

INTERNATIONAL OUTBREAKS OF IMPORTANCE

An update on the novel coronavirus disease 2019 outbreak, South Africa

As of 26 July 2020, global cases have surpassed 15.7 million with more than 600 000 deaths reported from 213 countries and territories. Weekly case numbers are currently highest in North America and Latin America, representing approximately 57% of the total cases reported over the past seven days. Cumulative case numbers are highest in the USA, Brazil, India, Russia and South Africa. Recent increases in daily cases have been reported in countries with previously controlled outbreaks including Australia, Hong Kong, Israel and Japan.

In Africa, 850 641 cases have been reported to date, with the highest numbers of confirmed cases reported from South Africa, Egypt, Nigeria, Ghana and Algeria. This is likely related to testing availability and testing strategies. As of 26 July 2020, 445 433 laboratory-confirmed cases, including 6 769 deaths, have been reported in South Africa.

In the past weeks there has been a surge of cases in Gauteng Province, and more recently in KwaZulu-Natal Province. The Eastern Cape Province continues to experience high caseloads, challenges with hospital capacity and mortalities in the community related to COVID-19. Trends in case numbers reported may be affected by changing testing practices in different provinces.

The sentinel hospital surveillance system (DATCOV) reports on 314 hospitals, 93 public facilities and 221 private hospitals in South Africa. For the period March to date, DATCOV reports on 33 266 patients. This programme is being rolled out to incorporate all private and public hospitals and will also capture facility-based capacity data. Of note is the importance of careful monitoring of patients with diabetes and COVID-19 for any deterioration, this to ensure rapid access to oxygen therapy.

The period of isolation of persons who test positive for the SARS-COV-2 has been amended:

- Asymptomatic: de-isolate 10 days post-positive test result
- Mild COVID-19 symptoms: de-isolate 10 days post-onset of symptoms
- Severe COVID-19 symptoms: de-isolate 10 days post-stabilisation (i.e. no longer requiring oxygen therapy)

NO LABORATORY TESTING IS REQUIRED FOR DE-ISOLATION

These de-isolation periods correlate with studies demonstrating failure to culture virus in respiratory secretions and lack of infectiousness. The PCR may remain positive in some persons, but does not indicate infectious virus. Fitness for return to work should always be assessed.

NO LABORATORY TESTING OF ASYMPTOMATIC CONTACTS IS REQUIRED

Post-mortem testing is recommended in persons where COVID-19 was not confirmed ante-mortem and is considered on clinical grounds. The guidelines can be accessed on the NICD website, www.nicd.ac.za

There are more than 200 vaccines in development with at least 6-8 undergoing clinical studies. A phase 3 vaccine trial of AZD1222 (previously AChAdOx1) commenced recruitment in South Africa at the end of June 2020 and plans to recruit 2 000 healthy volunteers between 18 and 65 years of age as part of a multinational placebo-controlled study to further assess safety, immunogenicity and efficacy. The vaccine is a replication-deficient live adenovirus vectored recombinant vaccine expressing the SARS-COV-2 spike protein. In a phase 1/2 clinical trial published in The Lancet ([https://www.thelancet.com/pdfs/journals/lancet/PIIS0140-6736\(20\)31604-4.pdf](https://www.thelancet.com/pdfs/journals/lancet/PIIS0140-6736(20)31604-4.pdf)), immunogenicity data show excellent responses.

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