National capacities review tool for a novel coronavirus (nCoV)

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The main aim of the national capacities review tool is to better understand existing capacities in the area of detection and response to a novel coronavirus (nCoV) that is zoonotic and causes respiratory disease. The tool was developed with other coronaviruses, such as SARS-CoV and MERS-CoV, in mind and in consultation with member states. This information will help national authorities to i) identify main gaps ii) perform risk assessments and iii) plan for additional investigations, response and control actions.

I. DETECTION

National Laboratory System

1. Which coronaviruses (CoV) diagnostic tests is the country capable of conducting?

    a. List the laboratories testing for CoV from human and animal health sectors along with the tests performed (PCR -CoV specific or panCoV-, sequencing, culture, serology, others)?

    b. How many samples can each of these lab(s) process every day?

    c. Does the country have a quality assurance program to ensure the quality of testing for CoVs by these laboratories (e.g. accreditation schemes, EQA program (proficiency-testing or rechecking), access to positive quality control materials)? Please list what is in place and the current gaps.

    d. Are there national guidelines for clinicians on laboratory testing for SARI or CoV (including the specimens to be collected and tests to be requested)?

2. Currently, which CoV diagnostic tests are conducted in the country?

3. How are laboratory data shared between human and animal health laboratories and with surveillance system(s)?

4. Please describe the structure of the laboratory system, including number of public health and animal labs, at local, intermediate levels/district, and national levels.

    a. Does the country have a national reference laboratories for CoV?

    b. Are there hospital laboratories testing for CoV? If so, which hospitals?

    c. Do local clinicians have the custom of using the laboratory system? Are there national guidelines for clinicians on which specimens should be collected for SARI/nCoV?

    d. What systems exist for returning laboratory results back to practitioners? How long does this take?

    e. How many samples can each of the lab(s) process for molecular testing (RT-PCR)?

5. Have national laboratories been accredited for CoV?

    a. If yes, to what standard?

b. Are guidelines and protocols for quality management system enforced and in use by public and animal health laboratories?

c. Is there a national body that oversees Internal Quality Controls and External Quality Assessment schemes for public health laboratories at national, regional and local levels?

6. How is laboratory data on zoonotic diseases shared between human and animal health laboratories?

7. Is Personal Protective Equipment available and used by laboratory staff?

8. Is the specimen referral network documented for nCoV?

a. Is there an arrangement with an overseas laboratory for testing when novel respiratory pathogen is suspected?

b. Are there infectious substance certified shippers at key laboratories which may ship the specimens abroad?

c. Are funds available to ship specimens?

d. Are triple packages available to ship specimens?

e. Are MTAs in place with overseas laboratories?

f. Are laboratories able to receive specimens from abroad for testing for CoVs/nCov (e.g. import permits)? If yes, are they willing to test at no charge for WHO or other Member States and/or assist with shipping costs?

9. Are standardized SOPs in place for specimen collection, packaging, and transport for emerging pathogens?

10. Does the country have a national EQA program (proficiency-testing or rechecking) for CoVs?

Surveillance and Risk Assessment

1. Is there an event-based surveillance system in place?

2. Does the country have the ability to quickly enhance current surveillance?

a. Can triggers/criteria/case definitions for investigation be quickly added to the system?

b. Does the country have a system to inform HCW and labs of the criteria to test and signal and who to report to, including the private sector?

3. Is there a functioning respiratory disease surveillance system in place, such as ILI, SARI, ARI or pneumonia surveillance systems?

4. Is a nCoV infection a national notifiable disease?

a. Have health authorities conducted specific training/s on the use of case definitions, how to identify suspected cases on a clinical basis as well as initiate early case management and contact tracing?

5. Is the private sector included in the respiratory surveillance system?

6. Do the public health staff at local/regional and/or national levels have the skills to analyze the surveillance data to detect SARI/pneumonia outbreaks/clusters?

7. For zoonotic pathogens, is data shared between human and animal health sectors? If so, how?

8. Does capacity exist to conduct risk assessment using available multiple sources of information?

9. Does the country have tools to collect, report, analyze case-based information?

Rapid Response Team (RRT)

1. Are there Public Health RRTs available in the country?

2. How are RRTs identified and assigned when alerts are identified?

   a. If yes, are the RRTs available at both national and subnational level?

   b. What disciplines are included in the RRTs? Do the RRTs also include representatives from the animal sector?

   c. Are the RRTs trained for respiratory disease outbreaks, including emerging diseases/pneumonia/SARI outbreak/cluster investigation?

   d. Are the needed resources (logistics and financial) secured to ensure the timely response?

3. Are there guidelines, SOPs and contact tracing and follow up forms available with the teams?

4. Is Personal Protective Equipment available for RRTs? Are they trained to use PPE properly/how is PPE use evaluated?

5. Are RRT trained specifically in contact tracing?

6. Are RRT trained in biological sample collection for respiratory pathogens?

7. Does the country have surge capacity for contact tracing?

8. Does the country have tools to follow up cases and contacts?

II. RESPONSE

Command and Coordination

1. Does the country have a national public health emergency preparedness and response plan that can address respiratory diseases including novel coronaviruses?

2. Does an Emergency operation Center (EOC)/Incident Management Structure (IMS) exist in the country?

3. Is there a multisectoral commission or a multidisciplinary emergency response committee?

   a. How are other Ministries involved in emerging diseases preparedness and response?

4. Are there other partners willing to be involved in the emergency response?

5. Is there political engagement should there be an event?

6. Is there dedicated financial support for emerging disease surveillance, preparedness and response in the country?

7. Are there dedicated public health laws related to infectious diseases (e.g., quarantine, restriction of movement)?

Risk Communication

1. Is there a team of risk communication, communications or health promotion professionals at the national and subnational levels who are trained in risk communication and can be called upon to design and implement risk communication strategies during crises? Is there surge support available within the government, in partner agencies or elsewhere to cover increased communication needs during a public health crisis?

2. Are risk communication personnel invited to participate as equal partners in risk assessment, in rapid response teams and at response coordination meetings (e.g. at the public health emergency operations center)?

3. Are there mechanisms in place for the rapid clearance of timely and transparent communication messaging and materials in such crisis situations? Do those in senior government leadership – including those outside of the Ministry of Health or equivalent – understand the importance of releasing timely and transparent information to protect the public's health even when there is uncertainty (e.g. the cause, effective treatment, severity of pathogen) or when there may be political sensitives.

4. Is it clear which government agency is leading on risk communication for an event of this nature and how communication will be coordinated across ministries and partners, and across different levels of government (e.g. which agency speaks first on which issue, what specific topics and audiences will be best addressed through which agency/partner, how will messaging be aligned)?

5. Is there capacity to develop and implement strategies to engage with at-risk or affected communities, including through their influencers (e.g., community leaders, religious leaders, health workers, traditional healers, etc.) and existing networks (e.g. women's groups, community health volunteers, unions, social mobilizers for polio, malaria, HIV)?

6. Are there systems in place to detect and quickly respond to misunderstandings, misinformation, rumors and frequently asked questions detected through the monitoring of media coverage, social media and hotlines or through healthcare worker and/or community networks? Is there a mechanism in place to utilize this information for revising risk communication strategy?

Point of Entry

1. Is there a public health emergency contingency plan, that can be used for potential nCoV events, is in place at each designated PoE?

    a. Are staff working at PoE aware of the appropriate action to manage ill passenger(s) detected before boarding, on board conveyances (such as planes and ships) and on arrival at PoE?
    b. Is a stockpile of PPE in place at PoE for assessing ill travelers?
    c. Is there an appropriate place for rapid health assessment and isolation, in the event of detecting a potential nCoV case at PoE?
    d. Is there a mechanism for safely transporting ill travelers to designated hospitals, including the identification of adequate ambulance services?
    e. Are procedures and means in place for communicating information on ill travelers between conveyances and PoE, as well as between PoE and national health authorities?
    f. Have ground services for environmental cleaning and disinfection at PoE been identified? If so, has the cleaning and disinfection protocol for potential nCoV events been put in place?

2. Are there means to provide incoming and outgoing travelers from/to affected countries, as well as travel, transport and tourism sectors with relevant information about the disease?

Case Management

1. Are there medical teams trained on SARI case management?

2. Are there ambulance teams trained to transport SARI patients?

3. Are there specific health facilities assigned to provide care to a patient/s with SARI?

    a. Are any health facilities designated to manage patients with CoV infection?
4. Do the health care facilities have the appropriate knowledge, training and sensitivities to carry out safe and respectful burials?

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5. What is the ICU capacity in country?

6. What provisions for mechanical ventilation, N95 masks, surgical masks, gloves, coveralls, etc.?

Infection Prevention and Control

1. Is there a functioning IPC program in each hospital/health care facility in the area where cases are suspected/identified/transferred?

2. Is there a national IPC authority that has developed IPC guidance and/or monitor IPC at the hospital level? Does the national IPC authority gather, analyze, document, and report data on health care-associated infections HAI at the country level?

3. Is the triaging system for patients with Acute Respiratory Illness (ARI) applied in the health facilities? If so, is the triage system adequate?

4. Are standard and/or droplet precautions are applied for all patients with suspected, or a confirmed high threat pathogen?

5. Are airborne precautions applied for all patients who require aerosol-generating procedures?

6. Is there a need/plan for patient placement and transportation based on the clinical status of nCoV patient?

7. What isolation facilities are available for nCoV patients?

8. What controls are/would be in place to limit visitors of patients and require PPE for visitors of nCoV patients?

9. Is Personal Protective Equipment available for medical staff? If so, what PPE is available, how is it used/use assessed?

10. Does a protocol/strategy for environmental cleaning and disinfection exist? If so, is it adequate?

11. Does a system for the proper collection and disposal of nCoV contaminated medical waste exist?

12. Is there an infection control team responsible to follow up exposed HCWs and decide to permit a healthcare worker to resume his/her work? What policies are in place to test and isolate (if positive) HCWs in contact with patients?

13. Is there a strategy to deal with patient/s exposed to a confirmed nCoV patient available?

Logistics, Procurement and Supply Management

1. Is there a Logistics & Supply focal point in the country assigned to the response and is able to link with all pillars for supply forecasting?

2. Is there a procurement mechanism in place in the country?

3. Is there a sufficient storage capacity in the country?

4. Is there a stock management system available in the country?

5. Is there a transport & distribution system available in the country?