



## Current Policy Options/Interventions to respond to COVID-19 Pandemic

### Executive Summary

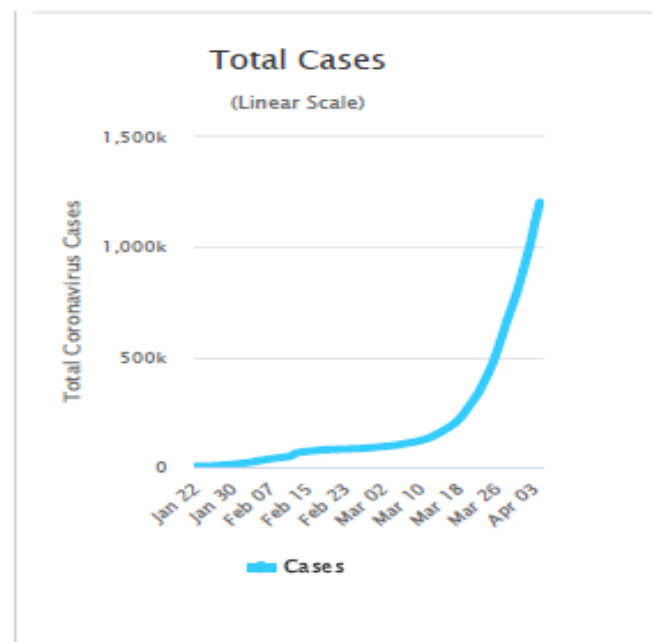
On 5<sup>th</sup> April, 2020, the Novel Coronavirus 2019 (COVID-19) has already affected 208 countries and territories around the world and 2 international conveyances since December 2019. It has already infected 1,225,047 people globally and 43 persons in Ethiopia since December 2019, and killed 66, 503 people globally and 2 persons in Ethiopia during the same period. Currently, COVID-19 has no specific antiviral agent for the treatment of the infection and there is no vaccine to prevent. As a result, implementation of public health prevention and control measures that aim slowing down and stopping of transmission is crucial. Detecting and testing suspected cases and tracking contacts with suspected and/or confirmed cases, individual social distancing that focuses on isolation of case, quarantine of contacts, and stay-at home; social distancing affecting multiple persons such as closure of educational institutions and workplaces, measures for special populations, mass gathering cancellations, and mandatory quarantine of a building or residential area; and environmental disinfection and use of personal protective equipment are currently available policy options to fight the disease. Considerations of local context in response to COVID-19 measures are crucial for slowing down and controlling the pandemic in order to minimize the negative social and economic consequences of the prevention and control measures.

### Key Findings

- Implementation of public health control measures that aim prevention of transmission is crucial to combat the COVID-19 pandemic
- A combination of interventions, especially non-pharmaceutical interventions, should be in place to contain the spread of the COVID-19 which may be most effective
- Considerations of local context in response to COVID-19 measures are crucial for slowing down and controlling the pandemic

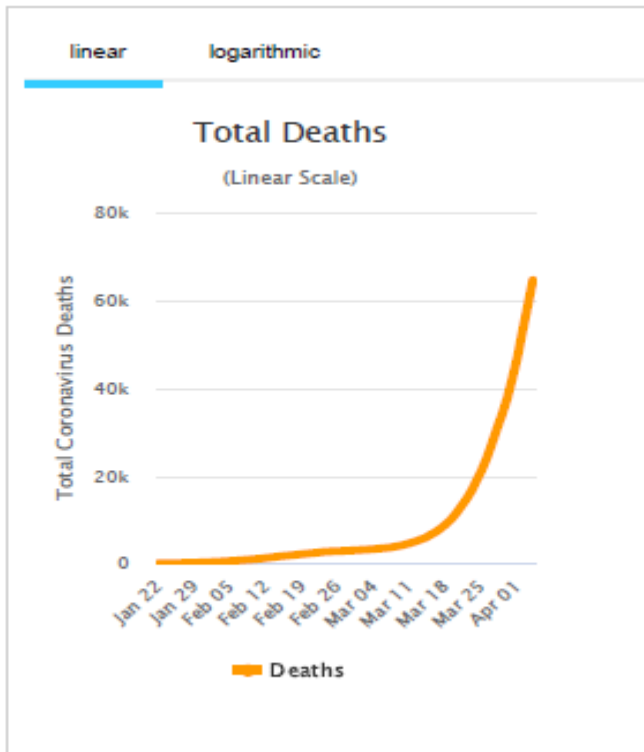
### Background

By April 05, 2020, according to World Population, the coronavirus COVID-19 is affecting 208 countries and territories around the world and 2 international conveyances. The disease has already infected 1,225,047 people globally since December 2019. In Ethiopia, the virus has already infected 43 individuals from March 12 to April 05, 2020.



*Global cases: Source: Worldometer, COVID-19. Last updated: April 05, 2020, 14:14 GMT*

In the same period the disease has already claimed the life of 66,503 people and 2 persons in Ethiopia.



**Global deaths:** Source: Worldometer, COVID-19 Pandemic. Last updated: April 05, 2020, 14:14 GMT

Currently, COVID-19 has no specific antiviral agent for the treatment of the infection and there is no vaccine to prevent. As a result, implementation of public health control measures that aims prevention of transmission is crucial.

### Policy Options

Pharmaceutical solutions, including vaccines and treatments for COVID-19, have been reported to take 12-18 months to develop. The immediate solution for slowing down the COVID-19 pandemic and minimize the social and economic catastrophe of the disease is to focus on prevention and control mechanisms. Evidence show that a variety of non-pharmaceutical interventions have been implemented to curve the diseases. The policy options that have been implemented include: detection and testing, social distancing affecting

individual and multiple persons, environmental disinfection and use of personal protective equipment.

**Detecting and Testing:** Identification suspected cases and follow-up of contacts is crucial. Testing could be done for both suspected cases or the whole. However, in a situation like this, the better option is to test the suspect cases. Testing everybody will not be feasible for countries with limited resources and may give a false sense of security if the test result is negative.

### Individual Social Distancing

**Isolation of cases:** This is for confirmed or suspected cases of COVID-19. They are either hospitalized (usually for moderate or severe cases) to provide care, or managed in dedicated isolation facilities or at home (mild cases).

**Quarantine of contacts:** This is for healthy person(s) who have had a high- or low-risk contact with a confirmed COVID-19 case. Quarantine of cases can be voluntary or mandatory. Resistance and non-compliance will be greater if impacts of this policy are inequitable, and for those on low incomes, loss of income means inability to pay for necessities.

**Stay-at-home:** This a comprehensive recommendation for the public to stay at home and avoid mass gatherings and close contacts with people, especially known high-risk groups. Concerns are likely to arise about impact on others within the household.

### Social Distancing affecting multiple persons

**Closure of educational institutions:** It refers to closure of schools (including day care centres, kindergartens, primary and secondary schools), and higher educational institutions (including universities, research institutes, etc.).

**Workplace closure:** Closure of offices, factories, retail outlets, agricultural production, construction, restaurants, cafes/bars, sports clubs,

haulage/transport etc. It can be flexible working schedules/shifts for employees; opportunities for distance working/teleworking; encouraging physical distancing measures within the workspace; increased use of email and teleconferences to reduce close contacts; reduced contact between employees and customers; reduced contact between employees; adoption of flexible leave policies; and promoting the use of other personal protective and environmental countermeasures.

**Measure for special populations:** It refers to measures to limit outside visitors and limit the contact between the inmates/patients in confined settings, such as long-term care facilities, either for the elderly or persons with special needs; psychiatric institutions; homeless shelters; and prisons.

**Mass gathering cancellations:** It means the cancellations of cultural, sporting, festival, and faith-based events; conferences, meetings, trade fairs, etc.

**Mandatory quarantine of a building or residential area(s):** Refers to the quarantine and closing off of a building or whole residential area (city, region...)

**Environmental disinfection and use of personal protective equipment:** Environmental disinfection and use of personal protective equipment can limit the spread of the virus from the environment-to-human, and human-to human, respectively.

### **How to implementing prevention and control measures**

Measures which are acceptable and feasible in one country/setting may not be in other countries. It is important to consider, anticipate and plan for mitigation, while keeping in mind the considerable public reaction that public health measures such as social distancing. There is no one-size-fits-all approach for implementation of prevention and control measures of COVID-19.

While implementing social distancing, it is important to assess its socio-economic

consequences at country and individual level. Frustration may arise in those unable to reduce social contact in their work. Guidance will be needed to mitigate this. Therefore countries implementing a single intervention or combination of interventions need to consider the following:

- Rights of individuals and groups
- Proportionality of the response
- Risk communication
- Countering stigma
- Support for people and communities, especially for vulnerable groups
- Promoting solidarity and mutual community support
- Financial compensation for lost income and employment
- Ensuring business continuity
- Process and impact evaluation

### **Recommendations**

- Use a combination of interventions and consider the feasibility of the intervention based on the country's context, and monitor progress.
- Consider closed educational institutions to be potential sites for managing the pandemic.
- Implement measures to monitor shut down places of social gathering, including restaurants, bars, movie theaters, concerts, sporting events, clubs, game centers, etc.
- Seal or restrict all Ethiopian borders to all forms of traffic/transport, and do not unseal borders until the pandemic is under control.
- Continue quarantining returning citizens returning from other countries in hotels or other facilities, and ensure these facilities are supplied with food, water, sanitary materials, communication capabilities, and other basic needs.
- Aware the people not to leave their home for anything other than medically necessary movement or work in support of the COVID-19 measures.
- Begin to gradually lift the measures if the observed reproduction number drops sufficiently. We must be extremely vigilant and



thorough with our testing in order not to stop social distancing actions and promotion of personal hygiene too early.

- Aggressively quarantine families of new patients for two to three weeks while provide supports for those families during the quarantine period.
- In the preparation, take into account the reappearance of the disease and watch case counts for signals of reappearance.
- Ensure a widespread surveillance and testing capability to detect and monitor infections.

## References

1. Adhikari SP, Meng S, Wu Y, et al. Epidemiology, causes, clinical manifestation and diagnosis, prevention and control of coronavirus disease (COVID-19) during the early outbreak period: a scoping review. *Infectious Diseases of Poverty* (2020) 9:29. <https://doi.org/10.1186/s40249-020-00646-x>
2. Worldometer. COVID-19 Coronavirus Pandemic. Last updated: April 05, 2020, 14:14 GMT. [www.worldometers.info/coronavirus/](http://www.worldometers.info/coronavirus/)
3. WHO Coronavirus disease 2019 (COVID-19) Situation Report - 30
4. CDDEP. COVID19 for India Updates. The Center for Diseases Dynamics, Economics, and Policy, John Hopkins University, 24 March, 2020
5. Hellewell J, Abbott S, Gimma A. Feasibility of controlling COVID-19 outbreaks by isolation of cases and contacts. *Lancet Glob Health* 2020; 8: e488–96. [https://doi.org/10.1016/S2214-109X\(20\)30074-7](https://doi.org/10.1016/S2214-109X(20)30074-7)
6. Ferguson NM, Laydon D, Nedjati-Gilani G, et al. Impact of non-pharmaceutical interventions (NPIs) to reduce COVID-19 mortality and healthcare demand. Imperial College COVID-19 Response Team, Imperial College London. 16 March 2020. DOI: <https://doi.org/10.25561/77482>
7. Stopping COVID-19: Short-Term Actions for Long-Term Impact. MITRE/ Solving Problems for a Safer World. MITRE #20-0803, March 18, 2020
8. European Centre for Disease Prevention and Control. Considerations relating to social distancing measures in response to COVID-19 – second update. Stockholm: ECDC; 2020
9. Potential effect of non-pharmaceutical interventions (NPIs) on a Covid-19 epidemic in the UK 26th February 2020
10. Wilder-Smith A, Freedman DO. Isolation, quarantine, social distancing and community containment: pivotal role for old-style public health measures in the novel coronavirus (2019-nCoV) outbreak. *Journal of Travel Medicine*, 2020, 1–4. DOI: 10.1093/jtm/taaa020
11. SPI-M-O: Consensus Statement on 2019 Novel Coronavirus (COVID-19), March 2, 2020.
12. SPI-M-O: Consensus view on behavioral and social interventions. [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/873729/06-spi-m-o-consensus-view-on-behavioural-and-social-interventions.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/873729/06-spi-m-o-consensus-view-on-behavioural-and-social-interventions.pdf)
13. World Economic Forum. Can I go for a run? When will this end? How should testing work? A WHO expert on coronavirus explains. Edited by Robin Pomeroy, World Economic Forum, March 28, 2020. <https://www.weforum.org/agenda/2020/03/how-to-stop-covid-19-find-test-isolate-treat/>
14. Sibylle BS, Patrick R, Yassoung S, et al. First cases of coronavirus disease 2019 (COVID-19) in France: surveillance, investigations and control measures, January 2020. *Euro Surveill*. 2020;25(6):pii=2000094. <https://doi.org/10.2807/1560-7917.ES.2020.25.6.2000094>

### About the team

*This work is produced by a team of experts from EPHI NDMC; FMOH PPMED; AAU, School of Public Health; University of Gondor .*

