

WEEKLY RESPIRATORY PATHOGENS SURVEILLANCE REPORT

SOUTH AFRICA WEEK 28 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 28

- RSV activity remains below seasonal threshold in both influenza-like illness (ILI) and pneumonia surveillance programmes.
- One new case of influenza from Gauteng was detected in week 28. To date, 54 influenza cases have been detected from Gauteng, Western Cape, North West, Eastern Cape, Mpumalanga and KwaZulu-Natal sentinel surveillance sites. The influenza season has not started.
- From 2 March 2020 to 18 July 2021, a total of 1 973 COVID-19 cases were detected from all surveillance programmes. An increase in detection rate has been noted in both ILI programme and pneumonia surveillance in this reporting week compared to previous week. Of the 1 283 hospitalised COVID-19 cases reported with available data on outcome, 192 (15%) died.

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

WEEK 28 2021

REPORTING PERIOD 4 JANUARY 2021 TO 18 JULY 2021

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)

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

WEEK 28 2021

REPORTING PERIOD 2 MARCH 2020 TO 18 JULY 2021

COMMENTS

Influenza

The influenza 2021 season has not started. Since the first influenza positive case of 2021 was detected in pneumonia surveillance in week 9 of 2021 (week ending on the 07 March 2021), sporadic cases have been reported from week 16 to date. Of the 54 influenza cases detected in surveillance sites in 2021, the majority (43, 80%) were influenza B/Victoria.

ILI programme: In 2021 to date, specimens from 946 patients meeting ILI case definition were received from 4 ILI sites. Influenza was detected in seven (1%) patients, of which five (71%) were influenza B(Victoria) and two (29%) were influenza B (lineage inconclusive). (Figure 1 and Table 1).

Viral Watch programme: In 2021 to date, specimens were received from 150 patients from Viral Watch sites in five of the 8 provinces participating in surveillance. Influenza was detected in nine (6%) patients, of which four (44%) were influenza B (Victoria), four (44%) influenza B (lineage inconclusive) and one (11%) was influenza B (pending lineage results). (Figure 5 and Table 4).

Pneumonia surveillance: Since the beginning of 2021, specimens from 3 101 patients with severe respiratory illness (SRI) were received from the 6 sentinel sites. Influenza was detected in 27 (0.9%) patients, of which one (4%) was influenza A(H3N2), 22 (81%) influenza B (Victoria) and four (15%) were influenza B (pending lineage results). (Figure 9 and Table 7).

In addition, influenza was detected in 11 (2%) specimens, all were influenza B (Victoria) from 526 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, 946 specimens were tested and RSV was detected in specimens of 70 (7%) patients.

Viral Watch programme: In 2021 to date, 150 specimens were tested and RSV was detected in specimens of six (4%) patients.

Pneumonia surveillance: Since the beginning of 2021, 3 101 specimens were tested and RSV was detected in specimens of 368 (12%) patients.

In addition, RSV was detected in 20 of 526 (4%) 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 2 257 patients were tested and SARS-CoV-2 was detected in 410 (18%) patients.

Viral Watch programme: From March 2020 to date, specimens were tested from 429 patients and SARS-CoV-2 was detected in 78 (18%) patients.

Pneumonia surveillance: From March 2020 to date, specimens from 7 079 patients with severe respiratory illness (SRI) were tested and SARS-CoV-2 was detected in 1 368 (19%) patients.

In addition, SARS-CoV-2 was detected in 117 of 718 (16%) 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 28 2021

REPORTING PERIOD 4 JANUARY 2021 TO 18 JULY 2021

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

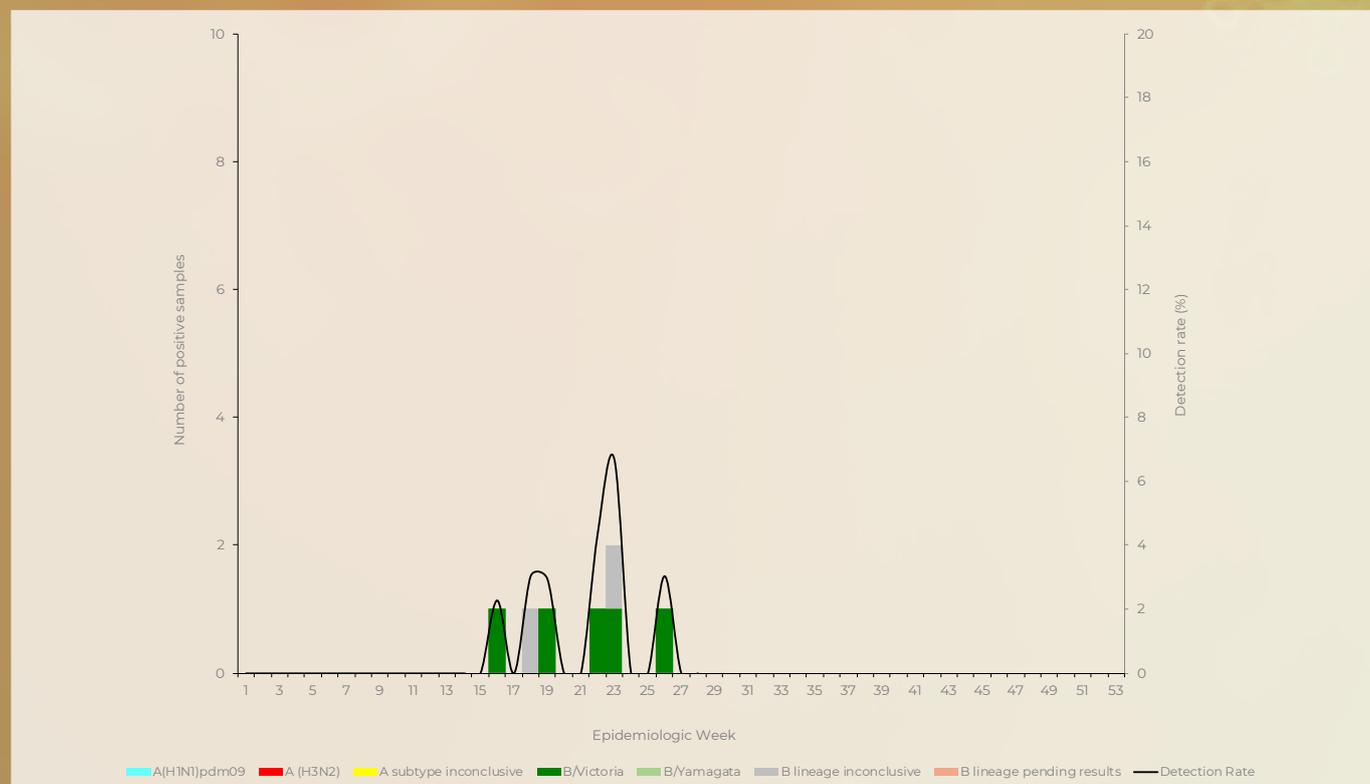


Figure 1. Number of positive samples* by influenza subtype and lineage** and detection rate*** by week

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

**Influenza was detected from 10 of 435 (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	128
Eastridge (WC)	0	0	0	0	0	0	0	153
Edendale Gateway (KZ)	0	0	0	2	0	2	0	105
Jouberton (NW)	0	0	0	3	0	0	0	455
Mitchell's Plain (WC)	0	0	0	0	0	0	0	105
Total:	0	0	0	5	0	2	0	946

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 10 of 435 (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 table.

***influenza B lineage results are pending

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

WEEK 28 2021

REPORTING PERIOD 4 JANUARY 2021 TO 18 JULY 2021

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

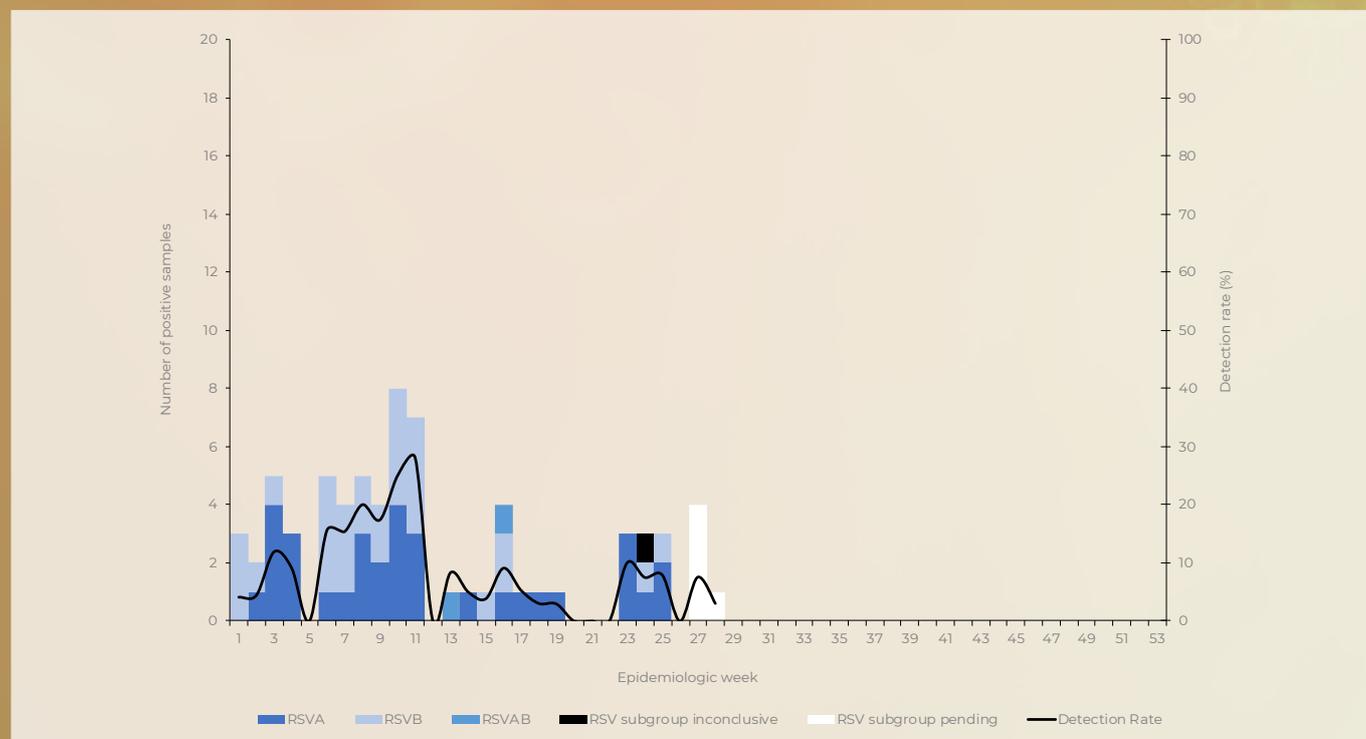


Figure 2. Number of samples testing positive for respiratory syncytial virus** by subgroup and detection rate by week

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 435 (3%) specimens from patients who met suspected SARS-CoV-2 case definition but did not meet influenza-like illness (ILI) case definition. These are not included in the epidemiological curve.

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

Clinic (Province)	RSVA	RSVB	RSVAB	RSV subgroup inconclusive	RSV subgroup pending*	Total samples
Agincourt (MP)	11	7	1	0	0	128
Eastridge (WC)	17	0	1	0	5	153
Edendale Gateway (KZ)	1	6	0	0	0	105
Jouberton (NW)	2	16	0	1	0	455
Mitchell's Plain (WC)	2	0	0	0	0	105
Total	33	29	2	1	5	946

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 435 (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.

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

WEEK 28 2021

REPORTING PERIOD 4 JANUARY 2021 TO 18 JULY 2021

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

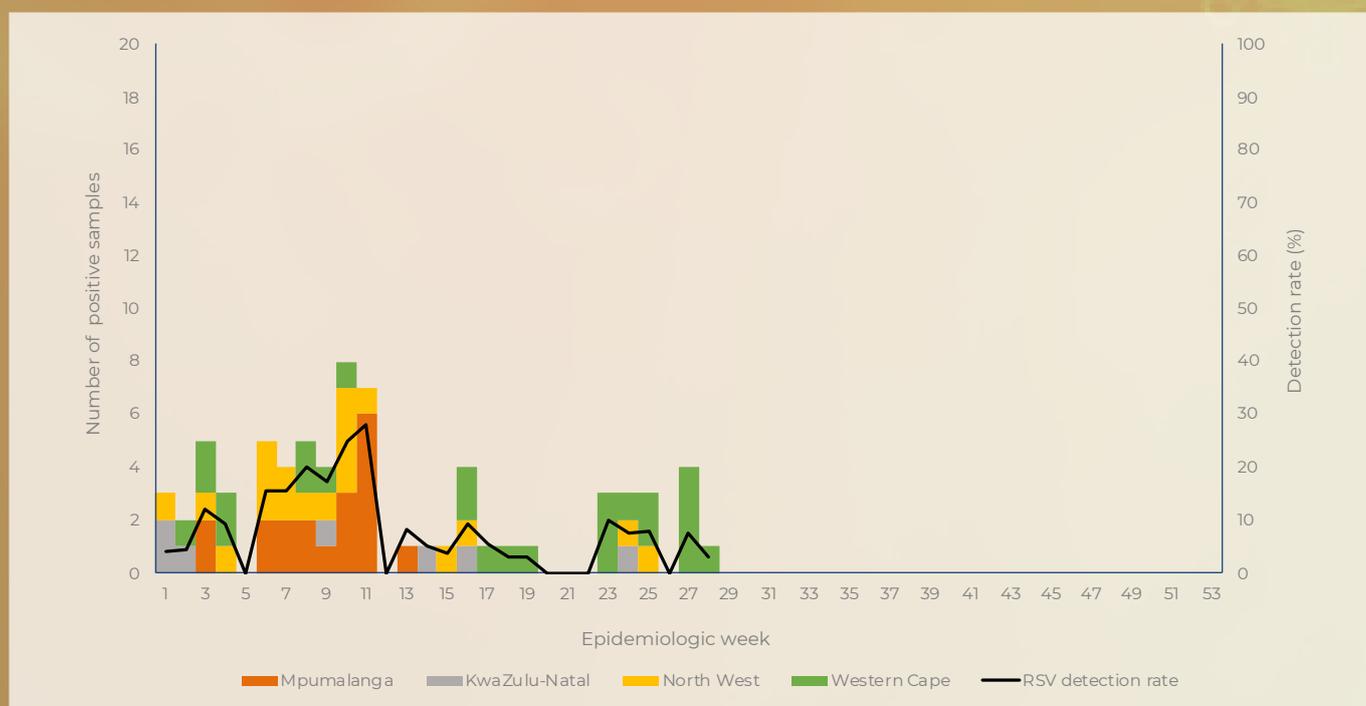


Figure 3. Number of samples testing positive for respiratory syncytial virus* by province and detection rate by week

*RSV was detected from 15 of 435 (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.

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

WEEK 28 2021

REPORTING PERIOD 2 MARCH 2020 TO 18 JULY 2021

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

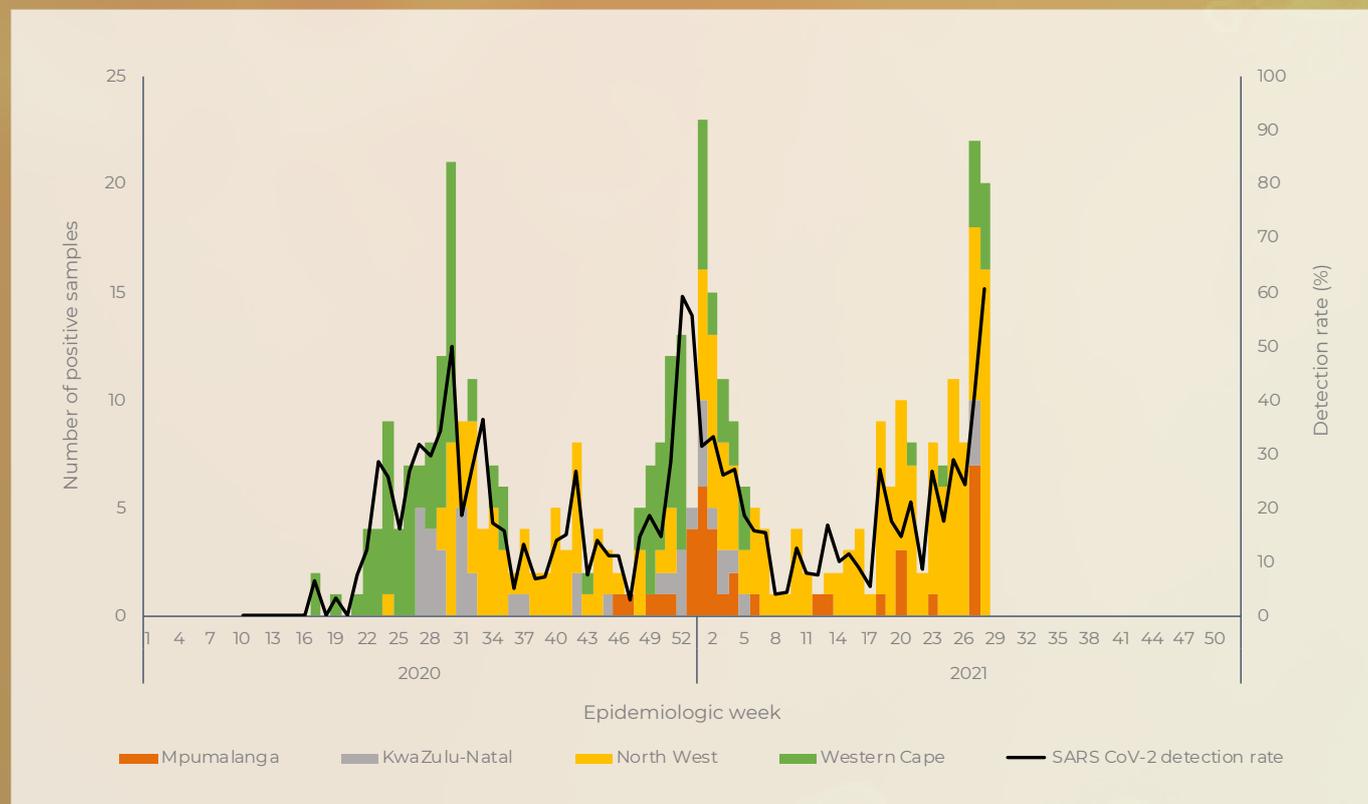


Figure 4. Number of samples testing positive for SARS-CoV-2*[‡] by province and detection rate by week

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

[‡]SARS-CoV-2 was detected in 95 of 565 (17%) 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)	37	158
Eastridge (WC)	48	641
Edendale Gateway (KZ)	42	246
Jouberton (NW)	209	778
Mitchell's Plain (WC)	74	434
Total:	410	2 257

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

**SARS-CoV-2 was detected in 95 of 565 (17%) 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 28 2021

REPORTING PERIOD 4 JANUARY 2021 TO 18 JULY 2021

INFLUENZA-LIKE ILLNESS (ILI) SURVEILLANCE VIRAL WATCH

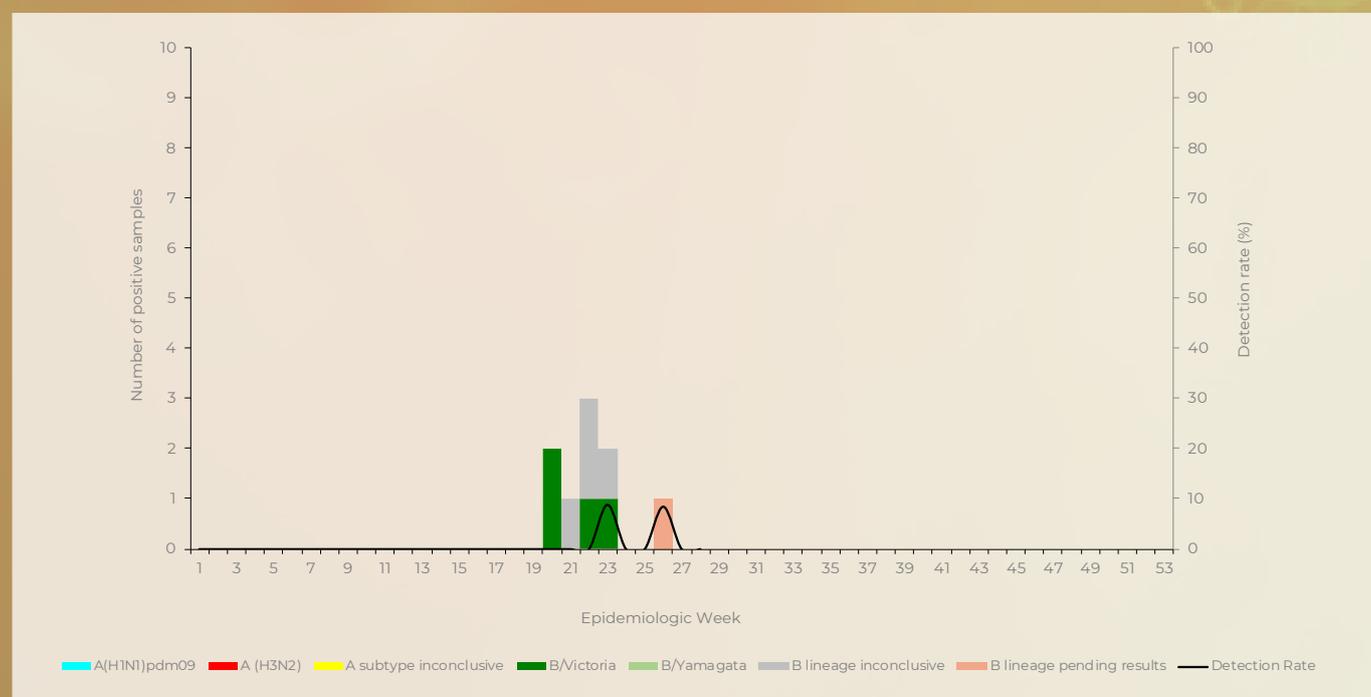


Figure 5. Number of positive samples* by influenza subtype and lineage and detection rate** by week

*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	1	0	0	0	1
Free State	0	0	0	0	0	0	0	0
Gauteng	0	0	0	3	0	4	1	131
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	15
Total:	0	0	0	4	0	4	1	150

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 28 2021

REPORTING PERIOD 4 JANUARY 2021 TO 18 JULY 2021

INFLUENZA-LIKE ILLNESS (ILI) SURVEILLANCE VIRAL WATCH

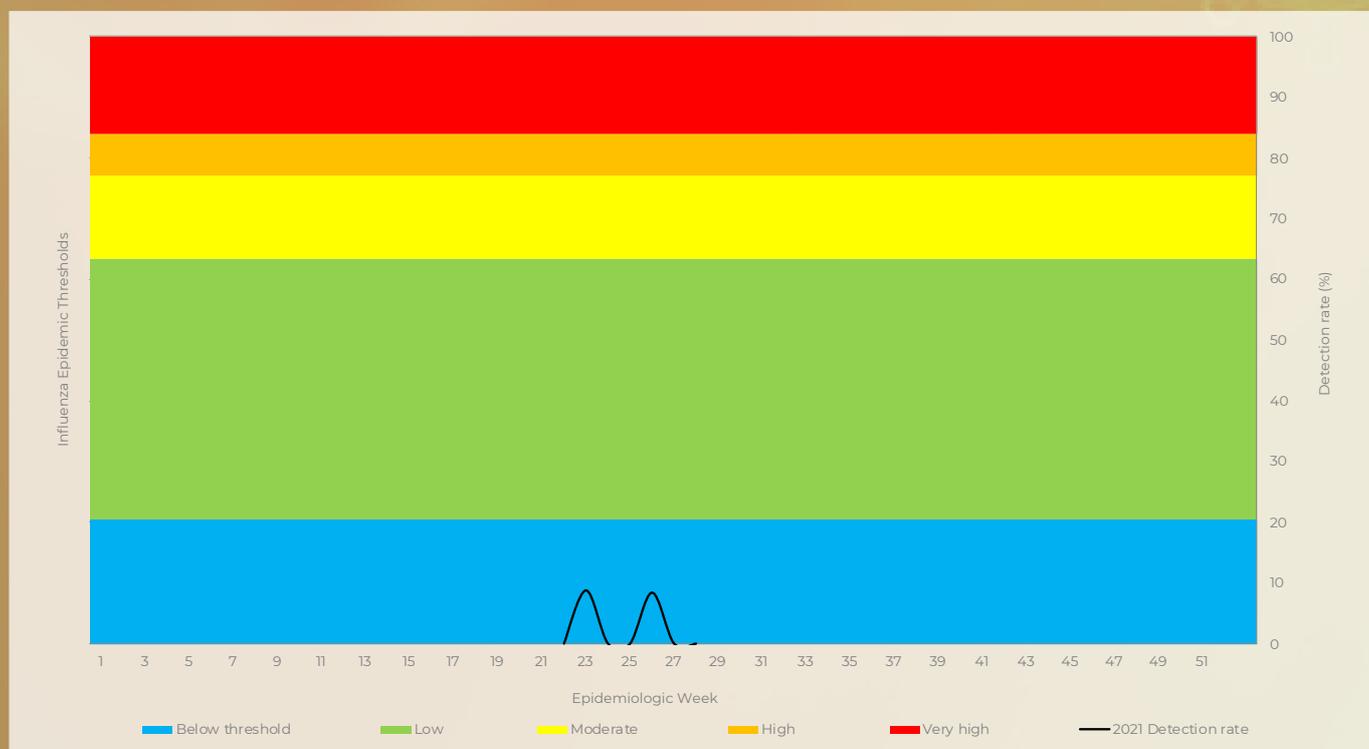


Figure 6. ILI surveillance (Viral Watch) percentage influenza detections and epidemic thresholds*

*Thresholds based on 2010-2019 data

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

WEEK 28 2021

REPORTING PERIOD 4 JANUARY 2021 TO 18 JULY 2021

INFLUENZA-LIKE ILLNESS (ILI) SURVEILLANCE VIRAL WATCH

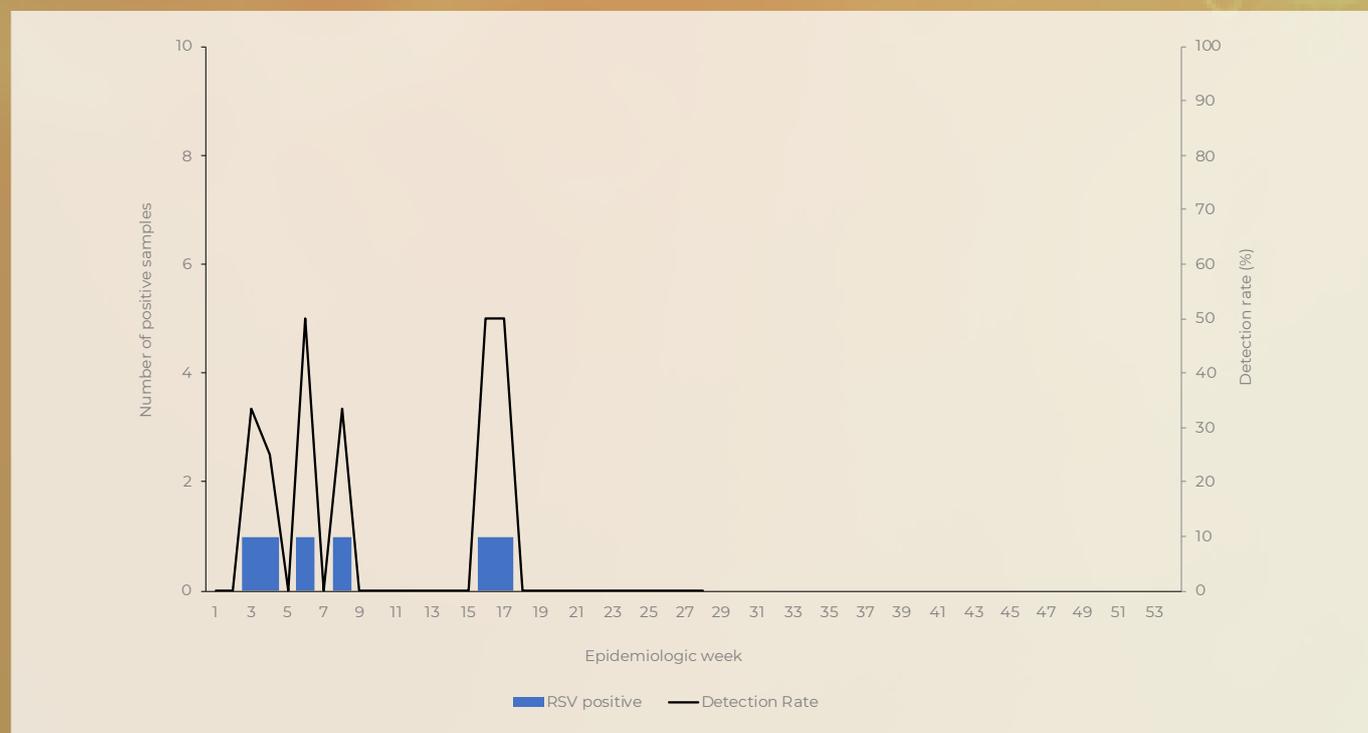


Figure 7. Number of samples testing positive for RSV*, and detection rate by week

*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	131
Limpopo	0	0
Mpumalanga	0	1
North West	0	2
Northern Cape	0	0
Western Cape	2	15
Total:	6	150

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

WEEK 28 2021

REPORTING PERIOD 2 MARCH 2020 TO 18 JULY 2021

INFLUENZA-LIKE ILLNESS (ILI) SURVEILLANCE VIRAL WATCH

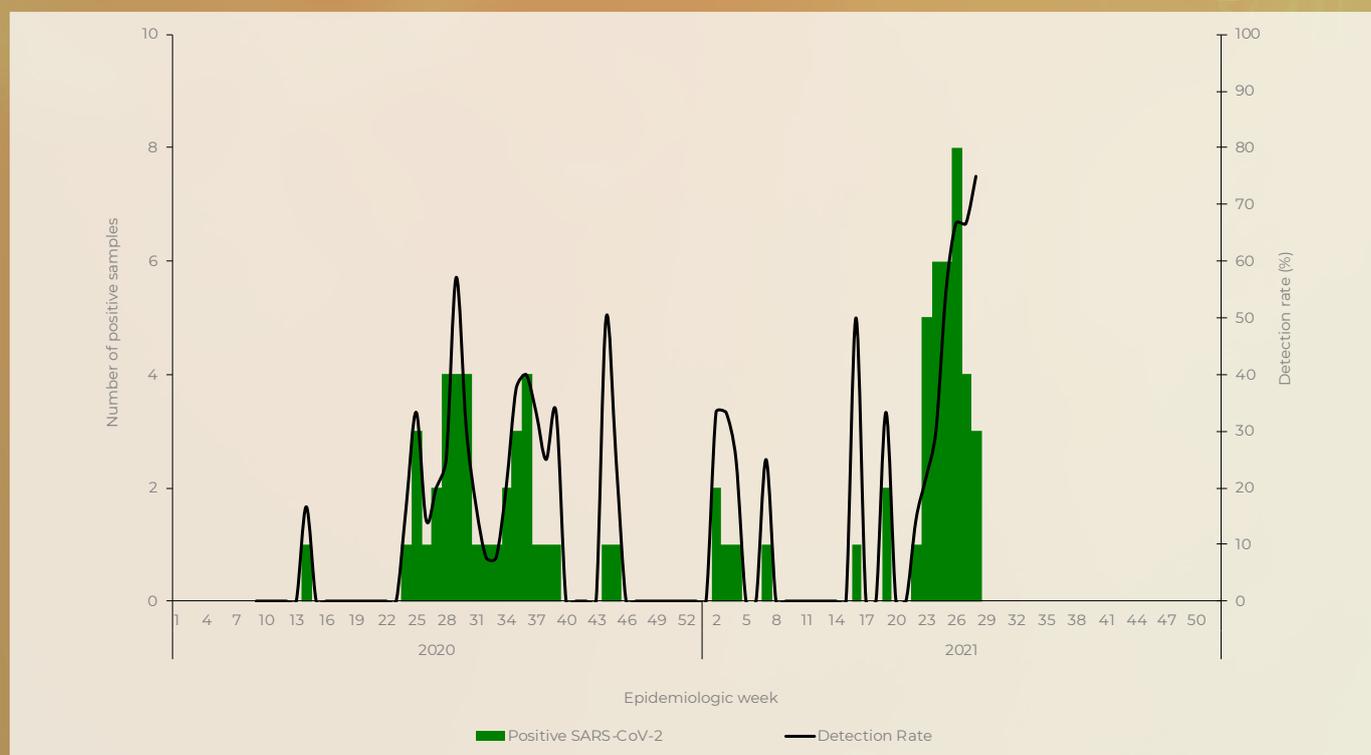


Figure 8. Number of samples testing positive for SARS-CoV-2*, and detection rate by week

*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	64	291
Limpopo	0	2
Mpumalanga	1	6
North West	0	2
Northern Cape	0	2
Western Cape	11	107
Total:	78	429

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

WEEK 28 2021

REPORTING PERIOD 4 JANUARY 2021 TO 18 JULY 2021

NATIONAL SYNDROMIC SURVEILLANCE FOR PNEUMONIA

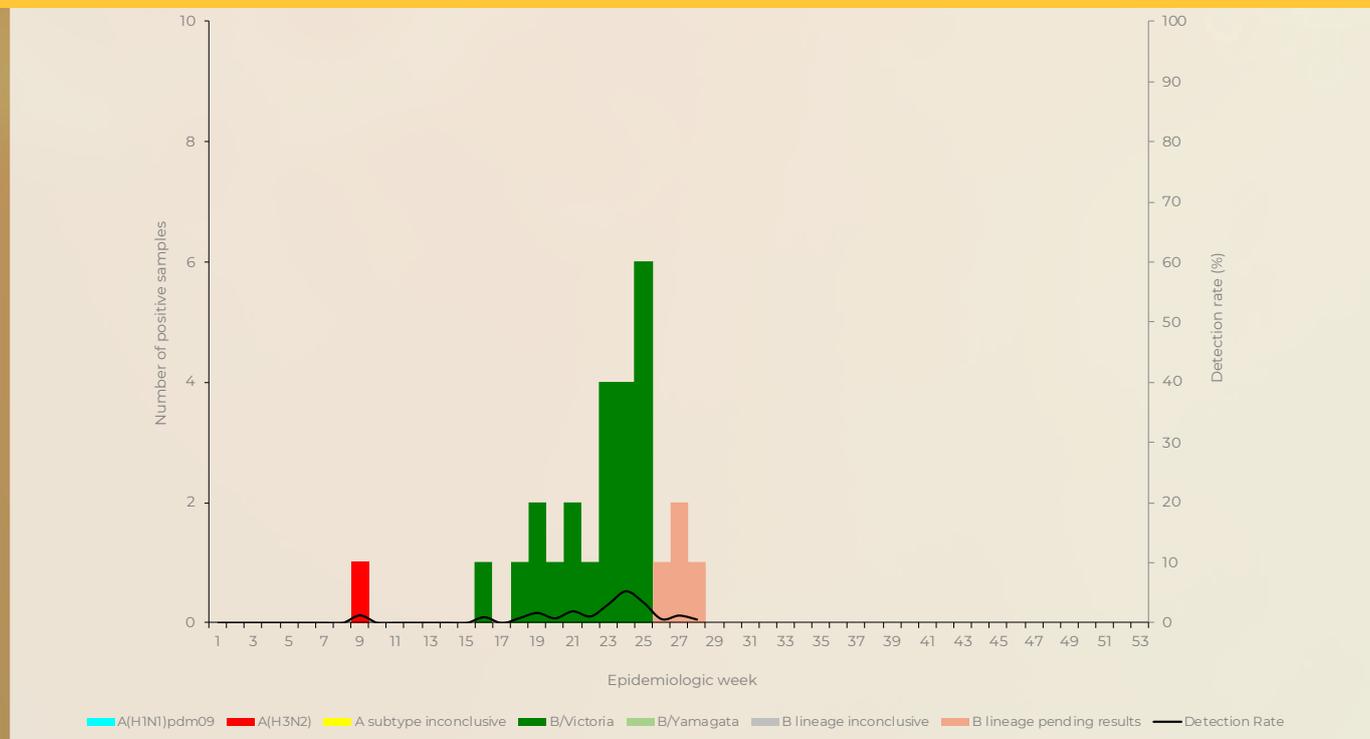


Figure 9. Number of positive samples* by influenza subtype and lineage** and detection rate*** by week

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

**Influenza B(Victoria) was detected from one of 91 (1%) 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: influenza B results for lineage are pending

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

Province	A(H1N1) pdm09	A(H3N2)	A subtype inconclusive	B/Victoria	B/Yamagata	B lineage inconclusive	B lineage pending results***	Total samples
Edendale (KZ)	0	0	0	7	0	0	0	385
Helen Joseph-Rahima Moosa (GP)	0	0	0	12	0	0	1	858
Klerksdorp-Tshepong (NW)	0	0	0	3	0	0	0	504
Mapulaneng-Matikwana (MP)	0	0	0	0	0	0	1	350
Red Cross (WC)	0	0	0	0	0	0	1	443
Mitchell's Plain (WC)	0	1	0	0	0	0	0	429
Tintswalo (MP)	0	0	0	0	0	0	1	132
Total:	0	1	0	22	0	0	4	3 101

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 91 (1%) 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 28 2021

REPORTING PERIOD 4 JANUARY 2021 TO 18 JULY 2021

NATIONAL SYNDROMIC SURVEILLANCE FOR PNEUMONIA

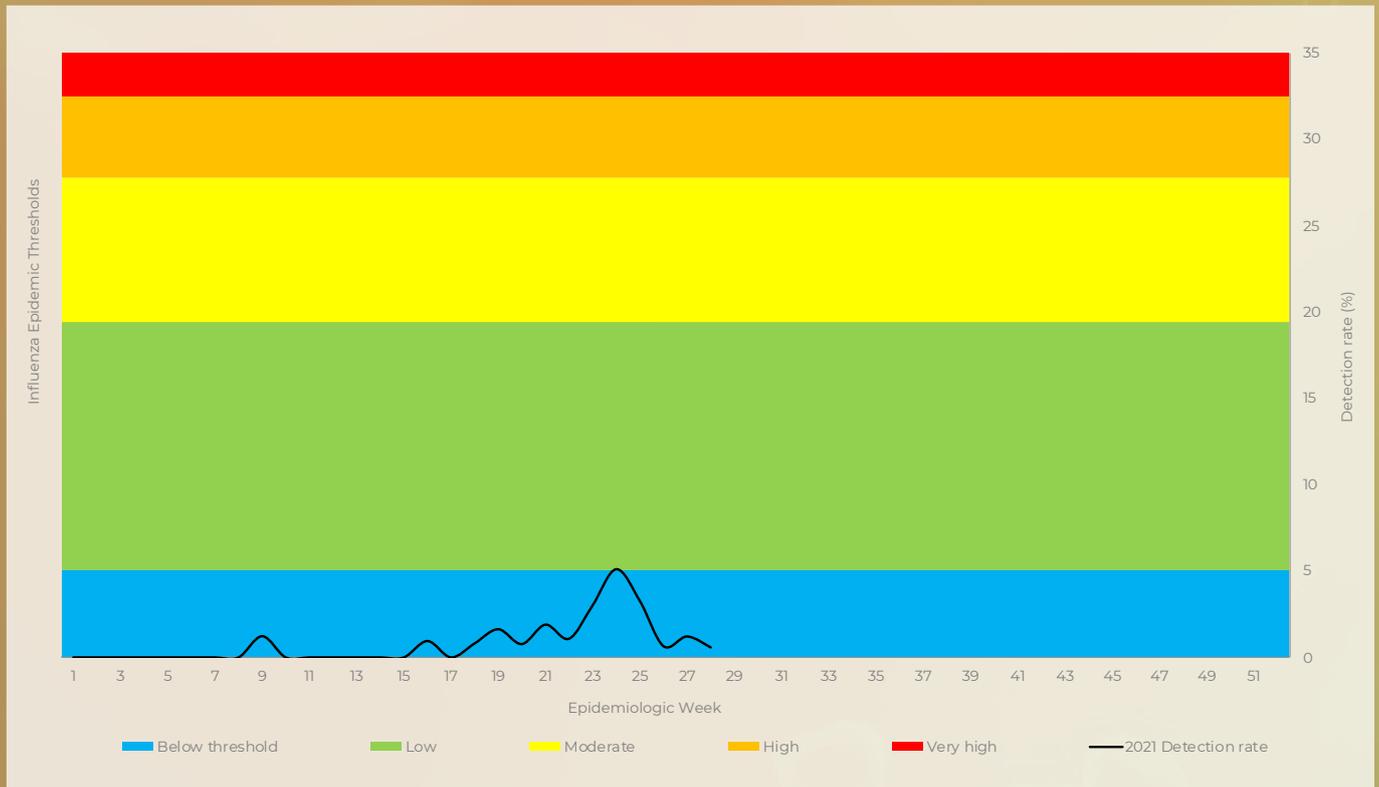


Figure 10. National syndromic surveillance for pneumonia percentage influenza detections and epidemic thresholds*

*Thresholds based on 2010-2019 data

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

WEEK 28 2021

REPORTING PERIOD 4 JANUARY 2021 TO 18 JULY 2021

NATIONAL SYNDROMIC SURVEILLANCE FOR PNEUMONIA

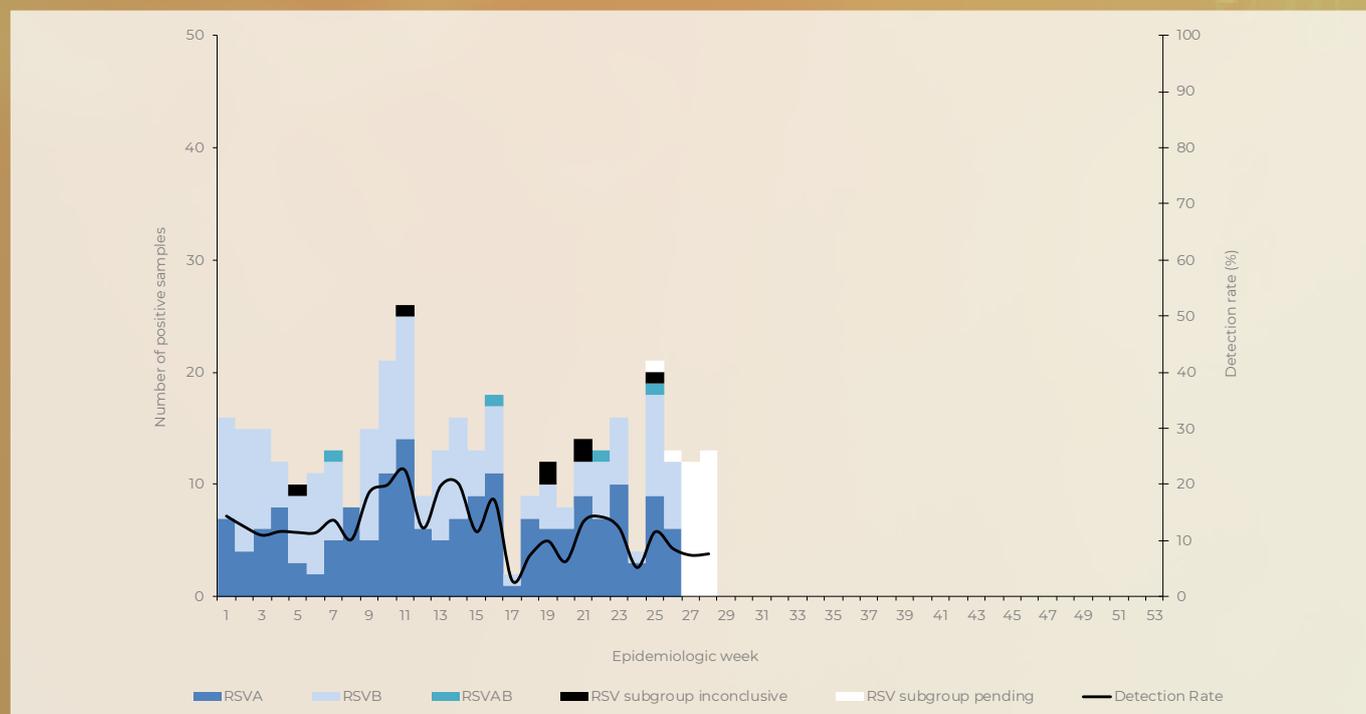


Figure 11. Number of samples testing positive for respiratory syncytial virus* by subgroup and detection rate by week

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 91 (5%) specimens from patients who met suspected SARS-CoV-2 case definition but did not meet pneumonia (SRI) case definition. These are not included in the epidemiological curve.

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

Hospital (Province)	RSVA	RSVB	RSVAB	RSV subgroup inconclusive	RSV subgroup pending*	Total samples
Edendale (KZ)	5	28	0	0	1	385
Helen Joseph-Rahima Moosa (GP)	35	42	0	0	1	858
Klerksdorp-Tshepong (NW)	8	42	0	2	2	504
Mapulaneng-Matikwana (MP)	20	7	1	0	0	350
Red Cross (WC)	66	27	2	4	15	443
Mitchell's Plain (WC)	31	6	1	1	8	429
Tintswalo (MP)	10	3	0	0	0	132
Total:	175	155	4	7	27	3 101

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 91 (5%) specimens from patients who met suspected SARS-CoV-2 case definition but did not meet pneumonia (SRI) case definition. These are not included in the table.

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

WEEK 28 2021

REPORTING PERIOD 4 JANUARY 2021 TO 18 JULY 2021

NATIONAL SYNDROMIC SURVEILLANCE FOR PNEUMONIA

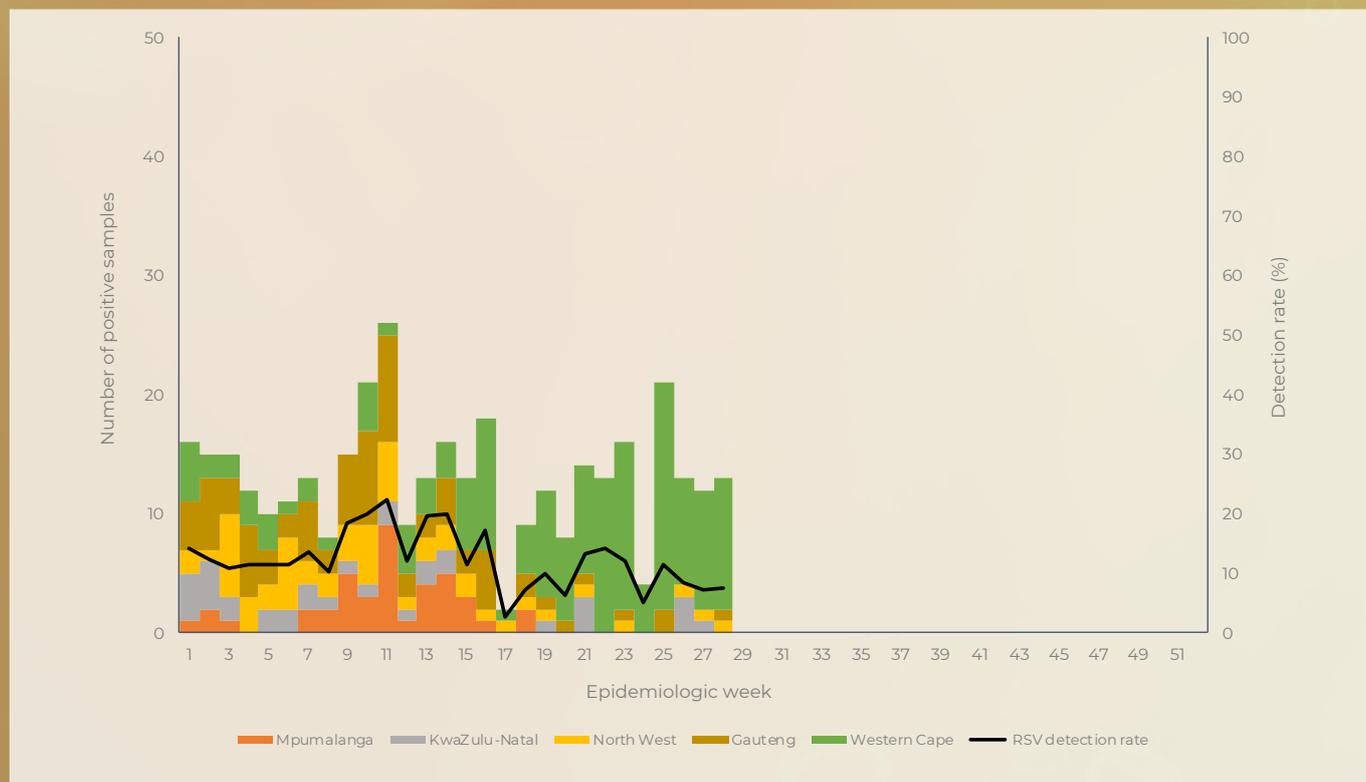


Figure 12. Number of samples testing positive for respiratory syncytial virus* by province and detection rate by week

*RSV was detected in five of 91 (5%) specimens from patients who met suspected SARS-CoV-2 case definition but did not meet pneumonia (SRI) case definition. These are not included in the epidemiological curve.

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

WEEK 28 2021

REPORTING PERIOD 2 MARCH 2020 TO 18 JULY 2021

NATIONAL SYNDROMIC SURVEILLANCE FOR PNEUMONIA

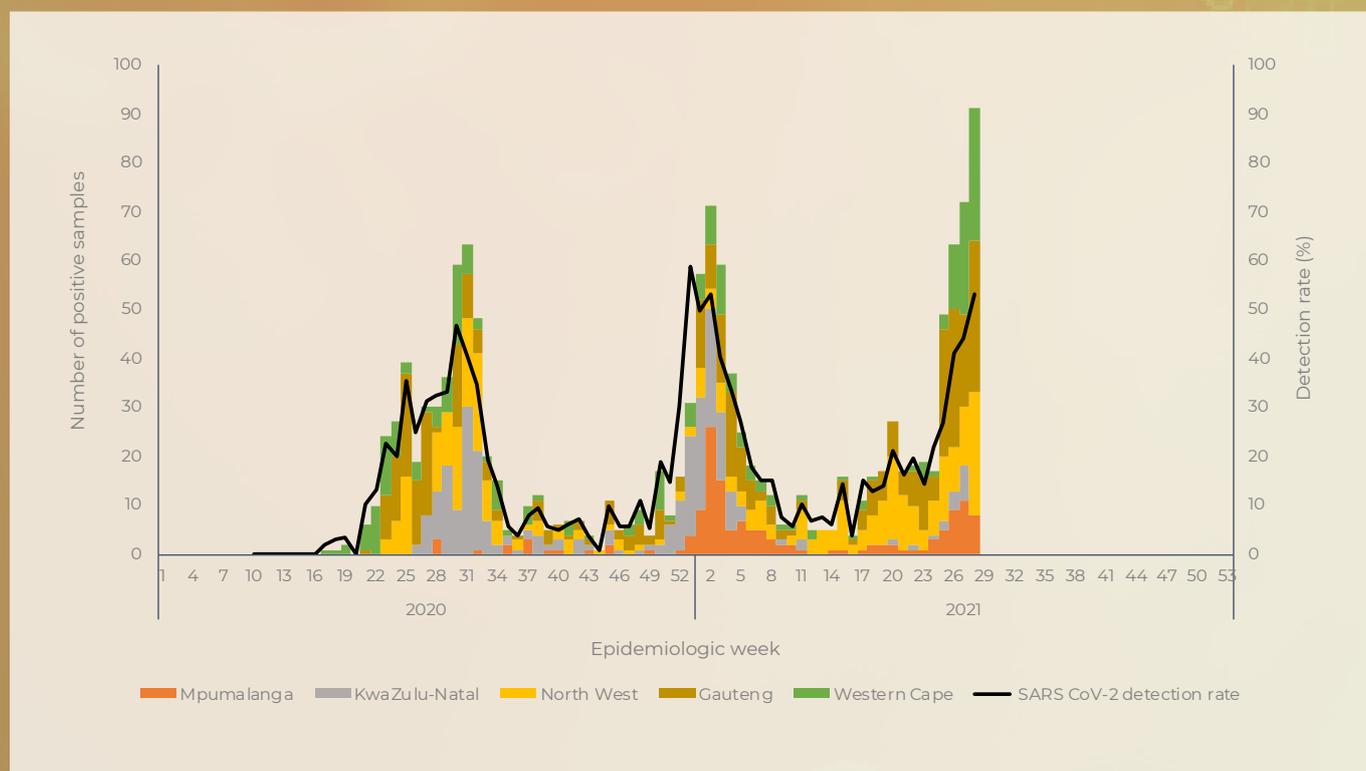


Figure 13. Number of samples testing positive for SARS-CoV-2** by province and detection rate by week

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

**SARS-CoV-2 was detected in 22 of 153 (14%) 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)	257	1 208
Helen Joseph-Rahima Moosa (GP)	396	1 698
Klerksdorp-Tshepong (NW)	333	1 097
Mapulaneng-Matikwana (MP)	119	652
Red Cross (WC)	46	1 396
Mitchell's Plain (WC)	188	896
Tintswalo (MP)	29	132
Total:	1 368	7 079

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 22 of 153 (14%) 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 28 2021

REPORTING PERIOD 2 MARCH 2020 TO 18 JULY 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 – 18 July 2021

Characteristic	Influenza-like illness (ILI), public-sector, n=505 (%)	Pneumonia, n=1 390 (%)
Age group		
0-9	38/505 (7)	86/1390 (6)
10-19	30/505 (6)	10/1390 (1)
20-39	231/505 (46)	237/1390 (17)
40-59	164/505 (32)	509/1390 (37)
60-79	40/505 (8)	499/1390 (36)
≥80	2/505 (<1)	49/1390 (3)
Sex-female	298/505 (59)	833/1390 (60)
Province*		
Gauteng	N/A	397/1390 (28)
KwaZulu-Natal	61/505 (12)	258/1390 (18)
Mpumalanga**	52/505 (10)	168/1390 (12)
North West	266/505 (53)	333/1390 (24)
Western Cape	126/505 (25)	234/1390 (17)
Race		
Black	366/502 (73)	1120/1384 (81)
Coloured	115/502 (23)	182/1384 (13)
Asian/Indian	3/502 (<1)	40/1384 (3)
White	17/502 (3)	23/1384 (2)
Other	1/502 (<1)	19/1384 (1)
Presentation		
Fever	415/502 (83)	698/1384 (50)
Cough	487/502 (97)	1330/1384 (96)
Shortness of breath	169/502 (34)	1090/1384 (79)
Chest pain	207/502 (41)	543/1384 (39)
Diarrhoea	46/502 (9)	86/1384 (6)

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

WEEK 28 2021

REPORTING PERIOD 2 MARCH 2020 TO 18 JULY 2021

Characteristic	Influenza-like illness (ILI), public-sector, n=505 (%)	Pneumonia, n=1 390 (%)
Underlying conditions		
Hypertension	17/502 (3)	247/1384 (18)
Cardiac	1/502 (<1)	39/1384 (3)
Lung disease	0/502 (0)	2/1384 (<1)
Diabetes	13/502 (3)	292/1384 (21)
Cancer	0/502 (0)	8/1384 (1)
Tuberculosis	7/502 (1)	35/1384 (3)
HIV-infection	83/502 (17)	282/1384 (20)
Other ***	12/502 (2)	90/1384 (7)
Management		
Oxygen therapy	5/502 (1)	964/1384 (70)
ICU admission	N/A	33/1384 (2)
Ventilation	N/A	37/1384 (3)
Outcome***		
Died	0/496 (0)	192/1283 (15)

*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 192 patients who died, one was in <20 age group, 17 in the 20-39 year age group, 54 in the 40-59 year age group, and 120 were ≥60 years; 116/192 (60%) were female. All except eight were known to have underlying medical conditions.