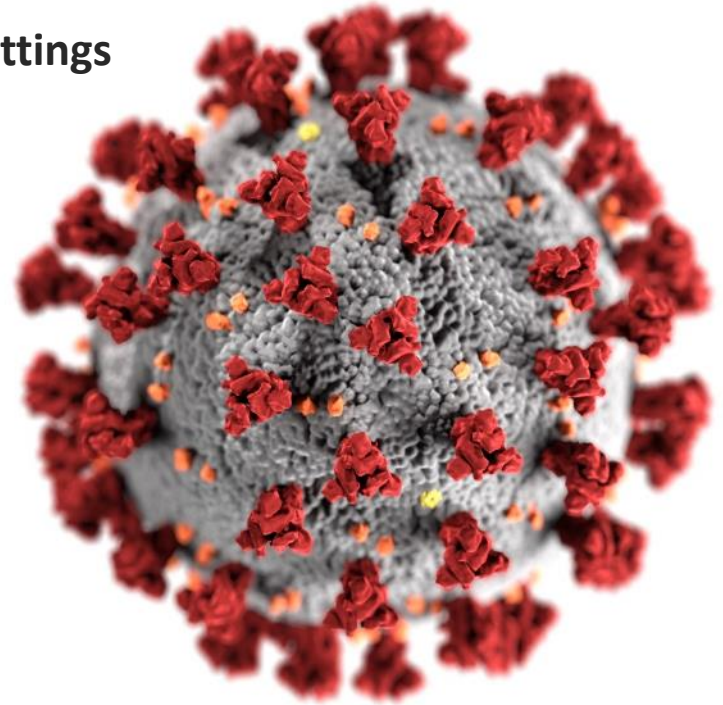


Operational Considerations for the Identification of Healthcare Workers and Inpatients with Suspected COVID-19

Intended for use in non-US healthcare settings



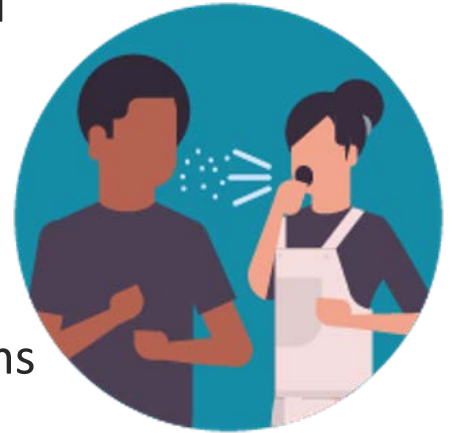
cdc.gov/coronavirus

Outline

- Background
- Goal and objectives
- Overview of case finding
- Identification of healthcare workers with suspected COVID-19
- Identification of inpatients with suspected COVID-19

Background: COVID-19

- Caused by a newly emergent coronavirus, SARS-CoV-2
- Leads to respiratory infection, including severe pneumonia
- Transmitted mainly via respiratory droplets
 - Respiratory droplets are produced when an infected person sneezes, coughs, or talks
- A person may get COVID-19 by touching a surface or object that has the virus on it and then touching their own mouth, nose, or possibly their eyes
- Some individuals with coronavirus may lack any symptoms (asymptomatic)



Background: Signs and Symptoms

- Commonly described symptoms are
 - Fever
 - Cough
 - Shortness of breath
- Sore throat, diarrhea, myalgia (muscle aches, body aches), tiredness or fatigue, and decreases in the sense of taste and smell are also reported
- Elderly patients may present differently than younger populations
 - Tiredness and/or confusion
- Facilities should define a standardized set of signs and symptoms for case finding activities (e.g., WHO or country-specific definition)



Goals of this Presentation

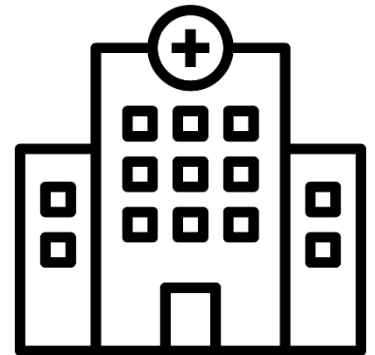
Guide establishment of systems to rapidly and consistently identify healthcare workers (HCW) and inpatients with suspected COVID-19 that balance COVID-19 risk and available resources

Overview of Case Finding



The Value of Case Finding

- Healthcare facilities can act as COVID-19 amplification points
 - Urgent need to implement practices to protect patients and staff
- Preventing COVID-19 amplification in healthcare facilities:
 - Rapid identification of sick/symptomatic healthcare workers followed by work restriction until assured they are not infectious
 - Identification of inpatients with suspected COVID-19 to guide infection prevention and control activities and prevent transmission



Passive Case Finding Strategies

- Suspected cases are identified by the healthcare worker who sees the case in their normal work activities and who then reports suspect cases to those that need to know
- Examples:
 - Inpatients: Healthcare workers providing clinical care evaluate their patients for signs and symptoms of COVID-19 during routine care and report suspect cases to appropriate authorities
 - Healthcare workers: Healthcare workers self-monitor their symptoms and act to self-exclude from work based on their own evaluation of their condition

Enhanced Passive Case Finding Strategies

- Suspect cases are identified by the healthcare worker who sees the case in their normal work activities supplemented by a system that reminds the healthcare worker to check for suspect case and to report to appropriate authorities
- Examples:
 - Systems are used to remind healthcare workers of their responsibility to check for the presence of COVID-19 symptoms and report every day and/or before each shift
 - Systems are used to remind healthcare workers to have a high index of suspicion for COVID-19

Active Case Finding Strategies

- Suspect cases are identified by the designated workers who are also responsible for taking appropriate action
- Examples:
 - Facility assigns a team (e.g., nurses or infection preventionists) to check all staff for COVID-19 symptoms before each shift as their primary role (e.g., apart from clinical work)
 - Dedicated team responsible for COVID-19 prevention reviews inpatients to identify suspect case patients

General Best Practices for Case Finding Activities

- **Train and educate healthcare workers**
 - Example: Training on detection among inpatients and self-recognition of symptoms
- **Monitor and manage ill and exposed healthcare workers**
 - Example: Implement sick leave policies that are flexible and do not include punishment for missing work
- **Establish reporting within and between healthcare facilities and to public health authorities**
 - Example: Communicate and collaborate with public health authorities

Identification of Healthcare Workers with Suspected COVID-19

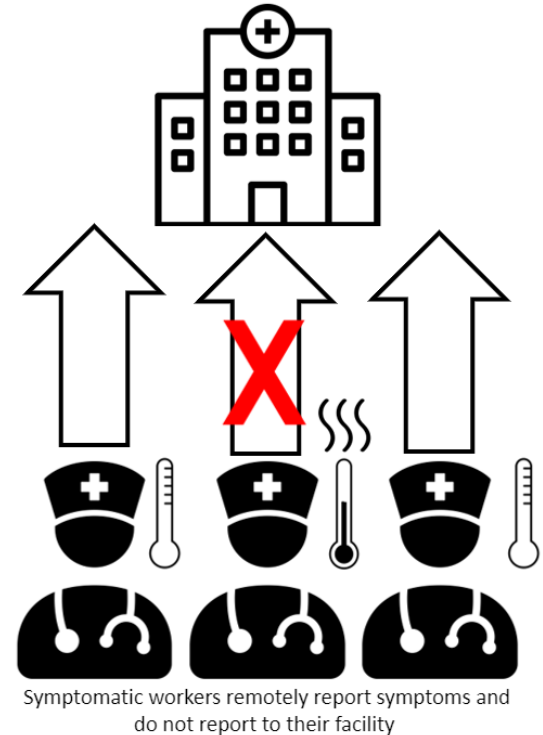


Identification of Ill Healthcare Workers with Suspected COVID-19

- **Objective: Prevent exposure of patients and staff to symptomatic COVID-19 positive healthcare workers**
- Passive strategy
- Enhanced passive strategy (Automated or Manual)
- Active strategy
 - In-person
 - Remote

Passive Strategy

- All healthcare workers self-assess for fever and/or a defined set of newly present symptoms that are indicative of COVID-19
- If a healthcare worker has a fever or respiratory symptoms, they should:
 - **NOT** report to their facility
 - Remotely report their condition
 - Be provided with immediate medical assessment and follow-up actions



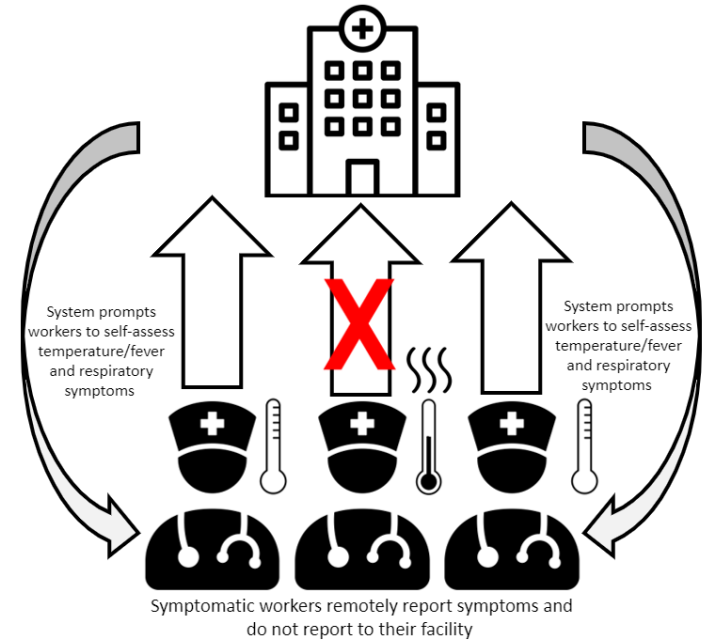
Passive Strategy Requirements



- Team responsible for monitoring activities and appropriate and rapid response
- List of symptoms and thermometer for self-assessment
- Staff and mechanisms (e.g., telephone line) for remote reporting of symptoms
- Direction on who should report for additional medical assessment based on their symptoms
- Standardized medical assessment and movement and monitoring forms

Enhanced Passive Strategy

- In addition to the passive strategy, establishes a plan to **remind or prompt workers** to self-assess for symptoms consistent with COVID-19
- Common reminders include automated text messages or phone calls



Enhanced Passive Strategy Requirements



Automated system

- Database of healthcare workers under monitoring
- Mass text messaging service
- Effective and informative mass text messages

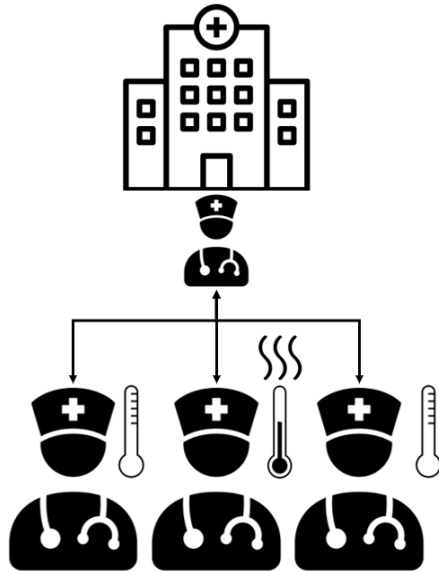
Manual system

- Database of healthcare workers under monitoring
 - Should be carefully targeted to minimize workload and maximize benefit
- Staff available to contact monitored healthcare workers with reminders
- Phone and phone credit to support messaging and/or calls

Active Strategy

In-person active strategy

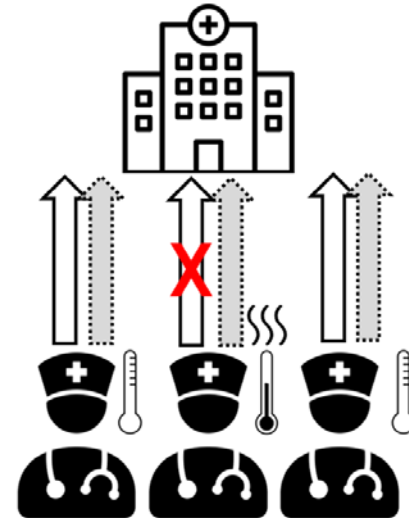
All healthcare workers are assessed for symptoms prior to each shift



All workers are assessed for symptoms before starting their shift

Remote active strategy

All healthcare workers required to report presence or lack of symptoms remotely prior to each shift



All workers report presence or lack of symptoms prior to each shift. Workers with symptoms do not report to their facility. Failure to report is followed-up.

Active Strategy Requirements

- All the requirements of the passive strategy
- Dedicated staff to evaluate healthcare workers before their shift (in-person) or respond and monitor healthcare worker reports (remote)
- Physical area for staff evaluations (in-person)
- No touch thermometers (in-person)
- Implementation plan that includes a method to ensure that staff present at a given place for pre-shift evaluation
- Accountability system to ensure all healthcare workers have been evaluated
 - This system can also be set up to ensure healthcare workers report in remotely prior to their work shift for the remote active strategy

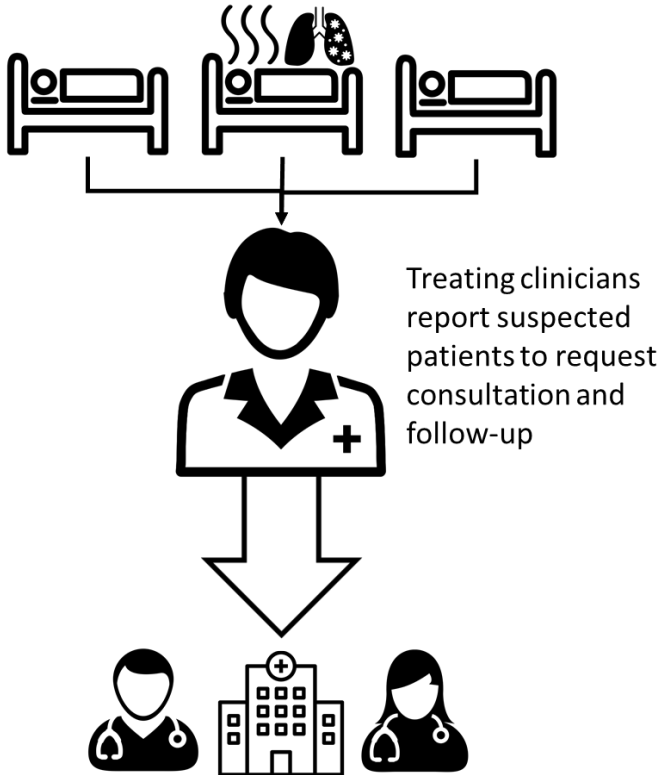
Identification of Inpatients with suspected COVID-19



Identification of Inpatients with Suspected COVID-19

- **Objective: Identify inpatients with suspected COVID-19 and guide infection prevention and control (IPC) strategies to prevent transmission**
- Passive strategy
- Enhanced passive strategy
- Active strategy

Passive Strategy



- Clinicians are kept informed of:
 - Current case definitions
 - Latest description of clinical presentation
 - Relevant local epidemiology
 - Facility admission triage and cohorting practices
- Clinicians must be made aware of what to do if they suspect COVID-19 in a hospitalized patient

Passive Strategy Requirements

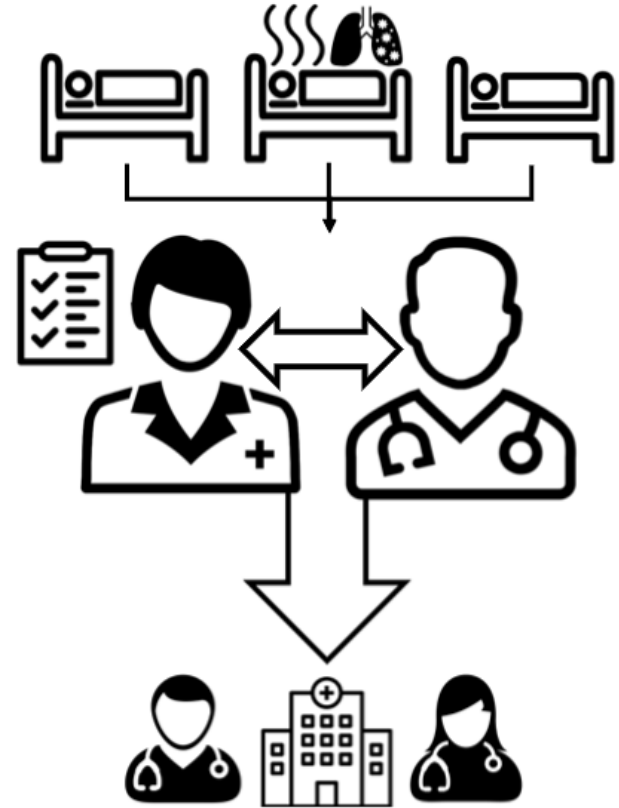
- Regular and up-to-date educational materials/job aids provided to and accessible by clinicians
- COVID-19 case definitions
- Standard operating procedures (SOP) for response to identified suspect case patients
 - See [WHO interim guidance](#) for recommendations
- Acceptable reporting/communication channels to hospital administration and public health authorities

Passive Strategy Considerations

- Dependent on the participation and skill of available clinicians
 - An understanding of local epidemiology and clinical presentation of COVID-19, which may differ in different populations
- Limited to no access for diagnostic testing will complicate this effort
 - Conservative strategy (treat all suspect cases as confirmed cases) could waste resources
- Supporting empirical case determination through clinician education and job aids can help improve accuracy of clinical diagnosis of/testing for COVID-19

Enhanced Passive Strategy

- Establishing systems that prompt or require clinicians to regularly review all patients for likelihood of COVID-19
- Examples:
 - Incorporating consideration of COVID-19 into sign out reporting
 - Requiring units to provide a daily clinician-generated list of suspected cases, including if there are zero cases
 - Specific daily request to clinicians to report and discuss encountered patients with symptoms/history consistent with COVID-19



Enhanced Passive

- **Requirements**

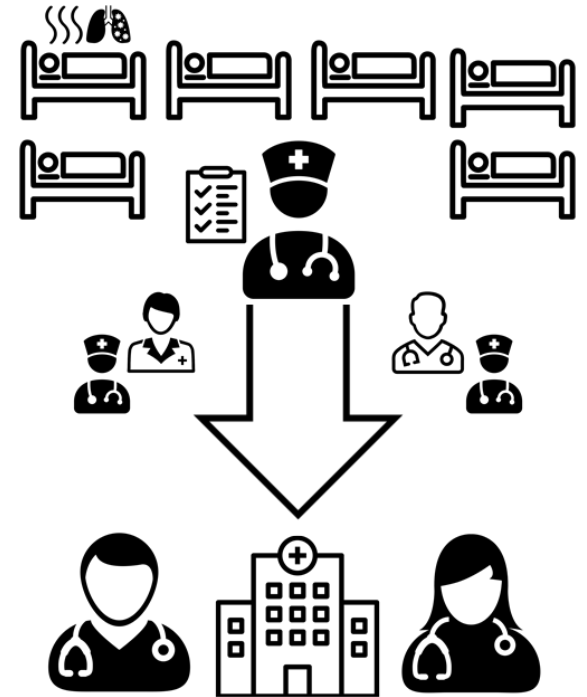
- All requirements of the passive strategy
- Strategy to prompt and/or ensure clinician review – Requirements will depend on selected strategy

- **Considerations**

- Effective strategies to enhanced passive inpatient case identification will be context specific and will require thought and effort in design and implementation
- May represent changes in current practice limiting acceptability

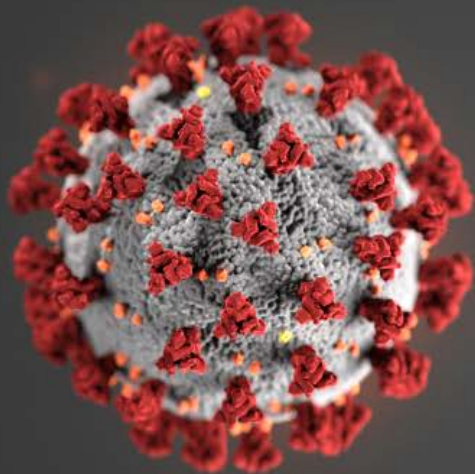
Active Strategy

- Targeted data collection and review of patient information by groups specifically responsible and trained for the identification of suspected COVID-19 cases
- Examples of responsible groups:
 - Facility infection prevention and control teams
 - Ministries of Health
 - Sub-national/local public health authorities



Active Strategy Requirements

- Data collectors/groups with the information access, resources, and experience necessary for systematic review of patient information in order to appropriately apply standardized suspect case definitions (i.e., case finding)
- Group(s) with responsibility for data analysis, data presentation, and the sharing of case finding information
- Group(s) with responsibility to regularly review case finding information with the **authority and willingness to take appropriate action**



For more information, contact CDC
1-800-CDC-INFO (232-4636)
TTY: 1-888-232-6348 www.cdc.gov

The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention.

