COVID-19 Reports: What Experts Expect & Propose

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The COVID-19 pandemic has already changed our world and is still underway with no end in sight. The crisis will likely continue over several years, if not longer. Some countries are beginning to slowly re-open after lockdown, while others are facing a sharp upswing in infections, e.g. Brazil, Mexico, India, and Russia. In the U.S., infections and deaths in some states are declining, but increasing in most states. Overall infections and deaths in the world continue to rise--and this information is under-reported. The IMHE (#3) projects 2.34m global deaths by 1/1/21, including 410,000 deaths in India and 363,000 deaths in the U.S.

A quick tech fix treatment or vaccine is unlikely, despite Operation Warp Speed by the U.S. government, to deliver 300m doses of a vaccine by January, and over 165 potential coronavirus vaccines in development worldwide (#46). Most experts expect success by early 2021 at best, and then there are problems of global distribution (#47) and "anti-vaxxer" backlash, as well as "A Pandemic of Misinformation" (*TIME*, 3 Aug, p.27), including ignorant statements and policies by some political leaders that defy what the experts propose and aggravate our existential problems (#45). These statements receive considerable attention, but what the experts expect and propose is not widely known, other than basic precautions such as masks and distancing.

Why focus on reports? Because they are not only written by scientists and other experts, but by groups pooling their expertise. Although not a flood of reports, there has been a steady stream since March, with the vast majority of the 66 reports identified here published in the past six months. All of them are by groups with two exceptions (#18 & 35), and all are by experts, again with two exceptions (#23 & \$55).

The reports are generally quite brief, clearly written, handsomely produced, and free online. Epidemiologists and other public health experts explain how governments at various levels can best deal with the crisis, while social scientists and journalists consider the profound impacts on security and sustainability of individuals, families, communities, industries (airlines, schools, colleges, hospitals, sports, theaters, meat-packers, etc.), small and large businesses, state and local governments, and international relations. Asterisks highlight the most important reports. All reports have links to the original document; some also have links to organizations.

The 66 reports are in seven categories:

- I. Daily Data Reports (cases and deaths by country, and US states and counties);
- II. Scenarios (COVID-19's course, global impacts, Sustainable Development Goals and COVID);
- III. General Overviews (global statistics, impacts on SDGs, COVID Commission, strategies);
- IV. Re-Opening Society (four-phase roadmap, local metrics, schools, businesses);
- V. Special Perspectives (leadership, communication, testing, tracing, disinformation);
- VI. Large Group Agendas (EU recovery, a new normal, healthy recovery, human security);
- VII. Pre-COVID-19 Warnings (global health security index, preventing pandemics, climate).

Also see Highlights and the Organization Index following this page. Most of these reports are by American experts. Readers are encouraged to suggest similar reports from elsewhere (e.g. #26 & 27), especially Europe (#44 & 57), and to pass this "report on reports" on to political and health leaders who might use some of them to make a difference.

HIGHLIGHTS

- 5. Forecasting Covid-19's Course (Center for Strategic and International Studies, May 20, 14p). Three scenarios of world impact ranging from best to worst case.
- 9. Sustainable Development Outlook 2020 (UN Dept of Economic and Social Affairs, July 2020, 56p). Three scenarios to attain the SDGs after COVID: pessimistic, optimistic, and 2019 benchmark.
- **12. How COVID-19 is Changing the World** (UN Committee for Coordination of Statistical Activities, May 2020, 87p). A "snapshot" of economic and social statistics from 36 organizations.
- 13. Shared Responsibility, Global Solidarity (UN Sustainable Development Group, March 2020, 24p). A joint effort of 43 UN organizations responding to the socio-economic impacts of COVID-19.
- **14. The Lancet COVID-19 Commission** (Jeffrey D. Sachs and five others, *The Lancet*, 9 July 2019). Seeks to speed up global, equitable, and lasting solutions worldwide, with several forthcoming reports.
- **17. COVID-19 Strategy Update** (World Health Organization, April 14, 23p). Insights on the current situation, with national and international strategies for speed, scale, and equity.
- **24. Principles for a Phased Reopening During COVID-19** (Johns Hopkins Center for Health Security, April 17, 23p). A framework to assess risks of likely transmission and nonessential business.
- **26.** Where and When to Lift a Lockdown (Indian Institute for Human Settlements, April 8, 10p). Lists 40 essentials for India's health systems, basic services, food, etc. and 10 priority activities.
- **27. COVID-19 Roadmap to Recovery** (Group of Eight Australia, April 2020, 190p). A report by >100 researchers from Australia's eight universities, exploring two basic options.
- **32. COVID-19 Back to School** (National Center for Disaster Preparedness, Columbia Univ, August 2020, 5p). Simply presented best practices as of summer 2020 to reopen schools.
- 35. Crisis Leadership for a Pandemic: COVID-19 (National Center for Disaster Preparedness, Columbia Univ,, May 2020, 2p). A concise overview of principles learned from 9/11: Connect with a truthful message, Collaborate governments, and Create a web of multiple leaders.
- **36. Effective COVD-19 Crisis Communication** (CIDRAP Viewpoint Part 2, Univ of Minnesota, May 6, 11p). Principles too often ignored: don't over-reassure, proclaim uncertainty, admit mistakes.
- 37. COVID-19 Surveillance: A National Framework (CIDRAP Viewpoint Part 5, Univ of Minnesota, July 9, 14p). Ongoing and systematic collection/analysis of data is key to public health.
- **46. COVID-19 Vaccine Allocation and Distribution** (Johns Hopkins Center for Health Security, August 19, 41p). An ethics framework for decisions on risk, equity, economic impact, and logistics.
- 57. Recovery Plan for Europe (European Commission, July 21, 7p). A major plan to help repair COVID's economic and social damage, laying foundations for a more modern and sustainable Europe.
- 59. C40 Cities Mayors' Agenda for a Green and Just Recovery (Global Mayors' Task Force, July 15, 43p). Large-city mayors seek "a new normal," a strong rebound, and the Global Green New Deal.
- <u>60.</u> **A World in Disorder** (Global Preparedness Monitoring Board, Sept 2020, 51p). Second annual report on Lessons Learned and five Urgent Actions on leadership, global health security, sustained investment, etc.
- **64. Global Health Security Index** (Johns Hopkins Health Security Center, *et al.*, Oct 2019, 316p). Offers 195 country profiles, ranking them across six categories and 34 indicators; all countries are seen as poorly prepared.

COVID-19 Reports: Organization Index

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I. DAILY DATA REPORTS

1. MAP OF U.S./WORLD

COVID-19 Map (Johns Hopkins Coronavirus Resource Center). A daily count of identified cases and deaths by country and by counties within US states. "Critical Trends" shows where COVID cases are increasing, mortality rates by country, and data about COVID testing and tracing.

Also see: The CDC COVID Data Tracker for US data only and the WHO Coronavirus Disease (COVID-19) Dashboard, with a daily and weekly count of confirmed cases and deaths by region and country, and a world map showing countries most at risk.

2. WORLDOMETER SPREADSHEET

Reported Cases and Deaths by Country, Territory, or Conveyance (Worldometer). COVID-19 is affecting 215 countries and territories, and two international conveyances. This spreadsheet of countries reports daily on total cases, new cases and deaths, total recovered, and tests, cases and deaths/1m population. *Note:* In many countries there is underreporting due to lack of testing, suppressed information, and/or probable COVID-caused deaths at home that aren't counted.

3. DATA PROJECTIONS

COVID-19 Projections (Institute for Health Metrics and Evaluation/IMSE, Univ of Washington, Oct 2). Weekly updated global and country projections of COVID deaths and infections, with optimistic "universal mask" scenarios and pessimistic "mandates easing" scenarios. Also posts policy briefs and articles on COVID and public health. The Sept 22 projection of global deaths as of 1 Jan 2021 was 2.34m, with 1.7m if universal masks and 3.2m if mandates easing. For the US, the projection for 1/1/21 was 363,000 deaths (277,000 if universal masks and 428,000 if mandates easing). For India, the 1/1/21 projection was 410,000 deaths.

II. SCENARIOS

4. THREE COVID SCENARIOS FOR 2020-2021

The Future of the COVID-19 Pandemic: Lessons Learned from Pandemic Infections (Michael Osterholm and 7 others, Center for Infectious Disease Research and Policy, Univ of Minnesota, April 30, 8p). Part 1 of "The CIDRAP Viewpoint" series. The worst case is a fall 2020 wave larger than the spring 2020 wave; middle case is "peaks and valleys" into 2021; best case is "slow burn" of ongoing cases but no further waves. *Note:* The worst case of a fall 2020 wave has already been supplanted by a summer 2020 wave that Osterholm called a "forest fire of cases" that is not "going to slow down" (*New York Times*, 22 June, A6).

Read more

5. *THREE WORLD SCENARIOS

Forecasting Covid-19's Course (Center for Strategic and International Studies, May 20, 14p). Commentary by the CSIS Senior VP on the pandemic as a "history-altering event," with no "V-shaped recovery for major economies." Presents three scenarios: Best Case (U-shaped recovery), Worst Case (5-10 year vaccine timeline, collapse of global trade, no global leadership), and Mixed Case (fall 2021 vaccine, uneven recovery, China as leader).

Read more

6. THREE WORLD SCENARIOS

What World Post-COVID-19? Three Scenarios (Atlantic Council Scowcroft Center for Strategy and Security, April 2020, 33p). The pandemic presents "a substantial shock to the post WWII order, and the worst may be yet to come until a vaccine is widely distributed. The recovery will likely be difficult and extended, and US global leadership is at risk. The three scenarios: downward deglobalization, China as global leader, and optimistic multilaterialism.

Read more

7. NINE SCENARIOS ON COVID AND ECONOMY

COVID-19 Briefing Materials: Global Health and Crisis Response (McKinsey & Company, April 13, 91p) An extensive analysis with many charts and graphs, as well as scenarios on economic downturn vs. renewal and virus containment vs. escalation.

Read more

8. SDG GOALS AND COVID

COVID-19: A Global Perspective. 2020 Goalkeepers Report (Bill & Melinda Gates Foundation, Sept 2020, 45p). Goalkeepers focuses on progress toward the SDGs, especially goals 1-6 on poverty, hunger, and good health. COVID-19 has reinforced the fact that everyone needs to do their part: governments, the private sector, civil society, and the general public. The report assesses the damage that the pandemic has done and is still doing, arguing for a collaborative response: "There is no such thing as a national solution to a global crisis."

Read More

9. *THREE SDG/COVID SCENARIOS

Sustainable Development Outlook 2020: Achieving SDGs in the Wake of COVID-19: Scenarios for Policymakers (UN Department of Economic and Social Affairs, July 2020, 56p). "The crisis has been unprecedented in its scope and scale, (but) has not affected all countries and all people in the same way," and setbacks need not be permanent. It is quite possible to move ahead towards the Sustainable Development Goals, and "even possible to convert the crisis into an opportunity for recovering better." A "Pre-COVID 19 benchmark scenario" from 2019 is provided, along with Post-COVID-19 pessimistic and optimistic scenarios.

Read more

Also see: Speaking Truth to Power about the SDGs by Jeffrey D. Sachs et al. (Sustainable Development Solutions Network, August 26 Working Paper, 10p), arguing against recent calls to change the SDGs and to lower ambition. COVID-19 is "a very serious setback for the SDGs," but does not put the goals out of reach. "Indeed, the SDGs provide a framework for recovery from the pandemic." The goals are affordable and can be financed at the cost of about 2% of global output. "Governments are currently spending vastly greater sums on responses to COVID-19." In view of the technical feasibility of the SDGs, experts and scientists should speak "truth to power" about what needs to be done.

10. THREE U.S. SCENARIOS TO JAN 2022

United States COVID Scenarios, January 2022 (Millennium Project/American Red Cross, Oct 2020, c.40p). Lively and extensive draft versions of a mixed ("American Endures"), a pessimistic, and an optimistic "Things Went Right" scenario, each with advice for Red Cross preparedness.

Read More

11. 2050 OPTIMISTIC SCENARIO

Pandemics---Lessons Looking Back from 2050 (Fritjof Capra and Hazel Henderson, Ethical Markets Media, March 2020, 8p). An idealistic scenario from 2050, looking back to the origin and evolution of the coronavirus over the last three decades, where there is widening human awareness of how the planet actually functions and the myopic policies that have driven inequality, poverty, pandemics, and rising social and environmental losses. Today in 2050, economies have become regenerative and poverty gaps and inequality have largely disappeared, as well as the ideologies of money and market fundamentalism.

III. GENERAL OVERVIEWS

12. *STATISTICAL OVERVIEW

How COVID-19 is Changing the World: A Statistical Perspective (UN Committee for the Coordination of Statistical Activities, May 2020, 87p). "COVID-19 has turned the world upside down. Everything has been impacted." New statistical records are being set on an almost weekly basis. The CCSA has compiled "a snapshot of some of the latest information," derived from 36 international organizations and assembled in four broad categories: economic, social, regional and statistical. The best information available is necessary because "decisions made now and in the coming months will be some of the most important made in generations."

Read more

13. *U.N. SUSTAINABLE DEVELOPMENT GROUP

Shared Responsibility, Global Solidarity: Responding to the Socio-Economic Impacts of COVID-19 (United Nations Sustainable Development Group, March 2020, 24p). A joint effort of 43 UN organizations describes global measures to match the magnitude of the crisis, and potential impacts for each of the UN's 17 Sustainable Development Goals.

Read more

14. *COVID-19 COMMISSION

The Lancet COVID-19 Commission (Jeffrey D. Sachs and Five Others, <u>The Lancet</u>, July 9, 2019). The Commission seeks "to help speed up global, equitable, and lasting solutions to the pandemic." A key aim is to enhance "awareness and adoption worldwide of successful strategies to suppress transmission." Holding its first meeting on June 23, the Commissioners are leaders in health science and delivery, business, politics, and finance from across the world.

Read more

15. MORE FREQUENT PANDEMICS

COVID-19 Stimulus Measures Must Save Lives, Protect Livelihoods, and Safeguard Nature to Reduce the Risk of Future Pandemics (Josef Settele and 3 others, <u>IPBES</u> Guest Article, April 27, 3p). Built on the reports of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services, warning that future pandemics are likely to be more frequent and spread more rapidly.

16. REDUCING FUTURE PANDEMICS

COVID-19: Urgent Call to Protect People and Nature (World Wildlife Fund, June 2020, 21p). Humanity's broken relationship with nature comes at a cost, revealed in terrible ways by the COVID-19 pandemic. Humans have increasingly encroached on the natural world, resulting in escalating contact with wildlife and new zoonotic diseases causing deadly pandemics.

Read more

17. *WHO STRATEGY

COVID-19 Strategy Update (World Health Organization/WHO, April 14, 23p.). On the current situation, key insights, and national and international strategies. "Countries must do everything they can to stop cases from becoming clusters and clusters from becoming explosive outbreaks." Speed, scale, and equity must be our guiding principles. "COVID-19 is a truly global crisis" requiring global solidarity.

Read more

18. GLOBAL GOVERNANCE

Responding to COVID-19: Priorities Now and Preparing for the Future (Augusto Lopez-Claros, Global Challenges Foundation, April 22, 5p). World Bank economist and co-author of Global Governance and the Emergence of Global Institutions (Cambridge UP, Jan 2020) looks at global institutional arrangements that are needed to deal with the looming crises that are likely.

19. GEOPOLITICS AND COVID

Taking Stock: Where Are Geopolitics Headed in the COVID-19 Era? (Atlantic Council Scowcroft Center for Strategy and Security, June 2020, 20p). The pandemic is having dramatic effects on everyday life, global prosperity, international security, and geopolitics. It is a transformative shock, and its negative effects on the global economy are a secondary shock.

Read more

20. GLOBAL POWER SHIFTS

How the World Will Look After the Coronavirus (*Foreign Policy*, March 20). 12 "leading global thinkers" offer their "predictions" on global political and economic power, e.g. reinforced nationalism and contracting of supply chains.

Read more

21. AMERICA AND CHINA

The Coming Post-COVID Anarchy: The Pandemic Bodes III for Both American and Chinese

Power--and for the Global Order (Kevin Rudd, *Foreign Affairs*, May 6). Former Australian Prime

Minister and president of the Asia Society Policy Institute warns of reinforced fragmentation and a possible new Cold War.

IV. RE-OPENING SOCIETY

22. NATIONAL ROADMAP

National Coronavirus Response: A Road Map to Reopening (Scott Gottlieb and 4 others, American Enterprise Institute, March 28, 16p). Details in four Phases, provided by Gottlieb (former director of the US Food & Drug Administration) and others from the Johns Hopkins Center for Health Security.

Read more

23. REOPENING: FIVE-PHASE PLAN

Saving Lives and Livelihoods: Recommendations for Recovery (National Coronavirus Recovery Commission, The Heritage Foundation, June 15, 2020, 113p). Proposes a five-phase plan to combat COVID-19 and reopen America, following an "all of society" approach recognizing that recovery "must proceed expeditiously" and that success requires coordination among all levels of government, the private sector, and civil society, rather than a national or top-down approach. Read more

24. *PHASED RE-OPENING PRINCIPLES

Public Health Principles for a Phased Reopening During COVID-19: Guidance for Governors (Johns Hopkins Center for Health Security, April 17, 23p). A framework for considering risks of likely transmission and assessing nonessential business. Decision-makers must make choices based on individual situations in their states, risk levels, and resource assessments.

Read more

25. LOCAL LEADERS

COVID-19: A Frontline Guide for Local Decision-Makers (<u>Nuclear Threat Initiative</u> and <u>Georgetown Univ Center for Health Science and Security</u>, May 22, 4p). Provides easy-to-use metrics for phased re-opening and a Metrics Scorecard to assess progress.

26. *TRANSITION ESSENTIALS

Where & When to Lift a Lockdown: What to Do to Enable a Transition to Normalcy (Indian Institute for Human Settlements, Delhi, April 8, 10p). Aromar Revi, the founder and director, lists 40 essentials regarding administration and coordination, finance and banking, health systems, basic services, food and agriculture, poverty and livelihoods, transportation, supply chains, housing and construction, and education, with priority to 10 activities.

27. *AUSTRALIAN OPTIONS

COVID-19 Roadmap to Recovery: A Report for the Nation (Group of Eight Australia, late April 2020, 190p). An independent report by >100 leading researchers from Australia's Group of Eight (Go8) universities, presenting two options: Elimination requiring restrictions for a longer duration at first and Controlled Adaptation by suppressing the illness to a low level and managing it—"a signal of pragmatic acceptance." A third option of Herd Immunity was rejected at the outset. Read more

28. DEVELOPED VS. DEVELOPING COUNTRIES

Containment Strategies and Support for Vulnerable Households (<u>IGC</u> COVID-19 Guidance Note, April 2020, 9p). The <u>International Growth Centre</u> in the UK notes that policy responses in developed countries are not a good model for developing countries, which must weigh health risks vs. economic damage.

Read more

29. BUSINESS

Work in the Time of Pandemic, Phase 1: Reopening America's Businesses (National Center for Disaster Preparedness, Earth Institute, Columbia U, May 2020?, 6p). A guide to Phase 1 reopening that is not a plan for full recovery ("a process that could take a year—or significantly longer"). Covers asymptomatic carriers, diagnostic and antibody testing, contact tracing (the US may need 100,000 to 200,000 workers), and examples of reopening for nine types of businesses.

30. BUSINESS

Operational Toolkit for Businesses Considering Reopening or Expanding (Johns Hopkins Center for Health Security, May 6, 14p). An "Instruction Manual" with a step-by-step Business Risk Worksheet and an Excel Assessment Calculator spreadsheet to attain a risk score and a modification score.

31. SCHOOLS

Filling in the Blanks: National Research Needs to Guide Decisions about Reopening School in the United States (Johns Hopkins Center for Health Security, May 15, 50p). Includes a 26p detailed Appendix on school policies in 11 countries: Australia, Denmark, France, Germany, etc.

32. *SCHOOLS

COVID-19 Back to School (Irwin Redlener *et al.*, <u>National Center for Disaster Preparedness</u>, Columbia Univ, August 2020, 5p). Is it safe for my child to be in school? "As opposed to what we thought months ago, children can carry the coronavirus, infect others, and become ill from COVID-19, although far less frequently and generally less severely than adults." New developments in testing, therapeutics and vaccines "may change everything," but the considerations presented here are in line with best practices as of late summer 2020. **Read more**

33. SCHOOLS

CDC Readiness and Planning Tool to Prevent the Spread of COVID-19 in K-12 Schools (Centers for Disease Control, May 2020, 9p; www.cdc.gov/coronavirus). Checklists of guiding principles for lowest risks (virtual-only activities) and highest risks (in-person activities), promoting behaviors to reduce spread, maintaining healthy environments, and when someone gets sick.

Note: <u>CDC</u> also offers guidelines for businesses and workplaces, child care, summer camps, youth sports, parks and recreation facilities, community events, first responders, shared housing, retirement communities, tribal communities, homeless populations, prisons and jails.

34. IMPACT ON WORKERS

Lives and Livelihoods: Assessing the Near-Term Impact of COVID-19 on US Workers (McKinsey Global Institute, April 2020, 10p). "Up to one-third of US jobs may be vulnerable—and more than 80% are held by low-income workers." *Also See:* McKinsey's COVID Response Center, with many reports, webinars, and articles on public health, economics, and human lives.

Read more

V. SPECIAL PERSPECTIVES

35. *LEADERSHIP

Crisis Leadership for a Pandemic: COVID 19 (National Center for Disaster Preparedness, Earth Institute, Columbia U, May 2020, 2p). A concise overview of principles learned from 9/11 by the former Assistant Chief of the FDNY: Connect ("remove information silos" with a message that is truthful and empathetic), Collaborate (across levels of government and with key stakeholders), and Create ("a spider's web structure of multiple leaders working with each other to coordinate efforts").

36. *COMMUNICATION

Effective COVID-19 Crisis Communication (Michael Osterholm and 7 others, <u>CIDRAP</u>, U of Minnesota, May 6, 11p). Part 2 of The CIDRAP Viewpoint on principles too often ignored: don't over-reassure, proclaim uncertainty, and admit mistakes (COVID-19 science is still in its infancy). Read more

37. *SURVEILLANCE OF COVID-19

SARS-CoV-2 Infection and COVID-19 Surveillance: A National Framework (Michael Osterholm and 11 others, CIDRAP, U of Minnesota, July 9, 14p). Part 5 of The CIDRAP Viewpoint focuses on surveillance—the ongoing and systematic collection and analysis of data—as "the cornerstone of public health practice." To have a meaningful impact, the data must be organized and analyzed in a thoughtful, structured way, with results "communicated regularly, clearly, and effectively to the public health workforce, policymakers, and the public."

Read more

38. TESTING

Smart Testing for COVID-19 Virus and Antibodies (Michael Osterholm and 7 others, CIDRAP, U of Minnesota, May 20, 13p). Part 3 of The CIDRAP Viewpoint states that testing is essential to confirm infection and contacts, guide patient care, prepare for case surges, and inform economic activity levels. Smart testing is "the right test given to the right person at the right time, with results provided in a timely manner."

39. TESTING

COVID-19 Strategic Testing Plan: Report to Congress (<u>U.S. Dept. of Health and Human Services</u>, May 24, 81p). A plan to assist states, localities, and tribal organizations in understanding COVID testing for both active infection and prior exposure, including hospital-based testing, laboratory testing, mobile-testing units, testing for employers and other settings, etc. Covers testing goals, increasing testing capacity, resources for testing, and mechanisms for responding to future pandemics.

40. TESTING, TRACING, SUPPORTED ISOLATION

Pandemic Resilience: Getting It Done: A TTSI Technical Handbook for States and Municipalities (Harvard Global Health Institute and Harvard Center for Ethics, June 30, 66p). A handbook by the 8-member Massachusetts Testing, Tracing, and Supported Isolation (MATTSI) collaborative. TTSI seeks to enable a safe and free society by providing an end-to-end framework with scaled-up testing, rapid contact-tracing, and using assets and spirit of the regional ecosystem.

Read More

41. CONTACT TRACING

Contact Tracing for COVID-19: Assessing Needs, Using a Tailored Approach (Michael Osterholm and 5 others, CIDRAP, U of Minnesota, June 2, 9p). Part 4 of The CIDRAP Viewpoint series, "based on our current reality and the best available data." Contact tracing is most effective early in the course of an outbreak, or much later when other measures have reduced disease incidence to low levels, e.g. it was "key in the late stages of the smallpox eradication program." It is most effective when cases and contacts can be quickly and easily identified; less effective when contacts are difficult to trace (e.g. situations with airborne pathogens), the incidence of infection is high, or many infections are asymptomatic.

Read more

42. CONTACT TRACING

A National Plan to Enable Comprehensive COVID-19 Case Finding and Contact Tracing (<u>Johns Hopkins Center for Health Security</u>, April 10, 15p). Argues for widespread testing and tracing, with examples from successful countries.

Read more

43. COVID-19 EVIDENCE

COVID-19 Evidence Network to Support Decision-Making (McMaster University, Hamilton, Ontario, n.d., 2p). Seeks to help those supporting decisions by finding the best evidence available, reducing duplication, and coordinating synthesis and tech assessment. Provides a guide to evidence sources, a rapid-evidence model, and seven principles underpinning the "COVID-END" network.

44. COVID RISK INDEX

INFORM Covid-19 Risk Index (European Commission Joint Research Centre, June 6, 29p). An adaptation of the annual INFORM Epidemic Risk Index on 189 countries at risk from health and humanitarian impacts of COVID-19. Countries are assessed on Hazard and Exposure, Vulnerability, and Coping Capacity. Top-rated countries are in northern Europe; highest-risk countries are in central Africa. *Also See:* the 2019 Global Health Security Index (#64), published several months before the COVID-19 pandemic, with essentially the same findings.

Read more

45. COVID DISINFORMATION/"INFODEMIC"

Ad-funded COVID-19 Disinformation: Money, Brands, and Tech (Global Disinformation Index, July 8, 2020, 3p). COVID-19 disinformation has real world harms to public health (claims about magical solutions and disinfectants), specific groups (Chinese cover-up Jewish elite, Aryan immunity) and public order (police state, vaccine mind control, WHO, bioweapons).

Read more

46. *VACCINE ALLOCATION

Interim Framework for COVID-19 Vaccine Allocation and Distribution in the United States (Eric Toner and 17 others, Johns Hopkins Center for Health Security, August 19, 38p + 3p Executive Summary). The COVID-19 pandemic will continue for the foreseeable future, but widespread vaccination could hasten its end. "At least 165 candidate vaccines...are in development worldwide," and there is hope that one or more will soon be shown to be sufficiently safe and effective to achieve emergency use authorization. When it is authorized, it will initially be in limited supply. A plan is needed for how to allocate and distribute this limited supply. This report offers an ethics framework for decisions, considering medical risk, public health, equity, economic impact, and logistics.

Read more

47. VACCINE ALLOCATION WORLDWIDE

An Ethical Framework for Global Vaccine Allocation (Ezekiel J. Emanuel & 7 others, *Science*, 11 Sept 2020, 1309-1312). Once effective COVID vaccines are developed, they will be scarce. Allocation among countries raises complex issues among three groups: the COVAX facility led by WHO and GAVI, producers committed to a broad and equitable distribution, and national governments seeking priority. The authors propose a "Fair Priority Model" as a common ethical framework to reduce duplication and waste.

Read more

48. COVID-19 RESEARCH

NIAID Strategic Plan for COVID-19 Research, FY2020-FY2024 (National Institute of Allergy and Infectious Disease, April 22, 10p). NIAID, headed by widely-known Dr. Anthony Fauci, describes four research priorities: improve fundamental knowledge, support development of diagnostics, test therapeutics, and develop safe and effective vaccines.

Read more

49. WASTE MANAGEMENT

COVID-19 Waste Management Factsheets (<u>UN Environment Programme</u>, June 19, 6p). Masks, gloves, gowns, and other protective equipment produced by hospitals, healthcare facilities, and individuals can be infected with the virus, leading to public health risks. Nine 1-2p Factsheets are available.

Read more

50. HUNGER TO INCREASE.

COVID-19: Potential Impact on the World's Poorest People (<u>UN World Food Programme</u>, April 2020, 13p). Warns that "the depth and breadth of hunger will increase worldwide," due to disruption of food supply chains, loss of income, and the locust plague in Northeast Africa. **Read more**

51. FOOD SECURITY

Policy Brief: The Impact of COVID-19 on Food Security and Nutrition (United Nations, June 2020, 23p). Before the pandemic, >820 million people were identified as chronically food insecure, with 135 million people categorized as crisis level or worse. That number could nearly double by the end of 2020. Moreover, as of late May, "368 million school children were missing out on daily school meals on which they depend."

Read more

52. SUB-SAHARA AFRICA.

The Economic Impact of COVID-19 Lockdowns in Sub-Saharan Africa (International Growth Centre, May 2020, 17p). Lockdowns are likely to make the savings of about 30% of the population essentially vanish, removing all resilience capacity to future shocks. Poor performance of COVID social protection programs suggests that expansion will do little to mitigate impacts.

53. MIGRATION PERSPECTIVES

COVID-19 Crisis Through a Migration Lens (World Bank Group and KNOMAD, Migration and Development Brief 32, April 2020, 37p). The economic crisis induced by COVID-19 could be long, deep, and pervasive for migration. Lockdowns, travel bans, and social distancing have reduced economic activities. Migrants face the risk of contagion, xenophobic discriminatory treatment, and loss of health insurance coverage, wages, and employment. Migrant remittances, expected to drop by around 20% in 2020 to \$445b, provide a lifeline to poor households in many countries. Foreign direct investment could fall even more, by 35%. The report describes regional trends in migration and remittance flows for six world regions.

54. INFRASTRUCTURE PERSPECTIVES

COVID-19's Impacts on America's Infrastructure (American Society of Civil Engineers, May 2020, 14p). The US has been underinvesting in infrastructure for decades, and "the COVID-19 pandemic has made a difficult situation worse". Many US infrastructure systems are supported by usergenerated revenue, but airports are now virtually empty, commuters are staying off roads and away from transit, and municipal and state budgets are stressed under unprecedented demands, with less support for parks, schools, etc. Infrastructure investment should be a centerpiece of the immediate response and long-term economic recovery.

55. COVID AND OTHER RISKS

Global Catastrophic Risks 2020 (Global Challenges Foundation, July 13, 54p). The Annual Report states that COVID-19 has "catapulted catastrophic risks and their governance into the global consciousness...If ever there was an argument for enhanced global cooperation, this is it." But there is a serious risk that attention to climate issues will dramatically decline in the face of the acute consequences of the pandemic. Or this crisis could be a turning point, giving rise to a greener future as many countries re-build economies towards sustainable modes of production. Succinct overviews are provided here not only on pandemics, but catastrophic climate change, ecological collapse, weapons of mass destruction, an asteroid impact, a supervolcanic eruption, and artificial intelligence, notably autonomous weapons.

56. GENDER PERSPECTIVES.

COVID-19: A Gender Lens. Protecting Sexual and Reproductive Health and Rights, and Promoting Gender Equality (<u>UNFPA</u> Technical Brief, March 2020, 8p). Warns that pandemics will worsen existing inequalities for women, girls, and other marginalized groups, especially because women are 70% of the vulnerable health and social sector workforce.

Read more

VI. LARGE GROUP AGENDAS

57. *EU RECOVERY PLAN

Recovery Plan for Europe (European Commission, May 26/July 21, 7p). On May 26, the EU proposed a major recovery plan to help repair the economic and social damage by the COVID pandemic, kick-start European recovery, and protect and create jobs. On July 21, EU leaders agreed on the plan and the financial framework for 2021-2027 to harness the full potential of the EU budget, "laying foundations for a modern and more sustainable Europe."

Read more

58. SOLUTIONS FOR CITIES

COVID-19 Rapid Response Solutions for Cities Report (SDSN Youth, August 26, 41p). During the month of May, Local Pathway Fellows sponsored by the Sustainable Development Solutions Network worked on proposed solutions for urban challenges resulting from COVID. Each of the 20 solutions was developed by a group of 3-8 fellows from different cities around the world. Topics include shutdowns or decreased services on mass transit, sanitation among homeless populations, collection of increased biomedical waste (see #49), safe resumption of public spaces for recreation, etc.

59. *GLOBAL MAYORS RECOVERY TASK FORCE

C40 Cities Mayors' Agenda for a Green and Just Recovery (Global Mayors COVID-19 Recovery Task Force, July 15, 2020, 43p). COVID has caused immense suffering in our cities, exacerbating a wider social and economic crisis that has wiped out 400 million full-time jobs in the second quarter of 2020. It has exposed the stark inequality in our cities and our world, and laid bare the need "to improve resilience, strengthen data-driven government, and revive multilateralism." Climate breakdown and the breach of other planetary boundaries threaten to be even more severe. "We must forge a new normal."

Read more

60. *URGENT GLOBAL ACTIONS

A World In Disorder: Global Preparedness Monitoring Board Annual Report 2020

(GPMB c/o World Health Organization, Sept 2020, 51p). The second report of GPMB, stating that "COVID-19 has taken advantage of a world in disorder," the pandemic is "far from over," the "lack of leadership is exacerbating the pandemic," and "it is well past time to act." Describes six Lessons Learned from COVID-19 and five Urgent Actions to strengthen the current response. Read More

61. HEALTHY RECOVERY.

In Support of a Healthy Recovery (<u>Healthy Recovery.net</u>, May 26, 9p). A letter to G20 leaders and their chief scientific/medical advisors, supported by 350 organizations (such as the World Medical Association) and >4,500 individual health professionals from 90 different countries. Calls for adequate investments in public health and preparedness, a healthier society that addresses climate change and pollution, and healthy cities.

62. WOMEN'S APPEAL.

Human Security for Public Health, Peace and Sustainable Development (Parliamentarians for Nuclear Non-Proliferation and Disarmament, Women Legislator's Lobby, and World Future Council, May 24, 7p). A "global women's appeal" on International Women's Day, expressing deep concern about impacts of the COVID-19 pandemic and existential treats to humanity and the environment from climate change and nuclear weapons. Calls for a substantial cut to the global military budget to better fund the UN and its SDGs. The world has become better united to combat COVID-19; "let us build on that unity and be torchbearers for a better world embracing human security.

63. REWRITING ECONOMIC RULES.

Life After COVID-19: Decommodify Work, Democratise the Workplace (*The Wire*, May 15, Op-Ed). More than 3,000 researchers from 600 universities issue an urgent call to heed the lessons of the pandemic and rewrite the rules or our economic life. This Op-Ed was published in 33 "leading media outlets around the world," including *The Guardian* and *The Boston Globe*.

VII. PRE-COVID-19 WARNINGS

64. *HEALTH SECURITY INDEX.

2019 Global Health Security Index (Nuclear Threat Initiative, Johns Hopkins Center for Health Security, and The Economist Intelligence Unit, Oct 2019, 316p). "Intended as a key resource in the face of increasing risks of high-consequence and globally catastrophic biological events." Provides 195 country profiles and ranks countries across six categories and 34 indicators, concluding that "national health security is fundamentally weak around the world" and "no country is fully prepared."

Note: This early warning, along with many others, was obviously ignored. It proved to be largely on target, but understated by ignoring the importance of national political leadership. **Read more**

65. PREVENTING PANDEMICS.

Global Monitoring of Disease Outbreak Preparedness: Preventing the Next Pandemic (Harvard Global Health Institute, 2018, 109p). On strengthening public health capacity, innovations in epidemic preparedness, rapid sharing of data, reinforcing risk analysis and incentives for action, strengthening global mechanisms, achieving sustained monitoring, and stakeholder participation.

66. CLIMATE AND PANDEMICS.

Pandemics in a Changing Climate: Evolving Risk and the Global Response (Swiss Re, Zurich, 2006, 27p). Prepared by students at Johns Hopkins University, succinctly warning that "Pandemic outbreaks can be economically devastating," and that serious disease outbreaks are becoming more common due to population growth, globalization, increased mobility, and environmental and climate change acting as a "risk multiplier" by driving changes to vector ecology.

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