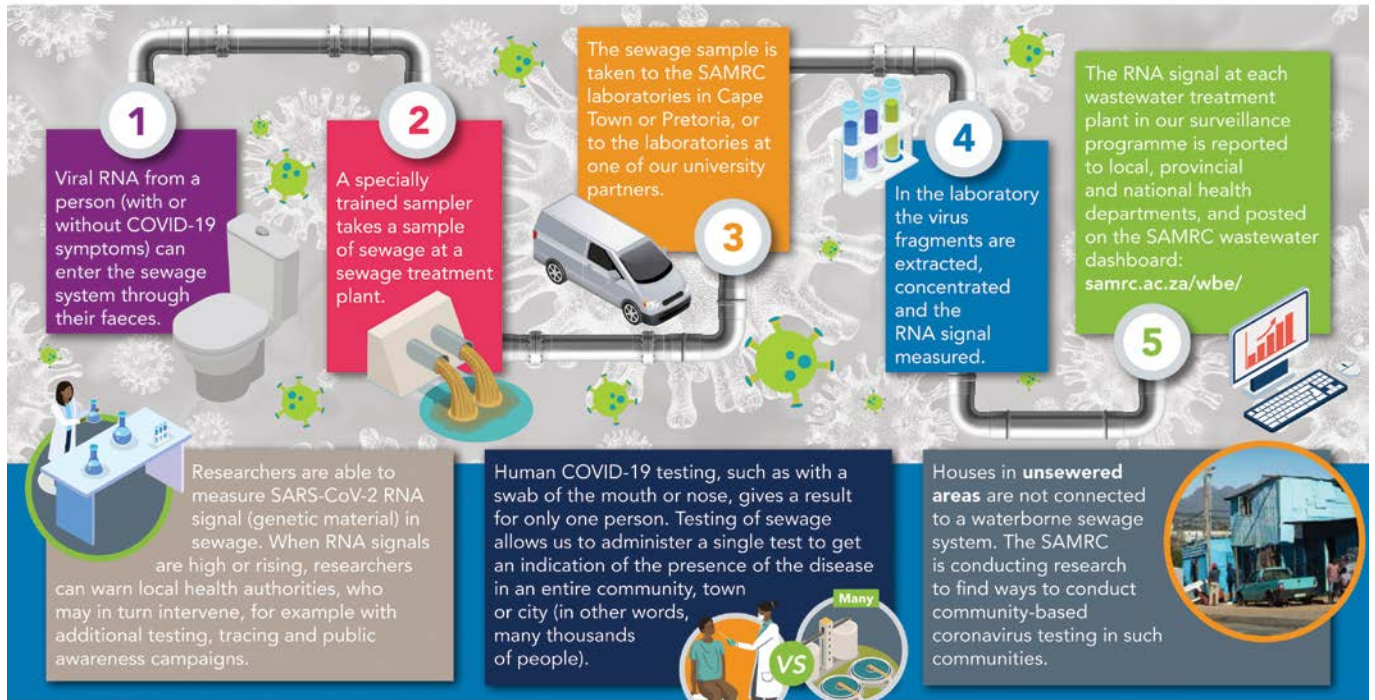


# ICoronavirus emanzini endle

## THE ROLE OF THE SAMRC IN THE DETECTION OF CORONAVIRUS RNA IN SEWAGE

(AN EARLY WARNING SYSTEM FOR COVID-19 INFECTIONS)



*Ukuqoqa amasampula amanzi endle kusiza kanjani ukukhomba izindawo lapho kungase kube nokuqubuka khona kwe-COVID-19?*

Emva kokuqubuka kwe gciwane le Corona, amazwe amaningi emhlabeni aqala ukufuna izindlela zokuqapha I covid 19 emiphakathini yabo. Enye yezindlela zokuqapha ukubhebhetheka kwaleligciwane emphakathini ukuhlola amanzi endle. Lendlela yokuhlola isidlale indima enkulu ukuthuthukisa amasu okulwisana namagciwane ayingozi afana no Vendle, i-norovirus ne hepatitis.

Emva kokuqubuka kwesifo se COVID-19 I South African Medical Research Council (SAMRC) yahlanganisa iminyango emihlanu yocwaningo ehlanganisa abacwaninga ngemvelo nempilo, I-biomedical research and innovative platform, abacwaninga ngesifo sofuba, I Genomics Centre Kanye ne Biostatistics Unit, ukuba bahlanganise ithimba lase SAMRC, elizosebenzisa ubuchwepheshe ukubheka ukukhula kwegciwane I COVID-19 besebenzisa amanzi endle. Lelithimba lochwepheshe base SAMRC libheka igciwane SARSCoV-2 Okuyigciwane elibanga I COVID-19, ngokuqoqa amasampula amanzi asendle lapho kuhlazwa khona lamanzi endle eningizimu ne Africa. Izincezwana ze SARS-

CoV-2 eziqhamuka kubantu abatheleleke ngaleligciwane, abanezimpawu ze COVID-19 nobanganazo zingena lapho kuhamba khona indle emva kokuzikhulula kwabo. Ngakho, ukuhlola amanzi endle kususisa ukuba sibone ubukhona be COVID-19 kuloyomphakathi.

Lokhu kuqashwa kwe SARS-CoV-2 emanzini endle kwenziwa emadolobheni athile ezifundazweni ezehlukene eningizimu Africa. Okubalulekile ukuthi uma kuhlolwa igciwane le SARS-CoV-2 emanzini endle lisuke lingasathathelani. Okwamanje ayikho imibiko etshengisa ukuthi umuntu angagula abe ne COVID-19 ngoba ethinte amanzi endle.



Njalo ngoMsombuluko ekuseni, isampula lamanzi endle liyathathwa ngumuntu oqeqeshiwe, ezindaweni ezahlukahlukene lapho kuhlanzwa khona amanzi endle. Lamasampula aqoqwa ngesikhathi esisodwa njalo ngeviki. Ngokuphazima kweso ngemva kokuqoqwa kwamasampula, ahanjiswa ngesiqandisi eya e SAMRC noma kwabasebenzisana nabo enyuvesi laboratories. Kubalulekile ukuthi lamasampuli ahlale kwisiqandisi ukuze angonakali.



I-SAMRC isungule indlela yokuhlola I SARS CoV-2 emanzi endle futhi iyona eqeqesha ozakwabo ababambisene nabo kulomkhankaso. Uma amanzi endle efika lapho ahlolwa khona, izincwezana ze SARS CoV-2 ziyakhishwa ebese zifakwa esikalini. I laboratory ebese iyaqiniseka ubukhona nobungako begciwane I SARS

CoV-2 kwisampula ngalinye. Ngenxa yokuthi igciwane le SARS CoV-2 liyazishintshashintsha, kumele kwenziwe olunye icwaningo ukuhlola izinhlobo ezahlukahlukene zaleligciwane. Lomkhankaso unochwepheshe abakwazi ukubona izinhlobo ezahlukene zaleligciwane. Ngokuhlola amanzi endle njalo ngeviki, siykwazi ukubona ukuthi izincezwana ze SARS-CoV-2



zingakanani, sikwazi ukubona uma kunyuka izinga lokutheleleka emphakathini.

Uma yonke imininingwane isisqoqiwe yahlelwa kahle, kubalulekile ukwabelana ngemiphumele nabezempilo nezokwelapha. Izincwezana ze SARS-CoV-2 ezitholakale kuzona zonke izindawo okuhlanzwa kuzo indle kuluhlelo lase SAMRC WSARP zibikwa kubaphathi bezindawo, izifundazwe kanye nabaphathi bezempilo kuzwe lonke, ziphinde zibikwe ezinkundleni zokuxhumana nomphakathi zocwaningo zokuhlola amanzi endle zase SAMRC.

izinkundla zokuxhumana zalolucwaningo lwase SAMRC zethulwe ngo November 2020, ukuze kubikwe ngemiphumela yezincwezana ze SARS-CoV-2 emanzi endle. Lezinkundla zokuxhumana zenzelwe ukuthi umphakathi ukwazi ukuzibhekela imiphumela yalolucwaningo ngokwawo. kulamanzi endle sikwazi ukubona indlela eliziphethe ngayo igciwane, lokhu kusenza sibone indlela eliziphethe ngayo igciwane kuleyondawo. Lokhu kusisiza ukuthi sibone ukuthi baningi noma bancane abantu abatheleleke ngegciwane le COVID-19 futhi kusisize ukuba sikwazi ukuqhamuka namasu okulwa negciwane le COVID-19. Abezempilo bayakwazi ukusebenzisa imiphumela yohlolo lwamanzi endle neminye imiphumela yezempilo ukuze baqhamuke namasu okulwa nokusabalala kwegciwane le COVID-19, njengokuqwashisa abasebenzi bezempilo uma kukhuphuka izibalo, ukwazisa imiphakathi ngokubaluleka kokufaka izimfonzo, ukuqhelelana Kanye nokugeza izindla.

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