

## Study Methods

This study was implemented in collaboration between John Hopkins Bloomberg School of Public Health's Center for Communication Programs with the Massachusetts Institute of Technology (MIT), the World Health Organization and Facebook's Data for Good. The methodologies described in this document are a cursory overview of the data coordination and sampling methodologies that were utilized. A more robust description of those procedures is forthcoming and will be made available in this location when available.

**Scope of Survey.** Sixty-nine countries were identified for recruitment of Facebook users at the outset of this study. Countries were selected where Facebook usage was sufficiently widespread and could plausibly result in samples representing a range of national characteristics. Twenty countries were identified as longitudinal (wave) countries and another 49 countries were identified as cross-sectional (snapshot) countries. In the end, two countries were removed due to inadequate response rates. See the full list of countries and designation below.

**Recruitment.** Individuals in the focus countries responded to an advertisement within their Facebook feed that was designed and implemented directly by Facebook's Data for Good. When clicking upon the recruitment advertisement, individuals were pushed to a survey portal operated by the team of researchers at MIT. Individuals clicking on the link were presented first with consent information and age verification questions to restrict recruitment to adults over 18 years of age. Then, if they consented, they progressed through the survey with the option of withdrawing or not responding to questions at any time. No compensation of any kind was provided to participants. The Committee on the Use of Humans as Experimental Subjects review board at MIT provided ethical approval for this study (# E-2294).

The survey went live on July 6, 2020 and data will continue to be collected until at least October 2020 for the wave countries. The survey was translated to 51 languages and participants in many countries could choose the language in which to take the survey. As of August 8, 2020, over 300,000 completed surveys were received from 67 countries. The full survey instrument is provided below. Target sample sizes for snapshot and wave countries was 3,000 per data collection event (wave countries  $8 \times 3,000 = 24,000$ ).

**Weights & Data.** All of the statistics generated in this dashboard were weighted using sampling weights determined by teams of statisticians at MIT and Facebook. A full account of the decisions surrounding the creation of the sampling weights is forthcoming.

External data were used to categorize the overall severity of the epidemic in the focal countries. Data were retrieved from the COVID-19 Data Repository by the Center for Systems Science and Engineering (CSSE) at Johns Hopkins University to generate a **case count** and **caseload trend** variables. The date when case counts were retrieved coincided with the launch of the first wave or when the snapshot survey was launched. For the 47 cross-sectional countries, data reflects case counts on 7/20/2020 and for the 20 longitudinal countries it reflects 7/6/2020. The date when case counts were retrieved for the 47 cross-sectional countries, data reflects the caseload trend from 7/6/2020 to 7/20/2020, while for the 20 longitudinal countries it reflects from

6/22/2020 to 7/6/2020. Countries were classified according to which tercile it fell into (high, medium and low) according to their COVID-19 severity on both variables.

**Survey.** The survey content was divided into eight blocks. Every individual was presented with the first five blocks of questions which addressed: trust in information sources, knowledge, vaccine acceptability and healthcare, and demographics. In snapshot countries, all respondents are shown an information block and then three additional blocks that are randomly selected from the remaining blocks, which include: Information needs, basic knowledge about COVID-19, distancing familiarity, importance and norms, risk perceptions and locus of control, prevention behaviors in practice, behavioral measures taken, beliefs about efficacy, work, and intentions to visit locations if open and open with precautions. In multi-wave countries, respondents are shown four randomly selected blocks. By design, not every participant was asked to respond to every question in the survey.

### Survey Questions

Q2.1 Thank you for considering participating in this survey.

According to the World Health Organization (WHO), Coronavirus (COVID-19) is an infectious disease where older people are more likely to develop serious illness.

The best way to prevent the spread is through techniques like:

- Washing your hands regularly with soap and water
- Covering your mouth and nose when coughing or sneezing
- Maintaining at least 1meter distance between you and other people
- Wearing a face mask or covering when in public or unable to keep distance from others

[You can find the WHO's guidance on Coronavirus \(COVID-19\) here.](#)

**End of Block: Debrief - Terminated**

**Start of Block: Knowledge and positive cases**

Q3.1 Which of the following is correct?

- There is a drug to treat COVID-19 (1)
- There is a vaccine for COVID-19 (2)
- There is both a drug for treatment and a vaccine for COVID-19 (3)
- There is currently no drug treatment or vaccine for COVID-19 (4)
- I am unsure which is correct (5)

Q3.2 Do you personally know someone who has tested positive for COVID-19?

- Yes (1)

- No (2)
- Prefer not to say (3)

**End of Block: Knowledge and positive cases**

**Start of Block: COVID-19 information exposure**

Q4.1 In the past week, how much, if anything, have you heard or read about coronavirus (COVID-19)?

- Nothing (1)
- A little (2)
- A moderate amount (3)
- A lot (4)

Q4.2 In the past week, did you see more or less news than you wanted to see about coronavirus (COVID-19)?

- Much more (1)
- More (2)
- About the right amount (3)
- Less (4)
- Much less (5)

**End of Block: COVID-19 information exposure**

**Start of Block: Vaccine and healthcare**

Q5.1 If a vaccine for COVID-19 becomes available, would you choose to get vaccinated?

- Yes (1)
- No (2)
- Don't know (3)

Q5.2 In the past week, have you avoided contact with health care facilities or health care workers due to fear of exposure to COVID-19?

- Yes (1)

No (2)

Q5.3 In the past week, have you been able to get an appointment with a healthcare worker when you needed one, whether related to COVID-19 or not?

Yes (1)

No, I needed one and was not able (2)

No, I did not need an appointment (3)

**End of Block: Vaccine and healthcare**

**Start of Block: Demographics**

Q6.1 What is your gender?

Male (1)

Female (2)

Other (3)

Q6.2 What is your age?

Under 20 (1)

20-30 (2)

31-40 (3)

41-50 (4)

51-60 (5)

61-70 (6)

71-80 (7)

Over 80 (8)

Q6.4 What is the highest level of education you have completed?

Less than primary school (1)

Primary school (5)

Secondary school (2)

- College / university (3)
- Graduate school (4)

Q6.5 In general, how would you rate your overall health?

- Excellent (1)
- Very good (2)
- Good (3)
- Fair (4)
- Poor (5)

Q6.6 In which country do you currently reside?

▼ Afghanistan (1) ... Zimbabwe (1357)

*Display This Question:*

*If Q6.6 = United States of America*

Q6.7 In which state do you currently reside?

▼ Alabama (1) ... I do not reside in the United States (53)

*Display This Question:*

*If Q6.6 = India*

Q6.8 In which state or union territory do you currently reside?

▼ Andaman and Nicobar Islands (1) ... West Bengal (36)

Q111 Which of these best describes the area where you are currently staying?

- City (1)
- Town (2)
- Village or rural area (3)

**End of Block: Demographics**

**Start of Block: Information sources**

Q7.1 In the past week, from which of the following, if any, have you received news and information about COVID-19? Select all that apply.

- Online sources (websites, apps, social media) (1)
- Messaging apps / SMS / text messaging (2)
- Newspapers (3)
- Television (4)
- Radio (5)

Q107 In the past week, from which of the following, if any, have you received news and information about COVID-19? Select all that apply.

- Local health workers, clinics, and community organizations (1)
- Scientists, doctors, and health experts (2)
- World Health Organization (WHO) (3)
- Government health authorities or other officials (4)
- Politicians (5)
- Journalists (8)
- Ordinary people I know personally (6)
- Ordinary people I don't know personally (7)

**End of Block: Information sources**

**Start of Block: Information sources – Trust**

Q8.1 How much do you trust each of the following as a source of COVID-19 news and information?

	Do not trust (1)	Somewhat trust (2)	Trust (3)
Online sources (websites, apps, social media) (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Messaging apps / SMS / text messaging (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Television (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Radio (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Newspapers (7)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q108 How much do you trust each of the following as a source of COVID-19 news and information?

	Do not trust (1)	Somewhat trust (2)	Trust (3)
Local health workers, clinics, and community organizations (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Scientists, doctors, health experts (31)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
World Health Organization (WHO) (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Government health authorities or other officials (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Politicians (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Journalists (33)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ordinary people I know personally (7)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Ordinary people I do not know personally (32)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**End of Block: Information sources – Trust**

**Start of Block: Information Needs**

Q10.1 Which of the following aspects of COVID-19 do you have the most questions about?

- The cause of the disease (1)
- Symptoms and risk factors (2)

- Treatment of the disease (3)
- How I can protect myself (4)
- Immunity (5)
- Scientific progress in development of a vaccine or treatment (6)
- How other people are coping (7)
- Caring for those most at risk of COVID-19 (8)
- How I can best take care of my children's school education (9)
- Differences between COVID-19 and other diseases (e.g. flu) (10)
- The evolution of the pandemic in \${{Q6.6/ChoiceGroup/SelectedChoices}} (11)
- The evolution of the pandemic globally (12)
- The economic impact of COVID-19 to me personally (13)
- The economic impact of COVID-19 in { ChoiceGroup/SelectedChoices} (14)
- How to maintain my mental health during the isolation (15)
- How to maintain my social contact despite the physical distancing (16)
- Other protection measures by the government and communities (17)

**End of Block: Information Needs**

**Start of Block: Basic knowledge**

Q11.1 Which of the following types of people are at the highest risk of severe illness from COVID-19? Select all that apply.

- People of certain religions (1)
- People of certain ages (2)
- People with certain medical conditions (3)

- People with certain ethnic backgrounds (4)
- ☒None of the above (5)

Q11.2 Which of the following best describes how COVID-19 spreads?

- Human contact, coughing or sneezing (1)
- Exposure to animals (2)
- Mosquito bites (3)
- Dirt or pollution (4)
- Other (5)

Q11.3 Which of the following can be symptoms of COVID-19? Please select as many as apply.

- Fever (1)
- Cough (2)
- Shortness of breath (3)
- Sore throat (4)
- Runny or stuffy nose (5)
- Muscle or body aches (6)
- Headaches (7)
- Fatigue (tiredness) (8)
- Diarrhea (9)
- Loss of taste and smell (10)
- ☒None of these (11)

**End of Block: Basic knowledge**

**Start of Block: Distancing familiarity, importance & norms**

Q12.1 Which of the following best describes your familiarity with the term “physical distancing” during the COVID-19 pandemic?

- I have not heard of it (1)
- I have heard of it but do not know what it means (2)
- I have heard of it and have some idea of what it means (3)
- I have heard of it and know what it means (4)

*Display This Question:*

*If Q12.1 = I have heard of it and have some idea of what it means*

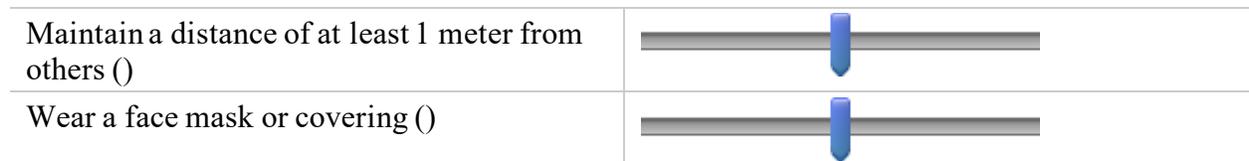
*Or Q12.1 = I have heard of it and know what it means*

Q12.2 How important do you think physical distancing is for slowing the spread of COVID-19?

- Not at all important (1)
- Slightly important (2)
- Moderately important (3)
- Very important (4)
- Extremely Important (5)

Q12.3 Out of 100 people in your community, how many do you think do the following when they go out in public?

0 10 20 30 40 50 60 70 80 90 100



**End of Block: Distancing familiarity, importance & norms**

**Start of Block: Risk perceptions and locus of control**

Q13.1 How dangerous do you think the COVID-19 risk is to your community?

- Not at all dangerous (1)
- Slightly dangerous (2)
- Moderately dangerous (3)

- Very dangerous (4)
- Extremely dangerous (5)

Q13.2 How likely is it that someone of the same age as you in your community becomes sick from COVID-19?

- Not at all likely (1)
- Slightly likely (2)
- Moderately likely (3)
- Very likely (4)
- Extremely likely (5)

Q102 Do you agree with this statement? "I have control over whether I will get COVID-19."

- Strongly disagree (1)
- Somewhat disagree (4)
- Neither agree or disagree (5)
- Somewhat agree (6)
- Strongly agree (7)

Q13.3 How serious would it be if you became infected with COVID-19?

- Not at all serious (1)
- Somewhat serious (2)
- Very serious (3)

**End of Block: Risk perceptions and locus of control**

**Start of Block: Prevention behaviors in practice**

Q14.1 How often are you able to stay at least 1 meter away from people not in your household?

- Never (1)
- Rarely (2)
- Sometimes (3)
- Often (4)

Always (5)

Q14.2 When you clean your hands, how often are you able to clean your hands with soap or alcohol-based handrub?

Never (1)

Rarely (2)

Sometimes (3)

Often (4)

Always (5)

**End of Block: Prevention behaviors in practice**

**Start of Block: Behavioral measures taken**

Q15.1 What measures have you taken to prevent infection from COVID-19 in the past week?

Washing hands regularly using disinfectants or soap and water (1)

Covering mouth and nose when coughing or sneezing (2)

Avoiding close contact with anyone who has a fever and cough (3)

Wearing a face mask or covering (4)

Staying at least 1 meter away from other people when out in public (5)

Staying at least 2 meters away from other people when out in public (6)

Avoiding touching your eyes, nose, and mouth with unwashed hands (7)

Taking herbal supplements (8)

Using homeopathic remedies (17)

Using caution when opening letters and packages (9)

Getting the flu vaccine (10)

Eating garlic, ginger, or lemon (11)

- Cleaning or disinfecting surfaces (12)
- Using antibiotics (13)
- Cleaning or disinfecting a mobile phone (14)
- Self-isolation (15)
- ⊗None of these (16)

**End of Block: Behavioral measures taken**

**Start of Block: Beliefs about efficacy**

Q16.1 How effective is handwashing for preventing the spread of COVID-19?

- Extremely effective (1)
- Very effective (2)
- Moderately effective (3)
- Slightly effective (4)
- Not effective at all (5)

Q16.2 How effective is wearing a face mask for preventing the spread of COVID-19?

- Extremely effective (1)
- Very effective (2)
- Moderately effective (3)
- Slightly effective (4)
- Not effective at all (5)

Q16.3 How well is COVID-19 being handled in  $\{Q6.6/ChoiceGroup/SelectedChoices\}$ ?

- Extremely well (1)
- Very well (2)
- Moderately well (3)
- Slightly well (4)
- Not well at all (5)

Q16.4 How well is your community handling COVID-19?

- Extremely well (1)
- Very well (2)
- Moderately well (3)
- Slightly well (4)
- Not well at all (5)

**End of Block: Beliefs about efficacy**

**Start of Block: Importance and norms**

Q17.1 How important is it for you to take actions to prevent the spread of COVID-19 in your community?

- Extremely important (1)
- Very important (2)
- Moderately important (3)
- Slightly important (4)
- Not at all important (5)

Q17.2 How important do other people in your community think it is to take actions to prevent the spread of COVID-19?

- Extremely important (1)
- Very important (2)
- Moderately important (3)
- Slightly important (4)
- Not at all important (5)

Q17.3 Out of 100 people in your community, how many do you think believe the following because of COVID-19?

0 10 20 30 40 50 60 70 80 90 100

Social gatherings should be cancelled ()



People should stay at least 1 meter away from other people when out in public ()	
People should wear a face mask or covering when out in public ()	
Non-essential retail shops should be closed ()	
A general curfew should be enforced ()	
Travel between countries should be restricted ()	
Travel within the country should be restricted ()	

**End of Block: Importance and norms**

**Start of Block: Work**

Q18.1 Have you been working at some point in 2020?

- Yes (1)
- No (2)

Q18.2 How has your work changed since January 31, 2020?

- No longer employed (1)
- Newly employed (2)
- Employed in a different business (3)
- Role substantially changed with same business (4)
- Little change (5)

*Display This Question:*

*If Q18.1 = Yes*

Q105 Which best way to describe the work you do most of the time to make money?

- I work for my own business (1)
- I work in a business that is run by my household or family member (2)
- I work in a business that is run by someone else (3)
- I work for the government (4)

Other (5)

*Display This Question:*

*If Q18.1 = Yes*

Q18.3 What is the main activity of the business or organization in which you were working before February 2020?

- Agriculture (1)
- Buying and selling (11)
- Construction (12)
- Education (13)
- Electricity/water/gas/waste (14)
- Financial/insurance/real estate services (15)
- Health (16)
- Manufacturing (17)
- Mining (18)
- Personal services (19)
- Professional/scientific/technical activities (20)
- Public administration (21)
- Tourism (22)
- Transportation (23)
- Other (24)

**End of Block: Work**

**Start of Block: Intentions to visit locations if open**

Q19.1 Which of the following businesses, locations, or events are currently open and operating near you?

- Restaurants (1)
- Parks and beaches (2)
- Retail shops / shopping malls (3)
- Schools (4)
- Performances and sporting events (5)
- Places of employment (6)
- Places of worship (7)
- Health care facilities (8)

Q19.2 Which of the following businesses, locations, or events would you visit or attend in the coming two weeks if they were operating at full capacity?

- Restaurants (1)
- Parks and beaches (2)
- Retail shops / shopping malls (3)
- Schools (4)
- Performances and sporting events (5)
- Places of employment (6)
- Places of worship (7)
- Health care facilities (8)

**End of Block: Intentions to visit locations if open**

**Start of Block: Intentions to visit with precautions**

Q20.1 Compared to a restaurant with no precautions at all, are you more or less likely to visit a restaurant with the following precautions?

	More likely to visit (1)	Doesn't affect my actions (2)	Less likely to visit (3)
Operating at limited capacity (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Everyone has to wear a mask (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Everyone has to pass a temperature check (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Has additional hand washing stations (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q20.2 Compared to a health care facility with no precautions at all, are you more or less likely to visit a health care facility with the following precautions?

	More likely to visit (1)	Doesn't affect my actions (2)	Less likely to visit (3)
Operating at limited capacity (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Everyone has to wear a mask (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Everyone has to pass a temperature check (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Has additional hand washing stations (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q20.3 Compared to a place of worship with no precautions at all, are you more or less likely to visit a place of worship with the following precautions?

	More likely to visit (1)	Doesn't affect my actions (2)	Less likely to visit (3)
Operating at limited capacity (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Everyone has to wear a mask (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Everyone has to pass a temperature check (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Has additional hand washing stations (4)

Q20.3 Compared to a retail shop with no precautions at all, are you more or less likely to visit a retail shop with the following precautions?

	More likely to visit (1)	Doesn't affect my actions (2)	Less likely to visit (3)
Operating at limited capacity (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Everyone has to wear a mask (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Everyone has to pass a temperature check (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Has additional hand washing stations (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**End of Block: Intentions to visit with precautions**

**Start of Block: Travel**

Q21.1 Have you refrained from traveling between cities because of restrictions on movement due to COVID-19?

- Yes (1)
- No — I planned to travel and kept plans (2)
- No — I did not plan to travel (3)

Q21.2 Have you refrained from traveling between cities due to fears regarding COVID-19?

- Yes (1)
- No — I planned to travel and kept plans (2)
- No — I did not plan to travel (3)

**End of Block: Travel**

**Start of Block: Debrief**

Q22.1

Thank you for participating in this survey, your answers will help researchers in your region and around the world understand how people are responding to COVID-19.

According to the World Health Organization (WHO), Coronavirus (COVID-19) is an infectious disease where older people are more likely to develop serious illness.

The best way to prevent the spread is through techniques like:

- Washing your hands regularly with soap and water
- Covering your mouth and nose when coughing or sneezing
- Maintaining at least 1 meter distance between you and other people
- Wearing a face mask or covering when in public or unable to keep distance from others

[You can find the WHO's guidance on Coronavirus \(COVID-19\) here.](#)

**End of Block: Debrief**

**Country Designations**

<b>Wave countries</b>	<b>Snapshot Countries</b>		
DRC	Mozambique	Uruguay	Canada
Ethiopia	Cote d'Ivoire	Georgia	Malaysia
Nigeria	Ghana	Afghanistan	Japan

Vietnam	Guatemala	Kazakhstan	Algeria
Philippines	Cambodia	Singapore	Spain
Indonesia	Myanmar	Cameroon	Peru
Romania	South Africa	Honduras	Germany
Poland	Jamaica	Portugal	Italy
Argentina	Uganda	Sudan	Colombia
France	Tanzania	Sri Lanka	
United Kingdom	Kenya	Bolivia	
Pakistan	Nepal	Netherlands	
Turkey	Barbados	Venezuela	
Egypt	Montenegro	Ecuador	
Bangladesh	Malta	Chile	
Thailand	Estonia	South Korea	
Mexico	Trinidad & Tobago	Ukraine	
Brazil	North Macedonia	Taiwan	
United States*	Azerbaijan	Morocco	
India*	Mongolia	Iraq	

\* Regional and zonal level data presented for the US and India