Coronavirus disease (COVID-19)

Situation Report – 128

EF

Highlights

WHO has published a case-control protocol for the assessment of risk factors for coronavirus disease 2019 (COVID-19) in health workers. The primary objective of this study is to characterize and assess the risk factors for SARS-CoV-2 infection in health workers exposed to COVID-19 patients.

A scientific brief has been published by WHO investigating any association between smoking and an increased risk for COVID-19. At the time of this review, the available evidence suggests that in hospitalized COVID-19 patients, smoking is associated with increased severity of disease and death.

WHO has published a population-based age-stratified seroepidemiological investigation protocol for COVID-19 virus infection. This protocol was designed to investigate the extent of infection, as determined by positive blood tests in the general population, in any country in which COVID-19 virus infection has been reported.

Elements of the COVID-19 Strategic Response and Preparedness Plan (SPRP) have been updated and are reviewed on a regular basis by WHO in consultation of all six regional offices. These elements are laid out in the COVID-19 WHO Appeal.

In today's 'Subject in Focus' below, the WHO Infodemics management pillar explores how WHO is listening to social media to get ahead of the infodemic.

Situation in numbers (by WHO Region)

Total (new cases in last 24 hours)

Globally	5 488 825 cases (84 314)	349 095 deaths (5 581)
Africa	85 815 cases (2 771)	2 308 deaths (94)
Americas	2 495 924 cases (41 472)	145 810 deaths (2 071)
Eastern Mediterranean	449 590 cases (10 690)	11 452 deaths (159)
Europe	2 061 828 cases (20 124)	176 226 deaths (3 013)
South-East Asia	218 523 cases (8 250)	6 359 deaths (219)
Western Pacific	176 404 cases (1 007)	6 927 deaths (25)

Subject in Focus: Using social media listening to get ahead of the infodemic

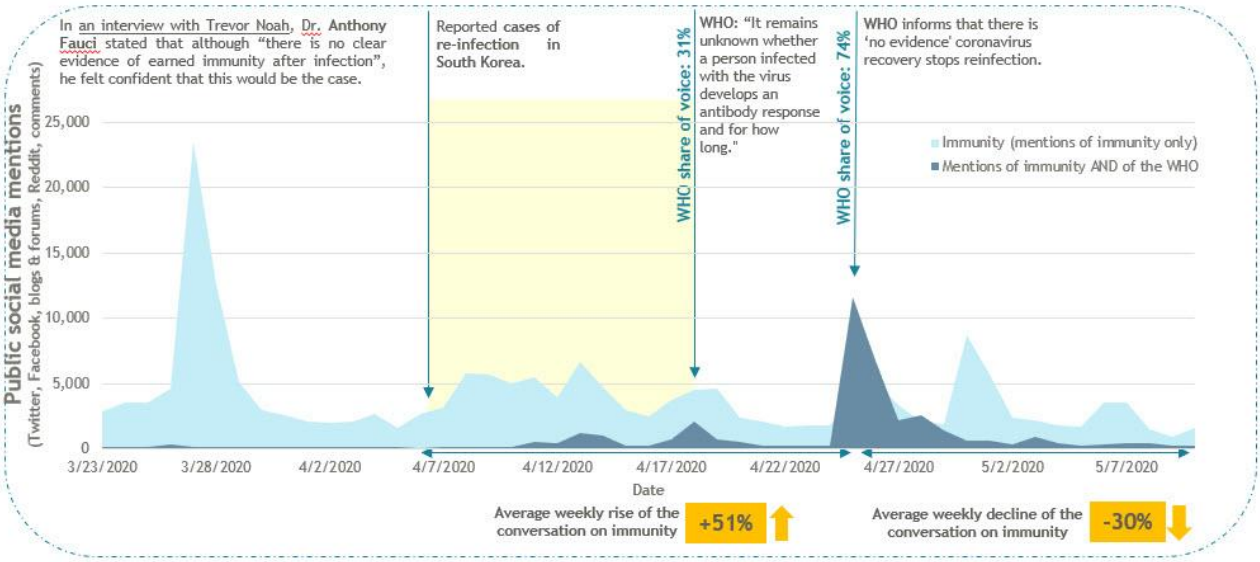
The COVID-19 pandemic is now a ubiquitous topic in global online conversations and "covid" ranks as the second most used word in all public English-language social media posts published in the past 30 days. The term received 55 million public mentions and was only surpassed by the word "people", with 57 million mentions.

The task of reaching global audiences with trustworthy and timely information is challenging in this tsunami of information – but more important than ever. The COVID-19 information ecosystem is sensitive to new "conversation inputs", such as news stories, influential statements, or new research findings. These inputs have a measurable impact on online conversations and can affect people's behaviour and emotions.

The WHO Infodemics management pillar has been monitoring global English- language conversations on COVID-19 to detect early signals of growing interest and public engagement with constantly emerging narratives around COVID-19. Regardless of whether these signals stem from trusted or unreliable sources they can be used to anticipate and intervene: what questions need answering or what myths need busting.

In early April, the weekly monitoring detected a 98% rise in the number of global posts that engaged with the conversation on COVID-19 immunity.

Figure 1. Overview of the English-language social media conversation on immunity from 23 March 2020 to 10 May 2020 and relative WHO communication intervention



Source: Tim Zecchin, Paolo Vacca and Amy Wright, Media Measurement

The publication of research data on South Korean patients who had tested positive for COVID-19 following post-recovery tests generated an increase in the volume of mentions, questions, and speculation over a possible "reactivation" of the virus. The linguistic analysis that complements the weekly study unpacked the emotional response expressed by English-speaking users, revealing a 137% jump in social media posts using language that is representative of fear.

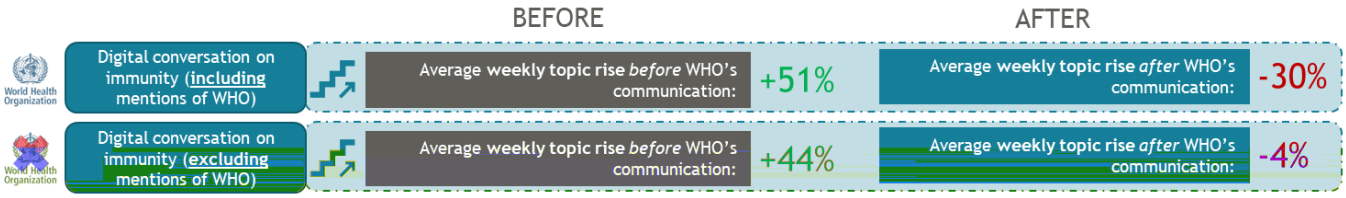
The analysis of 233 300 social media posts that mentioned immunity-related keywords in the context of COVID-19 between 23 March and 10 May 2020 suggested that the conversation had been rising by a daily average of 12% between 7 April to 17 April (Figure 1, highlighted in yellow). On 18 April, news media reported that WHO was "not sure whether the presence of antibodies in blood gives full protection against reinfection." On this day, 31% of the public social media conversation on immunity on was driven by the World Health Organization's own communication.

Following this statement, public concern over the possibility of COVID-19 re-infection – as inferred from the online conversation – decreased by 16% on average for the following six days. A second surge in conversation was then driven by WHO's follow up statement on the clear "lack of evidence" of earned immunity after infection on 25 April. On this day this statement was issued, 74% of the social media conversation on immunity was driven by the WHO's communication.

The data suggest that the introduction of a new input into the COVID-19 information ecosystem, on the topic of 're-infection / immunity' has been influenced by proactive WHO infodemic intervention, filling the potential information gap.

After an average weekly rise of 51% of social media mentions of immunity over the two weeks that preceded WHO's communication, the intervention helped to reverse the trend during the two weeks that followed (-30%). And even when immunity-related content did not specifically mention WHO, a decline in conversation could be detected: from +44% before the statement to -4% after the statement.

Figure 2. Breakdown of topic rise and decline before and after WHO's own communication interventions



Source: Media Measurement.

WHO's timely communication in response to a topic of growing concern has helped to de-escalate speculation around immunity and reinfection on social media - even before the release of information that eventually claimed that the cases of re-infection detected in South Korea were false positives.

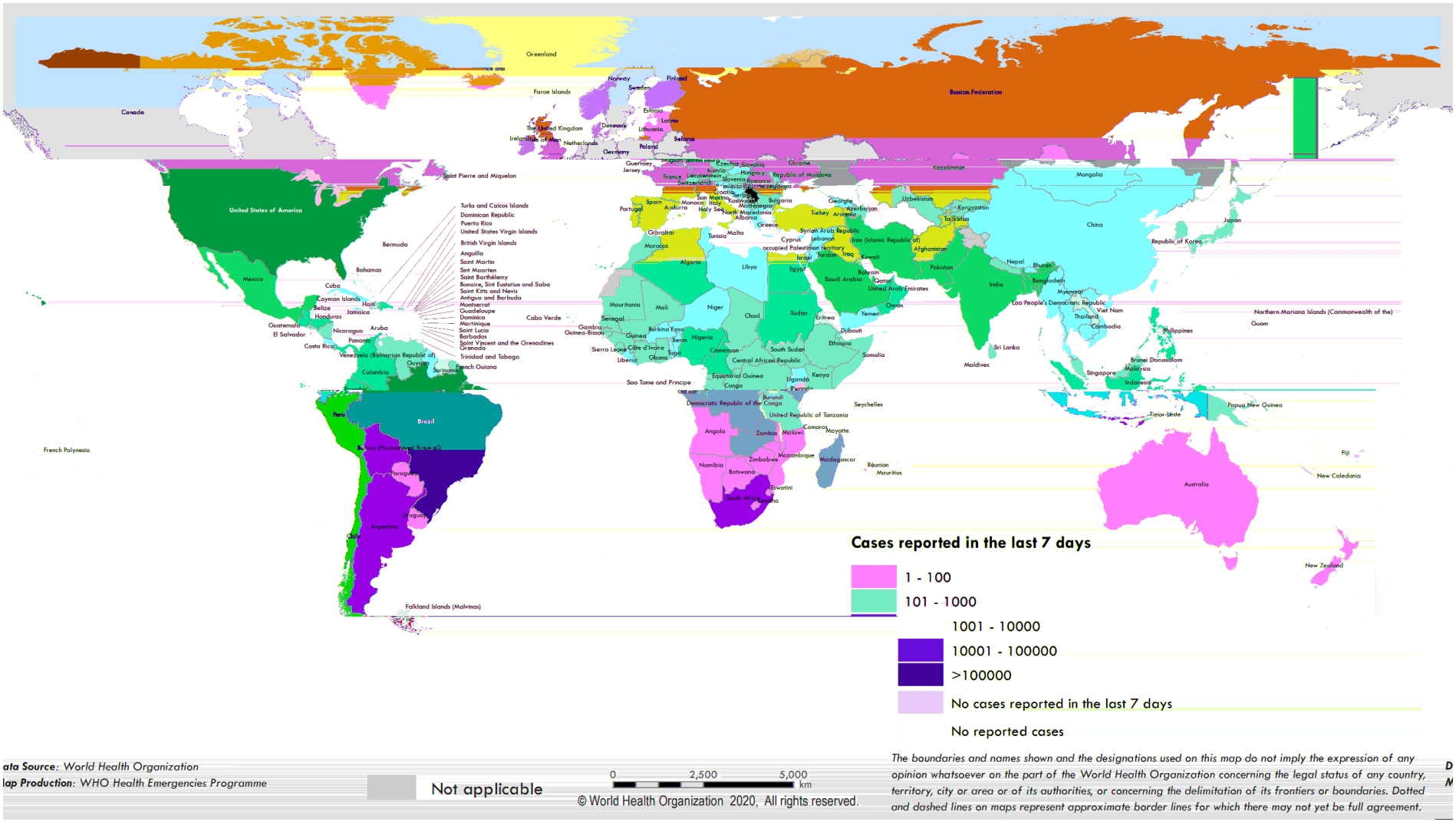
EPI-WIN has applied this social media listening methodology to public health and has detected invaluable insights, inspiring new ways of thinking and communicating risk during health emergencies.

The general approach to analysis was presented in the recent COVID-19 Situation Report number 100: https://www.who.int/docs/default-source/coronaviruse/situation-reports/20200429-sitrep-100-covid-19.pdf?sfvrsn=bbfbf3d1_6

WHO Information network for Epidemics: www.who.int/epi-win

Surveillance

Figure 3. Number of confirmed COVID-19 cases reported in the last seven days by country, territory or area, 21 May to 27 May**

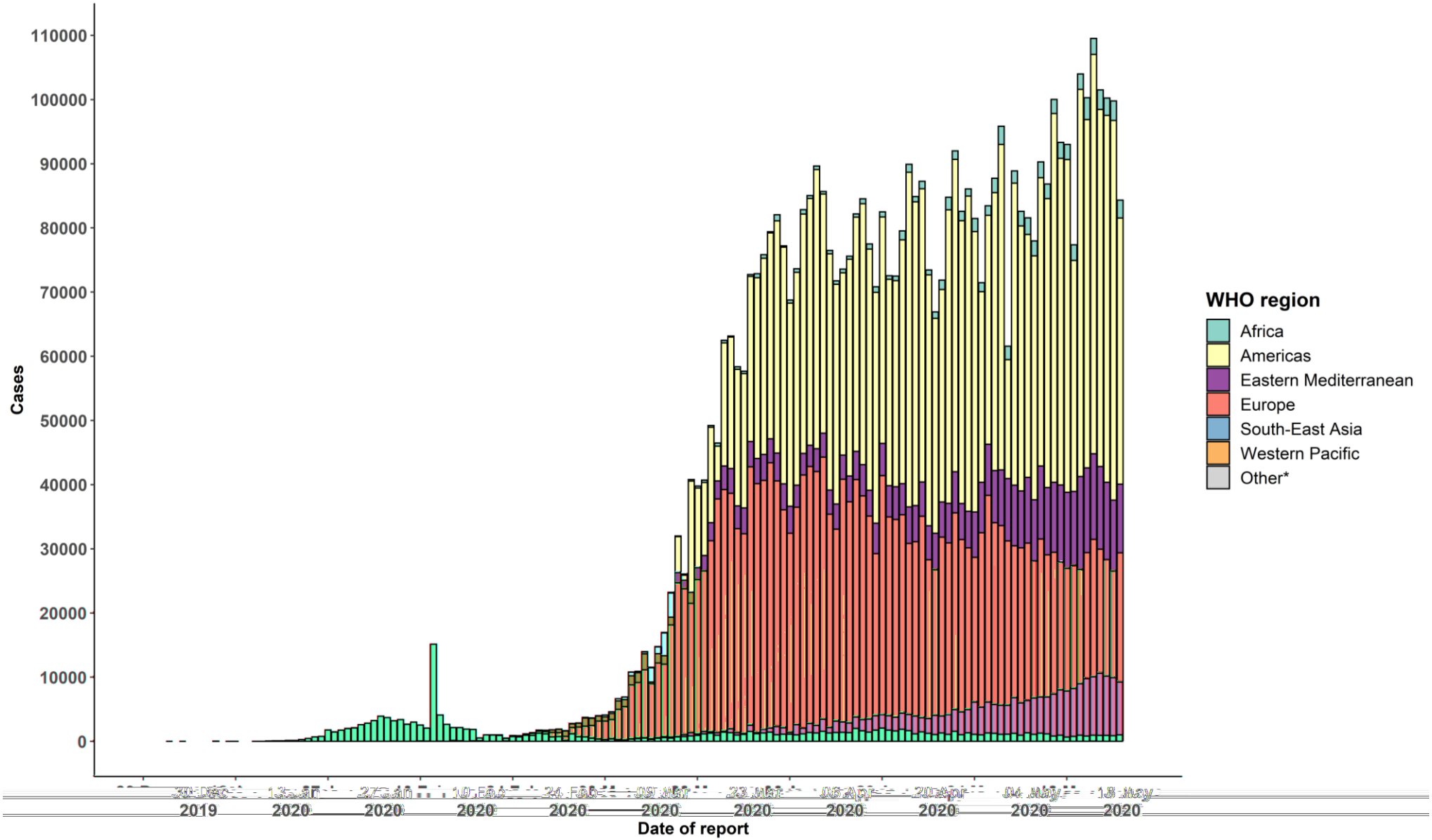


ata Source: World Health Organization
lap Production: WHO Health Emergencies Programme

The boundaries and names shown and the designations used on this map do not imply the expression of any opinion whatsoever on the part of the World Health Organization concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate border lines for which there may not yet be full agreement.

***See Annex 1 for data, table and figure notes.*

Figure 4. Number of confirmed COVID-19 cases, by date of report and WHO region, 30 December 2019 through 27 May 2020**



**See Annex 1 for data, table and figure notes.

Table 1. Countries, territories or areas with reported laboratory-confirmed COVID-19 cases and deaths, by WHO region. Data as of 10 AM CEST, 27 May 2020**

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***See Annex 1 for data, table and figure notes.*

Technical guidance and other resources

- To view all technical guidance documents regarding COVID-19, please go to this webpage.
- Updates from WHO regional offices
  - WHO AFRO
  - WHO EMRO
  - WHO EURO
  - WHO PAHO
  - WHO SEARO
  - WHO WPRO

- Research and Development
- Online courses on COVID-19 and in additional national languages
- The Strategic Preparedness and Response Plan (SPRP) outlining the support the international community can provide to all countries to prepare and respond to the virus
- WHO Health Emergency dashboard
- Weekly COVID-19 Operations Updates

Recommendations and advice for the public

- Protect yourself
- Questions and answers
- Travel advice
- EPI-WIN: tailored information for individuals, organizations and communities

Case definitions

WHO periodically updates the Global Surveillance for human infection with coronavirus disease (COVID-19) document which includes surveillance definitions.

Definition of COVID-19 death

COVID-19 death is defined for surveillance purposes as a death resulting from a clinically compatible illness in a probable or confirmed COVID-19 case, unless there is a clear alternative cause of death that cannot be related to COVID-19 disease (e.g. trauma). There should be no period of complete recovery between the illness and death.

Further guidance for certification and classification (coding) of COVID-19 as cause of death is available here.

Annex 1: Data, table and figure notes

Caution must be taken when interpreting all data presented. Differences are to be expected between information products published by WHO, national public health authorities, and other sources using different inclusion criteria and different data cut-off times. While steps are taken to ensure accuracy and reliability, all data are subject to continuous verification and change. Case detection, definitions, testing strategies, reporting practice, and lag times differ between countries/territories/areas. These factors, amongst others, influence the counts presented, with variable underestimation of true case and death counts, and variable delays to reflecting these data at global level.

The designations employed, and the presentation of these materials do not imply the expression of any opinion whatsoever on the part of WHO concerning the legal status of any country, territory or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. Dotted and dashed lines on maps represent approximate border lines for which there may not yet be full agreement. Countries, territories and areas are arranged under the administering WHO region.

The mention of specific companies or of certain manufacturers' products does not imply that they are endorsed or recommended by WHO in preference to others of a similar nature that are not mentioned. Errors and omissions excepted, the names of proprietary products are distinguished by initial capital letters.

[1] All references to Kosovo should be understood to be in the context of the United Nations Security Council resolution 1244 (1999). In the map, number of cases of Serbia and Kosovo (UNSCR 1244, 1999) have been aggregated for visualization purposes.

Counts reflect laboratory-confirmed cases and deaths, based on WHO case definitions, unless stated otherwise (see Country, territory, or area-specific updates and errata), and include both domestic and repatriated cases.

Other*: includes cases reported from international conveyances.

Due to the recent trend of countries conducting data reconciliation exercises which remove large numbers of cases or deaths from their total counts, WHO will now display such data as negative numbers in the "new cases" / "new deaths" columns as appropriate. This will aid readers in identifying when such adjustments occur. When additional details become available that allow the subtractions to be suitably apportioned to previous days, graphics will be updated accordingly. Prior situation reports will not be edited; see covid19.who.int for the most up-to-date data.

Additional table notes

[i] Transmission classification is based on a process of country/territory/area self-reporting. Classifications are reviewed on a weekly basis, may be revised as new information becomes available, and are based on the highest category reported. Differing degrees of transmission may be present within countries/territories/areas. Categories:

- No cases: with no confirmed cases
- Sporadic cases: with one or more cases, imported or locally detected.

- Clusters of cases: experiencing cases, clustered in time, geographic location and/or by common exposures.
- Community transmission: experiencing larger outbreaks of local transmission defined through an assessment of factors including, but not limited to: large numbers of cases not linkable to transmission chains; large numbers of cases from sentinel lab surveillance; and/or multiple unrelated clusters in several areas of the country/territory/area.
- Pending: transmission classification has not been reported to WHO.

ii “Territories” include territories, areas, overseas dependencies and other jurisdictions of similar status.

Country, territory, or area-specific updates and errata

- **Update 27 May 2020, Gibraltar:** Number of cases adjusted retrospectively by national authorities: one case was deducted.