


Figure 9. Number of positive samples* by influenza subtype and lineage** and detection rate*** by week

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

**Influenza B (Victoria) was detected in four (3%) of 160 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

A subtype/B lineage pending results: influenza A/B results for subtype/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 pending results***	B/ Victoria	B/ Yamagata	B lineage inconclusive	B lineage pending results***	Total samples
Edendale (KZ)	0	0	0	8	0	0	0	721
Helen Joseph-Rahima Moosa (GP)	5	6	6	17	0	1	4	1213
Klerksdorp-Tshepong (NW)	0	0	0	4	0	0	1	768
Mapulaneng-Matikwana (MP)	0	0	1	1	0	0	0	463
Red Cross (WC)	0	0	0	12	0	0	0	608
Mitchell's Plain (WC)	0	2	0	1	0	0	0	726
Tintswalo (MP)	0	0	0	1	0	0	0	181
Total:	5	8	7	44	0	1	5	4 680

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 in four (3%) of 160 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.

***A subtype/B lineage pending results: influenza A/B results for subtype/lineage are pending

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NATIONAL SYNDROMIC SURVEILLANCE FOR PNEUMONIA

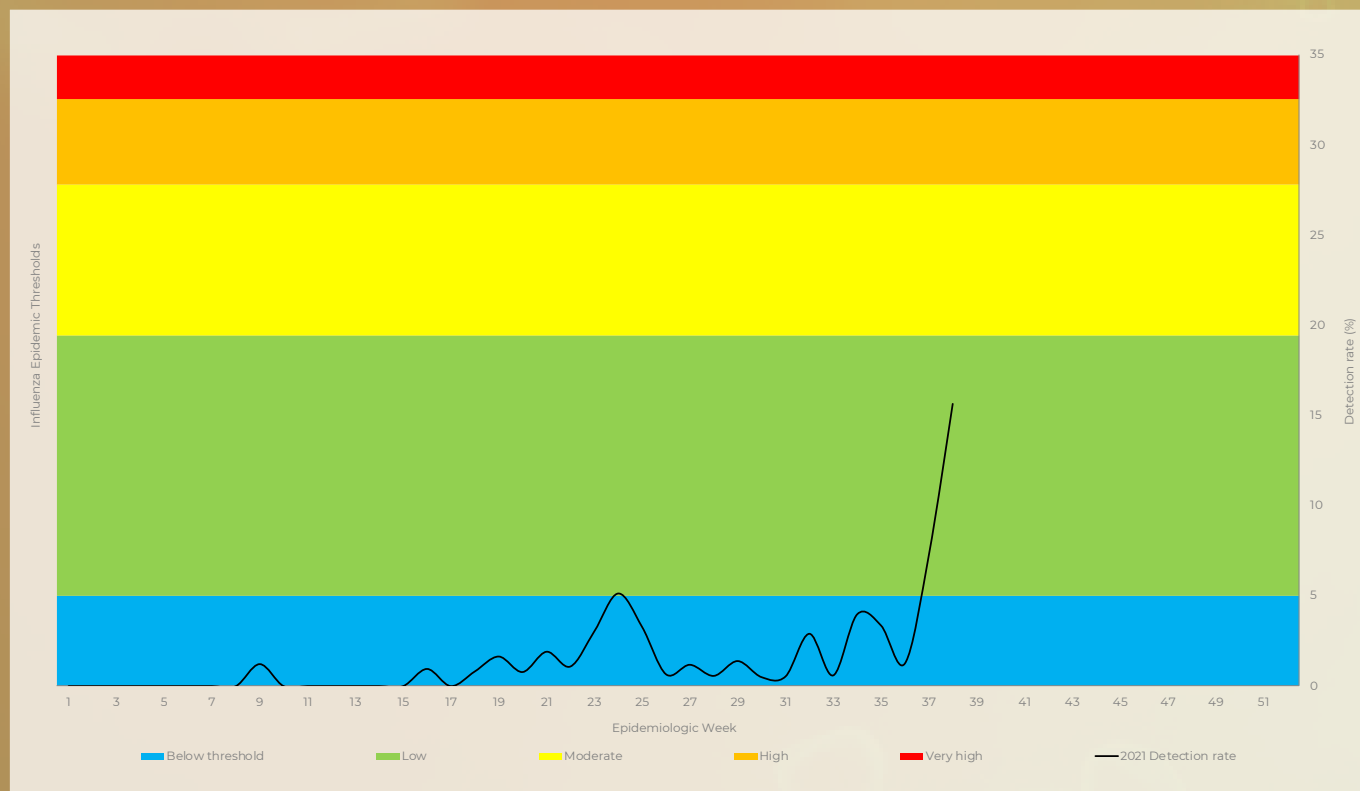


Figure 10. National syndromic surveillance for pneumonia percentage influenza detections and epidemic thresholds*

*Thresholds based on 2010-2019 data

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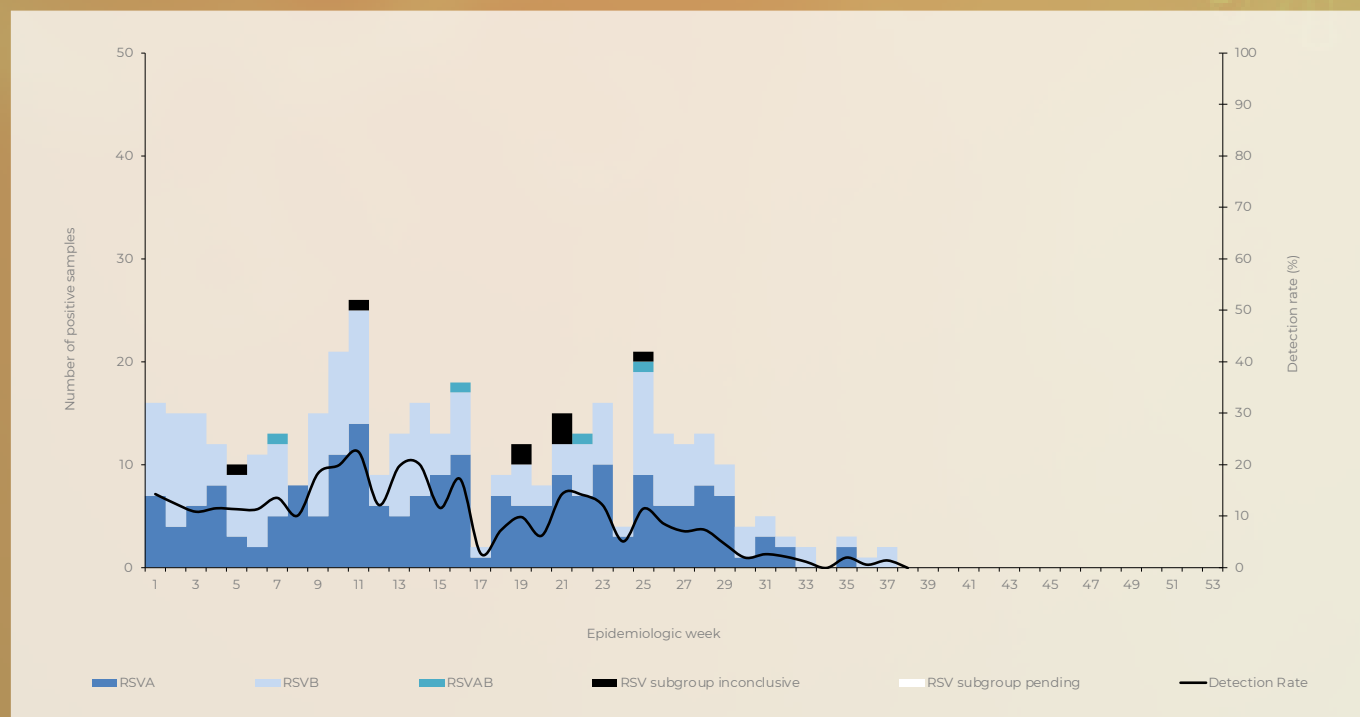


Figure 11. Number of samples testing positive for respiratory syncytial virus* by subgroup and detection rate by week

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 160 (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 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	721
Helen Joseph-Rahima Moosa (GP)	37	42	0	0	0	1213
Klerksdorp-Tshepong (NW)	8	44	0	2	0	768
Mapulaneng-Matikwana (MP)	20	7	1	0	0	463
Red Cross (WC)	84	47	2	5	0	608
Mitchell's Plain (WC)	40	11	1	1	0	726
Tintswalo (MP)	10	3	0	0	0	181
Total:	204	183	4	8	0	4 680

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 160 (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.

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NATIONAL SYNDROMIC SURVEILLANCE FOR PNEUMONIA

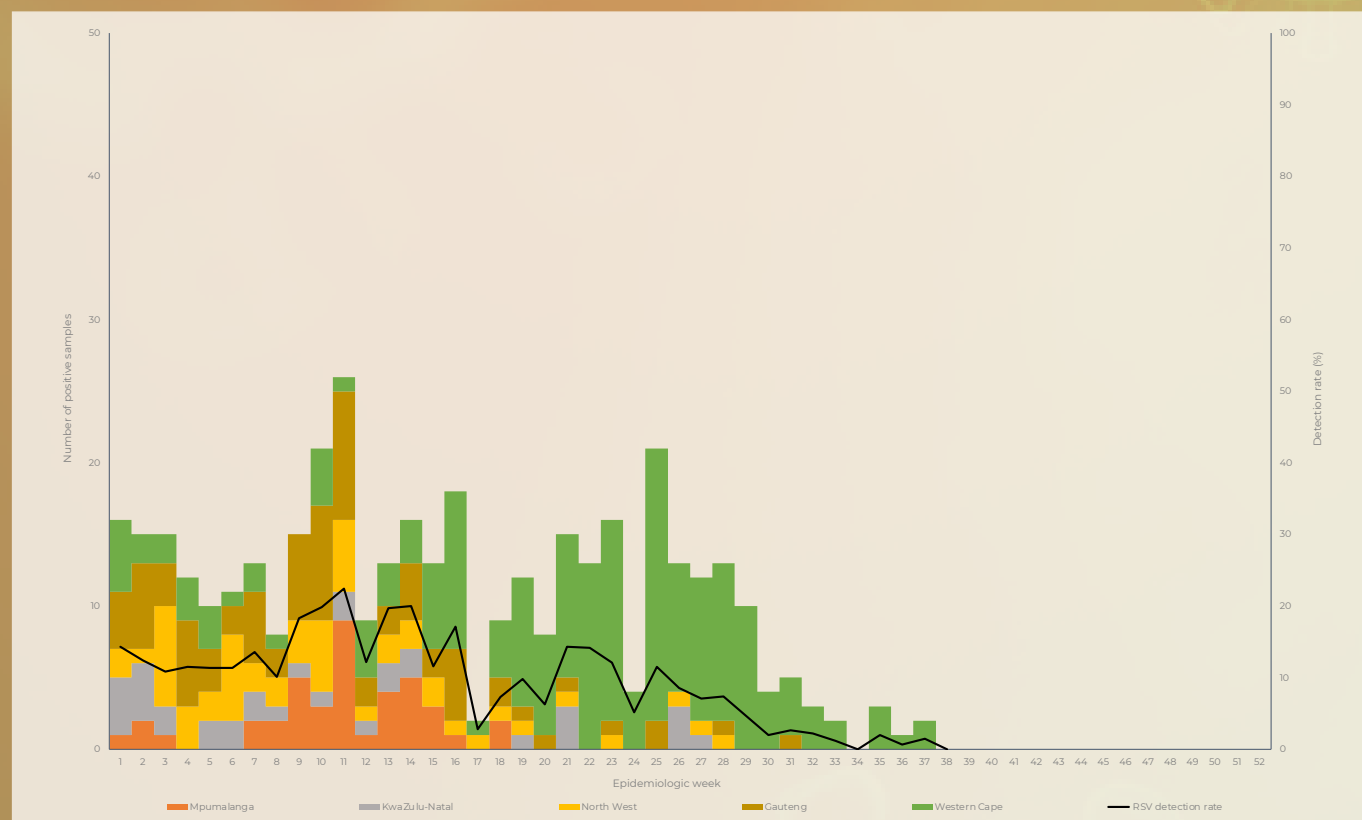


Figure 12. Number of samples testing positive for respiratory syncytial virus* by province and detection rate by week

*RSV was detected in six of 160 (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 epidemiological curve.

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NATIONAL SYNDROMIC SURVEILLANCE FOR PNEUMONIA

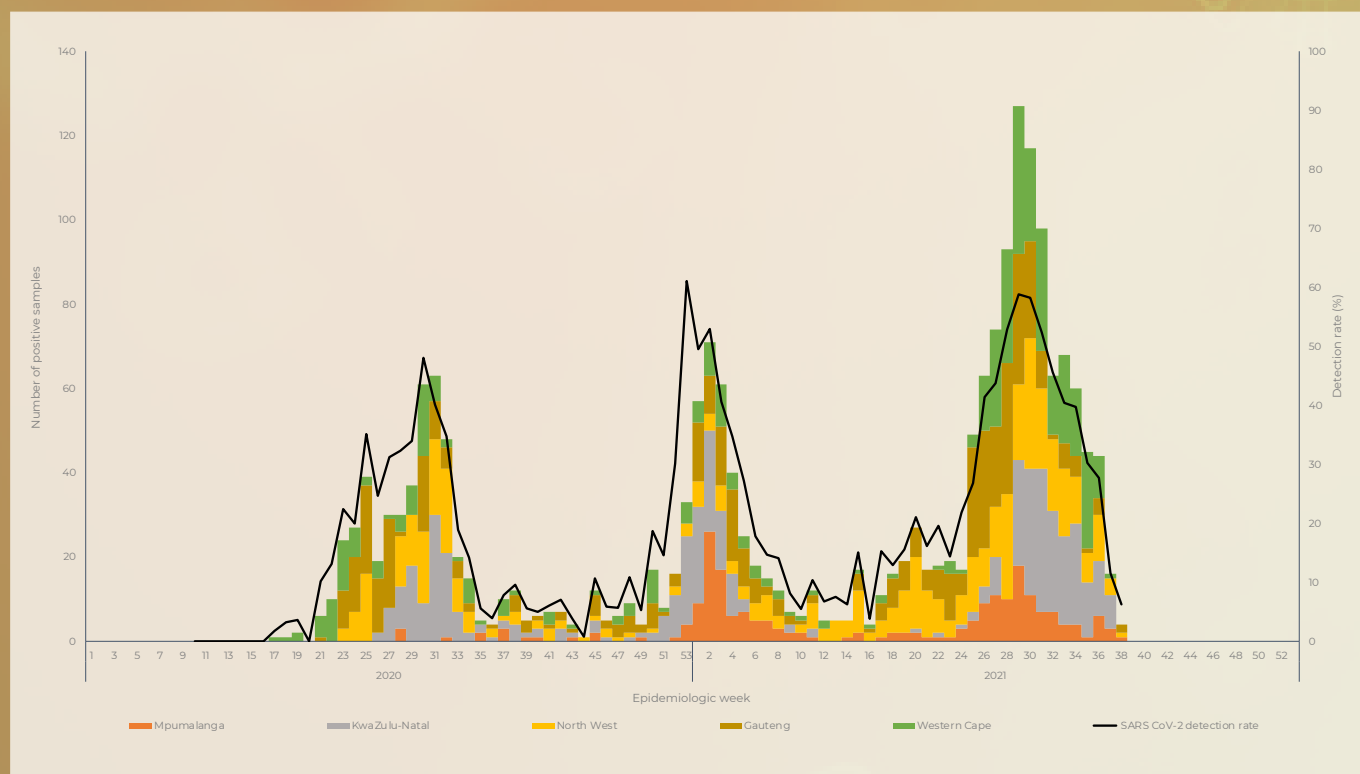


Figure 13. Number of samples testing positive for SARS-CoV-2** by province and detection rate by week

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

**SARS-CoV-2 was detected in 41 of 231 (18%) 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)	455	1 568
Helen Joseph-Rahima Moosa (GP)	480	2 055
Klerksdorp-Tshepong (NW)	471	1 365
Mapulaneng-Matikwana (MP)	165	765
Red Cross (WC)	61	1 568
Mitchell's Plain (WC)	346	1 192
Tintswalo (MP)	51	181
Total:	2 029	8 694

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 41 of 231 (18%) 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 – 26 September 2021

Characteristic	Influenza-like illness (ILI), public-sector, n=708 (%)	Pneumonia, n=2 070 (%)
Age group		
0-9	52/708 (7)	137/2070 (6)
10-19	52/708 (7)	15/2070 (1)
20-39	330/708 (47)	370/2070 (18)
40-59	219/708 (31)	778/2070 (37)
60-79	53/708 (7)	694/2070 (34)
≥80	2/708 (<1)	76/2070 (4)
Sex-female	430/708 (61)	1264/2070 (61)
Province*		
Gauteng	N/A	481/2070 (23)
KwaZulu-Natal	111/708 (16)	462/2070 (22)
Mpumalanga**	86/708 (12)	249/2070 (12)
North West	362/708 (51)	471/2070 (23)
Western Cape	149/708 (21)	407/2070 (20)
Race		
Black	535/704 (76)	1623/2054 (79)
Coloured	138/704 (20)	322/2054 (16)
Asian/Indian	4/704 (1)	49/2054 (2)
White	21/704 (3)	40/2054 (2)
Other	6/704 (1)	20/2054 (<1)
Presentation		
Fever	553/704 (79)	954/2054 (46)
Cough	685/704 (97)	1969/2054 (96)
Shortness of breath	255/704 (36)	1605/2054 (78)
Chest pain	307/704 (44)	838/2054 (41)
Diarrhoea	53/704 (7)	130/2054 (6)

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REPORTING PERIOD 2 MARCH 2020 TO 26 SEPTEMBER 2021

Characteristic	Influenza-like illness (ILI), public-sector, n=708 (%)	Pneumonia, n=2 070 (%)
Underlying conditions		
Hypertension [§]	17/604 (3)	249/1785 (14)
Cardiac	2/704 (<1)	47/2054 (2)
Lung disease	0/704 (0)	3/2054 (<1)
Diabetes	16/704 (2)	430/2054 (21)
Cancer	2/704 (<1)	13/2054 (1)
Tuberculosis	11/704 (2)	51/2054 (2)
HIV-infection	131/704 (19)	447/2054 (22)
Other ***	12/704 (2)	90/2054 (4)
Management		
Oxygen therapy	9/704 (1)	1582/2054 (77)
ICU admission	N/A	45/2054 (2)
Ventilation	N/A	53/2054 (3)
Outcome***		
Died	0/692 (0)	322/1911 (17)

[§]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

[§]Data on hypertension was not collected on all cases.

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

Of the 322 patients who died, three were in <20 age group, 23 in the 20-39 year age group, 110 in the 40-59 year age group, and 186 were ≥60 years; 187/322 (58%) were female.

Of the 1130 hospitalised cases with COVID19 vaccine status, 96 (8%) received vaccine. 11 (11%) received Johnson & Johnson, 74 (77%) received the first dose of Pfizer-BioNTech, 3 (3%) Astra Zeneca and 8 (8%) could not remember the vaccine type received. 18 (19%) of the 96 cases had full vaccination (n=11, J&J and n=7, Pfizer-BioNTech). Cases age varied from 35 years to >60 years old and the majority (72%, 69/96) were >60 years old. Females were a majority 57% (55/96) and 11% (11/96) cases were HIV infected.