

MONTHLY RESPIRATORY PATHOGENS SURVEILLANCE REPORT



NATIONAL INSTITUTE FOR
COMMUNICABLE DISEASES

Division of the National Health Laboratory Service

SOUTH AFRICA WEEK 22 2021

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CUMULATIVE DATA FROM



HIGHLIGHTS: WEEK 22

- A decline in RSV activity in both pneumonia surveillance and influenza-like illness (ILI) is noted in this reporting week (week22) and RSV season has not started yet.

- Five new cases of influenza, three from Gauteng and two from KwaZulu-Natal were detected in this current reporting week in addition to 17 cases reported in the previous weeks. To date, influenza cases have been detected from Gauteng, Western Cape, North West and KwaZulu-Natal sentinel surveillance sites. Influenza season has not started.

- From 2 March 2020 to 06 June 2021, a total of 1 436 COVID-19 cases were detected from all surveillance programmes. A decline in number of new positive cases in week 22 has been noted in influenza-like illness (ILI) and a slight increase in pneumonia surveillance programmes compared to previous week. Of the 1 052 hospitalised COVID-19 cases reported with available data on outcome, 149 (14%) died.

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 style="text-align: center;">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 style="text-align: center;">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)

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 22 influenza cases detected in surveillance sites in 2021, majority (17, 77%) were influenza B/Victoria.

ILI programme: In 2021 to date, specimens from 718 patients meeting ILI case definition were received from 4 ILI sites. Influenza was detected in four (0.6%) patients, of which two (50%) were influenza B (Victoria), one (25%) influenza B (lineage inconclusive) and one (25%) influenza B (lineage pending results). (Figure 1 and Table 1).

Viral Watch programme: During the same period, specimens were received from 73 patients from Viral Watch sites in four of the 8 provinces participating in surveillance. Influenza B (Victoria) was detected in four (5%) patients. (Figure 5 and Table 4).

Pneumonia surveillance: Since the beginning of 2021, specimens from 2 212 patients with severe respiratory illness (SRI) were received from the 6 sentinel sites. Influenza was detected in nine (0.4%) patients, of which one (11%) was influenza A(H3N2), seven (78%) influenza B (Victoria) and one (11%) were influenza B (pending lineage results). (Figure 9 and Table 7).

In addition, influenza B (Victoria) was detected in 5 of 398 (1.3%) specimens from 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, 718 specimens were tested and RSV was detected in specimens of 56 (8%) patients.

Viral Watch programme: During the same period, 73 specimens were tested and RSV was detected in specimens of six (8%) patients.

Pneumonia surveillance: Since the beginning of 2021, 2 212 specimens were tested and RSV was detected in specimens of 288 (13%) patients.

In addition, RSV was detected in 19 of 398 (5%) specimens from patients who met suspected SARS-CoV-2 case definition but did not meet the pneumonia/ILI surveillance case definitions.

Bordetella pertussis

There are no *B. pertussis* cases detected in 2021 in all programmes.

ILI programme: From 1 January 2021 to date, combined nasopharyngeal and oropharyngeal specimens were tested from 714 patients and *B. pertussis* was not detected.

Pneumonia surveillance: During the same period, combined nasopharyngeal and oropharyngeal specimens were tested from 2 184 patients and *B. pertussis* was not detected.

In addition, *B. pertussis* was not detected in 401 specimens from patients who met suspected *B. pertussis* case definition but did not meet the pneumonia/ILI surveillance case definition.

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 2020 to date, specimens from 2 028 patients were tested and SARS-CoV-2 was detected in 334 (16%) patients.

Viral Watch programme: From March 2020 to date, specimens were tested from 352 patients and SARS-CoV-2 was detected in 46 (13%) patients.

Pneumonia surveillance: From March 2020 to date, specimens from 6 190 patients with severe respiratory illness (SRI) were tested and SARS-CoV-2 was detected in 1 056 (17%) patients.

In addition, SARS-CoV-2 was detected in 85 of 568 (15%) specimens from patients who met suspected SARS-CoV-2 case definition but did not meet the pneumonia/ILI surveillance case definitions.

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

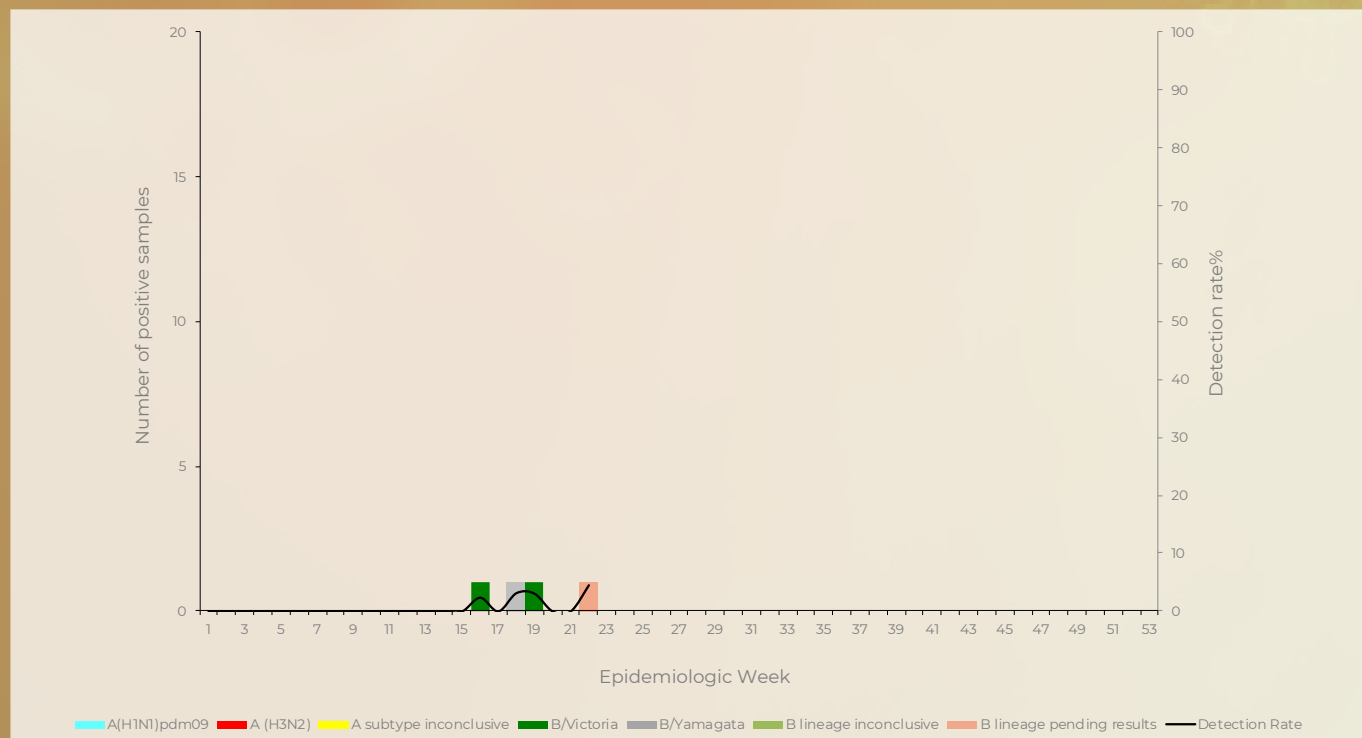


Figure 1. Number of positive samples* by influenza subtype and lineage** and detection rate*** by week

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

**Influenza was detected in four (1.3%) of 320 specimens, of which three 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	110
Eastridge (WC)	0	0	0	0	0	0	0	126
Edendale Gateway (KZ)	0	0	0	1	0	1	1	89
Jouberton (NW)	0	0	0	1	0	0	0	305
Mitchell's Plain (WC)	0	0	0	0	0	0	0	88
Total:	0	0	0	2	0	1	1	718

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 in four (1.3%) of 320 specimens, of which three 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-LIKE ILLNESS (ILI) SURVEILLANCE PRIMARY HEALTH CARE CLINICS

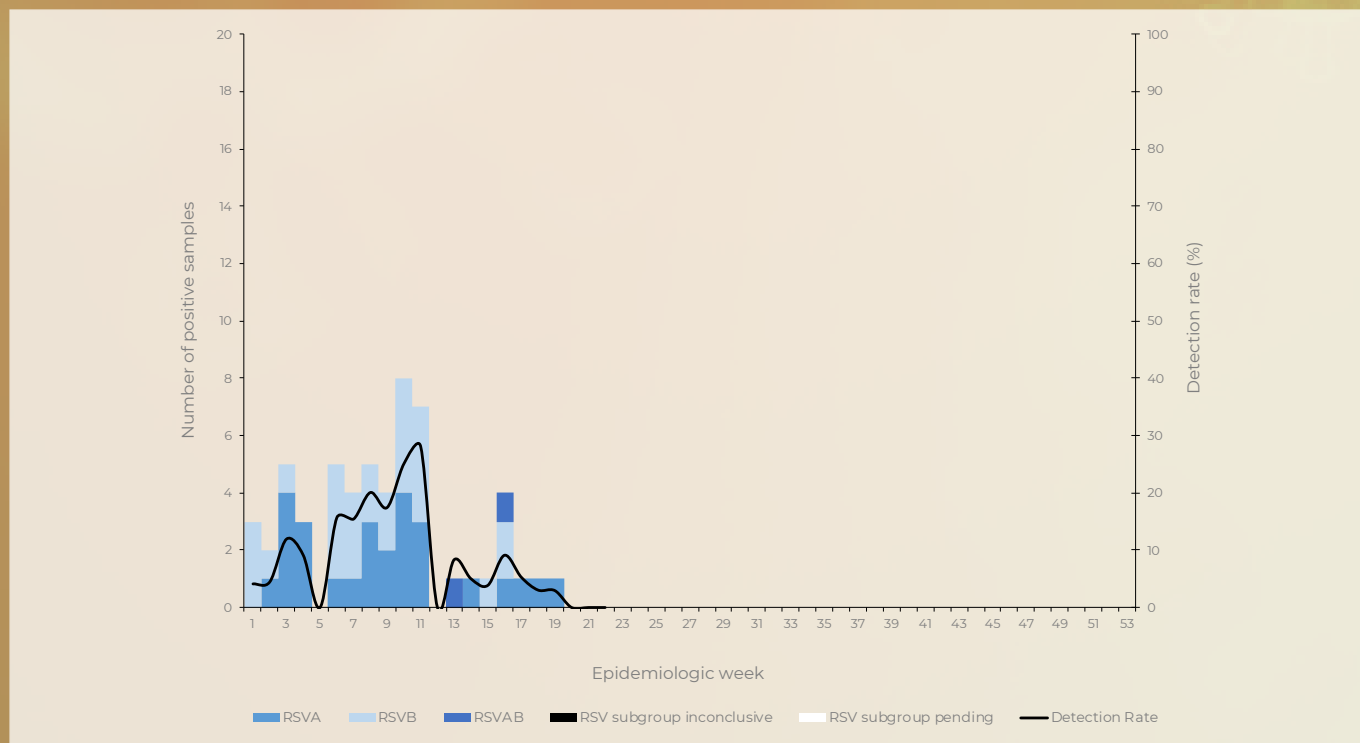


Figure 2. Number of samples testing positive for respiratory syncytial virus** by subgroup and detection rate by week

Inconclusive: insufficient viral load in sample and unable to characterise further
 RSV AB: Both RSV A and B subgroup identified

**RSV was detected from 14 of 237 (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	110
Eastridge (WC)	11	0	1	0	0	126
Edendale Gateway (KZ)	1	5	0	0	0	89
Jouberton (NW)	2	15	0	0	0	305
Mitchell's Plain (WC)	2	0	0	0	0	88
Total	27	27	2	0	0	718

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 14 of 320 (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-LIKE ILLNESS (ILI) SURVEILLANCE PRIMARY HEALTH CARE CLINICS

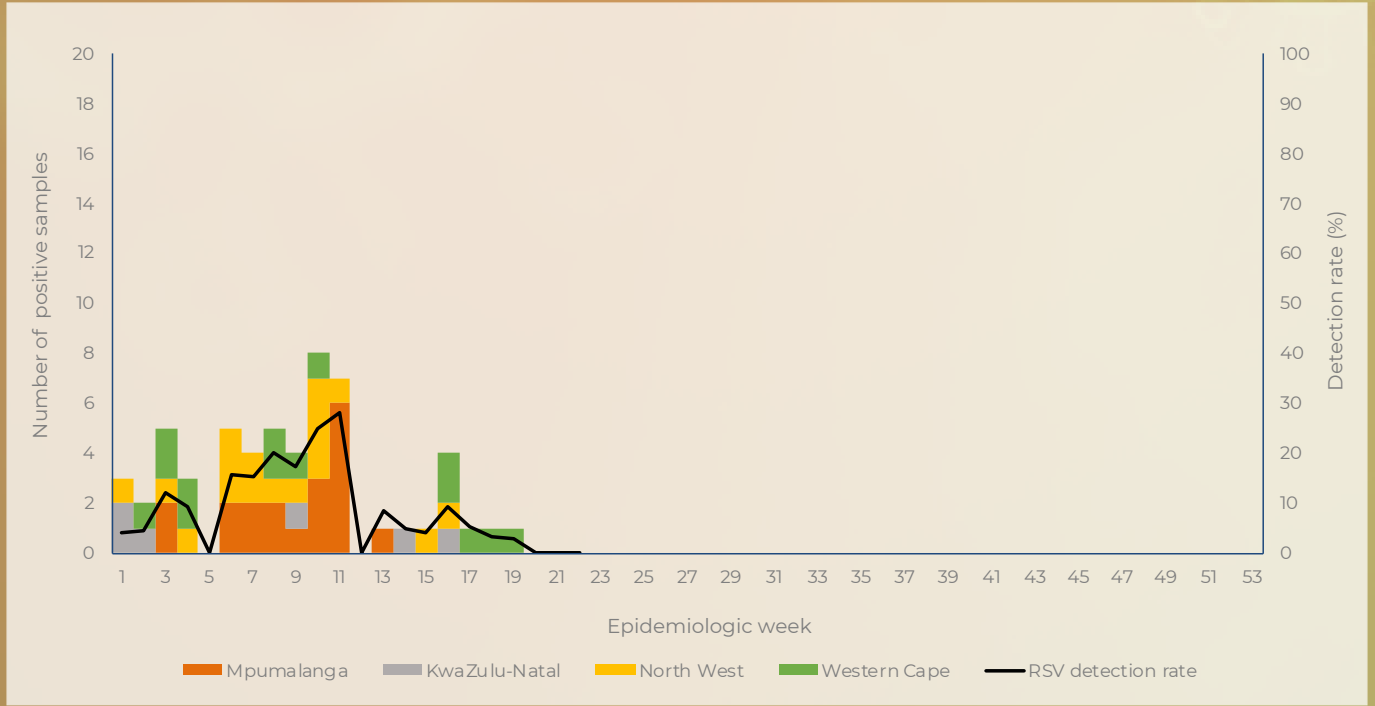


Figure 3. Number of samples testing positive for respiratory syncytial virus* by province and detection rate by week

*RSV was detected from 14 of 320 (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-LIKE ILLNESS (ILI) SURVEILLANCE PRIMARY HEALTH CARE CLINICS

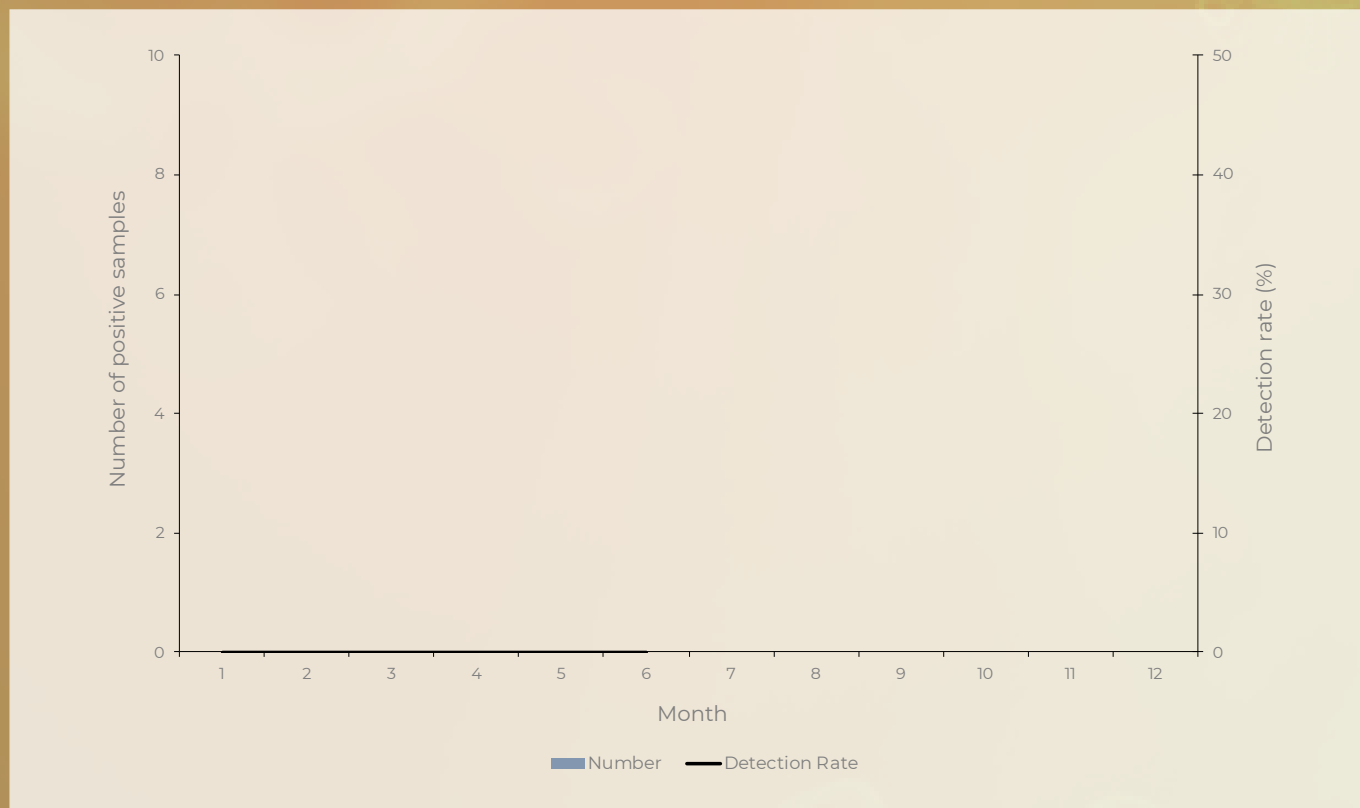


Figure 4. Number of samples testing positive for *B. pertussis* and detection rate by month

Table 3. Cumulative number of *B. pertussis* identified and total number of samples** tested by province

Clinic (Province)	<i>B. pertussis</i> Positive**	Total samples tested
Agincourt (MP)	0	106
Eastridge (WC)	0	126
Edendale Gateway (KZ)	0	89
Jouberton (NW)	0	305
Mitchell's Plain (WC)	0	88
Total:	0	714

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

**323 cases met the suspected pertussis case definition but did not meet Influenza-like illness (ILI) case definition. These are not included in the table or the epidemiological curve

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

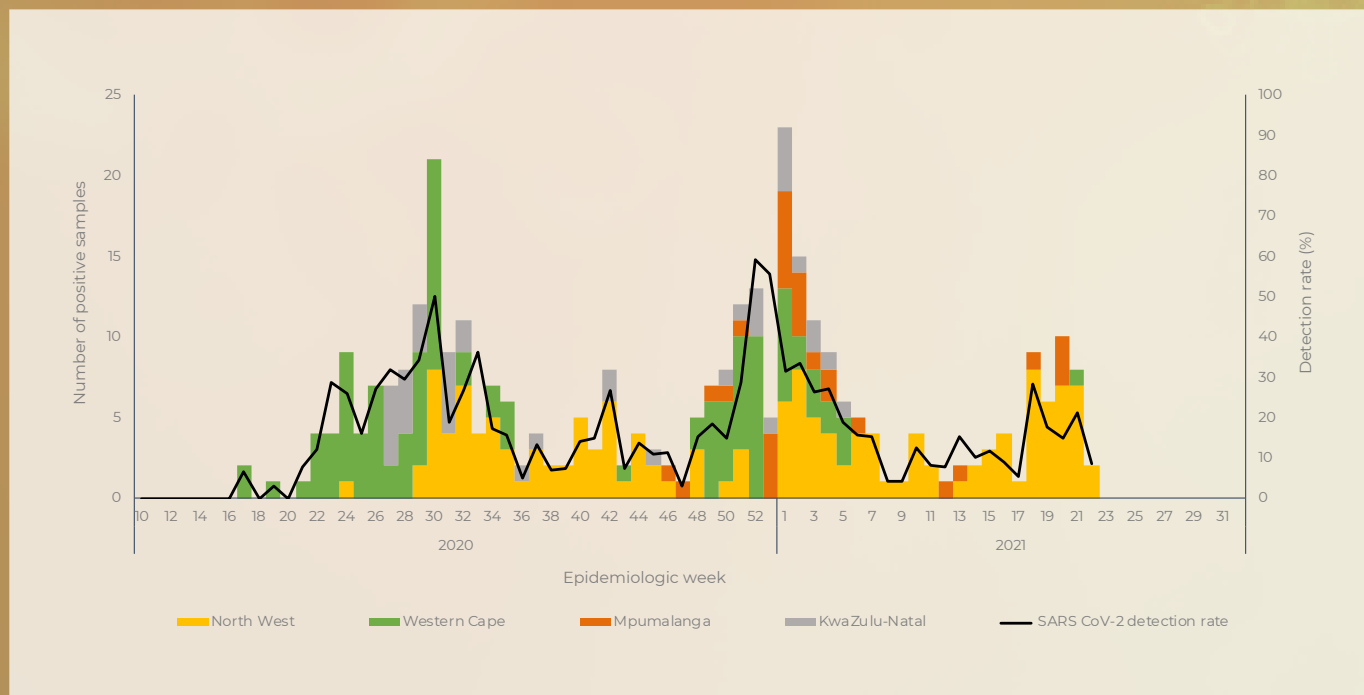


Figure 5. Number of samples testing positive for SARS-CoV-2* by province and detection rate by week

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

**SARS-CoV-2 was detected in 64 of 450 (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 4. 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)	29	140
Eastridge (WC)	47	613
Edendale Gateway (KZ)	39	230
Jouberton (NW)	153	628
Mitchell's Plain (WC)	66	417
Total:	334	2 028

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

**SARS-CoV-2 was detected in 64 of 450 (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-LIKE ILLNESS (ILI) SURVEILLANCE VIRAL WATCH

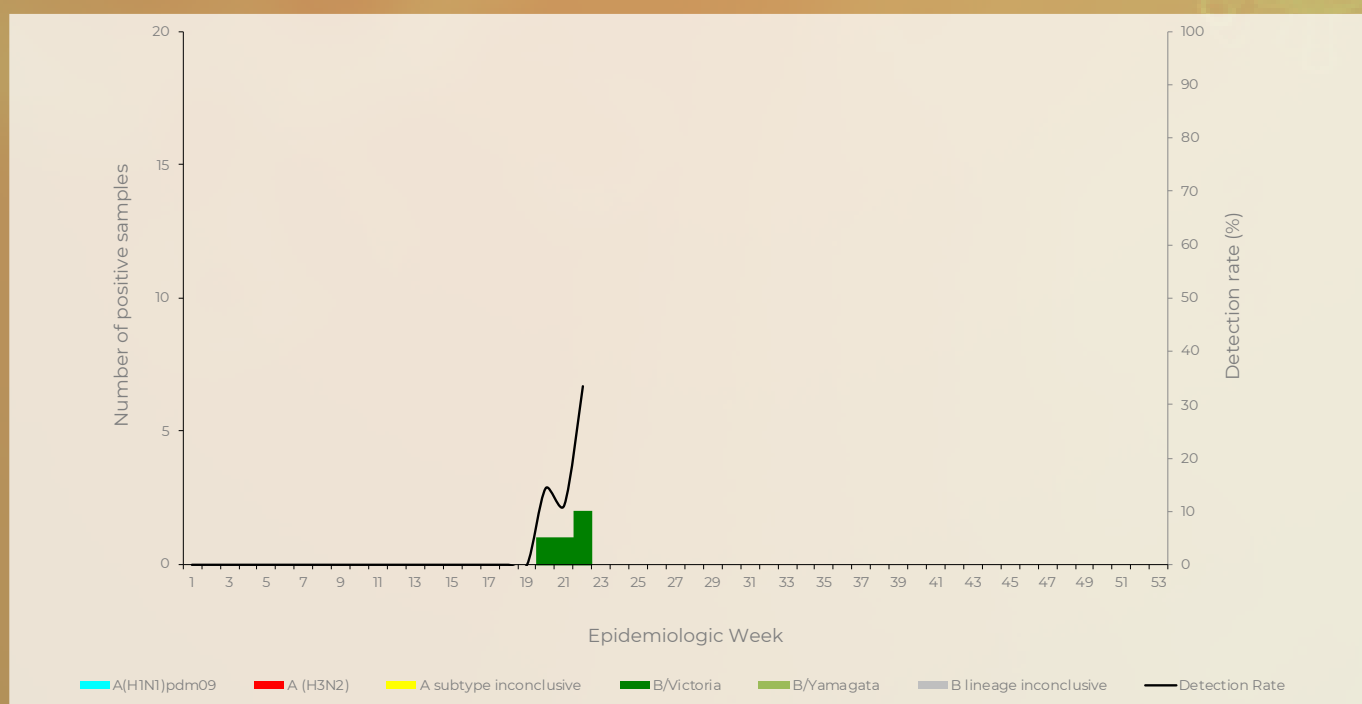


Figure 6. Number of positive samples* by influenza subtype and lineage and detection rate** by week

*Specimens from patients with Influenza-like illnesses at 90 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 5. 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	Total samples
Eastern Cape	0	0	0	0	0	0	0
Free State	0	0	0	0	0	0	0
Gauteng	0	0	0	4	0	0	61
Limpopo	0	0	0	0	0	0	0
Mpumalanga	0	0	0	0	0	0	1
North West	0	0	0	0	0	0	1
Northern Cape	0	0	0	0	0	0	0
Western Cape	0	0	0	0	0	0	10
Total:	0	0	0	4	0	0	73

*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-LIKE ILLNESS (ILI) SURVEILLANCE VIRAL WATCH

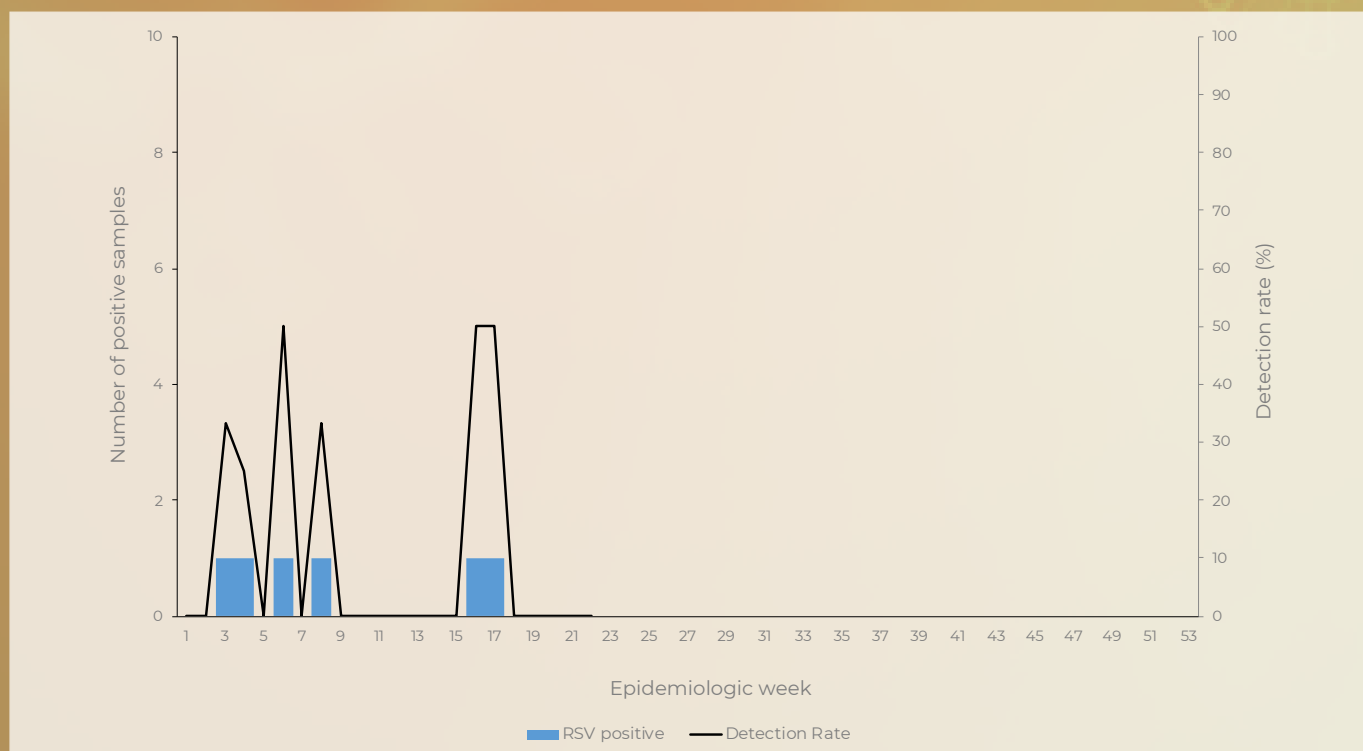


Figure 7. Number of samples testing positive for RSV*, and detection rate by week

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

Table 6. Cumulative number of RSV positive cases identified and total number of samples tested by province

Clinic (Province)	RSV positive	Total samples tested
Eastern Cape	0	0
Free State	0	0
Gauteng	4	61
Limpopo	0	0
Mpumalanga	0	1
North West	0	1
Northern Cape	0	0
Western Cape	2	10
Total:	6	73

INFLUENZA-LIKE ILLNESS (ILI) SURVEILLANCE VIRAL WATCH

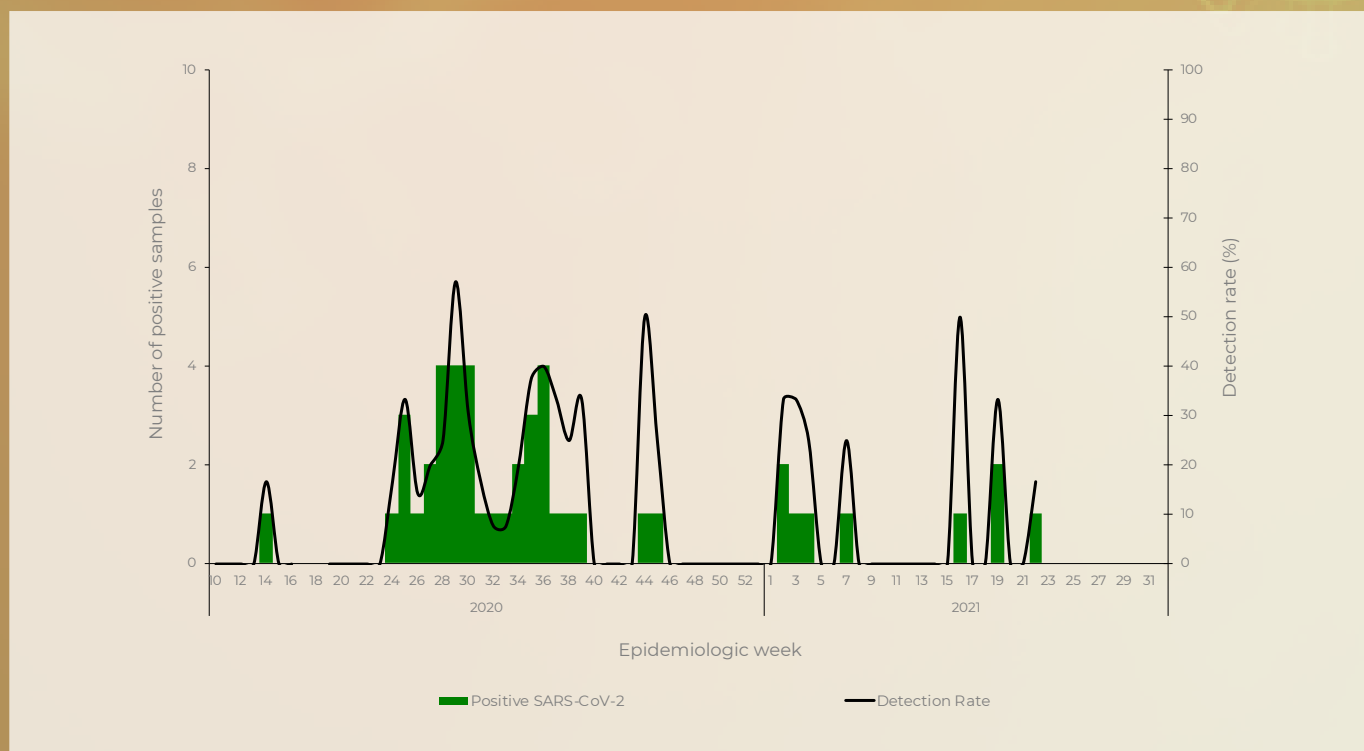


Figure 8. Number of samples testing positive for SARS-CoV-2*, and detection rate by week

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

Table 7. Cumulative number of SARS-CoV-2 identified and total number of samples tested by province

Clinic (Province)	SARS-CoV-2 positive	Total samples tested
Eastern Cape	1	4
Free State	1	14
Gauteng	33	221
Limpopo	0	2
Mpumalanga	1	6
North West	0	1
Northern Cape	0	2
Western Cape	10	102
Total:	46	352

NATIONAL SYNDROMIC SURVEILLANCE FOR PNEUMONIA

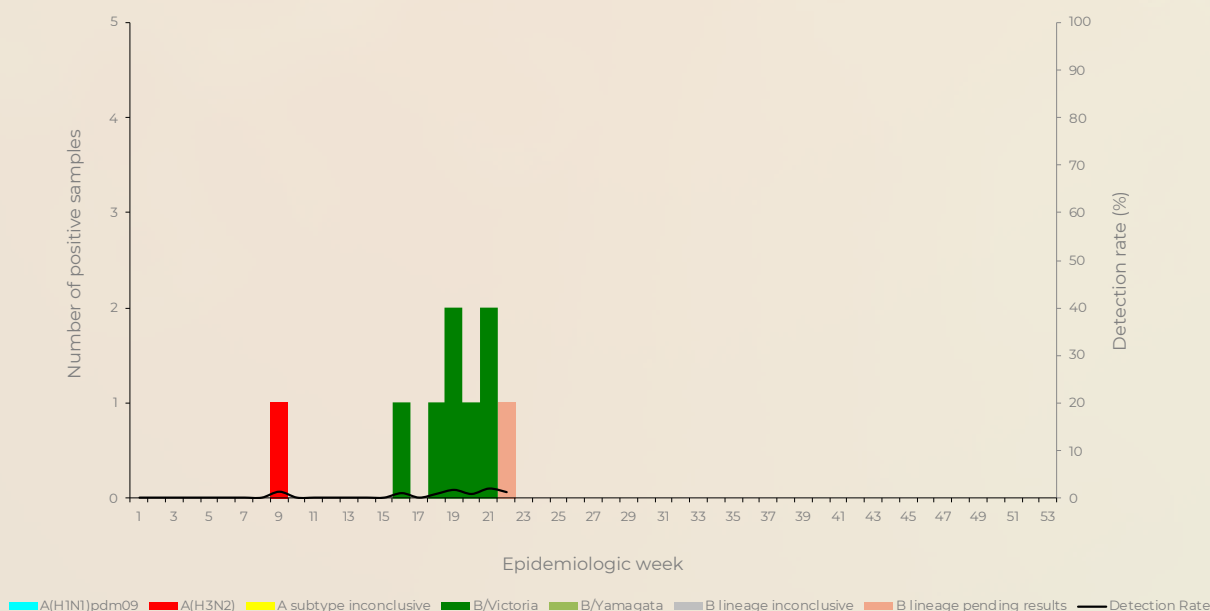


Figure 9. Number of positive samples* by influenza subtype and lineage** and detection rate*** by week

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

**Influenza B(Victoria) was detected from one of 78 (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 8. 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	3	0	0	0	296
Helen Joseph-Rahima Moosa (GP)	0	0	0	4	0	0	1	632
Klerksdorp-Tshepong (NW)	0	0	0	0	0	0	0	348
Mapulaneng-Matikwana (MP)	0	0	0	0	0	0	0	282
Red Cross (WC)	0	0	0	0	0	0	0	319
Mitchell's Plain (WC)	0	1	0	0	0	0	0	248
Tintswalo (MP)	0	0	0	0	0	0	0	87
Total:	0	1	0	7	0	0	1	2 212

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 78 (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

NATIONAL SYNDROMIC SURVEILLANCE FOR PNEUMONIA

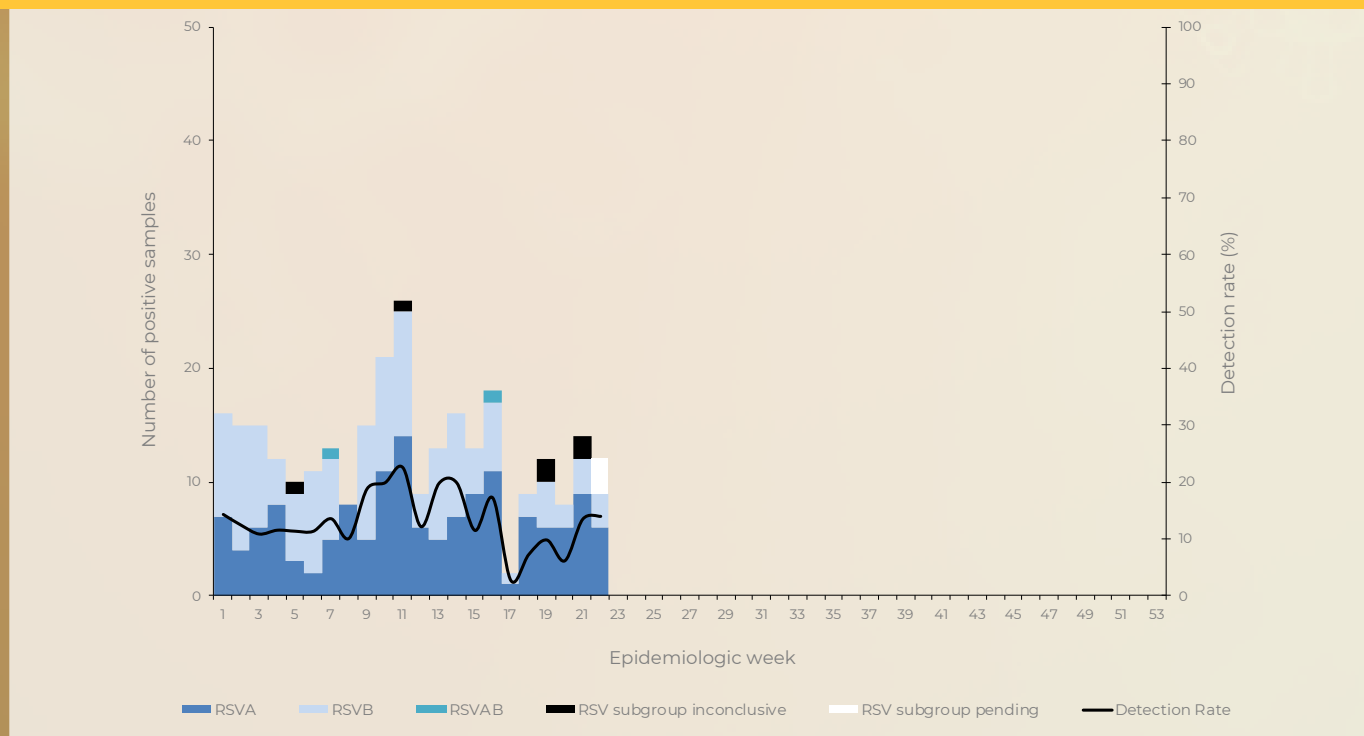


Figure 10. Number of samples testing positive for respiratory syncytial virus* by subgroup and detection rate by week

Inconclusive: insufficient viral load in sample and unable to characterise further
 RSV AB: Both RSV A and B subgroup identified
 RSV subgroup pending: 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 epidemiological curve.

Table 9. 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	296
Helen Joseph-Rahima Moosa (GP)	34	40	0	0	0	632
Klerksdorp-Tshepong (NW)	8	40	0	2	0	348
Mapulaneng-Matikwana (MP)	20	7	1	0	0	282
Red Cross (WC)	52	13	0	3	2	319
Mitchell's Plain (WC)	17	3	1	1	1	248
Tintswalo (MP)	10	3	0	0	0	87
Total:	146	131	2	6	3	2 212

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

NATIONAL SYNDROMIC SURVEILLANCE FOR PNEUMONIA

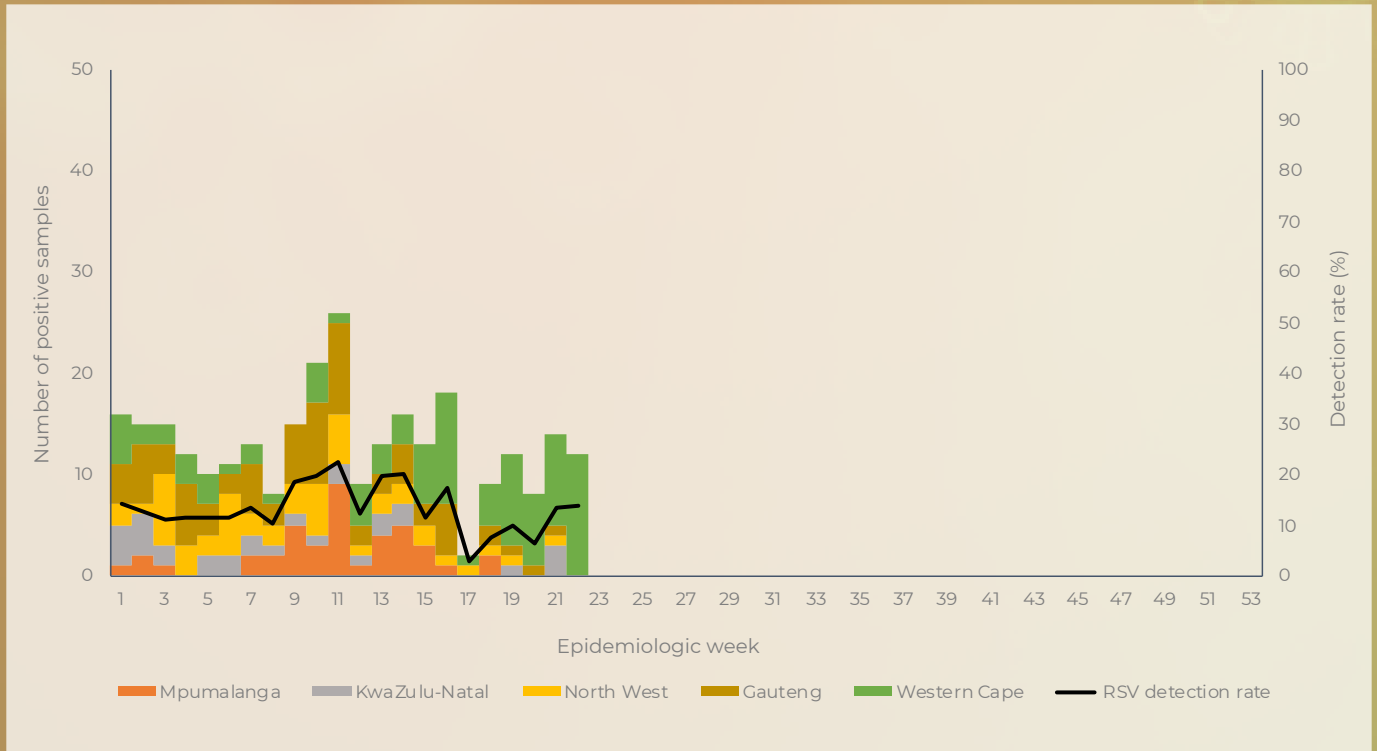


Figure 11. Number of samples testing positive for respiratory syncytial virus* by province and detection rate by week

*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 epidemiological curve.

NATIONAL SYNDROMIC SURVEILLANCE FOR PNEUMONIA

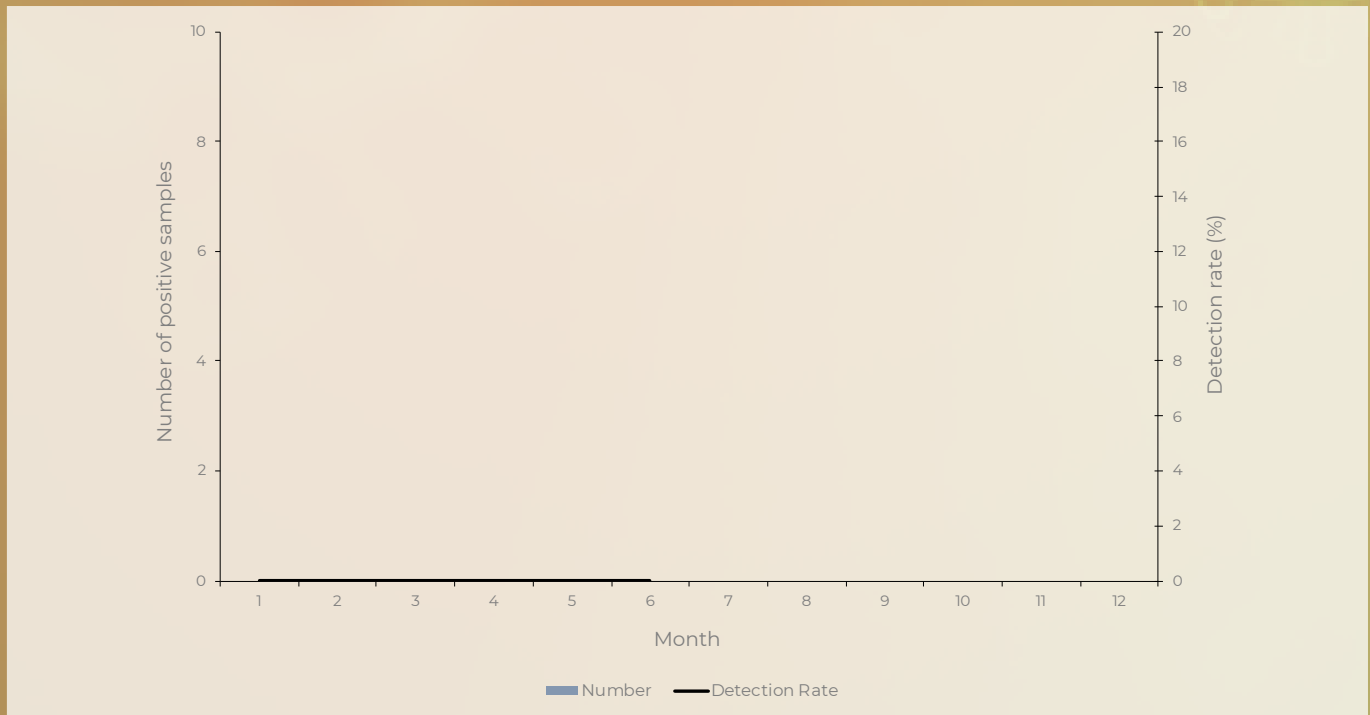


Figure 12. Number of samples testing positive for *B. pertussis* and detection rate by month

Table 10: Cumulative number of *B. pertussis* identified and total number of samples** tested by hospital and province

Hospital (Province)	<i>B. pertussis</i> Positive**	Total samples
Edendale (KZ)	0	295
Helen Joseph-Rahima Moosa (GP)	0	629
Klerksdorp-Tshepong (NW)	0	331
Mapulaneng-Matikwana (MP)	0	280
Red Cross (WC)	0	315
Mitchell's Plain (WC)	0	248
Tintswalo (MP)	0	86
Total:	0	2 184

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

**78 cases met the suspected pertussis case definition but did not meet Pneumonia Surveillance case definition. These are not included in the table and epidemiologic curve.

NATIONAL SYNDROMIC SURVEILLANCE FOR PNEUMONIA

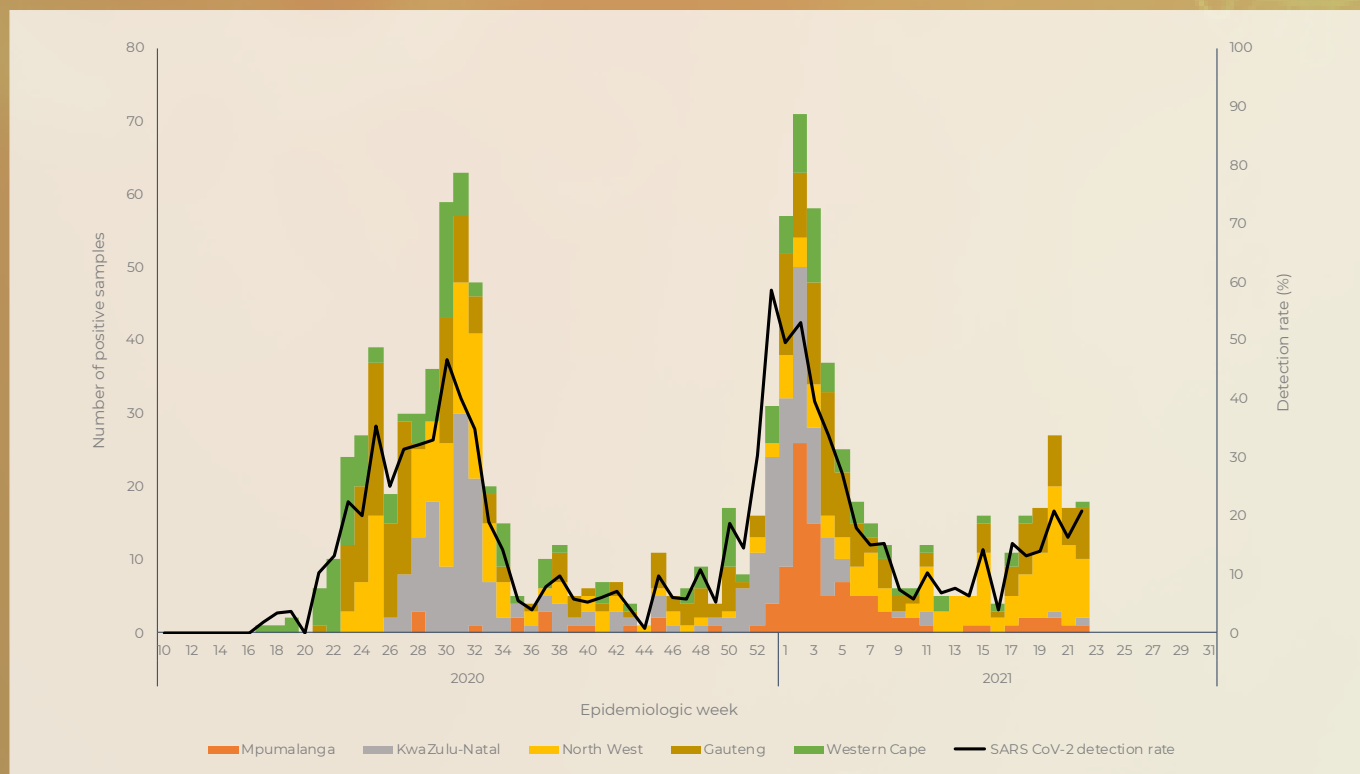


Figure 13. Number of samples testing positive for SARS-CoV-2*, and detection rate by week

*Specimens from patients hospitalised with pneumonia at 6 sentinel sites in 5 provinces

**SARS-CoV-2 was detected in 21 of 140 (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 11. 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	1117
Helen Joseph-Rahima Moosa (GP)	276	1471
Klerksdorp-Tshepong (NW)	263	941
Mapulaneng-Matikwana (MP)	99	584
Red Cross (WC)	43	1275
Mitchell's Plain (WC)	121	715
Tintswalo (MP)	12	87
Total:	1 056	6 190

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

**SARS-CoV-2 was detected in 21 of 140 (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.

SUMMARY OF LABORATORY CONFIRMED SARS-COV-2 CASES

Table 12. Characteristics of laboratory-confirmed cases of COVID-19, enrolled in influenza-like illness (ILI) and pneumonia surveillance programmes, South Africa, 2 March 2020- 06 June 2021

Characteristic	Influenza-like illness (ILI), public-sector, n=334 (%)	Pneumonia, n=1 056 (%)
Age group		
0-9	35/334 (10)	71/1056 (7)
10-19	25/334 (8)	7/1056 (1)
20-39	144/334 (43)	181/1056 (17)
40-59	103/334 (31)	387/1056 (37)
60-79	25/334 (7)	374/1056 (35)
≥80	2/334 (1)	36/1056 (3)
Sex-female	195/334 (58)	650/1056 (62)
Province*		
Gauteng	N/A	276/1056 (26)
KwaZulu-Natal	39/334 (12)	242/1056 (23)
Mpumalanga**	29/334 (9)	111/1056 (11)
North West	153/334 (45)	263/1056 (24)
Western Cape	113/334 (34)	164/1056 (16)
Race		
Black	234/334 (70)	874/1052 (85)
Coloured	93/334 (28)	117/1052 (11)
Asian/Indian	1/334 (<1)	24/1052 (2)
Other	5/334 (1)	18/1052 (2)
Presentation		
Fever	323/334 (97)	564/1052 (54)
Cough	331/334 (99)	1016/1052 (97)
Shortness of breath	108/334 (32)	836/1052 (79)
Chest pain	142/334 (43)	443/1052 (42)
Diarrhoea	34/334 (10)	67/1052 (6)

INFLUENZA, RSV, BORDETELLA PERTUSSIS AND SARS-COV-2 SURVEILLANCE REPORT

WEEK 22 2021

REPORTING PERIOD 2 MARCH 2020 TO 6 JUNE 2021

Characteristic	Influenza-like illness (ILI), public-sector, n=334 (%)	Pneumonia, n=1 056 (%)
Underlying conditions		
Hypertension	12/334 (4)	124/1052 (12)
Cardiac	0/334 (0)	8/1052 (1)
Lung disease	0/334 (0)	1/1052 (<1)
Diabetes	7/334 (2)	220/1052 (21)
Cancer	0/334 (0)	7/1052 (1)
Tuberculosis	1/334 (<1)	29/1052 (3)
HIV-infection	49/334 (15)	216/1052 (21)
Other ***	8/334 (2)	82/1052 (8)
Management		
Oxygen therapy	2/334 (1)	759/1052 (72)
ICU admission	N/A	26/1052 (2)
Ventilation	N/A	29/1052 (3)
Outcome***		
Died	0/334 (0)	149/1052 (14)

*ILI surveillance not conducted in Gauteng province

**Mpumalanga (ILI site started enrolling on the 10th November 2020)

***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.