Guidelines for Investigation and Management of Close Contacts of COVID-19 Cases Training Kit from Chinese Center for Disease Control and Prevention

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Guidelines for Investigation and Management of Close Contacts of COVID-19 Cases

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Citation

- Chinese Center for Disease Control and Prevention. Guideline for Investigation and Management of Close Contacts of COVID-19 Cases

- Prevention and Control Plan of COVID-19 （the 6th edition）

- Prevention and Control Plan of COVID-19 （the 5th edition）
Contents

- Purpose
- Principles of Investigation and Identification
- Contact Management
- Information Reporting Requirements
- Data Analysis and Use
Purpose

• Identify and manage close contacts in a timely manner to prevent further spread of the disease.

• Develop a more clear understanding of risk of infection and risk factors during various types of human contact.
Principles of Investigation and Identification (1)

Contacts

- “Contacts” include anyone who may have had contact with a case through a range of circumstances or activities including being family members, relatives, friends, colleagues, classmates, health care workers, and services personnel. Contacts can be classified as close contacts or general contacts based on the level of contact.

Close Contacts

- Close contacts are individuals who have had contact, without effective protection, with one or more suspected or confirmed COVID-19 cases any time starting 2 days before onset of the suspected or confirmed cases’ symptoms or 2 days before sampling for laboratory testing of asymptomatic infected persons.

General Contacts

- General contacts include anyone who has had contact with suspected cases, confirmed cases, and asymptomatic infected persons, but who do not meet the criteria for being a close contact while taking the same transportation vehicle (airplane, train, ship), or living, studying, or working together, or having less than close contact during diagnostic and treatment procedures.
Specific types of close contacts are:

- Family members living together
- Direct caregivers or providers of medical treatment and care services
- Healthcare workers who perform diagnostic and treatment activities that emit aerosols
- Persons who have had close contact in an office, factory, workshop, elevator, canteen or cafeteria, classroom, or other similar location
- Persons sharing meals, entertaining, and providing catering and entertainment services in a closed environment
- Healthcare workers and family members visiting infected patients or other people in close contact with COVID-19 cases
- People who take the same transportation and have close contact with a COVID-19 case or an asymptomatic infected person (See Appendix S1 for criteria for identifying close contacts on different types of transportation and vehicles)

Other persons assessed by onsite investigators meeting the criteria for close contact
## Contacts Management-Management Approach for Close Contacts(1)

- The local health departments shall, together with the relevant departments, organize and carry out the medical observation of close contacts.
- For those who refuse to do so, compulsory quarantine measures may be taken with the assistance of the local public security institutions.

### General Population

- Centralized management with medical observation should be applied for close contacts management;
- However, carefully-managed household isolation may be used when conditions do not permit centralized management.

### Children 14 years and younger

- Parents and family members are all close contacts, centralized management with medical observation is the preferred management method.
- If only the child is close contact, household management with medical observation can be used under guidance, and family members can live with the child with protection and distancing.

### Closes contacts who may not have the ability to perform self-care activities

- In principle, centralized isolation medical observation measures should be implemented, and nursing care should be carried out by designated personnel.
- If this cannot be carried out, home isolation medical observation can be taken under the guidance of community medical staff.

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**People with underlying diseases and the elderly can not serve as caregivers.**
General contacts should be registered and informed of their health risk as a general contact. They should be told that if they develop respiratory symptoms such as fever or dry cough or gastrointestinal symptoms such as diarrhea, they should immediately seek medical advice and provide history of their recent activities to the doctor or other healthcare professional.
Contact Management-Management Procedure

**Informed notification**
- The reason for the observation; the timeline; legal basis; matters needing attention; and disease-related knowledge
- Medical institution that is responsible for observation and the person and contact information of institution official. Fill Table S3.

**Health monitoring**
- Monitor the temperature of close contacts every morning and evening, and ask their health conditions.
- Fill Table S4, S5 and S6

**Observation period**
- Last until 14 days after the last contact without effective protection with a confirmed case or an asymptomatic infected person
- If the close contacts are tested negative during the medical observation period, they must be isolated till the end of the observation period

**Management of abnormal symptoms**
- If a close contact has any symptoms of fever, dry cough, and other respiratory symptoms, they must immediately be reported and transported to the designated medical institution for diagnosis, treatment, and specimen collection for laboratory testing and investigation.
- If they are found to be a suspected or confirmed case, their close contacts should be investigated and medically observed.

**Release from isolation and medical observation**
- When the required medical observation period ends, if the close contact has had no abnormal symptoms, he or she should be released from medical observation in time.
- If a suspected case is determined to not be a COVID-19 case or asymptotically-infected, his or her close contacts should be released from medical observation.
### Contact Management-Management Rules

#### Medical observation sites
- Cleaned
- Disinfeacted
- Meet the requirements of the selection of centralized medical observation sites and internal facilities (Appendix S2)

#### Close contacts
- Live alone
- Minimize contact
- Not allowed to go outside
- If they must go outside, they should do so only with approval of the medical observation management staff; they must wear surgical masks and avoid going to crowded places while outside.

#### Staff performing medical observation
- Use effective personal protection practices for respiratory droplets and contact transmission.
### Overall System
- Local areas are encouraged to report relevant information through the online reporting module.
- After a close contact is released from medical observation, summarize and update the health status of the close contact during medical observation based on the Health Status Monitoring Case Form for Close Contacts
- Guarantee quality audit

### Established System
- The original system can be continually used
- Encourage the use of national close contacts medical observation and health monitoring information system interface to improve data

### Released Cases
- In principle, the relevant information of released cases does not require supplementary reporting through the network reporting system.

Information report website: [https://10.249.6.18:8880/portal](https://10.249.6.18:8880/portal)
Information Reporting Requirements (2)

Report Contents

- Basic information (e.g., name, ID number, sex, age, contact information)
- Information about contacted case (e.g., times of contact)
- Health monitoring information (the starting date of isolation, initial clinical manifestations)

Online Report Module
- Health Status Monitoring
- Case Form for Close Contacts (Supplementary Table S3)

Information Connection

When register:

- The recording of “the worst clinical outcome of the case” must be consistent with the information reported in the Infectious Disease Information Reporting and Management System.

After released from observation:

- The report card for Disease Information Reporting and Management System
Table S3. Health Status Monitoring Case Form for Close Contacts

*Filled when registering*

<table>
<thead>
<tr>
<th>Name</th>
<th>ID number</th>
<th>Sex</th>
<th>Age</th>
<th>Contact Information</th>
<th>Underlying medical conditions</th>
<th>Last contacted case’s name</th>
<th>Type of case</th>
<th>Date of first contact</th>
<th>Date of last contact</th>
<th>Contact ways</th>
<th>Isolation start date</th>
<th>Presence or absence of clinical symptoms</th>
<th>Onset date of first symptoms</th>
<th>Initial clinical manifestation</th>
<th>2019-nCoV test results</th>
<th>Date of positive specimen collection</th>
<th>Date of hospital discharge or isolation release</th>
<th>Worst clinical status of the close contact</th>
</tr>
</thead>
</table>

• Direct report online
Data Analysis and Use

• Analysis the secondary attack rate of COVID-19 infection among close contacts
  – close contacts in key places such as homes and hospitals and places varying by their characteristics

• Analysis the proportion of different clinical severity of COVID-19 cases diagnosed in close contacts

• Estimate the 2019-nCoV incubation period based on the first and last contact time of the close contact with the case, and the onset of close contacts’ illnesses.
Appendix and Supplementary Tables

- Appendix S1-Criteria for identifying close contacts on different types of transportation and vehicles
- Appendix S2-Requirements of selection of centralized medical observation sites and internal facilities.

- Case forms
  - Health Status Monitoring Case Form for Close Contacts (online report)
  - Registration Form for Medical Observation of Close Contacts

- Information Summary Tables
  - Daily Report Form for Medical Observation of Close Contacts
  - Daily Summary Form for Medical Observations of Close Contacts
Appendix S1 - Criteria for identifying close contacts on different types of transportation and vehicles

**Plane**
- In general, all passengers in the same row with and three rows in front and rear the case seats, as well as crew members providing cabin services in the above-mentioned areas are close contacts.
- Other passengers on the same flight are general contacts.

**Railway**
- Fully enclosed air-conditioned train, all passengers and crew of the hard seat, hard berth or soft berth in the same compartment where the case is located.
- Non-closed ordinary trains, passengers in soft sleeper compartments in the same room, or passengers in the same hard seat (hard berth) compartment and adjacent compartments, as well as attendants serving the area.

**Automobile**
- Fully sealed air-conditioned bus, all personnel in the same car with the case.
- A ventilated ordinary bus, passengers and passengers with three rows of seats in front and rear of the case.

**Ship**
- All passengers in the same compartment as the case and the crew providing services to the compartment.
## Appendix S2-Requirements of selection of centralized medical observation sites and internal facilities

### Sites Selection
- In principle, it should be relatively independent and far away from densely populated areas.
- Centralized isolation sites shall not be set up in medical institutions

### Sites Facilities
- The centralized medical observation sites should be divided into living area, material guarantee supply area and medical observation area according to the need, and the division should be clearly marked.
- Infrastructures should be applies to ensure the normal life of centralized isolation personnel, and ventilation conditions should be provided to meet the implementation of daily disinfection practice.

### Septic tank
- Isolated septic tank should be provided.
- If not, collect excreta in a special container and disinfected before discharge it.

### Sites Requirements
- Centralized medical observation places should be equipped with thermometers, stethoscopes and other medical equipment, masks, disinfectants and other personal protective equipment and disinfection products.
- Provide Single room and isolated bathroom
# Appendix S3-Health Status Monitoring Case Form for Close Contacts

Filled when registering

Fill in the clinical outcome after the close contact cases have converted to diagnosed case.

| Name | ID number | Sex | Age | Contact Information | Underlying medical conditions | Patient’s name | Type of case | Date of first contact | Date of last contact | Contact ways | Isolation start date | Presence or absence of clinical symptoms | Onset date of first symptoms | Initial clinical manifestation | 2019-nCoV test results | Date of positive specimen collection | Worst clinical status of the close contact | Date of hospital discharge or isolation release |
|------|-----------|-----|-----|---------------------|-------------------------------|----------------|--------------|----------------------|---------------------|-------------|----------------------|-----------------------------------------|-------------------------------|-------------------------------|-----------------------------|----------------------------------------|------------------------------------------|

• Direct report online
Appendix S4-Registration Form for Medical Observation of Close Contacts

<table>
<thead>
<tr>
<th>Serial no.</th>
<th>Close contact's name</th>
<th>Sex</th>
<th>Age</th>
<th>Current address</th>
<th>Start date of observation</th>
</tr>
</thead>
</table>

**Clinical manifestation**

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
<th>12</th>
<th>13</th>
<th>14</th>
</tr>
</thead>
<tbody>
<tr>
<td>Body temperature(°C)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Presence of symptoms</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
<td>9</td>
<td>10</td>
<td>11</td>
<td>12</td>
<td>13</td>
<td>14</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: 1. This table is intended for use by the healthcare workers performing medical observation on the close contacts of COVID-19 cases and asymptomatic infected person.

2. Under "clinical manifestation," fill in the actual temperature in Celsius for "Body temperature." Please tick √ if any of the following symptoms appear, otherwise tick ×: chills, sputum, stuffy nose, runny nose, sore throat, headache, fatigue, muscle soreness and aches, joint soreness and aches, shortness of breath, dyspnea, chest tightness, conjunctival congestion, nausea, vomiting, diarrhea, abdominal pain, and other symptoms.

Entered by (organization): _____ Entered by (individual): _____ Date of entry: ___mm__dd__yy
# Appendix S5-Daily Report Form for Medical Observation of Close Contacts

<table>
<thead>
<tr>
<th>Sub-district/community or household</th>
<th>Observation start date for the first close contact</th>
<th>Total number of persons observed</th>
<th>Persons who are under medical observation</th>
<th>Number of persons who have clinical manifestations</th>
<th>Number of persons who become infected with COVID-19 or have asymptomatic infections</th>
<th>Date the last close contact is expected to be released from observation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Number of persons observed for the day</td>
<td>New additions</td>
<td>Of the day</td>
<td>Total</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Number of persons observed for the day</td>
<td>New additions</td>
<td>Of the day</td>
<td>Total</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Number of persons observed for the day</td>
<td>New additions</td>
<td>Of the day</td>
<td>Total</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Number of persons observed for the day</td>
<td>New additions</td>
<td>Of the day</td>
<td>Total</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Number of persons observed for the day</td>
<td>New additions</td>
<td>Of the day</td>
<td>Total</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Number of persons observed for the day</td>
<td>New additions</td>
<td>Of the day</td>
<td>Total</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Number of persons observed for the day</td>
<td>New additions</td>
<td>Of the day</td>
<td>Total</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Number of persons observed for the day</td>
<td>New additions</td>
<td>Of the day</td>
<td>Total</td>
</tr>
</tbody>
</table>

Note: 1. This table is intended for aggregate submission by healthcare workers performing medical observation on close contacts of COVID-19 cases and asymptomatic infected persons.  
2. Clinical manifestations include: chills, sputum, stuffy nose, runny nose, sore throat, headache, fatigue, muscle soreness and aches, joint soreness and aches, shortness of breath, dyspnea, chest tightness, conjunctival congestion, nausea, vomiting, diarrhea, abdominal pain, and other symptoms.  
3. All “total” entries in the table refer to aggregate numbers since the start of medical observation of the close contacts.

The cumulative figures involved in the table refer to the total number since the medical observation of close contacts was carried out.
### Appendix S6-Daily Summary Form for Medical Observations of Close Contacts

<table>
<thead>
<tr>
<th>Jurisdiction</th>
<th>Date of the onset of observation of the first case</th>
<th>Cumulative number of observers</th>
<th>Medical observer</th>
<th>Number of people with abnormal clinical manifestations</th>
<th>Number of converted cases and asymptomatic infections</th>
<th>The expected date of the last close contact is released from medical observation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Number of people observed on the day</td>
<td>Released number</td>
<td>Newly added number</td>
<td>current date number</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Total number</td>
<td>Released number</td>
<td>Newly added number</td>
<td>current date number</td>
</tr>
</tbody>
</table>

- This table can be used for statistics and summary of municipal and district-level centers for disease control and prevention.
- Abnormal clinical manifestations: fever, cough, shortness of breath and other symptoms.
- The cumulative figures involved in the table refer to the total number since the medical observation of close contacts was carried out.
Comparison between the fifth edition and the sixth edition of Close Contact Management (1)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Title</td>
<td>Title Adjustment</td>
<td>Close Contacts of COVID-19 Cases Management Plan</td>
<td>Guidelines for Investigation and Management of Close Contacts of COVID-19 Cases</td>
</tr>
</tbody>
</table>
| Content Framework  | Content Adjustment| • Determination Principle  
• Management Requirement  
➢ Contacts Management  
➢ Measures during medical observation  
➢ Centralized medical observation place  
• Information Report | • Purpose  
• Principles of Investigation and Identification  
• Contact Management  
• Information Reporting Requirements  
• Data Analysis and Use |
| Exclusion of close contacts of suspected cases | Added Content | None | After the suspected cases are excluded, those who are in close contact with them can be relieved of medical observation |
| Concept of contact cases | Added Content | None | Yes |
| Refined Close Contact Management | Added Content | None | Add medical observation and guidance for children under 14 years old and disabled and semi-disabled people |
## Comparison between the fifth edition and the sixth edition of close contact management (2)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Concept of Close Contacts</td>
<td>Content Revisement</td>
<td>Close contacts refer to persons who are in close contact with them (within 1 meter) from 2 days before the symptoms of suspected and confirmed cases, or 2 days before the samples of asymptomatic infections are collected.</td>
<td>• Deletes 'within 1 meter'&lt;br&gt;• The rest of contents consist with the fifth edition</td>
</tr>
<tr>
<td>Appendix S2</td>
<td>Content Revisement</td>
<td>Appendix2: Registration Form for Close Contacts of COVID-19</td>
<td>• Revised as Appendix S3-Health Status Monitoring Case Form for Close Contacts&lt;br&gt;• Close health monitoring variables have been added to the table&lt;br&gt;• Consist with the Guidelines</td>
</tr>
<tr>
<td>Information Report</td>
<td>Consistant</td>
<td>Encourage districts and counties to adopt direct online reporting system</td>
<td>• Appendix S3-Health Status Monitoring Case Form for Close Contacts should be reported online directly</td>
</tr>
<tr>
<td>Appendix</td>
<td>Content Adjustification</td>
<td>5 Appendixes</td>
<td>• 6 Appendixes&lt;br&gt;• Requirements of selection of centralized medical observation sites and internal facilities serves as appendix 2</td>
</tr>
</tbody>
</table>
Guided by the evolving understanding of COVID-19 and the progress scored by the epidemic control programme, these guidelines will be continuously updated and improved, so as to fulfil our mandate of better protecting the lives and physical wellbeing of the public.