

# BULLETIN

Issue 16



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01

## **General information you need to know about Coronavirus**

03

## **WHAT IS CORONAVIRUS DISEASE (COVID-19)?**

Coronavirus disease (COVID-19) is a new strain of Coronavirus that causes respiratory illness.

02

## **WHAT IS KEMRI DOING ABOUT CORONAVIRUS**

KEMRI starts mass testing using the automated Cobas 8800 platform



## STOP THE SPREAD

# WHAT IS QUARANTINE AND HOW DO WE DO IT?



Quarantine separates and restricts the movement of people who were exposed to a contagious disease to see if they become sick. This means that you reduce contact with other people until the period of quarantine is over. The aim is to protect your loved ones and other members of the public from potentially acquiring an infection from you if you have come into contact with the virus. This is an important public health measures that will be enforced.



**If you are to self-quarantine, then you must stay at home and not move out of your home for a period of 14 days:**

- While at home stay away from others. If possible, you should stay in a specific room with adequate ventilation and use a separate bathroom. If you are sharing bathroom facilities then this should be disinfected regularly using household disinfectant.
- Wash your hands often with soap and water for 20 seconds.
- Avoid sharing personal household items. After using personal items, such as silverware, dishes, towels, sheets and more, wash thoroughly with soap and water.
- Cover your mouth and nose with a tissue when you cough and sneeze and then throw it into the trash.
- Postpone all non-essential appointments until you are out of quarantine.

## HOW TO MOVE FROM ONE POINT TO ANOTHER DURING THE COVID-19 PANDEMIC:.

### i. In a Taxi

- Please **Ensure** that you are the only person and that the driver should wear a mask.
- Sit on the back left seat of the vehicle (do not sit on the co-driver's seat)
- Do not have any physical contact with the driver.

### ii. In public transport,

- Wash your hands or sanitize regularly before boarding the vehicle
- Avoid touching seats and railings and if you do sanitize
- Observe social distancing in seating
- Ensure you have your mask on at all the time

## When in self-quarantine or mandatory quarantine:

- Please notify the Institute immediately you suspect you have COVID-19 and immediately self-quarantine
- Your contact details will be taken (name, next of kin, physical address and telephone contact) to allow follow-up on the progress of your quarantine. If at any time you feel you are unable to continue self-quarantine then **call 719** and you will be directed to a self-quarantine facility near you.
- The Institute is making elaborate arrangements that will be communicated to all staff on the protocol to follow

## If you develop any symptoms during the period of quarantine

- Such symptoms may include (fever, cough, muscle pain, headache. Sore throat, diarrhoea), notify the Institute or **call 719** and you will be transferred to an isolation facility.
- At the facility, you will be evaluated by a health care personnel and a swab of your throat and nose taken for laboratory testing and appropriate care offered.
- Understand that if you break the self-quarantine then you risk exposing your loved ones and other members of the public to infection.
- Your movements during this period of quarantine may be monitored by the Ministry of Health officials from time to time. If you break the self-quarantine, then Ministry of Health officials are authorised to admit you to a quarantine facility.

## If you are unable to self-quarantine, then you will be taken to a Government designated quarantine facility.

- Ensure you give correct contacts and information. Please note that it is an offence under the Public Health to give false information.



## ABOUT CORONAVIRUS DISEASE (COVID-19)?

**01** Corona Virus Disease 2019 (COVID19) is a new respiratory illness that can easily be spread from person to person.

**02** COVID-19 is spread through contact with droplets produced by a person who is sneezing or coughing or contaminated surfaces or objects.

**03** COVID-19 can cause severe symptoms like fever, cough, headache, body aches and difficulty in breathing.

**04** COVID-19 is preventable through;

- Washing your hands with soap and running water or using an alcohol based hand sanitizer,
- Keeping a social distance of at least 2 metres or 2-3 steps from people with flu-like symptoms.
- Avoid shaking hands, hugging or kissing with people with flu-like symptoms.
- Staying at home and avoiding travel when you have flu-like symptoms.
- Wear a mask when out in public

**05** Early detection and treatment can contribute greatly to survival of the patient.

# KEMRI'S RESPONSE IN THE FIGHT AGAINST COVID-19 PANDEMIC.



## ***A KEMRI scientist running test on a Covid-19 suspected sample***

The COVID-19 outbreak caused by a novel coronavirus (SARS-CoV-2) has rapidly evolved into a global pandemic that is continuing to progress.

Following the declaration by the World Health Organisation (WHO) that coronavirus epidemic as a Public Health Emergency of International Concern countries were advised to put in place measures to guarantee preparedness that would mitigate the threat of outbreak.

When the first case of Covid-19 was reported in Kenya on 13<sup>th</sup>, March 2020, the Ministry of

Health immediately issued directives to minimise transmission. The directives include; staying at home, social distancing, observing personal hygiene, avoiding social gatherings and observing the daily dusk to dawn curfew among others.

As the situation unfolded Director General, Prof. Yeri Kombe quickly put in place measures to not only support the government's measures, but also complement the directives.

The following is a summary of how the Institute has responded to the COVID-19 pandemic:

## FLAGSHIP PROJECTS AND ACTIVITIES BEING UNDERTAKEN

### 01. Whole Genome Sequencing

- Corona Virus Disease 2019 (COVID19) is a new respiratory illness that can easily be spread from person to person.

### 02. Evaluation of COVID-19 screening Kits

- The Institute has been tasked to evaluate all diagnostic kits in the market.
- Arrangements are in place to collect both blood and nasal swabs samples from COVID-19 positive and suspected cases







### 03. Virus Transport Media (VTM)

- VTM production is ongoing with over 3,000 litres already produced and some deliveries made to Mombasa Hospital among other Public Health facilities.
- The VTM is not only being produced for Kenya, but some regional countries have also expressed interest such as Rwanda, Uganda & Somalia.
- At the moment, the Market demands at least 10 million quantities of VTM. The KEMRI Production Department are able to produce up to 10,000 liters a day. The shelf life of VTM is six months, however, can be used up to 12 years from the date of manufacture.
- Although its Quality Control (QC) was done internally, plans are underway to have external evaluation by the Africa CDC among other local & International Institutions.

### 04. Point of Care (PoCT) Kit Production

- The process has started and in a few weeks the Institute will launch its own PoCTs kits.
- Branding, strategy and designing has already commenced.

### 05. Development of PCR Kits

- Plans are advanced to develop the PCR kits. Already the procurement of the DNA synthesizer is being done by KEMRI.
- COVID-19 Primers have also been availed by our collaborators.
- RNA/DNA polymerase will be produced by KEMRI.

### 06. Testing of Drug efficacy

- To commence with testing certain formulations including herbal products.

### 07. Commercialization of KEMRI PoCTs

- PoCT production will increase from 3000 to 10,000 pieces in the coming months as the need increases.
- PoCT prequalification by WHO and Africa CDC process to be put in place as soon as the kits are in place.

### 08. COVID-19 Vaccine Development

- Vaccine candidate for COVID-19 is also being explored. A multi-centre approach has been put in place towards this end.

### 09. Hand sanitizers (KEM-rub)

- Approximately 100,000 litres of hand sanitizers have been produced and supplied to various stakeholders including counties such as Lamu, Taveta, Machakos & government facilities.
- A proposal has been developed for the production of alcohol based hand sanitizer (KEM-Rub) within KEMRI.
- There are also consideration to strengthen TBcide production as well as rebrand it.

### 10. Provision of Covid-19 Testing Infrastructure

- Supporting the National Testing for COVID-19.
- Mass Testing Capabilities of about 37,600 cases with machines at KEMRI Centers in Nairobi, Kisumu, Busia, Kericho and Kilifi.
- So far KEMRI laboratories have conducted over 7,000 tests.

### 11. Capacity Building & Training

- Improvement of skills and knowledge for health workers at county level.
- KEMRI is involved in validation of laboratories to test against COVID-19 for all the 47 counties .
- Institute is also involved in training laboratory staff on actual testing and preparedness.
- Lessons learnt to inform future pandemic preparedness including the equipping people with skills and equipment.

## YOUR SAY

# WHAT STAFF HAVE TO SAY ABOUT COVID-19



As part of response to Covid-19 the management appointed KEMRI COVID-19 Internal Strategy and Operations Committee to advise the Director General on all issues pertaining to COVID-19. A survey was carried out amongst KEMRI staff during which it was established that staff were generally aware of the cause, mode of transmission, symptoms and prevention of the disease. Staff felt that the institute was not adequately prepared to deal with the pandemic and called on management to provide adequate Personal Protective Equipment (PPE), give regular updates, recruit more technical staff, fumigate all facilities and screen people entering KEMRI premises.

The report further states that staff prefer their testing for COVID-19 to be handled by the Institute other than other public facilities.

"It was evident that staff are filled with fear, panic and to some extent stigma due to the fatality, negative economic effect, work disruptions, uncertainty as a result of the pandemic," informs Dr. Phelgona Otieno, the Chairperson of the Internal Strategy and Operation Team appointed by the Director General to advise the management on the response of the COVID-19 matters. Other members are Patrick Mutinda, Dr. Rose Bosire,



Dr. Rosemary Sang, Dr. Linnet Onger, Bernard Keter, Elijah Nyabige, Dr. Cecilia Wanjala, Joan Lelei, Duke Isaboke and James Wodera.

In addition, the staff are also of the view that the Institute should take advantage of the COVID-19 pandemic to enhance its visibility as a leading research organization by providing quality diagnostic services and also by producing rapid test kits to be used for mass testing and increase timeliness of results.

"Staff also look up to KEMRI management to develop a vaccine for COVID-19 including giving assurance that necessary measures are being put in place to mitigate the effects of COVID-19," informs Dr. Otieno adding that "staff also expressed their willingness to support the institute in dealing with the pandemic by offering diagnostic, clinical services as well as providing public education in line with government guidelines."

# HOW TO PUT ON, USE TAKE OFF AND DISPOSE OF A MASK

**Before putting on a mask  
clean hands with soap and  
water or alcohol based hand  
sanitizer**



**Cover your mouth and nose  
with mask and make sure  
there are no gaps between  
your face and the mask**



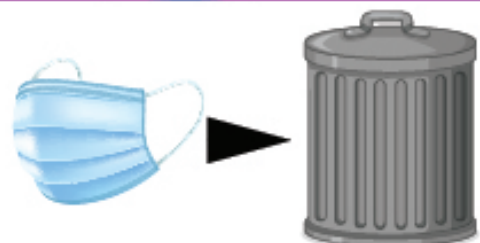
**Avoid touching the mask  
while using it; if you do, clean  
your hands with soap and  
water alcohol-based hand  
sanitizer**



**To remove the mask:  
remove it from  
behind do not touch  
the front of mask;  
discard immediately  
in a closed bin; clean  
hands with soap and  
water or  
alcohol-based hand  
sanitizer**



**Replace the mask with a new one  
as soon as it is damp and do not  
re-use single-use masks**



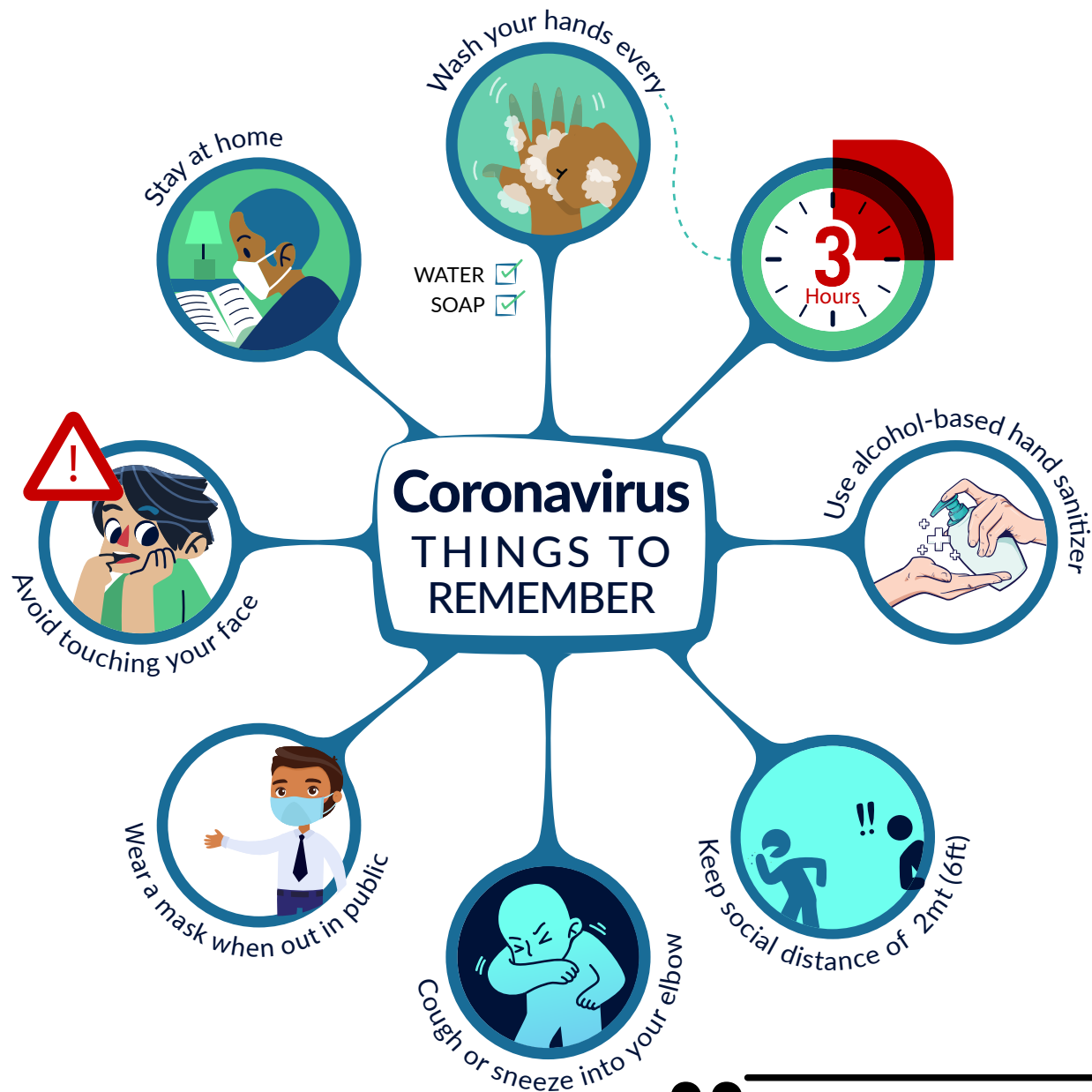
COVID-19 pandemic is a depressing situation but we have to hold on to the hope that this will not last forever. Let's pray for one another that all will be well and we will come out of this victorious

**Please observe all MOH directives and stay safe**



# NOTE

*The basics to remember to effectively protect yourself*



**#Komesha Corona  
# Stay Safe**

“ Send your feedback or contributions to [corporate@kemri.org](mailto:corporate@kemri.org) ”

If you are feeling unwell please call 719 or sms \*719# for assistance ”