



University of the Philippines Manila and National Institutes of Health Position Statement on Preparing for the 2019 Novel Coronavirus (2019-nCoV) Epidemic

Feb 04, 2020

Given to the Senate of the Republic of the Philippines

A technical working group was constituted by the University of the Philippines Manila (UP Manila), spearheaded by the National Institutes of Health (NIH), in response to the recently announced global health emergency -- 2019 novel coronavirus. Key representatives shared insights grounded by their experience and expertise in public health, policy development, clinical epidemiology, molecular biology, disaster management, and infection control, among others. The discussion was driven by the need to generate consensus policy recommendations in light to the Senate Resolution No. 291, 293, and 301, directing the appropriate Senate Committees to aid in legislation on the preparedness of the Philippine Government on the appropriate measure to address possible outbreak of the 2019 novel coronavirus (2019-nCoV). The UP Manila and the NIH strongly support the current initiatives of the Department of Health (DOH), and ready to be of service for any assistance needed.

The World Health Organization declared the 2019 novel coronavirus epidemic (nCoV) as a "Public Health Emergency of International Concern (PHEIC)," while the US Centers for Disease Control has advised all US citizens to refrain from travelling to China, and for all travellers from China to isolate themselves for 14 days upon arrival in the US.

From the reported 44 cases on December 31, 2019, the current running total of infections from this nCoV is now reported to be 9,800, globally.

Currently, the Philippines counts only two (2) confirmed cases with one death. Thirty-one (31) people under investigation (PUI) have been admitted, with 24 PUIs testing negative. All PUIs are Chinese nationals and there is no evidence of local person-to-person

transmission. However, we must be prepared for any eventuality, especially for a probable epidemic.

The availability of rapid test for nCoV within 24 to 48 hours can significantly help in the reduction of the spread of this disease. The Research Institute for Tropical Medicine (RITM) is in possession of this test and is working to confirm or clear PUIs in coordination with the DOH and hospitals taking care of these patients. Researchers from the UP Manila and NIH are currently developing a rapid diagnostic screening test to detect cases which will be made available in a few days. Further, re-confirmation will be performed at the Philippine Genome Center (PGC), University of the Philippines.

The UP Manila and the NIH recognize the leading role of the Department of Health in the control and management of this disease and of all diseases.

The UP Manila and the NIH agree with the World Health Organization's (WHO) five (5) principles of infection prevention and control when nCoV is suspected (WHO, 2020):

1. *Early recognition and source control. Specifically, for health care workers to be on heightened level of clinical suspicion for nCoV, for facilities to post signages encouraging symptomatics to alert health care workers of their condition, and for the facilities to institute screening procedures for all who enter, including thermal cameras.*
2. *Standard precaution for all patients. Specifically, for symptomatics and suspects to wear face mask, for everyone to cover nose and mouth when sneezing, or sneeze into tissue or flexed elbow when there is no tissue paper. For hand hygiene to be practiced, and for asymptomatics to keep between 3 feet to 6 feet distance from symptomatics or suspects. There is no need for asymptomatics to wear face mask.*
3. *Droplet and contact precaution. Specifically, for health care providers to wear N95 face mask, wear gloves and eye protection, and practice hand hygiene at all times including washing with soap and water if contact is significant, or wiping with 70% alcohol for instances with less significant contact with symptomatics, their droplets, or things they have touched.*
4. *Administrative control. Specifically, for facilities to provide training for all health care workers, and patient's care providers, and to create and implement policies on surveillance and recognition, laboratory testing, maintain adequate patient to staff ratio, and infection prevention and control (IPC) procedures.*

5. *Environmental and engineering controls. Specifically for facilities to provide adequate ventilation and cleaning of areas, and to provide spatial separation (quarantine areas) for symptomatics and suspects.*

Preparedness of Health Facility

With the epidemiologic history of the Philippine on emerging diseases such a SARS and MERS-CoV, government and private hospitals alike have established emergency protocols on disease outbreak management. The challenge is to ensure financial, logistical, and technical resources to function and sustain operations. In preparation for a possible epidemic, quality care to current patients cannot be compromised. Thus, there should be an increase in the number of referral hospitals in the country with adequate quarantine areas to prevent crowding out of existing patients and to ensure correct hospital infection control procedures.

Laboratories

At this time, RITM is the only center for laboratory analysis of nCoV tests for the entire Philippines. In case the outbreak progresses, laboratories with technical capabilities can be deputized. To increase resources, disaster funds should be accessible to mobilize and upgrade other laboratories to deliver the RITM tests, which will also lead to faster detection outside of the National Capital Region.

Evidence-based information dissemination

The quick spread of the virus globally is causing undue panic, fueled by fake and unverified news proliferating online.

Thus, it is recommended that an inter-agency/institutional collaboration engaging UP Manila, NIH, Philippine Society for Microbiology and Infectious Diseases (PSMID) and other institutions like the UP Manila College of Public Health and College of Arts and Sciences work with the DOH to verify information and debunk fake news in all forms in real time. The need to work with social scientists including psychologists, to help in properly implementing risk and strategic communications is also recognized. Appropriate funds should be allocated to sustain manning the operation to decrease the impact of misinformation on the response.

For example, the fear of asymptomatic transmission is much feared, yet. In fact, the WHO has announced that while such mode is possible, it is at an insignificant level. The current mode of transmission is droplet contact with infected people, who apparently have recent travel history to Wuhan City or Hubei Province, or China. A new report from China indicate that nCoV virus was detected in the feces of nCoV patients who did not present with fever, but had diarrhea. Thus, pending more definitive findings, standard hygienic food handling practices and precautions apply, including ingesting only clean food and water. This also underscored the imperative to practice appropriate sanitation and proper personal hygiene all the time.

Reinforce quarantine services

China, as of today, is the only country with sustained human-to-human transmission, or spread of virus beyond a small cluster of patients. Hence, UPM and the NIH support the difficult but necessary effort of our Government to quarantine all suspected cases, implement travel ban to and from anywhere in China, and instilling social accountability for self-reporting to health facilities for nCoV-like symptoms (CNN, 2020).

For preventive measures, it is recommended for those who have travel history to China to do self-quarantine for 14 days, starting from the day they depart from China and its special administrative regions, in accordance with Bureau of Immigration directives. This period of observation is to monitor development of any symptoms given that incubation period usually takes five to twelve days. This applies only to Filipino citizens and permanent residents. Others may not be allowed entry at this time. Enhanced measures and resources for the Bureau of Quarantine should be in place as well.

Allow social-distancing until epidemic ends

Because of the current flu season, nCoV symptoms can be easily confused with flu symptoms. Thus, it is recommended that facilities and schools be lenient with students and workers who wish to be absent for a maximum of 14 days, specifically, those who have had travel to or contact with people who have travelled to China. Furthermore, institutions are

encouraged to use non-contact modes of meetings, such as teleconferences, or internet-based communications, and avoid physical contact such as shaking hands, embracing, or kissing.

Use of face masks

Face mask demand continues to spike, depleting market supplies and reservoir. This is due to the misconception of most Filipinos regarding appropriate and proper use of masks in an outbreak setting. The WHO already announced that healthy individuals need not wear any mask. The UP Manila and the NIH support this, highlighting that there are specific circumstances when individuals need to wear mask. A surgical mask mainly functions to prevent an infected individual from spreading illnesses to others. It may offer some protection to an individual from getting infected, but this is still uncertain. The colored side of the face mask should always be on the outside. Please refer to official WHO guidelines for appropriate mask use.

Who should use surgical masks

1. Sick individuals who have respiratory symptoms should wear mask all the time.
2. Healthy individuals in crowded and congested areas such as malls, terminals, and social gatherings.
3. Healthy individuals travelling using public transportation such as trains, buses, and aircraft.
4. Health care workers having direct contact to patients under investigation (PUI).
5. Health care workers with direct contact to wards for infectious diseases.

Special consideration:

Caution must be practiced in wearing of mask among healthy young children, especially toddlers. Adjusting adult mask to fit in the small frame of children will bring discomfort and might hamper breathing. There are specific masks tailored for children

though availability and accessibility might be difficult. It is still best to avoid bringing young children to crowded areas, and avoid kissing children.

Moreover, minimize direct contact with other people. It is commendable that the Catholic Bishops' Conference of the Philippines (CBCP) has issued a circular for Mass guidelines to fight spread of virus. this includes receiving communion by hand, and discouraging direct contact as holding hands during prayer, kissing during sign of peace.

The use of mask is not necessary when the healthy individual is at home or in uncrowded outdoor areas. Unnecessary use of facemask now may mean inadequate supply if and when the epidemic is at hand.

The use of appropriate mask should also be clear to the public. With the recent widespread ash fall due to the phreatic eruption of Taal volcano, there has been confusion on guidelines in the use face mask. It is important to note that cloth masks may offer protection against ash fall and dust, and may capture the droplets of a sneezing individual, but they may not protect against disease infections, significantly.

It is recommended that the government issues very clear guidelines based on different settings suchs as schools, workplaces, malls, places of worships, etc.

Regulating face mask

The economic logic of increased demand has led to increased prices of commodity along with diminishing supplies, artificial or real. The desperation of the public to procure face masks has led to unregulated unreasonable price hike (300 to 400% higher) of masks, while some reported that selected suppliers are hoarding supplies with anticipation with further price increases.

The government should establish regulatory measures over all stores, both physical and online, and set ceiling price for the basic disaster commodities such as face mask and alcohol. This is consistent with the guidelines of Oplan Metro Yakal Plus on disaster preparedness.

Packages from China

Envelope viruses like the 2019-nCoV do not survive long outside the body in ambient temperature and high relative humidity. While no study on the nCoV survival on surfaces has been published, as of yet, a 2010 study on two other coronaviruses, transmissible gastroenteritis virus and mouse hepatitis virus by Cassanova et al. showed that at 40 degrees centigrade and 80% relative humidity, the survival of these two coronaviruses were less than 6 hours. Thus, as long as the packages have been in transit for more than a day, the risk for infection is insignificant.

LONG TERM

Detection and management of emerging diseases has always been under the direct mandate of the DOH as the main steward of health for all Filipinos. However, with the unpredictability on when and uncertainty of how to cure emerging and evolving diseases, resources (i.e. financial, human, supplies, technical and infrastructural inputs) of the Department are almost always exhausted, significantly hampering their current operations and ongoing commitments. This scenario extends to the experience of RITM. Hence, policy reforms must seek to circumvent this gap.

The creation of a Center for Disease Control (CDC) in the Philippines may equip the country with an agency solely dedicated to protect the nation's health from threats through advanced and progressive researches towards epidemics, prevention, and preparedness. Unlike in the SARS years, decisive and correct actions have been implemented by China through its CDC, thus giving more time for countries like the Philippines to prepare and protect themselves. UP Manila and the NIH support the creation of a whole-of-government, prevention-focused, and proactive Philippine CDC to quickly respond to, and even prevent future epidemics as a complement to vital service delivery work of, and as a means to safeguard the vital population health gains won by, the Department of Health.

References:

- Al-Osail and Al-Wazzah. (2017). The history and epidemiology of Middle East respiratory syndrome corona virus. *Multidisciplinary Respiratory Medicine* 12:20 DOI 10.1186/s40248-017-0101-8.
- Bennett. (2020). *Mandell, Douglas and Bennett: Principles and Practice of Infectious Diseases 9th Ed.* Elsevier: 1600 John F. Kennedy Blvd.Ste 1600 Philadelphia, PA 19103-2899.
- Cassanova LM, Jeon S, Rutala WA, Weber DJ, and Sobsey MD. (2010). Effects of air temperature and relative humidity on coronavirus survival on surfaces. *Appl Environ Microbiol*, vol 76, no 9, pages 2712-2717.
- Chen, et al. (2020). A novel coronavirus outbreak of global health concern. Published Online January 24, 2020. [https://doi.org/10.1016/S0140-6736\(20\)30185-9](https://doi.org/10.1016/S0140-6736(20)30185-9).
- CNN Philippines. (February 2, 2020). Duterte widens travel ban on mainland China, Hong Kong, Macau. [cited 2 February 2020]. Retrieved from <https://cnnphilippines.com/news/2020/2/2/Duterte-travel-ban-mainland-China-Hong-Kong-Macau.html>.
- Huang, et al. (2020). Clinical features of patients infected with 2019 novel coronavirus in Wuhan, China, in www.thelancet.com Published online January 24, 2020 [https://doi.org/10.1016/S0140-6736\(20\)30183-5](https://doi.org/10.1016/S0140-6736(20)30183-5).
- Huang, et Al (2020). Clinical features of patients infected with 2019 novel coronavirus in Wuhan, China, in www.thelancet.com Published online January 24, 2020. [https://doi.org/10.1016/S0140-6736\(20\)30183-5](https://doi.org/10.1016/S0140-6736(20)30183-5).
- WHO. Principles of infection prevention and control during health care when novel coronavirus infection is suspected. [https://www.who.int/publications-detail/infection-prevention-and-control-during-health-care-when-novel-coronavirus-\(ncov\)-infection-is-suspected](https://www.who.int/publications-detail/infection-prevention-and-control-during-health-care-when-novel-coronavirus-(ncov)-infection-is-suspected).

Members of Technical Working Group:

Eva Maria C. Cutiongco-de la Paz, MD, FPPS, *Executive Director*, National Institutes of Health, University of the Philippines Manila

Hilton Y. Lam, MHA, PhD, *Director*, Institute of Health Policy and Development Studies, National Institutes of Health, University of the Philippines Manila; *Consortium Director*, Metro Manila Health Research and Development Consortium

Marissa M Alejandria, MD, MSc, FPCP, FPSMID, *Director*, Institute of Clinical Epidemiology; *Head*, Research Implementation and Development Office, UP College of Medicine

Carlos Primero D. Gundran, MD, MScDM, FPCEM, *Chair*, Emergency Preparedness and Response Subcommittee, UP Manila; *Assistant Professor*, College of Public Health

Edsel M. Salvana, MD, DTM&H, FPCP, FIDSA, *Director*, Institute of Molecular Biology and Biotechnology, National Institutes of Health

Raul V. Destura, MD, MBA, *Director*, National Training Center for Biosafety and Biosecurity, National Institutes of Health, University of the Philippines Manila & *Deputy Director*, Philippine Genome Center, UP

Regina P. Berba, MD, *Head*, Hospital Infection Control Unit, UP-Philippine General Hospital; *National Chairperson*, Philippine Coalition Against TB

Maria Margarita M. Lota, MD, *Chair*, Department of Medical Microbiology, UP College of Public Health

Ma-Ann M. Zarsuelo, RND, MSc, *Senior Research Associate*, Institute of Health Policy and Development Studies, National Institutes of Health, University of the Philippines Manila

Fedelynn M. Jimena, Information, Publication & Public Affairs Office, University of the Philippines Manila