

## COVID-19 preparedness activities in Rwanda

Hartnett Bridget<sup>1,\*</sup>, Niyigena Julien<sup>1</sup>, Nsanabaganwa Christian<sup>2</sup>, Ndishimye Pacifique<sup>1</sup>, Hitimana Nadia<sup>3</sup>, Byiringiro Fidele<sup>2</sup>, Nyamusore Jose<sup>5</sup>, Angela Umutoni<sup>5</sup>, Adeline Kabeja<sup>5</sup>, Felicien Nizeyimana<sup>5</sup>, Helene Balisanga<sup>5</sup>, James Kamanzi<sup>5</sup>, Edson Rwagasore<sup>5</sup>, Theophile Dushime<sup>5</sup>, Vedaste Ndahindwa<sup>5</sup>, Alfred Rutagengwa<sup>5</sup>, Mike Habinshuti<sup>5</sup>, Albert Tuyishime<sup>5</sup>, Francine Umutesi<sup>5</sup>, Elizabeth Mgamb<sup>5</sup>, Innocent Turate<sup>5</sup>, Halifa Ndayisabye<sup>5</sup>, Innocent Munyengango<sup>5</sup>, Daniel Nyamwasa<sup>5</sup>, Tharcisse Mpunga<sup>5</sup>, Daniel Ngamije<sup>5</sup>, Mutesa Leon<sup>4</sup>, Nsanzipimana Sabin<sup>1</sup>, Kayumba Malick<sup>1</sup>

<sup>1</sup>Rwanda Biomedical Centre, Kigali, Rwanda

<sup>2</sup>Rwanda Military Hospital, Kigali, Rwanda

<sup>3</sup>Clinton Health Access Initiative (CHAI), Kigali, Rwanda

<sup>4</sup>Centre for Human Genetics, University of Rwanda, Kigali, Rwanda

<sup>5</sup>COVID-19 Joint Task Force Committee, Kigali, Rwanda

### INTRODUCTION

WHO declared the Coronavirus Disease 2019 (COVID-19) as a public health event of international concern (PHEIC) on 30 January 2020 [1]. The risk is currently evaluated as very high globally and international cooperation is crucial to effectively combating COVID-19 [2,3,5].

So far, 183 cases of Coronavirus have been reported in Rwanda as of 25 April 2020 [6]. The Government of Rwanda has set up a multidisciplinary team to assess and strengthen preparedness and response to the epidemic [8].

Rwanda introduced stepped up detection at all its borders. The Government of Rwanda has implemented strict quarantine procedures and strengthened the existing healthcare system to respond to the current situation [2].

#### \*Corresponding author:

Ms. Hartnett Bridget  
Rwanda Health Communication  
Center  
Rwanda Biomedical Center  
Kigali-Rwanda  
E-mail: harnett12@gmail.  
com

Received: March 28, 2020

Accepted: April 15, 2020

Published: April 30, 2020

Cite this article as: Harnett et al.  
COVID-19 Preparedness activities  
in Rwanda. Rw. Public Health Bul.  
2020; Rw. Public Health Bul. 2020,  
2(1): 07-10.

The country has put in place preparedness and response mechanisms to deal with a possible outbreak, including below preventive measures [2,3].

### PREVENTIVE MEASURES

These are preventive measures recommended [3,8]:

» Hand wash regularly using clean water and soap or use sanitizers to avoid contamination.

» Avoid touching eyes, nose, mouth and handshakes.

» Cover your mouth and nose with a tissue or sleeve when coughing or sneezing.

» Avoid unnecessary travel to affected countries.

» If you have a history of travel in affected countries and present one of the following symptoms: fever, cough, runny nose, sore throat. Please contact 114 for more information.

**Potential Conflicts of Interest:** No potential conflicts of interest disclosed by all author. **Academic Integrity:** All authors confirm their substantial academic contributions to development of this manuscript as defined by the International Committee of Medical Journal Editors. **Originality:** All authors confirm this manuscript as original piece of work, and has not been published elsewhere. **Review:** All authors allow this manuscript to be peer-reviewed by independent reviewers in a double-blind review process. © **Copyright:** The Author(s). This is an Open Access article distributed under the terms of the Creative Commons Attribution License (CC BY-NC-ND), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited. **Publisher:** Rwanda Health Communication Centre, KG 302st., Kigali-Rwanda. Print ISSN: 2663 - 4651; Online ISSN: 2663 - 4653. **Website:** www.rwandapublichealthbulletin.org

» Rwanda has strengthened its surveillance and prevention measures at all points of entry, health facilities, public places and in the community [3,4].

## **HIGHLIGHTS OF CURRENT GLOBAL COVID-19 PANDEMIC AS OF 25/04/2020**

» Total affected countries and territories: 211 (178 countries + 33 territories)

» Cumulative number of cases: 2,940 234 confirmed (194 530 new in last 24 hours)

» Cumulative recovery cases: 841,966 recovered/discharged

Cumulative death: 5873 deaths (84 new)

## **COORDINATION AND LEADERSHIP**

» Activation of the national taskforce for COVID-19 prevention and response.

» Activation of the national technical coordination team (Incident Management System/IMS) for the prevention and response.

» Development and dissemination of the first version of COVID-19 guidelines and SOPs to guide response teams, health facilities and partners.

» Activation of district taskforce for COVID-19, ensuring coordination at district level.

» Development of national preparedness plan.

## **SURVEILLANCE**

The Rwanda Biomedical Centre established health screening points at 31 points of entry (Kigali International Airport and 30 land and water border entries) [2,4].

The cumulative number of people screened is 1,400,859 at land borders and 61,209 screened at Kigali International Airport (KIA) from 27th January – March 5th, 2020 [4,5].

Surveillance screening documents were developed to guide health care workers. These include: case definition, screening algorithm, case investigation form and contact tracing standard operating documents [2,4,5].

## **LABORATORY**

The National Reference Laboratory (NRL) has been upgraded to test COVID-19 since early

February, 2020 in partnership with Robert Koch Institute (RKI), Germany; The Centers for Disease Control and Prevention and the World Health Organization [4].

NRL has been able to run cumulatively over 900 tests for COVID-19 and all were tested negative [4].

12 laboratory technicians from NRL were successfully trained as trainers and continued to provide trainings to over 32 lab technicians from district satellite laboratories for sample collection and management [2,4].

## **CASE MANAGEMENT, INFECTION, PREVENTION & CONTROL (IPC)**

RBC trained 219 health care providers (Medical doctors, laboratory technicians, environmental health and nurses) from all hospitals in Rwanda [4].

## **RISK COMMUNICATION AND COMMUNITY ENGAGEMENT**

Rwanda has strong skills in developing and implementing national, regional, and cross-border Risk Communication and Community Engagement (RCCE) strategic plans for managing outbreaks. [2,8]. With experience in managing all awareness activities related to detection and response during public health emergencies, including Ebola Virus Disease, the RCCE Technical Working Group has developed structures at the district and community levels related to COVID-19 [2,8].

» Strengthened capacity building for RCCE members, including a training completed by Malick Kayumba and Alexis Kapiteni by the African Union and Africa Centres for Disease Control and Prevention.

» Messages on prevention have been developed, designed, pretested, and disseminated.

» A list of spokespersons and media contacts have been prepared at central and district level and provide them with talking points on regular basis.

» Train journalists on COVID-19 pre and during outbreak reporting.

» Daily updates on the country situation are shared with the general population through national radio and TV, as well as through all social media channels.

» Aggressive awareness campaigns to increase knowledge on preventive measures on COVID-19 are being widely implemented through different communication channels including community meetings, Radio, TV, caller tune, radio comic series, electronic billboards in strategic places and social media.

» COVID-19 awareness and prevention messages are being sent through SMS to all phone holders registered to national telecommunication companies.

» The Rwanda health sector increased the capacity of the existing Call Centre toll-free number 114 with new equipment and staff to ensure it is operational 24/7, an increase from the previous operation of 13 hours a day/6 days a week [8]. The team provides needed information and advice to all those who call the toll-free number 114 and produce reports from the daily media monitoring and information from the focal points in the community to ensure proper management of rumors [2,8].

## LOGISTICS

Hospital capacities for holding and isolating cases is being upgraded and as well as the identification of quarantine and isolation and treatment site [2,4].

## HOSPITAL AND ISOLATION CENTERS PREPARATION

With the support of the Ministry of Health (MoH) and Rwanda Biomedical Centre (RBC), staff from all hospitals, health centers, health posts, community health workers, private clinics, and the

existing Infection Prevention and Control (IPC) committee at each health facility mentioned above have been trained on Coronavirus, COVID-19. Training, which took place at Kigali teaching hospital CHUK, included pathophysiology, signs and symptoms, screening and prevention measures, and the IPC staff have been tasked to oversee any issues related to COVID-19 [2].

The training focused on preventive measures and the construction of handwashing sinks at all hospital entry points and in various areas throughout the hospital [8]. The screening procedure has been initiated for both health facility staff, as well patients who seek medical care at each facility. Screening is based on body temperature with travel or contact history, and signs and symptoms of an active respiratory infection. The screened people are then categorized according to those who have been identified to be at high risk, and are then sent to a designated isolation center for further management [2,8].

Prevention measures enacted at the healthcare facilities include social distancing, meaning at least 1 meter of space between people [3,8]. In addition, staff meeting conferences have been placed on hold in hospitals and all other activities which may gather groups of people have ceased [2]. Each health facility has an isolation room reserved for suspected COVID-19 cases, and stocked with appropriate Personal Protection Equipment (PPE) (Figure 1 and Figure 2) which includes single-use impermeable coverall, masks, glasses, shoe cover, gloves, and hoods [2].



**Figure 1:** Simulation exercises at Kigali University Teaching Hospital (CHUK) (Left) and healthcare professional in a PPE (Right)

All health facilities have been equipped with ambulances for easy transport of suspected cases to designed COVID-19 treatment centers [2].

All hospitals have created a system of responsiveness for any suspected cases of COVID-19. The channel starts by contacting key persons who take the patient to the isolation room for blood sampling, which is then sent to NRL to be tested. After test results are released, patients with negative test results are released back in the community, whereas patients with positive test results are transported via dedicated ambulances

to one of the treatment centers to be managed and followed up [2,8].

The MoH and RBC have created COVID-19 treatment centers in Kanyinya and at LaPalisse Hotel in Nyamata, and deployed well-trained personnel for the management of COVID-19 patients. In each center, COVID-19 positive patients have been followed and managed, and for those identified with severe respiratory failure, mechanical ventilators have been reserved at Rwanda Military Hospital (RMH) [2].



**Figure 2:** Healthcare professionals in training (Left) and isolation room (Right) at Rwanda military hospital

In conclusion, the best way to curb the virus spread, is to avoid shaking hands, avoid close contact (at least than a meter), wash hands regularly with soap and clean water and use alcohol-based hand sanitizer regularly where hand washing is not applicable (WHO).

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