Chinese Center for Disease Control and Prevention
Technical Guidance for Prevention and Control of COVID-19
Audio and Video Training Courseware

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Protocol for Prevention and Control of COVID-19 (Edition 6)

Liping Wang
Researcher
Office of Infectious Disease Management
Technology basis

Protocol for Prevention and Control of COVID-19 (Edition 6)

Protocol for Prevention and Control of COVID-19 (Edition 5)
Drafting process of Protocol for Prevention and Control of COVID-19

1.15 Protocol for Prevention and Control of COVID-19 (Edition 1)

1.18 Diagnosis and Treatment Protocol for Novel Coronavirus Pneumonia (Version 1)

1.20 Diagnosis and Treatment Protocol (version 2)

1.22 Diagnosis and Treatment Protocol (version 3)

1.27 Diagnosis and Treatment Protocol (version 4)

2.4 Diagnosis and Treatment Protocol (version 5)

2.6 Diagnosis and Treatment Protocol (version 6)

2.18 Diagnosis and Treatment Protocol (version 7)

2.21 Protocol for Prevention and Control of COVID-19 (Edition 2)

2.28 Protocol for Prevention and Control of COVID-19 (Edition 3)

3.7 Protocol for Prevention and Control of COVID-19 (Edition 4)

3.4 Protocol for Prevention and Control of COVID-19 (Edition 5)

3.9 Protocol for Prevention and Control of COVID-19 (Edition 6)

3.9 Relevant technical guidelines

- Protocol for Prevention and Control of COVID-19 (Edition 1)
- Protocol for Prevention and Control of COVID-19 (Edition 2)
- Protocol for Prevention and Control of COVID-19 (Edition 3)
- Protocol for Prevention and Control of COVID-19 (Edition 4)
- Protocol for Prevention and Control of COVID-19 (Edition 5)
- Protocol for Prevention and Control of COVID-19 (Edition 6)

- a notifiable Category B infectious disease but regulated as a Category A infectious disease

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- Relevant technical guidelines
国家卫生健康委员会办公室

国家卫生健康委办公厅关于印发
新型冠状病毒肺炎防控方案
（第六版）的通知

各省、自治区、直辖市及新疆生产建设兵团卫生健康委，中国疾病
预防控制中心：

为进一步指导下做好新型冠状病毒肺炎防控工作，我委组
织更新了新型冠状病毒肺炎防控方案。现印发给你们，请参照执
行。各地在执行过程中如有相关建议，请及时反馈我委。

国家卫生健康委办公厅
2020年3月7日

（信息公开形式：主动公开）

中国疾病预防控制中心文件

中国疾病预防控制中心关于印发新型冠状病毒
肺炎防控方案相关技术文件的通知

各省市（自治区、直辖市）疾病预防控制中心：

为配合国家卫生健康委方案（第六版）的实施
及疫情形势，现同步印发相关方案（第六版）中相
关技术文件。现将有关技术文件印发给你们，请查
照执行。

附件：
1. 新型冠状病毒肺炎流行病学调查指南
2. 新型冠状病毒肺炎密切接触者调查与管理指南
3. 新型冠状病毒肺炎实验室检测技术指南
4. 特定场所消毒技术指南
5. 特定人群个人防护指南

http://www.chinacdc.cn/jkzt/crb/zl/szkb_11803/jszl_1
1815/202003/t20200309_214241.html
Content

• Protocol for Prevention and Control of COVID-19 (Edition 6)
  - Difference between edition 6 and edition 5
  - Contents of edition 6

• Technology guidelines
  - Guidelines for COVID-19 Epidemiological Investigation
  - Guidelines for COVID-19 Close Contact Management
Protocol for Prevention and Control of COVID-19

(Edition 6)
Major revisions

- Strengthen the strategy of “early detection, early reporting, early isolation, and early treatment”
- Strict implementation of time limits for reporting, testing, and epidemiological investigations
  - 2h-12h-24h
- Timely revision and supplement of relevant standards
  - Serological diagnosis
- Prevent the importation of overseas case
- Strengthen the technical guidance role of the Chinese Center for Disease Control and Prevention
- Give play to the role of traditional Chinese medicine

http://www.nhc.gov.cn/jkj/s3577/202003/4856d5b0458141fa9f376853224d41d7.shtml
Protocol for Prevention and Control of COVID-19
Outline

• Purpose
• Etiology and Epidemiological Characteristics
• Surveillance Case Definitions
• Prevention and Control Measures
• Supportive Measures
Purpose

- Guide localities to detect and report COVID-19 cases and cluster epidemic in a timely manner
- Guide localities to conduct epidemiological investigations and outbreak responses
- Guide localities to standardize management of close contacts
Etiology and Epidemiological Characteristics

- **Etiology characteristics**
  - 2019-nCov, is a β-type coronavirus, but its genetic characteristics are significantly different from SARS-CoV and MERS-CoV.
  - The 2019-nCoV is sensitive to ultraviolet rays and heat and can be killed by heating for 30 minutes at 56 °C; lipid solvents such as ether, 75% ethanol, chlorine-containing disinfectants, peracetic acid, and chloroform can also inactivate the virus.

- **Epidemiological characteristics**
  - **Incubation period**: 1–14 days and generally in the range of 3–7 days;
  - **Source of infection**: The main source of infection is COVID-19 patients, but asymptomatic individuals infected with 2019-nCoV may also infect others.
  - **Main modes of transmission**: The main modes of transmission are via droplets and direct contact. The possibility of aerosol transmission exists in relatively closed settings with exposure to high concentrations of aerosol for a long period of time. Other transmission routes need further investigation.
  - **Virtually the entire population is susceptible to 2019-nCoV infection**.
Surveillance Case Definitions

- Suspected Case
- Confirmed Case
- Asymptomatic Infected Persons
- Clusters of Cases
- Close Contacts
Suspected Case

- having any of the epidemiological history criteria plus any two clinical manifestations;
- having all three clinical manifestations if there is no clear epidemiological history.

- Epidemiological history:
  - History of travel to or residence in Wuhan and its surrounding areas, travel to other communities in China where cases have been reported, or travel to other countries/regions with severe outbreaks outside China within 14 days prior to the onset of the disease;
  - Contact with an individual infected with 2019-nCoV (who tested positive with a nucleic acid test) within 14 days prior to the onset of the disease;
  - Contact with patients with fever or respiratory symptoms from Wuhan, Wuhan’s surrounding areas, communities where confirmed COVID-19 cases have been reported, or from other countries/regions with severe outbreaks outside China within 14 days before the onset of the disease;
  - Clustered cases (two or more cases with fever and/or respiratory symptoms in a small area such as in families, offices, schools, workplaces, and other gatherings within 14 days).

- Clinical manifestations:
  - Fever and/or respiratory symptoms;
  - Radiographic imaging consistent with COVID-19 pneumonia;
  - Normal or decreased WBC count, or normal or decreased lymphocyte count in the early stages of illness.
Confirmed Cases

- Suspected cases with one of the following etiological or serological pieces of evidence:
  - Real-time fluorescent RT-PCR positive result for 2019-nCoV nucleic acid;
  - Viral genetic sequence that is highly homologous to 2019-nCoV;
  - 2019-nCoV virus-specific IgM and IgG detectable in serum, 2019-nCoV virus-specific IgG is detectable, or there is at least a 4-fold increase in IgG between paired acute and convalescent sera.
Asymptomatic Infected Persons

- Asymptomatic individuals with etiological detection of 2019-nCoV in respiratory specimens or specific IgM detected in serum.

- Major discovery paths: screening of close contacts, investigation of cluster epidemic, and tracing of sources of infection.
Clusters of Cases

- Clusters of cases refer to 2 or more confirmed COVID-19 cases or asymptomatic 2019-nCoV-infected persons in a small area such as in families, offices, schools, workplaces, and other gatherings within a 14-day period, in which there exists the possibility of human-to-human transmission or common exposure.
Close Contacts

- People who had unprotected close contact with a confirmed or suspected case within two days prior to illness onset or with an asymptomatic 2019-nCoV-infected person within two days before obtaining clinical samples from the asymptomatic infected person.
Prevention and Control Measures

• Precise Prevention and Control Tailored to Specific Areas and Levels
• Early Detection
• Early Reporting
• Early Isolation
• Early Treatment
• Epidemiological Investigation
• Close Contact Tracing and Management
• Specimen Collection and Lab Testing
• Strengthen Prevention and Control Measures Targeting Key Settings, Institutions, and Populations
• Nosocomial Infection Control, Disinfection of Specific Settings, and Personal Protection
• Publicity and Education and Risk Communication
(1) Precise Prevention and Control Tailored to Specific Areas and Levels

- Epidemic risk level shall be assessed for each county/district (as a unit) based on its demographic and epidemiological situation, and appropriate prevention and control strategies shall be determined.
  - In low-risk areas: The strategy is “strictly prevent importation”.
  - In medium-risk areas: The strategy is “to prevent importation and stop local transmission”.
  - In high-risk areas: The strategy is “to stop local transmission, prevent exportation, and implement strict prevention and control measures”.

- conduct dynamic research and analysis, adjust risk levels in a timely manner
  - Case numbers decline steadily
  - Risk of epidemic spread is effectively controlled
(2) Early Detection

1. **Healthcare facilities at all levels** should raise their awareness of diagnosing and reporting COVID-19 cases.

2. **Grassroots level organizations or employers** should put great effort in screening people who travelled to or resided in Wuhan and its surrounding areas within 14 days, people who travelled to or resided in communities where confirmed cases have been reported, and people who travelled to or resided in other countries/regions with severe outbreaks outside China.

3. **Existing surveillance networks** for pneumonia of unknown etiology (PUE), influenza-like illness (ILI), and hospitalized severe, acute, respiratory illness (SARI) should be employed to **strengthen etiological surveillance**.

4. **Port health quarantine should be strengthened** by strictly implementing temperature monitoring and medical inspection at inbound and outbound ports.

5. The health status of close contacts should be monitored. Patients with respiratory symptoms such as fever and dry cough and digestive tract symptoms such as diarrhea should be transferred in a timely manner to the designated healthcare facilities with their specimens already collected and pathogenic testing completed.
(3) Early Reporting

**Case reporting**
- Direct network report should be made within 2 hours
- Complete the three-level confirmation review of the information reported through the network within 2 hours

**Updating reports**
- Suspected cases should be promptly revised as "confirmed cases" or excluded based on laboratory test results.
- In "clinical severity", the most severe state of the case is its final state.
- Asymptomatic infections should be revised as confirmed cases, and the onset date is the time when clinical symptoms appear.
- After the case dies, fill in the date of death within 24 hours

**Reporting of emergency events**
- Each county (district) has the first confirmed case of COVID-19 or a cluster outbreak, The local CDC should conduct direct network report through the Emergency Public Reporting System (EPRS) within 2 hours.
- Select "Unrated" for the event level. Make timely adjustments and reports based on the investigation and evaluation of the incident.
(4) Early Isolation

• Case management
  – Suspected and confirmed cases should be isolated and treated in designated healthcare facilities.
  – Suspected cases should be isolated and treated in single rooms and **can be ruled out as a suspected case** following 2 consecutive negative virus nucleic acid tests with at least a 24-hour interval between samplings and negative IgM and IgG tests 7 days after onset of isolation.

• Management after discharge
  – After a patient reaches discharge criteria and is discharged, the patients should undergo a 14-day isolation and have their health status continuously monitored throughout the 14 days.
  – When condition permits, provincial-level health authorities are encouraged to strengthen follow-up observation of discharged patients and testing of their respiratory specimens; those testing positive should be put in centralized isolation for medical observation with their information submitted to China CDC.

• Management of asymptomatic infected persons
  – Asymptomatic infected persons should be put under centralized isolation for 14 days. Those testing negative with two consecutive virus nucleic acid tests (with at least 24-hour interval between samplings) can be released from isolation.
(5) Early Treatment

- Treatment in designated hospital
  - Suspected cases should be transferred to the designated hospital for treatment in time.

- Get ready
  - The designated hospitals shall make preparations for personnel, medicines, facilities, equipment, and protective supplies required for medical treatment.

- Standardized treatment
  - Standardize the treatment according to the latest version of the diagnosis and treatment program of COVID-19.

- All in need are tested, admitted, treated, and isolated

- Improve admission and cure rates

- Reduce infection and case fatality rates
(8) Specimen Collection and Lab Testing

- Healthcare facilities receiving COVID-19 cases should collect relevant clinical specimens in a timely manner.

- Laboratories testing specimens should report test results within 12 hours.
  - Specimens involving case diagnosis should be tested first

- Specimen collection, transportation, storage, and testing should be conducted strictly in accordance with the requirements set out in the Technical Guidelines for COVID-19 Laboratory Testing issued by China CDC.

- All original specimens of clustered outbreak with 5 or more cases and overseas imported cases of COVID-19 should be sent to the Chinese Center for Disease Control and prevention for review and confirmation.
**Strengthen Prevention and Control Measures**

**Targeting Key Settings, Institutions, and Populations**

- Strengthen multi-sectoral, joint prevention and control mechanisms
- Implement measures such as ventilation, disinfection, and taking body temperature in places with large population flows

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<tr>
<th>Key places</th>
<th>Key institutions</th>
<th>Key population</th>
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</thead>
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<tr>
<td>Public places such as stations, airports, terminals</td>
<td>enterprise</td>
<td>Enterprise employees</td>
</tr>
<tr>
<td>Airtight vehicles such as cars, trains, airplanes</td>
<td>Schools, child care institutions</td>
<td>Migrant Workers</td>
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<tr>
<td></td>
<td>Elderly care institutions, disabled people, welfare institutions and prisons</td>
<td>Teachers and students coming back to school</td>
</tr>
<tr>
<td></td>
<td>Port</td>
<td>Vulnerable people</td>
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<tr>
<td></td>
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<td>People coming and returning to China</td>
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</table>
(10) Nosocomial Infection Control, Disinfection of Specific Settings, and Personal Protection

• Healthcare facilities should follow the requirements set out in the technical protocol for COVID-19 control and prevention in healthcare facilities to strictly implement nosocomial infection control and prevention measures.

• Strictly clean and disinfect related items, environment and places, and conduct the disposal and management of medical waste in strict accordance with relevant documents.

• In accordance with the *Guidelines for Personal Protection of Specific Groups from COVID-19* and *Technical Guidelines for Disinfection of Specific Sites for COVID-19* issued by CDC, do a good job of disinfection of relevant sites and protection of specific groups.
(11) Publicity and Education and Risk Communication

• Disseminate knowledge about COVID-19 and its prevention and control. Health education and risk communication shall be enhanced for key populations to help guide the public on personal protection to reduce possible contact or exposure.

• With progress in epidemic prevention and control efforts and increasing understanding of COVID-19, health education strategies should be updated and corresponding scientific publicity and education should be organized in a timely manner.

• Activities include public opinion monitoring, promptly response to concerns and questions of the public, and conducting risk communication on epidemic prevention and control.
Supportive Measures

- **Strengthening Organization and Leadership**
  - Local governments should ensure availability of funding and materials
  - Prevention first, integration of prevention and treatment, scientific guidance, and timely treatment

- **Enhancing Joint Prevention and Control Efforts**
  - Cross-sectoral information sharing and regular discussion and assessment of the epidemic trends should be implemented and strengthened. Each department performs its duties.

- **Strengthening Capacity Building**
  - Technical training of health professionals in medical and health facilities on COVID-19 with a focus on proactive prevention first shall be implemented.
  - Scientific research should be strengthened to provide scientific evidence to optimize prevention and control strategies.
  - The use of traditional Chinese medicine in the prevention and treatment of infectious diseases is encouraged and supported.
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<tr>
<td><strong>Purpose</strong></td>
<td>强化方案的指导作用</td>
<td>及时发现和报告新型冠状病毒肺炎病例，了解疾病特征与暴露史，规范密切接触者管理，指导公众和特定人群做好个人防护，严格特定场所消毒，精准科学、分类指导，有效遏制疫情扩散，减少新型冠状病毒感染对公众健康造成的危害。</td>
<td>指导各地及时发现和报告新冠肺炎病例和聚集性疫情，开展流行病学调查和疫情处置，规范密切接触者管理，做好防控工作。</td>
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<td><strong>Etiology and Epidemiological Characteristics</strong></td>
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<td>在总论中叙述</td>
<td>单独一部分阐述</td>
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<td><strong>Surveillance Case Definitions</strong></td>
<td>单独一部分阐述</td>
<td>在附件监测方案中阐述</td>
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<td><strong>Prevention and Control Measures</strong></td>
<td>（一）分区分级精准防控</td>
<td>科学划分疫情风险等级，分区分级精准防控</td>
<td>分区分级精准防控</td>
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<td>（二）早发现</td>
<td>病例与突发事件的发现与报告措施中的一部分</td>
<td>将早发现单独列为大家防控措施，细化病例发现的五条主要途径</td>
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<td></td>
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<td>将早报告单独列为大家防控措施</td>
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## 防控总体方案（五）和（六）版对比

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<td>(四)早隔离</td>
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<td>明确病例管理、出院后管理、无症状感染者管理的具体要求。</td>
<td></td>
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<tr>
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<td>单独一个措施，明确相关要求</td>
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<tr>
<td>(六)流行病学调查</td>
<td>措施中只提出总体要求，附件中详述</td>
<td>个案调查、聚集性疫情调查、信息报告详细描述</td>
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<tr>
<td>(八)标本采集和实验室检测</td>
<td></td>
<td>明确12小时内反馈实验室检测结果；要求各地区新冠肺炎5例及以上的聚集性病例的所有原始标本应当送至中国疾控中心进行复核确认。</td>
<td></td>
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<tr>
<td>(九)重点场所、机构、人群防控</td>
<td></td>
<td>增加来华（归国）人员防控要求</td>
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### Supportive Measures

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<tr>
<td></td>
<td>在防控措施“健全防控机制，加强组织领导”与“加强专业人员培训和相关调查研究”两部分中体现</td>
<td>单独成一部分，与防控措施并列，增加“发挥信息技术在传染病防控中的作用”、“鼓励、支持发挥中医中药的作用”</td>
</tr>
</tbody>
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TECHNICAL TIPS

This training is based on Protocol for Prevention and Control of COVID-19 (Edition 6) and Protocol for Prevention and Control of COVID-19 (Edition 5). With increasing awareness of the COVID-19 and progress been made in epidemic prevention and control, the guidelines will be continuously adjusted and improved to better protect the lives and health of the general public.