PRIVATE CONSULTATIONS SURVEILLANCE REPORT

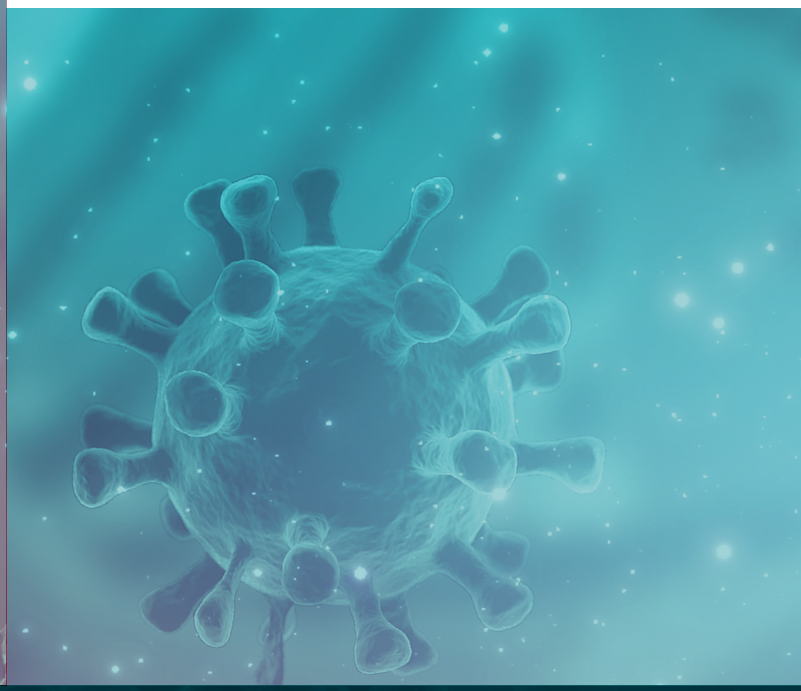
NATIONAL INSTITUTE FOR COMMUNICABLE DISEASES
Division of the National Health Laboratory Service

SOUTH AFRICA | WEEK 30 2020

CONTENTS

HIGHLIGHTS: WEEK 30

- The reduction in total numbers of respiratory hospitalisations as a result of the lockdown has reversed and numbers are now exceeding those preceding the national lockdown.
- Sustained increase in proportion of respiratory hospitalisations among 5-19, 20-49 and ≥50 years and in all four provinces evaluated likely reflects increasing respiratory cases including COVID-19 cases.
- Increasing percentage of casualty visits coded as respiratory is observed, reaching very high levels in individuals aged 20-49 years and ≥50 years.
- Differences by province and age group should be interpreted with caution due to low numbers in some groups.



PROGRAMME DESCRIPTIONS

Inpatient data from a large national private hospital group and outpatient data from a general practitioner network linked to the same hospital group were received for the last week. Data were obtained from eight provinces (**Eastern Cape**, Free State, **Gauteng**, Limpopo, **KwaZulu-Natal**, Mpumalanga, North West, **Western Cape**). Sufficient numbers for province-level reporting were available for four of these (bold). Consultations and admissions were coded based on discharge diagnosis using the International Classification of Diseases and Related Health Problems, 10th revision (ICD-10). Data were analysed using the indicator: All respiratory and confirmed or suspected COVID-19 (J00-J99 & U07.1 & U07.2)/Total consultations. Data on the indicator Pneumonia and Influenza (J10-J18)/Total consultations are available on request but were not included in this report.

Data were categorised in the following age groups: All ages, <5 years, 5-19 years, 20-49 years, ≥50 years

Epidemic Threshold

Thresholds were 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 historical data (2015-2019 for inpatients, 2016-2019 for outpatients) to calculate thresholds of activity, defined as follows:

- Epidemic threshold: Median of weekly values for all baseline years
- Low activity: Between epidemic threshold including 40th percentile
- Moderate activity: Between 40th and 90th percentile
- High activity: Between 90th and 97.5th percentile
- Very high activity: 97.5th percentile and above

Hospitalisation data for recent weeks are adjusted for delayed reporting (diagnosis codes assigned on discharge delayed for prolonged hospitalisations). Adjustment accounts for the probability of being admitted, but not yet discharged at the time of data drawdown using the age- and syndrome-specific probability distribution of duration of admission obtained from all hospitalizations that occurred during 2015-2019 and applied to the most recent weeks in 2020.

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INTERPRETATION OF DATA PRESENTED

Total admissions reduced from week 13 when lockdown was implemented and have remained below pre-lockdown levels. **Total respiratory admissions** reduced from week 13 when lockdown was implemented and slowly increased exceeding pre-lockdown levels in week 26 and continuing to increase, now reaching approximately double the level before the lockdown. The proportion of admissions coded as confirmed COVID-19 (out of suspected) increased from week 15, exceeding 60% from week 26.

Total and respiratory outpatient (general practitioner) consultations reduced from week 13. Respiratory consultations recovered to levels similar to those preceding the lockdown from week 26. The proportion of general practitioner consultations coded as confirmed COVID-19 (out of suspected) increased from week 15.

Total and respiratory outpatient (casualty) consultations reduced from week 13. Respiratory consultations recovered to levels similar to those preceding the lockdown from week 26. The proportion of casualty consultations coded as confirmed COVID-19 (out of suspected) increased from week 15, exceeding 50% from week 25.

Proportion of admissions respiratory or suspected COVID-19 overall remained below threshold until week 21, following which it increased rapidly reaching the very high threshold in week 25 and remaining above the threshold to date. By age group, percent admissions respiratory or suspected COVID for 0-4 years, has increased in recent weeks, remaining below the seasonal threshold. Among individuals aged 5-19 years, 20-49 years and ≥50 years, percent respiratory admissions has continuously increased since week 13, reaching very high level in 20-49 years and ≥50 years groups.

Proportion of outpatient (general practitioner) consultations respiratory or suspected COVID-19 overall increased from week 11, peaking in week 13 then dropping well below the threshold, but showing an increasing trend in recent weeks, crossing the seasonal threshold in week 25. By age group, percent outpatient visits (general practitioner) showed similar trends for all age groups, and has breached the seasonal threshold among individuals aged 5-19 in week 27 and among individuals aged 20-49 years and ≥50 years from week 25.

Proportion of outpatient (casualty) consultations respiratory or suspected COVID-19 overall dropped from week 13 during the lockdown but then increased from week 23 reaching very high levels in week 28. By age group, percent outpatient visits (casualty) showed similar trends, breaching the seasonal threshold in age group 5-19 years and reaching very high levels in individuals aged 20-49 years and ≥50 years.

Trends in proportion of admissions and outpatient consultations respiratory or COVID varied by province with proportion inpatients respiratory reaching very high levels in all provinces evaluated. Proportion of casualty patients respiratory was in the very high level in Eastern Cape, Gauteng and KwaZulu-Natal Provinces.

Limitations

Thresholds are established based on the proportion of consultations which are respiratory. If numbers of non-respiratory consultations drop substantially because of changes in health-seeking behaviour, this could lead to elevated respiratory proportions. Delays in coding of consultations may lead to changes in data from previous weeks.

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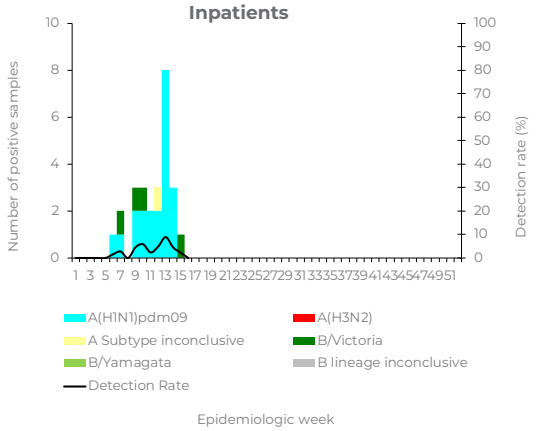
Assessment

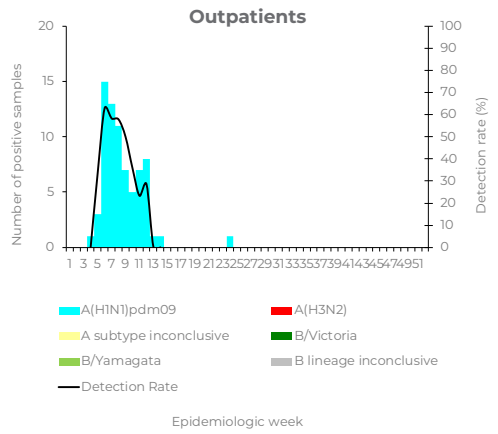
The sustained increase in proportion of respiratory hospitalisations among 5-14, 20-49 and ≥50 years likely reflects increasing respiratory cases including COVID-19 cases. Changes in health-seeking behaviours and/or effects of lockdown-related reductions may also have contributed. The reduction in total numbers of respiratory hospitalisations as a result of the lockdown has reversed and numbers are now exceeding those preceding the national lockdown.

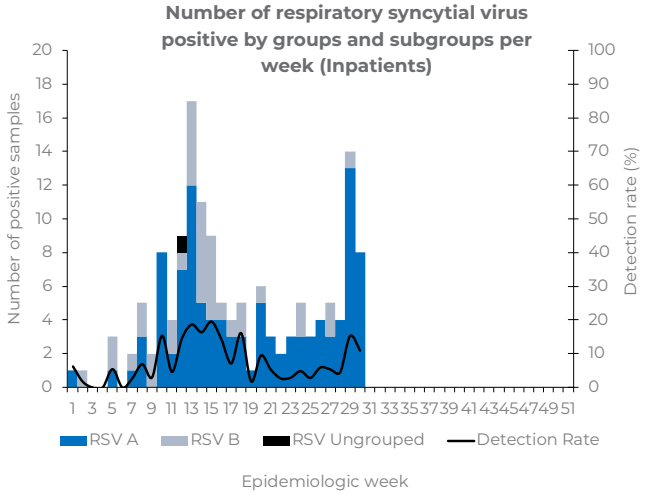
Increasing percentage of casualty visits coded as respiratory is observed, reaching very high levels in individuals aged 20-49 years and ≥50 years. Proportion outpatient visits to general practitioners are also showing increasing trends.Differences by province and age group should be interpreted with caution due to low numbers in some groups.

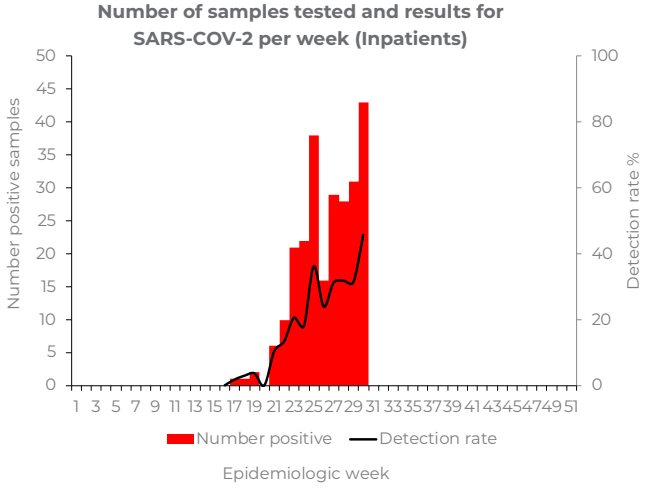
DATA FROM VIROLOGIC SURVEILLANCE PROGRAMMES TO AID IN INTERPRETATION OF CONSULTATION TRENDS

NUMBER OF INFLUENZA POSITIVE SAMPLES BY SUBTYPE/LINEAGE AND DETECTION RATE BY WEEK









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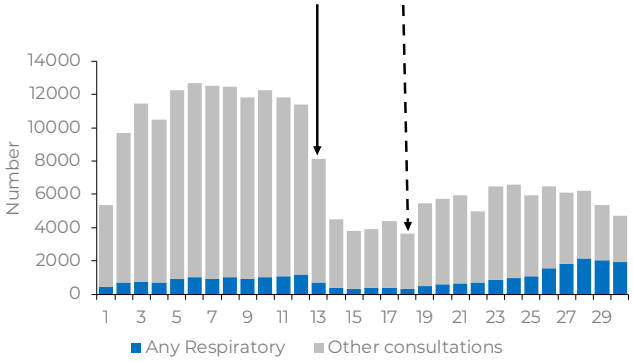
PRIVATE CONSULTATIONS SURVEILLANCE REPORT

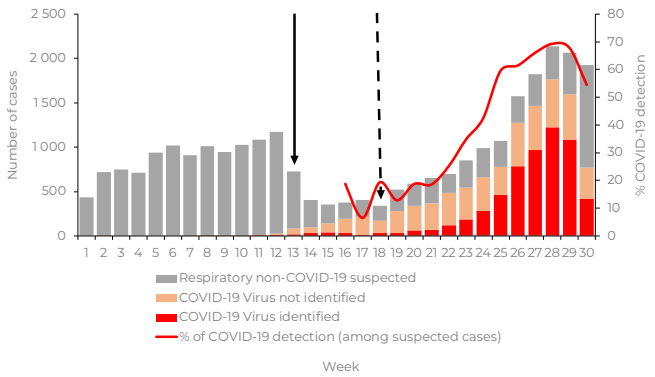
WEEK **30** 2020

NUMBER OF INFLUENZA POSITIVE SAMPLES BY SUBTYPE/LINEAGE AND DETECTION RATE BY WEEK

(SOLID ARROW INDICATES FIRST WEEK OF LOCKDOWN, DASHED ARROW FIRST WEEK OF LEVEL 4)

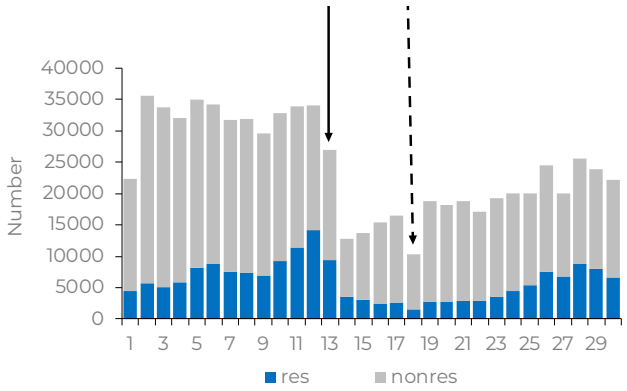
Inpatients

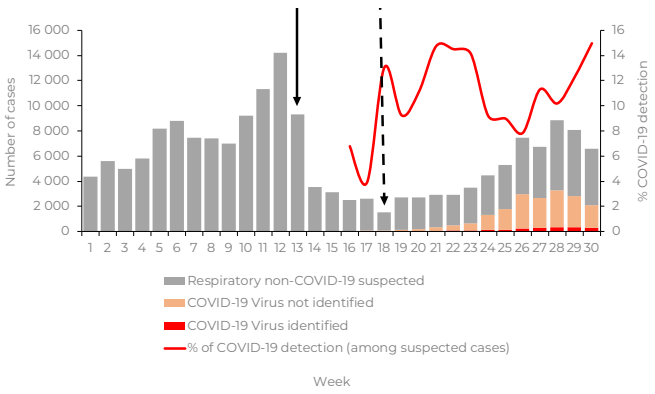




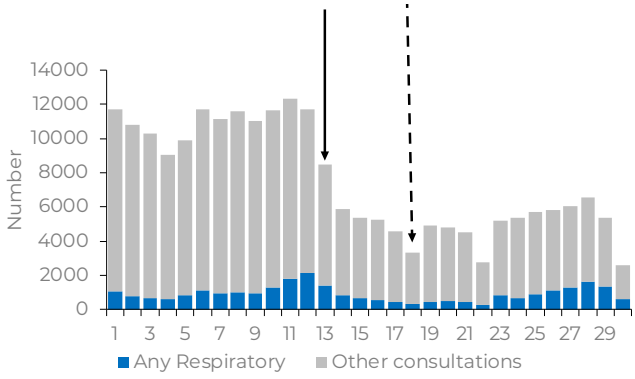
Outpatients

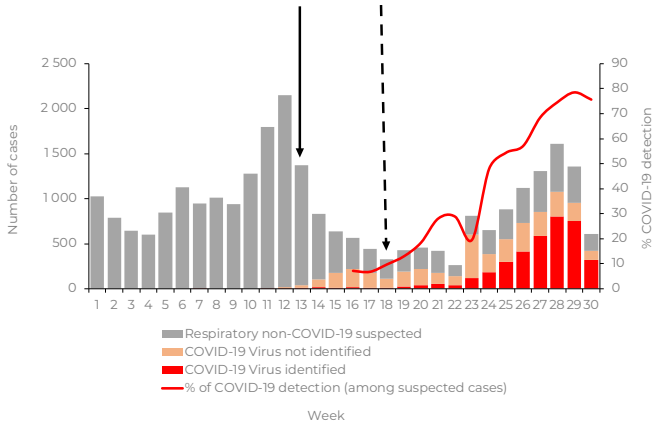
A) General Practitioners





B) Casualty





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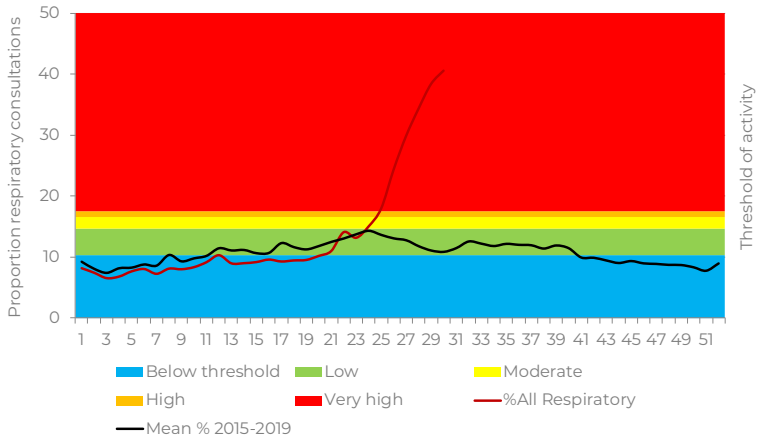
PRIVATE CONSULTATIONS SURVEILLANCE REPORT

WEEK **30** 2020

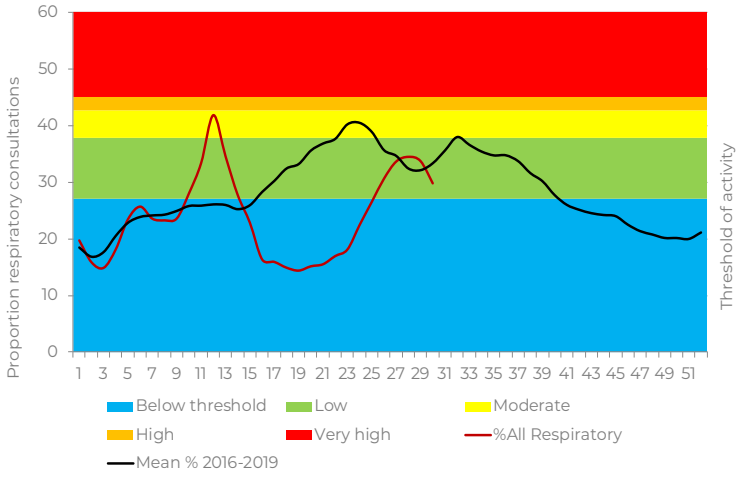
ALL AGES

All Respiratory including confirmed or suspected COVID-19 (J00-J99 & U07) indicators – Inpatients

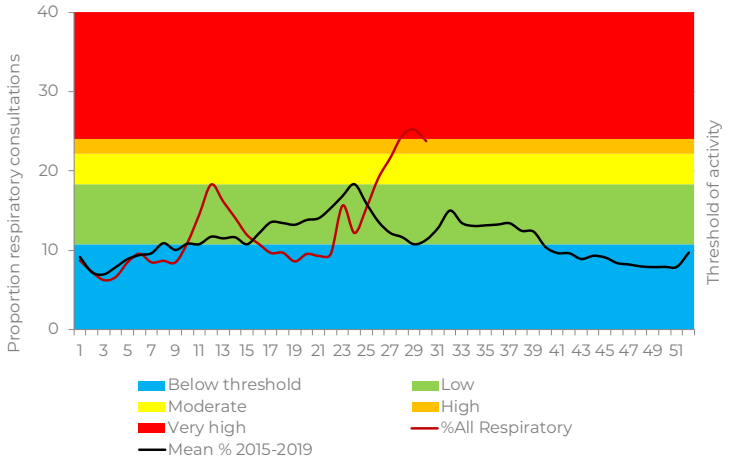


All Respiratory including confirmed or suspected COVID-19 (J00-J99 & U07) indicators – Outpatients

A) General Practitioners



B) Casualty



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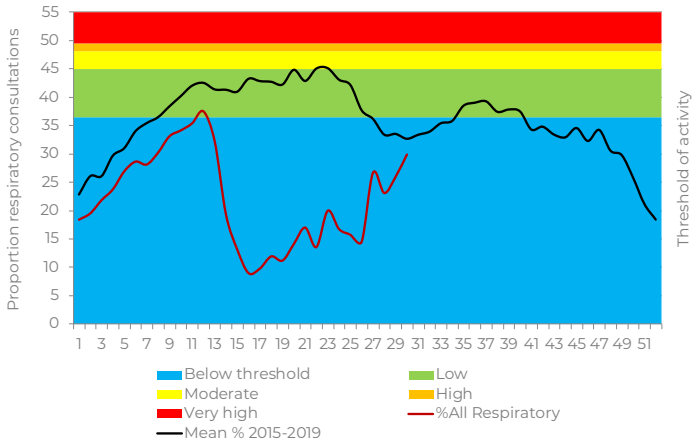
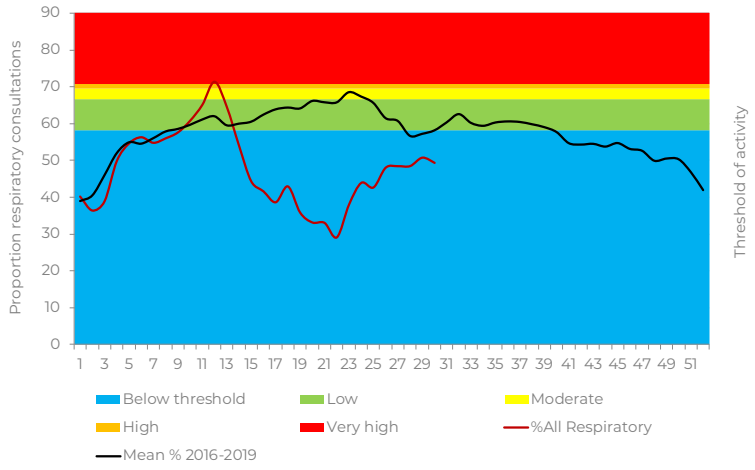
0-4 YEARS OF AGE

All Respiratory including confirmed or suspected COVID-19 (J00-J99 & U07) indicators – Inpatients

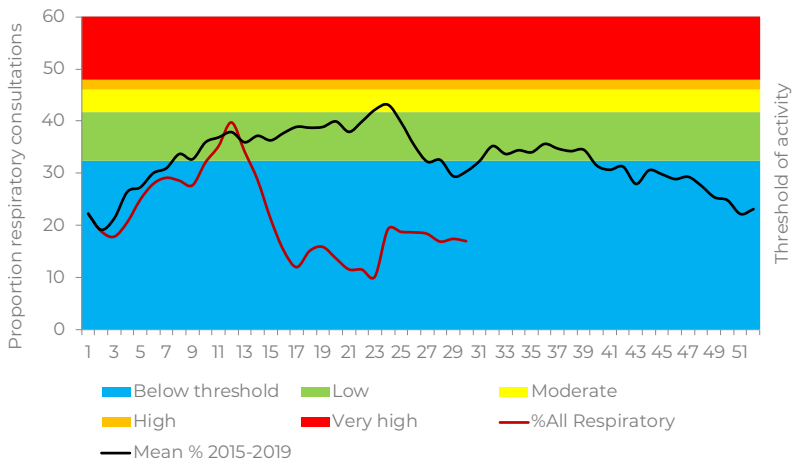


All Respiratory including confirmed or suspected COVID-19 (J00-J99 & U07) indicators – Outpatients

A) General Practitioners



B) Casualty



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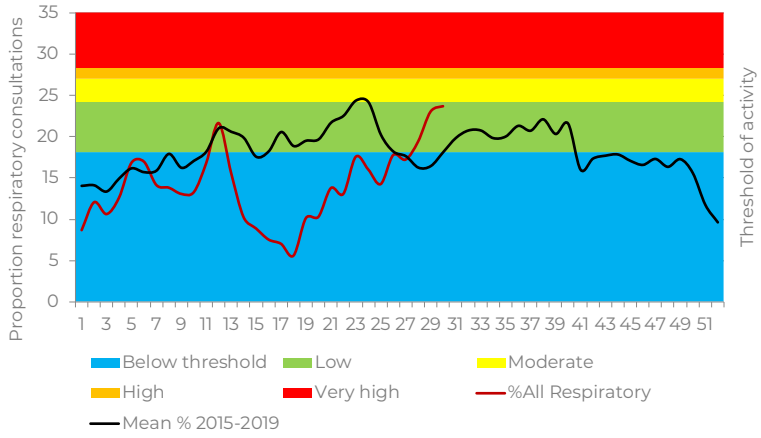
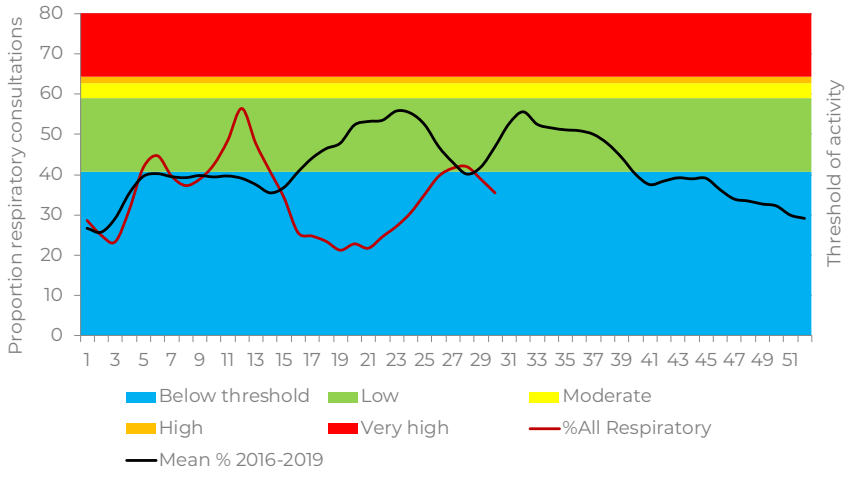
5-19 YEARS OF AGE

All Respiratory including confirmed or suspected COVID-19 (J00-J99 & U07) indicators – Inpatients

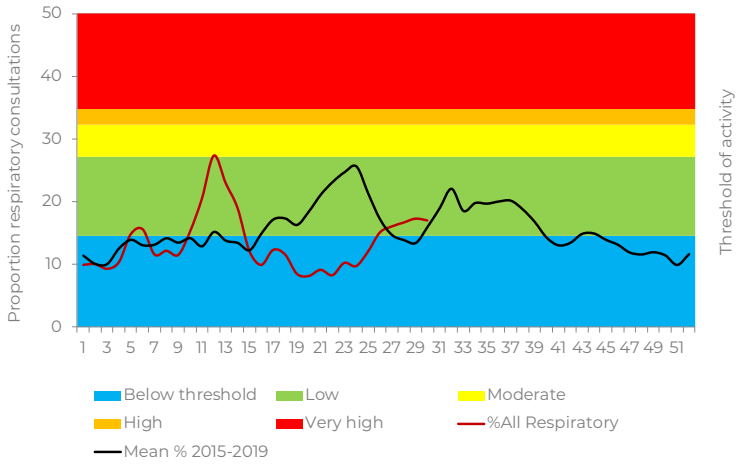


All Respiratory including confirmed or suspected COVID-19 (J00-J99 & U07) indicators – Outpatients

A) General Practitioners



B) Casualty



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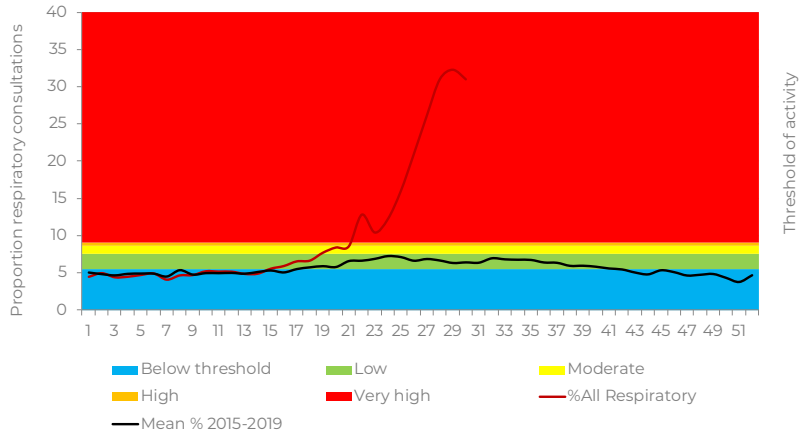
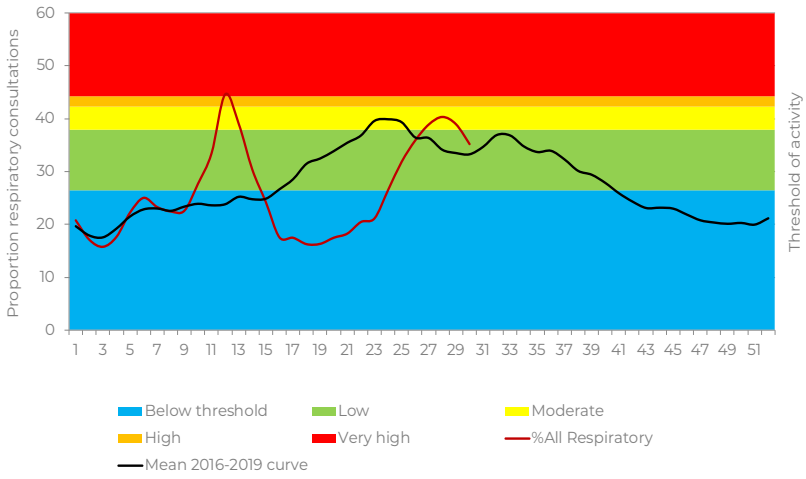
20-49 YEARS OF AGE

All Respiratory including confirmed or suspected COVID-19 (J00-J99 & U07) indicators – Inpatients

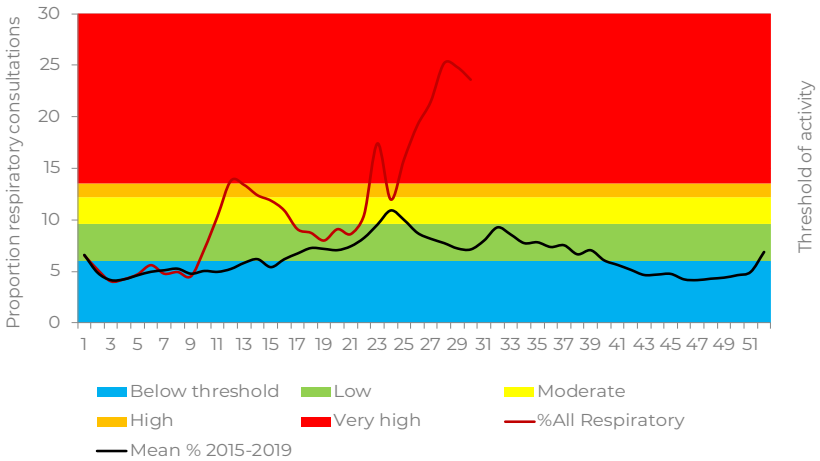


All Respiratory including confirmed or suspected COVID-19 (J00-J99 & U07) indicators – Outpatients

A) General Practitioners



B) Casualty



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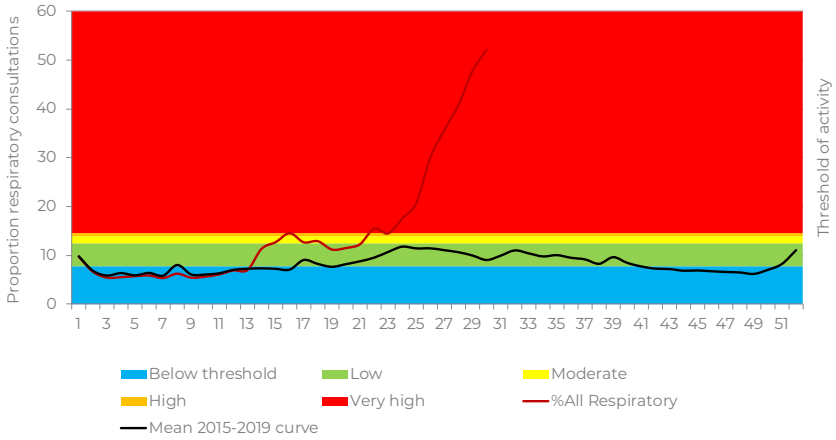
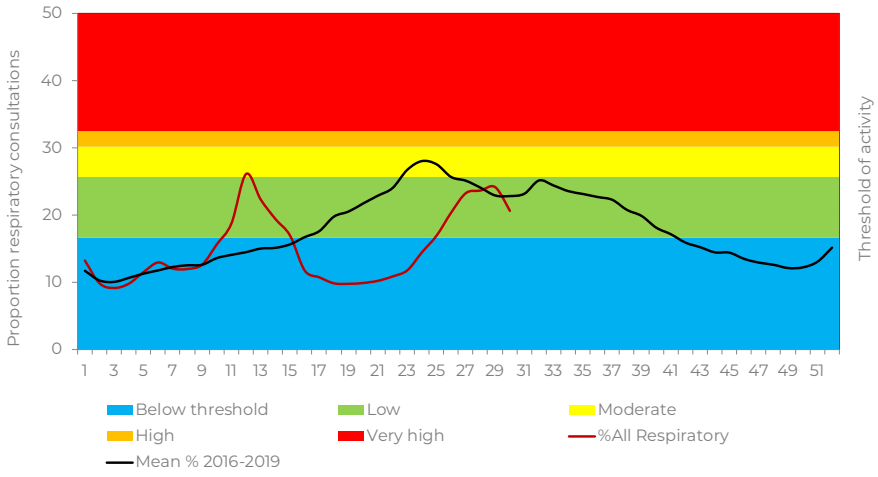
≥50 YEARS OF AGE

All Respiratory including confirmed or suspected COVID-19 (J00-J99 & U07) indicators – Inpatients

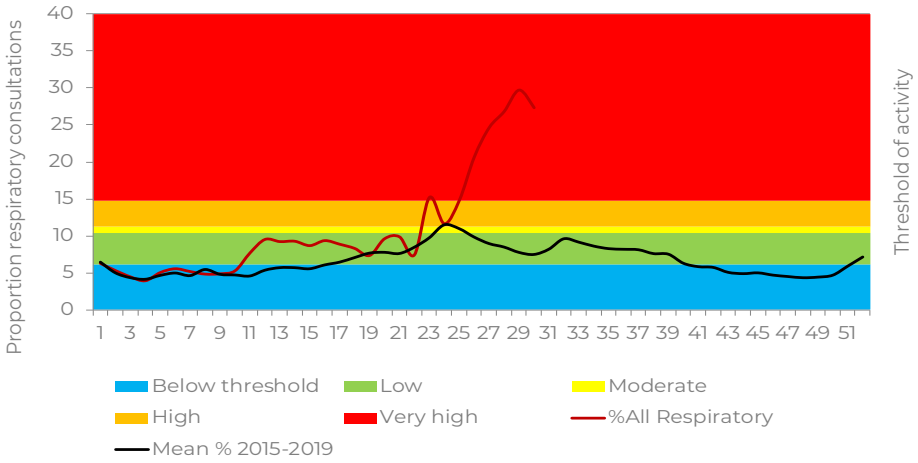


All Respiratory including confirmed or suspected COVID-19 (J00-J99 & U07) indicators – Outpatients

A) General Practitioners



B) Casualty



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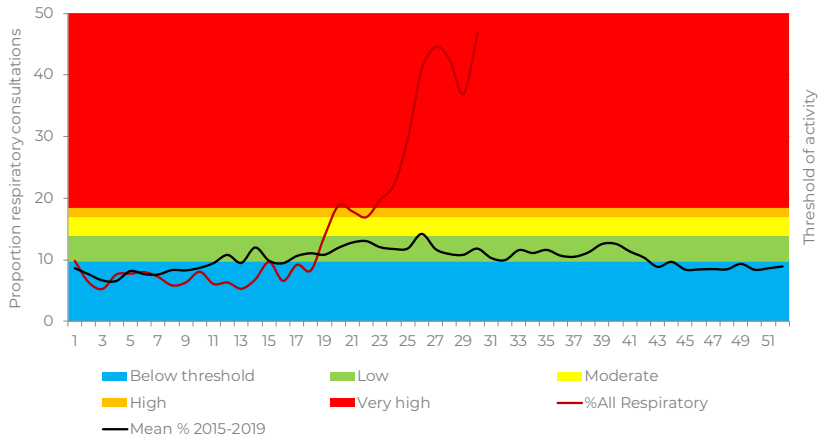
PRIVATE CONSULTATIONS SURVEILLANCE REPORT

WEEK **30** 2020

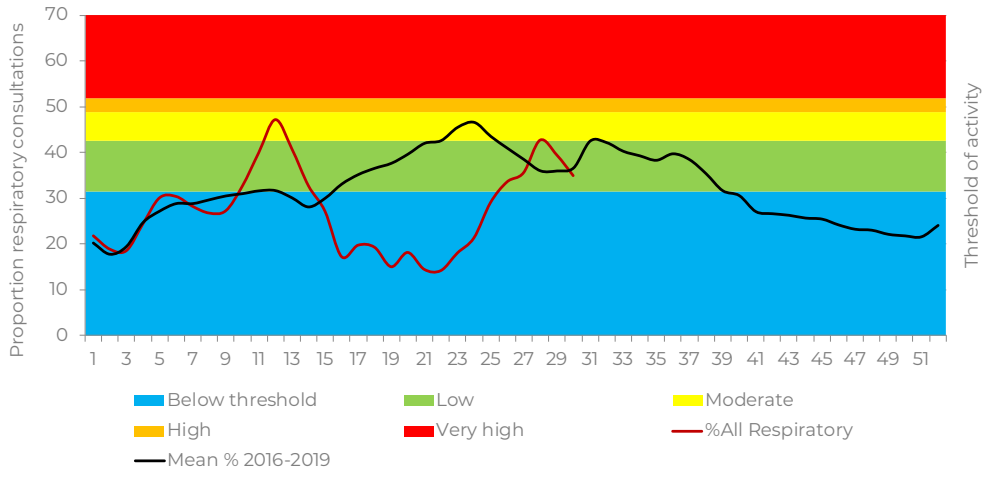
EASTERN CAPE PROVINCE

All Respiratory including confirmed or suspected COVID-19 (J00-J99 & U07) indicators – Inpatients

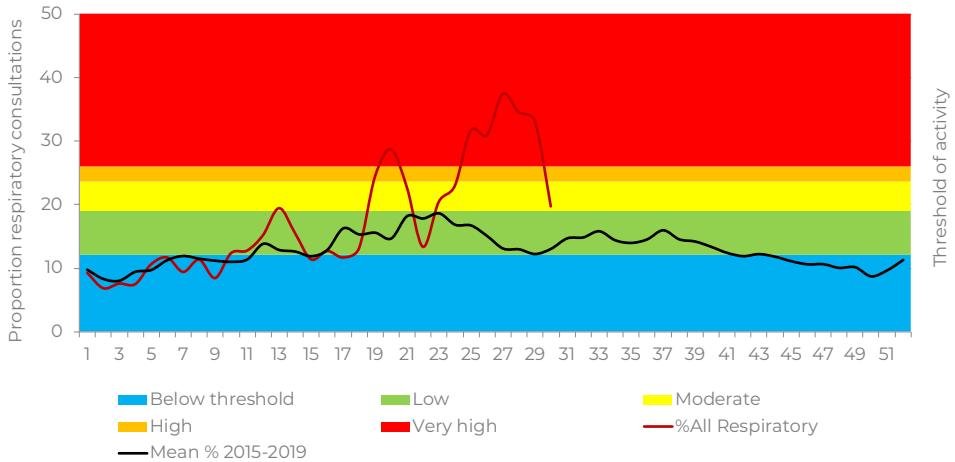


All Respiratory including confirmed or suspected COVID-19 (J00-J99 & U07) indicators – Outpatients

A) General Practitioners



B) Casualty



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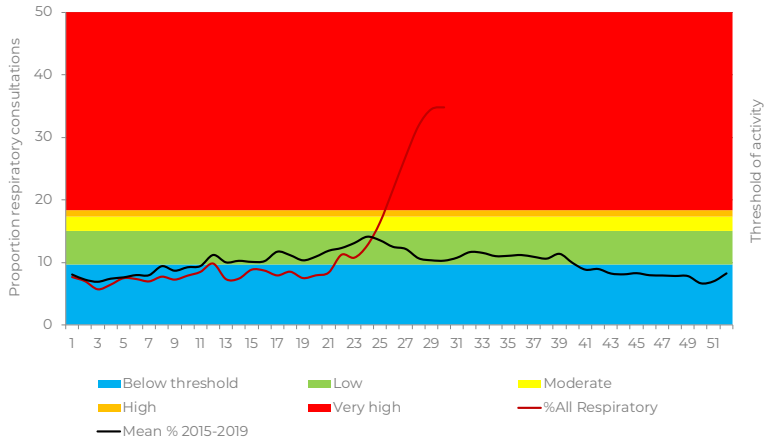
PRIVATE CONSULTATIONS SURVEILLANCE REPORT

WEEK **30** 2020

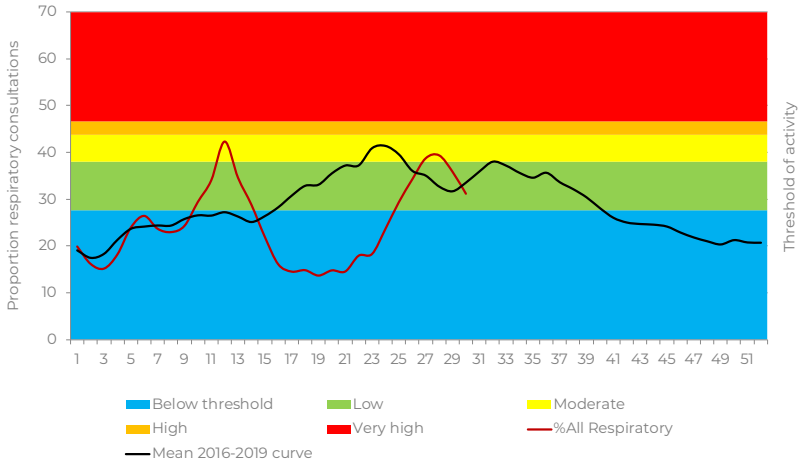
GAUTENG PROVINCE

All Respiratory including confirmed or suspected COVID-19 (J00-J99 & U07) indicators – Inpatients

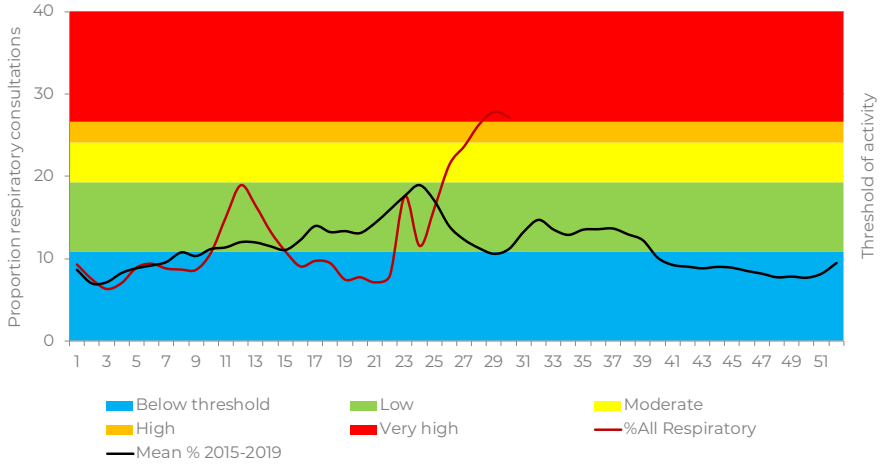


All Respiratory including confirmed or suspected COVID-19 (J00-J99 & U07) indicators – Outpatients

A) General Practitioners



B) Casualty



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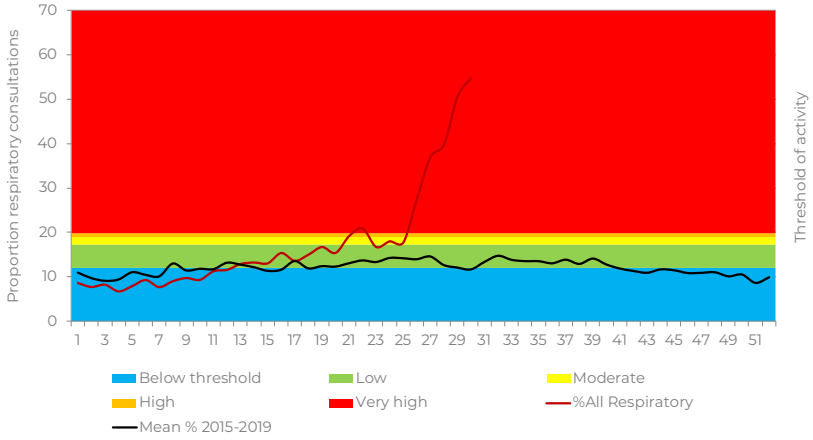
PRIVATE CONSULTATIONS SURVEILLANCE REPORT

WEEK **30** 2020

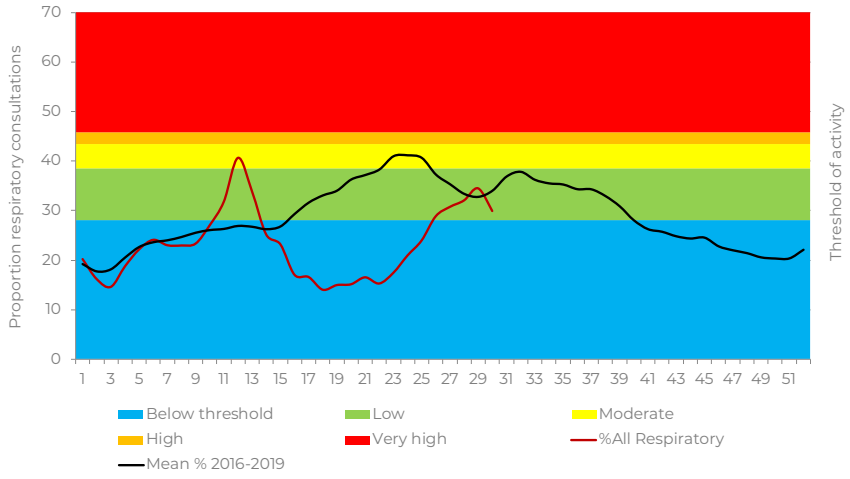
KWAZULU-NATAL PROVINCE

All Respiratory including confirmed or suspected COVID-19 (J00-J99 & U07) indicators – Inpatients

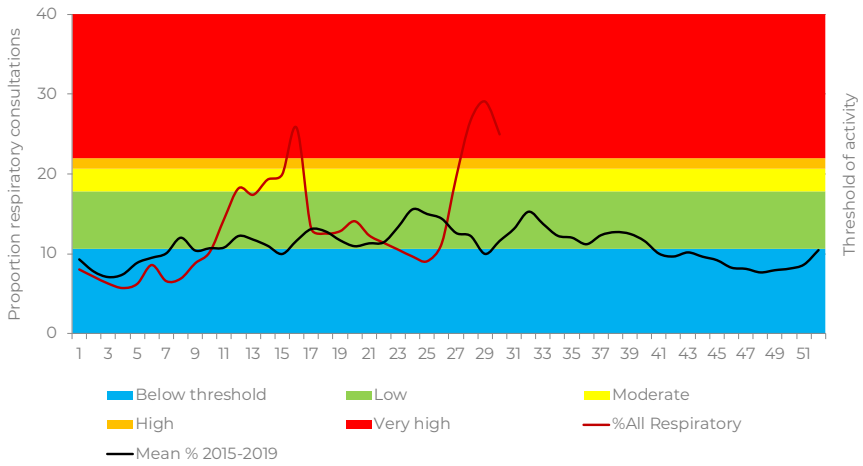


All Respiratory including confirmed or suspected COVID-19 (J00-J99 & U07) indicators – Outpatients

A) General Practitioners



B) Casualty



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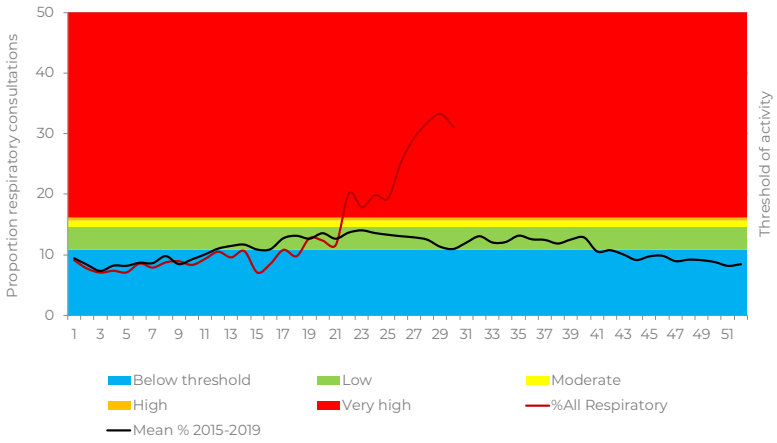
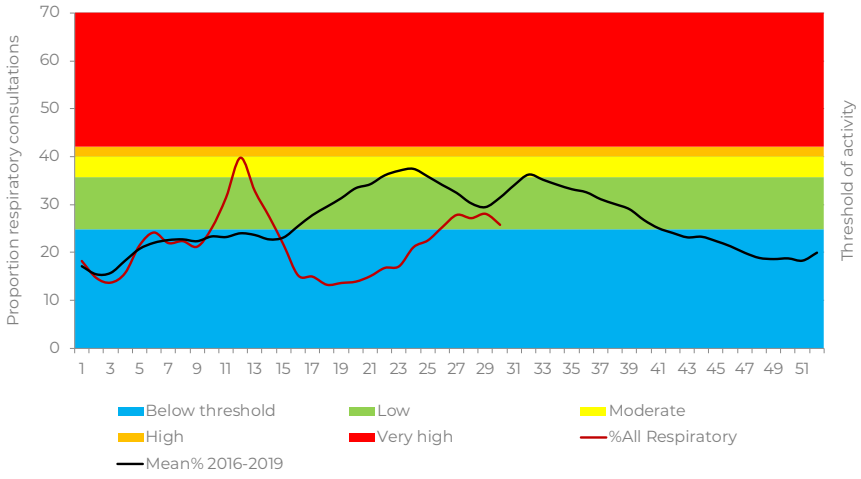
WESTERN CAPE PROVINCE

All Respiratory including confirmed or suspected COVID-19 (J00-J99 & U07) indicators – Inpatients

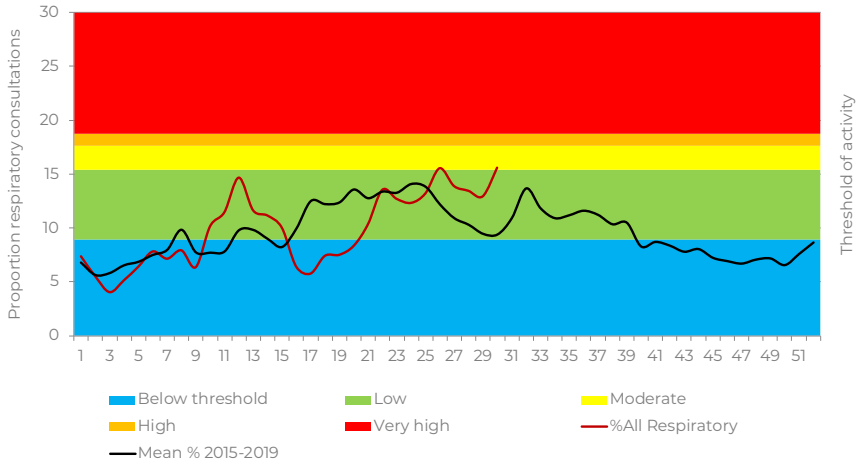


All Respiratory including confirmed or suspected COVID-19 (J00-J99 & U07) indicators – Outpatients

A) General Practitioners



B) Casualty



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