

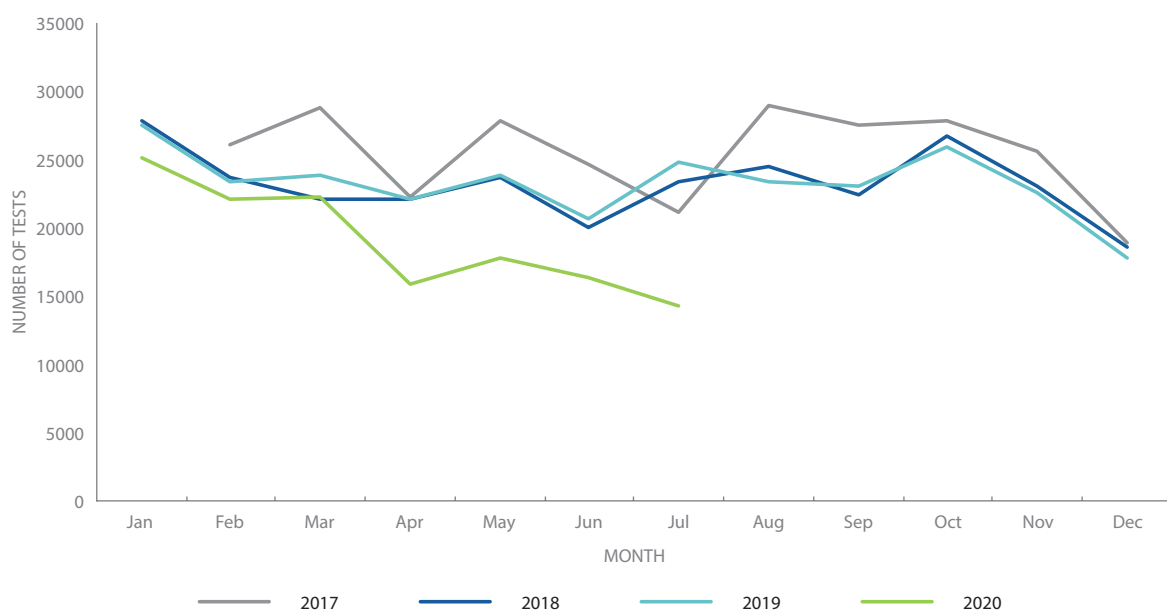
## CRYPTOCOCCAL DISEASE

## Reduced cryptococcal antigen screening among people living with advanced HIV disease during the national lockdown period for COVID-19

Since late 2016, South Africa has implemented a national cryptococcal antigen (CrAg) screening programme to reduce mortality from cryptococcal meningitis, the second leading cause of AIDS-related deaths. Screening aims to identify cryptococcal blood infection, a precursor to meningitis, in people living with HIV with a CD4 count below 100 cells/ $\mu$ L. Patients with a new positive blood screening test should have a lumbar puncture to exclude cryptococcal meningitis. In the absence of meningitis, pre-emptive antifungal treatment is required to prevent progression to meningitis.

Since February 2017, NHLS CD4 laboratories have automatically performed over 950 000 CrAg screening tests on patient blood samples with CD4 counts below 100 cells/ $\mu$ L, achieving a screening coverage of 99.0%. Screening has identified 48 060 individuals with a positive blood CrAg test, indicating a national prevalence of 6.2% among individuals with a CD4 count <100 cells/ $\mu$ L.

Historical trends in testing from 2017-2019 have been fairly consistent, with an average of 24 010 CrAg tests performed per month (Standard deviation=2 869). However, following the implementation of national lockdown measures in response to the global COVID-19 pandemic in late March 2020, CrAg screening has fallen sharply by nearly 33%, with a monthly testing average of 16 182 (Standard deviation= 1 214.5) from April through to July 2020 (Figure 3). Though a rebound was expected with a transition to lower lockdown levels, screening numbers have remained lower than average throughout the lockdown period, with the lowest levels of CrAg screening recorded in July 2020 thus far at 14 444, 38.6% lower than the historical average of 23 238 (Standard deviation=1 494).



**Figure 3.** Number of cryptococcal antigen screening tests on blood specimens with a CD4 count <100 cells/ $\mu$ L by month, January 2017 through to July 2020