

Version 2.0

Lockdown rollback checklist: Do countries meet WHO recommendations for rolling back lockdown?

Research note

1 May 2020

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As countries begin to roll back 'lockdown' measures, how and when do we know it is safe to do so?

The Oxford COVID-19 Government Response Tracker (OxCGRT) provides a cross-national overview of which countries meet four of the World Health Organisation's (WHO) six recommendations for relaxing physical distancing measures.

While the OxCGRT data cannot fully say how ready countries are to leave lockdown, it does provide for a rough comparison across nations. Even this "high level" view reveals that few countries are close to meeting the WHO criteria for rolling back lockdown measures.

At the time of writing, only a handful of countries are doing well at the four "checklist" criteria OxCGRT is able to track.

World Health Organization criteria

The WHO <u>has recently outlined six categories</u> of measures governments need to have in place before rolling back "lockdown" measures. In brief, these are as follows (quoted in part; for full descriptions see <u>here</u>):

- 1. COVID-19 transmission is controlled to a level of sporadic cases and clusters of cases, all from known contacts or importations; at a minimum, new cases would be reduced to a level that the health system can manage based on health care capacity.
- 2. Sufficient public health workforce and health system capacities are in place to enable the major shift from detecting and treating mainly serious cases to detecting and isolating all cases, irrespective of severity and whether there is local transmission or an importation.
- 3. Outbreak risks in high-vulnerability settings are minimised, which requires all major drivers or amplifiers of COVID-19 transmission to have been identified, with appropriate measures in place to maximise physical distancing and minimise the risk of new outbreaks.
- 4. Preventive measures are established in workplaces.
- 5. Manage the risk of exporting and importing cases from communities with high risks of transmission.
- 6. Communities are fully engaged and understand that the transition away from large-scale movement restrictions and public health and social measures from detecting and treating serious cases to detecting and isolating all cases is a 'new normal' in which prevention measures would be maintained, and that all people have key roles in preventing a resurgence in case numbers.



What does the Oxford data measure?

OxCGRT currently provides information relevant to recommendations 2, 4, and 6. We combine this with epidemiological data from the European Centre for Disease Control on cases and deaths, provided by <u>Our</u> <u>World in Data</u>, which address recommendation 1, and data from <u>Apple</u> and <u>Google</u> on travel and mobility, which further address recommendation 6. OxCGRT also tracks emergency investments in the healthcare system since 1 January 2020, which can provide useful contextual information. See our <u>working paper</u> for a complete description of the data.

From this information, we construct a "Lockdown rollback table," defined below, which roughly describes how close countries are to achieving four of the six current WHO recommendations.

Because the data only measure four of six recommended actions, we should be cautious about inferring what countries are ready to rollback lockdown from this measure. Indeed, the data provides a better indication of what countries are *not* ready.

Moreover, we stress that the WHO recommendations are more specific and extensive than cross-national measures like OxCGRT can readily provide. The checklist below should therefore be seen as a starting point for assessing a country's preparedness for leaving lockdown. In particular, we note that the OxCGRT data measure countries' stated policies, not how well they implement them.

| WHO recommendation | OxCGRT indicators | Rollback readiness | | |
|------------------------------|--|---------------------------------------|--|--|
| Transmission controlled | Daily cases and deaths | New daily cases <50 and daily growth | | |
| | (from European CDC via Our World | rate lower than a week ago | | |
| | in Data) | | | |
| Test / trace / isolate | H2 (testing policy) | H2 + H3 gives a value between 0 and | | |
| | H3 (contact tracing policy) | 5 (does not measure isolation) | | |
| High vulnerability settings | Not currently measured | Not currently measured | | |
| Preventative measures | Not currently measured | Not currently measured | | |
| established in workplaces | | | | |
| Manage risk of exporting and | C8 (international travel restrictions) | C8 gives a value between 0 and 4 | | |
| importing cases | | (does not measure risk of exporting | | |
| | | cases) | | |
| Communities fully engaged | H1 (public information campaigns) | Must have a nationwide public info | | |
| | Travel and mobility data from Apple | campaign (H1 = 2G); reduction from | | |
| | and Google | baseline mobility levels | | |
| | | | | |
| | H4 (investments in health system | Not included, but useful contextually | | |
| | since 1 January 2020) | | | |

We will continue to develop our assessment of the WHO checklist as new indicators become available.

Assessing countries on the Lockdown Rollback Checklist

As of 1 May 2020, we estimate that no countries fully meet all 4 of the WHO recommendations we are able to estimate with the OxCGRT data, and only around 20 are coming close. We conclude that further steps are likely needed to ensure a safe re-opening of society in the next weeks.

Table 1: Lockdown Rollback Checklist 1 May 2020

(NB: Not every country is updated every day, so data for any particular country may be several days out of date)

| Less ready to exit lockdown | More ready to exit lockdown | | | | | | | |
|--------------------------------|--------------------------------|-------------------------|-------------------------------------|--|-----------------------------|----------------------------|----------------------------|--|
| | Cases controlled | Test, trace, isolate | Vulnerable settings (no data) | Preventative measures in workplaces (no data) | Manage imported cases | Community understanding | Overal (based on 4/6 | |
| Trinidad and Tobago | 1.0 | 0.8 | | | 1.0 | 0.9 | 0.9 | |
| Croatia | 0.8 | 0.8 | | | 1.0 | 1.0 | 0.9 | |
| Hong Kong | 1.0 | 0.8 | | | 1.0 | 0.7 | 0.9 | |
| Iceland | 1.0 | 1.0 | | | 0.8 | 0.8 | 0.9 | |
| Slovak Republic | 0.9 | 0.6 | | | 1.0 | 0.9 | 0.8 | |
| Costa Rica | 0.9 | 0.8 | | | 0.8 | 1.0 | 0.8 | |
| Botswana | 1.0 | 0.4 | | | 1.0 | 0.9 | 0.8 | |
| Jordan | 1.0 | 0.6 | | | 0.8 | 1.0 | 0.8 | |
| South Korea | 0.8 | 1.0 | | | 0.8 | 0.7 | 0.8 | |
| Taiwan | 1.0 | 0.8 | | | 1.0 | 0.5 | 0.8 | |
| Thailand | 0.8 | 0.6 | | | 1.0 | 0.9 | 0.8 | |
| Papua New Guinea | 1.0 | 0.8 | | | 1.0 | 0.5 | 0.8 | |
| Mongolia | 1.0 | 0.6 | | | 1.0 | 0.6 | 0.0 | |
| Cape Verde | 1.0 | 0.4 | | | 1.0 | 0.9 | 0.8 | |
| Myanmar | 1.0 | 0.6 | | | 0.8 | 0.9 | 0.8 | |
| Slovenia | 0.9 | 0.6 | | | 0.8 | 0.9 | 0.8 | |
| Albania | 0.7 | 0.4 | | | 1.0 | 1.0 | 0.8 | |
| Libya | 1.0 | 0.4 | | | 1.0 | 0.7 | 0.8 | |
| Burkina Faso | 0.9 | 0.6 | | | 1.0 | 0.5 | 0.8 | |
| Australia | 0.8 | 0.4 | | | 1.0 | 0.9 | 0.8 | |
| India | 0.0 | 1.0 | | | 1.0 | 1.0 | 0.1 | |
| Uganda | 1.0 | 0.4 | | | 0.8 | 0.9 | 0.1 | |
| Zambia | 0.9 | 0.6 | | | 1.0 | 0.4 | 0.1 | |
| Venezuela | 1.0 | 0.2 | | | 1.0 | 0.8 | 0. | |
| Greece | 0.5 | 0.4 | | | 1.0 | 1.0 | 0. | |
| United Arab Emirates | 0.0 | 1.0 | | | 1.0 | 0.9 | 0. | |
| Rwanda | 0.0 | 1.0 | | | 1.0 | 0.9 | 0. | |
| Kenya | 0.8 | 0.4 | | | 1.0 | 0.6 | 0. | |
| South Africa | 0.0 | 0.8 | | | 1.0 | 1.0 | 0. | |
| Ecuador | 0.0 | 0.8 | | | 1.0 | 1.0 | 0. | |
| Colombia | 0.0 | 0.8 | | | 1.0 | 1.0 | 0. | |
| Romania | 0.0 | 0.8 | | | 1.0 | 1.0 | 0. | |
| Gabon | 0.0 | 1.0 | | | 1.0 | 0.8 | 0. | |
| Chile | 0.0 | 0.8 | | | 1.0 | 1.0 | 0.1 | |
| Sri Lanka | 0.0 | 0.8 | | | 1.0 | 1.0 | 0. | |
| Kyrgyz Republic | 0.7 | 0.4 | | | 0.8 | 0.9 | 0. | |
| Aruba | 1.0 | 0.0 | | | 0.8 | 1.0 | 0. | |
| Turkey | 0.0 | 0.8 | | | 1.0 | 0.9 | 0. | |
| Ghana | 0.0 | 1.0 | | | 1.0 | 0.7 | 0. | |
| Sierra Leone | 0.8 | 0.8 | | | 1.0 | 0., | 0. | |

| Djibouti | 0.6 | 1.0 | 1.0 | | 0.7 |
|------------------------|-----|-----|-----|-----|-----|
| Canada | 0.0 | 0.8 | 1.0 | 0.8 | 0.7 |
| Mozambique | 1.0 | 0.6 | 0.5 | 0.5 | 0.7 |
| Guam | 0.0 | 0.8 | 1.0 | 0.8 | 0.7 |
| New Zealand | 0.0 | 0.6 | 1.0 | 1.0 | 0.6 |
| Madagascar | 0.0 | 0.6 | 1.0 | 1.0 | 0.6 |
| Peru | 0.0 | 0.6 | 1.0 | 1.0 | 0.6 |
| Macao | 0.0 | 0.6 | 1.0 | 1.0 | 0.6 |
| Panama | 0.0 | 0.6 | 1.0 | 1.0 | 0.6 |
| Belize | 0.0 | 0.6 | 1.0 | 1.0 | 0.6 |
| Malawi | 1.0 | 0.6 | 1.0 | | 0.6 |
| Bermuda | 1.0 | 0.6 | 1.0 | | 0.6 |
| Oman | 0.0 | 0.8 | 1.0 | 0.8 | 0.6 |
| Kuwait | 0.0 | 0.8 | 1.0 | 0.8 | 0.6 |
| Serbia | 0.0 | 0.6 | 1.0 | 1.0 | 0.6 |
| Dominican Republic | 0.0 | 0.6 | 1.0 | 1.0 | 0.6 |
| Israel | 0.0 | 0.6 | 1.0 | 1.0 | 0.6 |
| Portugal | 0.0 | 0.8 | 0.8 | 1.0 | 0.6 |
| Italy | 0.0 | 0.8 | 0.8 | 1.0 | 0.6 |
| China | 0.0 | 1.0 | 0.8 | 1.0 | 0.6 |
| Andorra | 1.0 | 0.8 | 0.8 | | 0.6 |
| | 0.0 | 0.8 | 1.0 | 0.9 | 0.6 |
| Paraguay | 0.0 | | | | |
| Saudi Arabia | | 0.6 | 1.0 | 0.9 | 0.6 |
| Vietnam | 0.0 | 1.0 | 0.8 | 0.8 | 0.6 |
| Bosnia and Herzegovina | 0.5 | 0.4 | 0.8 | 0.8 | 0.6 |
| Estonia | | | 0.5 | | 0.6 |
| Guatemala | 0.0 | 0.6 | 1.0 | 0.9 | 0.6 |
| Hungary | 0.0 | 0.6 | 1.0 | 0.9 | 0.6 |
| Indonesia | 0.0 | 0.6 | 1.0 | 0.9 | 0.6 |
| Namibia | 0.0 | 0.6 | 1.0 | 0.8 | 0.6 |
| Pakistan | 0.0 | 0.6 | 1.0 | 0.8 | 0.6 |
| Argentina | 0.0 | 0.4 | 1.0 | 1.0 | 0.6 |
| Mauritius | 0.0 | 0.4 | 1.0 | 1.0 | 0.6 |
| France | 0.0 | 0.4 | 1.0 | 1.0 | 0.6 |
| Morocco | 0.0 | 0.4 | 1.0 | 1.0 | 0.6 |
| Spain | 0.0 | 0.4 | 1.0 | 1.0 | 0.6 |
| Bahrain | 0.0 | 0.8 | 1.0 | 0.6 | 0.6 |
| Jamaica | 0.7 | 0.4 | 0.5 | 0.8 | 0.6 |
| Uruguay | 0.0 | 0.4 | 1.0 | 1.0 | 0.6 |
| Honduras | 0.0 | 0.4 | 1.0 | 1.0 | 0.6 |
| Kazakhstan | 0.0 | 0.6 | 1.0 | 0.8 | 0.6 |
| El Salvador | 0.0 | 0.4 | 1.0 | 0.9 | 0.6 |
| Nicaragua | 1.0 | 0.2 | 0.5 | 0.6 | 0.6 |
| United States | 0.0 | 0.8 | 0.8 | 0.8 | 0.6 |
| Qatar | 0.0 | 0.6 | 1.0 | 0.7 | 0.6 |
| Nigeria | 0.0 | 0.6 | 1.0 | 0.7 | 0.6 |
| Belgium | 0.0 | 0.4 | 1.0 | 0.9 | 0.6 |
| Barbados | 0.0 | 0.8 | 0.5 | 1.0 | 0.6 |
| Philippines | 0.0 | 0.8 | 0.5 | 1.0 | 0.6 |
| Ukraine | 0.0 | 0.6 | 1.0 | 0.7 | 0.6 |
| Luxembourg | 0.7 | 0.6 | 0.0 | 1.0 | 0.6 |

| Singapore | 0.0 | 0.8 | 0.5 | 0.9 | 0.6 |
|---------------------------------|-----|-----|---------|------------|------------|
| Bangladesh | 0.0 | 0.6 | 0.8 | 0.9 | 0.6 |
| Czech Republic | 0.0 | 0.8 | 0.5 | 0.9 | 0.6 |
| Austria | 0.0 | 0.8 | 0.5 | 0.9 | 0.6 |
| Moldova | 0.0 | 0.4 | 1.0 | 0.8 | 0.6 |
| Bolivia | 0.0 | 0.4 | 1.0 | 1.0 | 0.6 |
| Egypt | 0.0 | 0.6 | 0.8 | 0.8 | 0.5 |
| Norway | 0.0 | 0.0 | 1.0 | 0.8 | 0.5 |
| Finland | 0.0 | 0.4 | 1.0 | 0.8 | 0.5 |
| Syria | 1.0 | 0.4 | 0.8 | 0.0 | 0.5 |
| | 0.0 | 0.4 | 1.0 | 0.7 | 0.5 |
| Angola Puerto Rico | 0.0 | 0.4 | 0.8 | 1.0 | 0.5 |
| | 0.0 | 0.4 | | | |
| Denmark | | | 1.0 | 0.7 | 0.5 |
| Japan Democratic Republic of | 0.0 | 0.8 | 0.8 | 0.6 | 0.5 |
| Congo | 0.7 | 0.4 | 1.0 | | 0.5 |
| Brazil | 0.0 | 0.2 | 1.0 | 0.9 | 0.5 |
| Poland | 0.0 | 0.2 | 1.0 | 0.9 | 0.5 |
| Russia | 0.0 | 0.6 | 0.8 | 0.8 | 0.5 |
| Zimbabwe | 0.0 | 0.2 | 1.0 | 0.9 | 0.5 |
| Malaysia | 0.0 | 0.2 | 0.8 | 0.9 | 0.5 |
| Lebanon | 0.0 | 0.4 | 0.8 | 0.9 | 0.5 |
| Ethiopia | 1.0 | 0.4 | 0.5 | 0.9 | 0.5 |
| Mexico | 0.0 | 0.0 | 0.8 | 0.9 | 0.5 |
| | 0.0 | 1.0 | 1.0 | 0.9 | 0.5 |
| Cyprus | 0.0 | 0.2 | 1.0 | 0.8 | 0.5 |
| Laos | 0.0 | | | | |
| Netherlands Switzerland | 0.0 | 0.4 | 0.8 | 0.8 0.8 | 0.5 0.5 |
| | 0.0 | 0.4 | | 0.8 | |
| lraq | | | 0.8 | 0.8 | 0.5 |
| Burundi | 1.0 | 0.2 | 0.8 | | 0.5 |
| Cuba | 0.3 | 0.6 | 1.0 | | 0.5 |
| San Marino | 0.8 | 0.6 | 0.5 | | 0.5 0.5 |
| Palestine | 0.9 | 0.0 | 1.0 | 0.0 | |
| Bulgaria | 0.0 | 0.2 | 0.8 | 0.9 | 0.5 |
| Ireland | 0.0 | 0.4 | 0.5 | 1.0 | 0.5 |
| Niger | 0.0 | 0.4 | 1.0 | 0.5 | 0.5 |
| Cameroon | 0.0 | 0.4 | 1.0 | 0.4 | 0.5 |
| Mali | 0.0 | 0.6 | 0.8 | 0.4 | 0.4 |
| Germany | 0.0 | 0.2 | 0.8 | 0.8 | 0.4 |
| Greenland | 0.0 | 1.0 | 0.8 | 1.0 | 0.4 |
| Sweden | 0.0 | 0.4 | 0.8 | 0.6 | 0.4 |
| Tanzania | 0.0 | 0.2 | 1.0 | 0.4 | 0.4 |
| Brunei | 0.0 | 0.6 | 1.0 | | 0.4 |
| South Sudan | 0.0 | 0.6 | 1.0 | | 0.4 |
| Azerbaijan | 0.0 | 0.6 | 1.0 | | 0.4 |
| Uzbekistan | 0.2 | 0.6 | 0.8 | | 0.4 |
| Seychelles | 0.0 | 0.8 | 0.8 | | 0.4 |
| Dominica | 0.0 | 0.4 | 1.0 | | 0.3 |
| Tunisia | 0.0 | 0.4 | 1.0 | | 0.3 |
| Sudan | 0.0 | 0.4 | 1.0 | | 0.3 |
| Gambia | 0.0 | 0.4 | 1.0 | | 0.3 |

| Kosovo | 0.0 | 0.4 | 1.0 | | 0.3 |
|----------------|-----|-----|-----|-----|-----|
| Eswatini | 0.0 | 0.6 | 0.8 | | 0.3 |
| Guyana | 0.0 | 0.6 | 0.8 | | 0.3 |
| Afghanistan | 0.0 | 0.4 | 0.3 | 0.6 | 0.3 |
| Lesotho | 0.0 | 0.2 | 1.0 | | 0.3 |
| Chad | 0.0 | 0.2 | 1.0 | | 0.3 |
| United Kingdom | 0.0 | 0.2 | 0.0 | 0.9 | 0.3 |
| Mauritania | 0.0 | 0.0 | 1.0 | | 0.3 |
| Algeria | 0.0 | 0.2 | 0.8 | | 0.2 |
| Iran | 0.0 | 0.0 | 0.0 | | 0.0 |