Report on epidemiological situation

Nowcasting and short-term forecasting of cases counts

World Health Organization

2024-08-20

# Overview

# Background

## Nowcasting

Often when collecting epidemiological data in an outbreak situation, there are limitations in the data collected and interpretation in real-time is challenging. This can be due to reporting delays, where cases in the current or recent weeks have not yet been fully reported due to logistical challenges in the field, limited laboratory capacity or other factors.

The purpose of nowcasting is to estimate case counts, growth rate, and doubling time in the recent period where reporting delays apply to give a more clear picture of current burden. Furthermore, by estimating the growth rate current trends can be determined, which may otherwise be challenging due to noise and reporting irregularities in the data.

## Short-term forecasting

By extension, short-term forecasting is used to estimate the number of cases in the near future based on the current trends. This can be useful for planning purposes, to anticipate the number of cases that may be expected in the coming weeks should the current trends continue. **Note this approach is not suitable for mid- or long-term forecasting and the time window should not be extended beyond a few weeks.**

flextable(data.frame(text = “Disclaimer: the estimates from both nowcasting and short-term forecasting are based on the assumption that the reporting delays can be clearly determined and that current trends will continue. This may not be the case if there are changes in the underlying dynamics of the outbreak, such as changes in public health measures, changes in population behavior, or other factors.” )) %>% theme\_box() %>% autofit()

# Data summary

# Results

# Limitations

# Conclusions

# References

# Appendix

## Methods

The estimates are produced using the epinow package. Further information on the methods used are described in <https://epiforecasts.io/EpiNow2/>.