Rapid Review: Are any jurisdictions using isolation periods other than 14 days in response to COVID-19? If yes, what is their rate of COVID-19 cases?

Prepared by: The National Collaborating Centre for Methods and Tools

Date: June 5, 2020

Suggested Citation:

Executive Summary

Background
International jurisdictions have established guidance on COVID-19 quarantine and self-isolation periods for individuals exposed, or potentially exposed, to the virus, and for people infected with COVID-19, respectively. The extent to which quarantine and isolation periods vary, and the implications of varied periods for COVID-19 disease rates, may be of interest to jurisdictions seeking to provide the most prudent guidance based on emerging information.

This rapid review was produced to support public health decision makers’ response to the coronavirus disease (COVID-19) pandemic. This review seeks to identify, appraise, and summarize emerging research evidence to support evidence-informed decision making.

This rapid review includes evidence available up to June 2, 2020.

In this rapid review, we provide the most recent evidence to answer the question: Are any jurisdictions using isolation periods other than 14 days in response to COVID-19? If yes, what is their rate of COVID-19 cases?

Key Points
- The majority of jurisdictions recommended or required a 14-day quarantine for people exposed, or thought to have been exposed, to COVID-19.
- Among jurisdictions with a 14-day quarantine or self-isolation period, the number of cases ranges from 58 to 6125 per million.
- Three jurisdictions have quarantine guidance other than for a 14-day period: Switzerland and Norway require a 10-day quarantine period; Sweden does not recommend a period of quarantine for people who may have been exposed to COVID-19. Two of these jurisdictions have a higher total number of cases per million than Canada (for June 3, 2020, Canada: 2448 cases/million; Norway: 1557 cases/million; Switzerland: 3557 cases/million; Sweden: 3820 cases/million.) In addition to different quarantine or self-isolation periods, jurisdictions vary in their application of other public health measures and the timing of the implementation of public health measures relative to the occurrence of cases.
- There is variability in the prescribed self-isolation period for people who are infected and able to self-isolate at home, ranging from 5-14 days post-symptom onset and/or 1-7 days after the end of fever or other symptoms.

Overview of Evidence and Knowledge Gaps
- The extent to which quarantine periods of shorter than 14 days affect rates of COVID-19 is not known, given the small number of jurisdictions deviating from a 14-day period.
- The extent to which self-isolation periods of shorter than 14 days affect rates of COVID-19 is not known, given the wide variability in prescribed self-isolation periods.
Methods

Research Questions
Are any jurisdictions using isolation periods other than 14 days in response to COVID-19? If yes, what is their rate of COVID-19 cases?

Search
On June 2, 2020 the following government and public health websites were searched for information regarding international and national guidelines for the length of time required for COVID-19 quarantine or self-isolation. Research databases were also searched for guidelines related to self-isolation or quarantine duration.

- International: World Health Organization
- International: World Health Organization: Regional Office for Europe
- International: European Centre for Disease Prevention and Control
- Australia: The Australian Government
- Canada: Government of Canada
- China: National Health Commission of the People’s Republic of China
- China: The State Council: The People’s Republic of China
- Germany: Federal Ministry of Health
- Iceland: Government of Iceland
- India: Ministry of Health and Family Welfare
- Italy: Government of Italy
- Ireland: Health Information and Quality Authority
- New Zealand: Ministry of Health
- Northern Ireland: Public Health Agency
- Norway: The Norwegian Institute of Public Health
- Scotland: Health Protection Scotland
- Singapore: Ministry of Health
- South Korea: Korean Centres for Disease Control and Prevention
- Sweden: Public Health Agency of Sweden
- Switzerland: Federal Office of Public Health
- UK: United Kingdom Government
- USA: Centers for Disease Control and Prevention
- USA: National Institutes of Health
- Pubmed’s curated COVID-19 literature hub: LitCovid
- Trip Medical Database
- World Health Organization’s Global literature on coronavirus disease

A copy of the search strategy is available on request.
Selection Criteria
The search results were first screened for recent guidelines and syntheses. Single studies were included if no syntheses were available, or if single studies were published after the search was conducted in the included syntheses. English-language, peer-reviewed sources and sources published ahead-of-print before peer review were included. Guidance documents, jurisdictional policies, and expert opinion were included as relevant to the question. Surveillance sources were excluded. When available, findings from syntheses and clinical practice guidelines are presented first, as these take into account the available body of evidence and, therefore, can be applied broadly to populations and settings.

Data Extraction and Synthesis
Data on release date, country, and the nature of the policy considerations or jurisdictional guidance were extracted when reported.

A narrative description of the nature of the policy or guidance is provided.

Quality assessment was not relevant for these jurisdictional sources, other than the syntheses. The quality of the syntheses was evaluated using the critical appraisal tool indicated below. Quality assessment was completed by one reviewer and verified by a second reviewer. Conflicts were resolved through discussion.

<table>
<thead>
<tr>
<th>Study Design</th>
<th>Critical Appraisal Tool</th>
</tr>
</thead>
<tbody>
<tr>
<td>Synthesis</td>
<td>Health Evidence™ Quality Appraisal Tool</td>
</tr>
</tbody>
</table>

Completed quality assessments for each included study are available on request.

Data on release date, country and the nature of the policy considerations were extracted when reported. We have provided a narrative description of the nature of the policy or guidance.

Quality assessment was not done on these sources, given the very limited policy-relevant evidence
Findings

Quality of Evidence

This document includes two completed syntheses, 17 jurisdictional policies or recommendations and two international organization policies or recommendations for a total of 21 publications included in this evidence review addressing two distinct questions. The quality of the evidence included in this review is as follows:

<table>
<thead>
<tr>
<th></th>
<th>Total</th>
<th>Quality of Evidence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Policies or recommendations - jurisdictions</td>
<td>17</td>
<td>N/A</td>
</tr>
<tr>
<td>Policies or recommendations – international organizations</td>
<td>2</td>
<td>N/A</td>
</tr>
<tr>
<td>Syntheses</td>
<td>2</td>
<td>2 Low</td>
</tr>
</tbody>
</table>

Warning

Given the need to make emerging COVID-19 evidence quickly available, many emerging studies have not been peer reviewed. As such, we advise caution when using and interpreting the evidence included in this rapid review. We have provided a summary of the quality of the evidence as low, moderate or high to support the process of decision making. Where possible, make decisions using the highest quality evidence available.
<table>
<thead>
<tr>
<th>Jurisdiction</th>
<th>Organization</th>
<th>Reference</th>
<th>Date Released</th>
<th>Contact Quarantine Period</th>
<th>Post-Infection Isolation Period</th>
<th>Case Rate/ Million on June 3 2020 (Our World in Data, 2020)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Canada</td>
<td>Government of Canada</td>
<td>How to quarantine (self-isolate) at home when you may have been exposed to COVID-19 and have no symptoms.</td>
<td>May 28, 2020</td>
<td>14 days</td>
<td>Once advised by public health</td>
<td>2448</td>
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<td></td>
<td>How to isolate at home when you may have COVID-19</td>
<td>May 1, 2020</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>International</td>
<td>WHO</td>
<td>Contact tracing in the context of COVID-19</td>
<td>May 10, 2020</td>
<td>14 days</td>
<td>10 days after symptom onset + 3 days after end of symptoms</td>
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</tr>
<tr>
<td>International</td>
<td>ECDC</td>
<td>Contact tracing: public health management of persons, including healthcare workers, having had contact with COVID-19 cases in the European Union – second update</td>
<td>April 8, 2020</td>
<td>14 days</td>
<td>14 days</td>
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<td></td>
<td>Novel coronavirus (SARS-CoV-2) – Discharge criteria for confirmed COVID-19 cases</td>
<td>March 10, 2020</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Australia</td>
<td>Australian Government</td>
<td>Quarantine for coronavirus (COVID-19)</td>
<td>May 22, 2020</td>
<td>14 days</td>
<td>Once advised by public health</td>
<td>283</td>
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<tr>
<td>China</td>
<td>National Health Commission of the People’s Republic of China</td>
<td>Protocol on Prevention and Control of Novel Coronavirus Pneumonia (Edition 6)</td>
<td>March 7, 2020</td>
<td>14 days</td>
<td>14 days isolation + 3 days no fever</td>
<td>58</td>
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<td>Germany</td>
<td>Federal Ministry of Health</td>
<td>None found</td>
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<td>Iceland</td>
<td>Government of Iceland</td>
<td>Novel Coronavirus COVID-19</td>
<td>May 18, 2020</td>
<td>14 days</td>
<td>14 days after symptom onset + 7 days after end of symptoms</td>
<td>5292</td>
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<tr>
<td>India</td>
<td>Ministry of Health &amp; Family Welfare</td>
<td>Guidelines for home quarantine</td>
<td>March 11, 2020</td>
<td>14 days</td>
<td>17 days after symptom onset + no fever for 10 days</td>
<td>150</td>
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<tr>
<td></td>
<td></td>
<td>Revised guidelines for Home Isolation of very mild/pre-symptomatic COVID-19 cases</td>
<td>May 10, 2020</td>
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<tr>
<td>Italy</td>
<td>Government of Italy</td>
<td>FAQ – COVID-19, questions and answers</td>
<td>June 2, 2020</td>
<td>14 days</td>
<td>Not stated</td>
<td>3862</td>
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<tr>
<td>Country</td>
<td>Ministry/Agency</td>
<td>Description of included studies</td>
<td>Date Released</td>
<td>Duration</td>
<td>Summary of Findings</td>
<td>Quality Rating: Synthesis</td>
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<td>New Zealand</td>
<td>Ministry of Health NZ</td>
<td>COVID-19: Self-isolation for close contacts</td>
<td>May 22, 2020</td>
<td>14 days</td>
<td>Once advised by public health</td>
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<tr>
<td>Northern Ireland</td>
<td>Public Health Agency</td>
<td>COVID-19: Information for the public: What should I do if I think I have COVID-19?</td>
<td>n.d.</td>
<td>14 days</td>
<td>7 days after end of symptoms</td>
<td>5076</td>
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<tr>
<td>Norway</td>
<td>Norwegian Institute of Public Health</td>
<td>Social distance, quarantine and isolation</td>
<td>April 5, 2020</td>
<td>10 days</td>
<td>1 day after end of symptoms</td>
<td>1557</td>
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<tr>
<td>Scotland</td>
<td>Health Protection Scotland</td>
<td>COVID-19 – guidance for Health Protection Teams (HPTs)</td>
<td>May 30, 2020</td>
<td>14 days</td>
<td>7 days from symptom onset</td>
<td>Not available</td>
</tr>
<tr>
<td>Singapore</td>
<td>Ministry of Health</td>
<td>COVID-19 Resources</td>
<td>Feb 3, 2020 and April 21, 2020</td>
<td>14 days</td>
<td>5 days from symptom onset</td>
<td>6125</td>
</tr>
<tr>
<td>South Korea</td>
<td>KCDC</td>
<td>The updates on COVID-19 in Korea as of 29 March</td>
<td>March 29, 2020</td>
<td>14 days</td>
<td>Not stated</td>
<td>226</td>
</tr>
<tr>
<td>Sweden</td>
<td>The Public Health Agency of Sweden</td>
<td>FAQ about COVID-19/How long is the incubation period of the coronavirus?</td>
<td>May 22, 2020</td>
<td>None specified</td>
<td>2 days after end of symptoms</td>
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<tr>
<td>Switzerland</td>
<td>Federal Office of Public Health</td>
<td>New coronavirus: Isolation and quarantine</td>
<td>May 11, 2020</td>
<td>10 days</td>
<td>10 days after symptom onset + 2 days after end of symptoms</td>
<td>3557</td>
</tr>
<tr>
<td>UK</td>
<td>Public Health England</td>
<td>Stay at home: guidance for households with possible or confirmed coronavirus (COVID-19) infection</td>
<td>May 28, 2020</td>
<td>14 days</td>
<td>2 days with no fever</td>
<td>4094</td>
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<td></td>
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<td>Guidance for stepdown of infection control precautions and discharging COVID-19 patients.</td>
<td>May 20, 2020</td>
<td>10 days</td>
<td></td>
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<td>USA</td>
<td>CDC</td>
<td>Health Departments: Interim Guidance on Developing a COVID-19 Case Investigation &amp; Contact Tracing Plan</td>
<td>June 1, 2020</td>
<td>14 days</td>
<td>10 days after symptom onset</td>
<td>5534</td>
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<td>Coronavirus Disease 2019 (COVID-19): Ending Home Isolation</td>
<td>May 29, 2020</td>
<td>7 days</td>
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</table>

**Table 2: Syntheses**

- **Reference**
- **Date Released**
- **Country**
- **Description of included studies**
- **Summary of Findings**
- **Quality Rating: Synthesis**
- **Quality Rating: Included Studies**
<table>
<thead>
<tr>
<th>Source</th>
<th>Date</th>
<th>Country</th>
<th>Description</th>
<th>Level</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>European Centre for Disease Prevention and Control. (March 10, 2020). Novel coronavirus (SARS-CoV-2) – Discharge criteria for confirmed COVID-19 cases.</td>
<td>March 10, 2020</td>
<td>International</td>
<td>This review of selected countries’ practices reports a comparison of current-to-date guidelines on de-isolation of COVID-19 cases.</td>
<td>Low</td>
<td>Not done</td>
</tr>
</tbody>
</table>
REFERENCES

Australian Government. (June 04, 2020). *Quarantine for coronavirus (COVID-19).*


Centers for Disease Control and Prevention. (June 01, 2020). *Health Departments: Interim Guidance on Developing a COVID-19 Case Investigation & Contact Tracing Plan*

European Centre for Disease Prevention and Control. (April 08, 2020). *Contact tracing: public health management of persons, including healthcare workers, having had contact with COVID-19 cases in the European Union – second update.*


Government of Canada. (May 28, 2020). *How to quarantine (self-isolate) at home when you may have been exposed to COVID-19 and have no symptoms.*

Government of Canada. (May 01, 2020). *How to isolate at home when you may have COVID-19.*


Health Protection Scotland. (May 20, 2020). *COVID-19 – guidance for Health Protection Teams (HPTs)*

Korean Centers for Disease Control and Prevention. (March 29, 2020). *The updates on COVID-19 in Korea as of 29 March*


Ministry of Health Singapore. (April 21, 2020). *COVID-19 Resources*

Ministry of Health Singapore. (February 03, 2020). *COVID-19 Resources*


Norwegian Institute of Public Health. (April 05, 2020). *Social distance, quarantine and isolation*

Our World in Data. (June 05, 2020). *Coronavirus Pandemic (COVID-19) – the data*


The Public Health Agency of Sweden. (May 29, 2020). *FAQ about COVID-19/How long is the incubation period of the coronavirus?*


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