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MUSLIM INTERSCHOLASTIC TOURNAMENT

THE CHARACTER OF COMMUNITY: HEALING TOGETHER AS ONE

MIST BOWL: TOPIC V

THE PANDEMIC COVID–19

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Regional testable material will be based upon:

National testable material will be based upon the above information and:

Coronavirus, COVID-19

https://my.clevelandclinic.org/health/diseases/21214-coronavirus-covid-19

What is coronavirus?

Coronaviruses are a family of viruses that can cause respiratory illness in humans. They get their name, "corona," from the many crown-like spikes on the surface of the virus. Severe acute respiratory syndrome (SARS), Middle East respiratory syndrome (MERS) and the common cold are examples of coronaviruses that cause illness in humans.

The new strain of coronavirus, COVID-19, was first reported in Wuhan, China in December 2019. The virus has since spread to all continents (except Antarctica).

How many people are infected with COVID-19?

The number of people infected changes daily. Organizations that collect this information, including the World Health Organization (WHO) and the Centers for Disease Control and Prevention (CDC), are gathering information and continuously learning more about this outbreak. As of this writing (02/1/2021), more than 103,000,000 people in the world have been infected. Over 2,200,000 people have died. Some 192 countries and territories on all continents (except Antarctica) have now reported cases of COVID-19. The U.S. has the highest number of cases, with more than 26,000,000 people infected and over 440,000 deaths. India has more than 10,700,000 cases and 154,000 deaths; Brazil has over 9,200,000 cases; Russia and England have over 3,800,000 cases; France has over 3,200,000 cases; Spain, Turkey and Italy have over 2,400,000 cases; Germany has more than 2,200,000 cases; Columbia has 2,000,000 cases; Argentina has over 1,900,000 cases; and Mexico has more than 1,800,000 cases. For the latest statistics, see the World Health Organization's situation reports and Johns Hopkins Coronavirus Resource Center map references at end of article.

How does the new coronavirus (COVID-19) spread from person to person?

COVID-19 is likely spread:

- When the virus travels in respiratory droplets when an infected person coughs, sneezes, talks, sings or breathes near you (within six feet). This is thought to be the main way COVID-19 is spread.
- When the virus travels in small respiratory droplets that linger in the air for minutes to hours from an infected person who is more than six feet away or has

since left the space. This method of spread is more likely to occur in enclosed spaces with poor ventilation.
- From close contact (touching, shaking hands) with an infected person.
- By touching surfaces that the virus has landed on, then touching your eyes, mouth, or nose before washing your hands. (Not thought to spread easily by this method.)

COVID-19 enters your body through your mouth, nose or eyes (directly from the airborne droplets or from transfer of the virus from your hands to your face). The virus travels to the back of your nasal passages and mucous membrane in the back of your throat. It attaches to cells there, begins to multiply and moves into lung tissue. From there, the virus can spread to other body tissues.

Governments, health agencies, researchers and healthcare providers are all working together to develop policies and procedures to limit the spread of this virus both globally and from individual to individual.

How long is a person infected with COVID-19 considered contagious?

Researchers are still learning about COVID-19. What IS known is that people infected with COVID-19 can spread the virus to others before experiencing symptoms themselves (while people are still "asymptomatic"). Once you do have symptoms, the CDC says you are no longer contagious 10 days after your symptoms began.

Until everything about COVID-19 is fully understood, the best advice from healthcare providers to remain safe is to:

- Stay six feet away from others whenever possible.
- Wear a cloth mask that covers your mouth and nose when around others.
- Wash your hands often. If soap is not available, use a hand sanitizer that contains at least 60% alcohol.
- Avoid crowded indoor spaces. Bring in outdoor air as much as possible.
- Stay self-isolated at home if you are feeling ill with symptoms that could be COVID-19 or have a positive test for COVID-19.
- Clean and disinfect frequently touched surfaces.

How soon after becoming infected with COVID-19 will I develop symptoms?

This so-called "incubation period," the time between becoming infected and showing symptoms, can range from two to 14 days. The average time before experiencing

symptoms is five days. Symptoms can range in severity from very mild to severe. In about 80% of patients, COVID-19 causes only mild symptoms.

Who is most at risk for getting COVID-19?

Persons at greatest risk of contracting COVID-19 are:

- People who live in or have recently traveled to any area with ongoing active spread.
- People who have had close contact with a person who has a laboratory-confirmed or a suspected case of the COVID-19 virus. Close contact is defined as being within six feet of an infected person for a *cumulative* total of 15 minutes or more over a 24-hour period.
- People over age 60 who have pre-existing medical conditions or a weakened immune system.

Have certain ethnic groups been harder hit by COVID-19?

Yes. Many researchers have been analyzing data across the country and in some large cities, looking at number of confirmed cases and deaths based on race and ethnicity and related factors. What they found is that African Americans and the Latino-Hispanic populations have disproportionate higher rates of hospitalizations and deaths due to COVID-19.

There are several reasons why researchers suspect these populations are more affected. They believe these ethnic groups tend to:

- Live in more crowded housing situations -- living in densely populated areas and in multi-generational households -- making social distancing practices difficult.
- Work in consumer-facing service industries and are more likely to use public transportation to get to work, putting them at risk for increased exposure to COVID-19.
- Be at increased risk of severe illness if they get COVID-19 because of higher rates of existing medical conditions, such as high blood pressure, diabetes, obesity, asthma, and heart, liver and kidney diseases.
- Be more likely to be uninsured or lack a consistent care source, which limits access to COVID-19 testing and treatment services.

Researchers are still studying other factors that may make ethnic groups more susceptible to negative COVID-19 outcomes, including genetics and possible

differences in lung tissue as well as socioeconomic status and the social environment and systems.

If I recover from a case of COVID-19, can I be infected again?

The U.S. Centers for Disease Control says that "the immune response to COVID-19 is not yet understood." Because this is a new strain of coronavirus, scientists are still collecting information and research on the virus so it's still too early to know if you can get it a second time if you've had it once.

In a related theme, scientists are seeing a subset of patients who have COVID-19 and have symptoms that continue off and on for weeks and even months. These patients are called coronavirus long haulers. Scientists continue to follow these patients.

Where do coronaviruses come from?

Coronaviruses are often found in bats, cats and camels. The viruses live in but do not infect the animals. Sometimes these viruses then spread to different animal species. The viruses may change (mutate) as they transfer to other species. Eventually, the virus can jump from animal species and begins to infect humans. In the case of COVID-19, the first people infected in Wuhan, China are thought to have contracted the virus at a food market that sold meat, fish and live animals – but they are still investigating. Although researchers don't know exactly how people were infected, they already have evidence that the virus can be spread directly from person to person through close contact.

SYMPTOMS AND CAUSES

What are the symptoms of the novel coronavirus (COVID-19) infection?

The CDC says you may have coronavirus if you have these symptoms or combination of symptoms:

- Fever or chills.
- Cough.
- Shortness of breath or difficulty breathing.
- Tiredness.
- Muscle or body aches.
- Headaches.
- New loss of taste or smell.

- Sore throat.
- Congestion or runny nose.
- Nausea or vomiting.
- Diarrhea.

Additional symptoms are possible.

Symptoms may appear between two and 14 days after exposure to the virus. Children have similar, but usually milder, symptoms than adults. Older adults and people who have severe underlying medical conditions like heart or lung disease or diabetes are at higher risk of more serious complication from COVID-19.

Call 911 and get immediate medical attention if you have these warning signs:

- Trouble breathing.
- Persistent pain or pressure in your chest.
- New confusion.
- Inability to arouse (wake up from sleep).
- Bluish lips or face.

This list does not include all possible symptoms. Contact your healthcare provider if you are concerned you may coronavirus, have other symptoms or have any severe symptoms.

DIAGNOSIS AND TESTS

How is coronavirus diagnosed?

COVID-19 is diagnosed with a laboratory test. Your healthcare provider may collect a sample of your saliva or swab your nose or throat to send for testing.

When should I be tested for the coronavirus (COVID-19)?

Call your healthcare provider if you:

- Feel sick with fever, cough or have difficulty breathing.
- Have been in close contact with a person known or suspected to have COVID-19.

Your healthcare provider will ask you questions about your symptoms. Your healthcare provider will tell you if you need to be tested for the novel coronavirus, COVID-19 and where to go to be tested.

If I have a positive test for coronavirus, how long should I self-isolate?

According to current CDC recommendations, you should self-isolate until you've met all three of the following criteria:

- It's been 10 days since your symptoms first appeared.
- You've not had a fever for 24 hours and you've not used fever-lowing medications during this time.
- Your COVID-19 symptoms have improved.

While at home, ideally self-isolate within separate room of your home if possible to limit interaction with other family members. If you can't stay 100% isolated in a separate room, stay six feet away from others and wear a cloth mask, wash your hands often/family members wash hands often, and frequently disinfect commonly touched surfaces and shared areas.

You don't need to be retested to be around others outside your home. However, since everyone and every case is unique, follow your healthcare provider's recommendations for testing.

If you have a weakened immune system or have had a severe case of COVID-19, the CDC's criteria do not apply to you. You may need to stay home for up to 20 days after your symptoms first appeared. Talk with your healthcare provider about your situation.

How long do I need to isolate myself if I've been around a person with COVID-19?

According to the CDC, if you've been in close contact with a person who has COVID-19, your safest strategy is to stay home for 14 days after you've last seen this person.

Recently, the CDC updated its guidance. Alternatives to the 14-day quarantine are:

- End your quarantine after 10 days without a test if you've had no symptoms at any time over these 10 days.
- End your quarantine after seven days if you've had no symptoms at any time over these seven days and have tested negative for COVID-19. Your COVID-19 test should be obtained no earlier than day 5 of your quarantine. If you get a negative test result back before day 7, stay isolated for the full seven days. If you don't get results back by day 7, continue to quarantine until you do, up to day 10.

Is it possible to test negative for COVID-19 and still be infected with the virus?

Yes. This is possible. There are several reasons for "false negative" test results -- meaning you really DO have COVID-19 although the test result says you don't.

Reasons for a false negative COVID-19 test result include:

- You were tested too early in the course of illness. The virus hasn't multiplied in your body to the level that it could be detected by the test.
- A good specimen was not obtained. The healthcare personnel may not have swabbed deeply enough in the nasal cavity to collect a good sample. There could also be handling errors and transportation errors, as the sample must be transported to a lab to be tested.
- The COVID-19 test itself was not sensitive or specific enough to detect COVID-19. "Sensitivity" refers to the ability of the test to detect the smallest amount of virus. "Specificity" refers to the ability of the test to detect only the COVID-19 virus and not other similar viruses. Many different commercial and hospital laboratories have developed tests for COVID-19. All must meet standards, but no test is 100% sensitive and 100% specific for COVID-19. This is why there is always a possibility of "false negative" and "false positive" tests.

If you think you might have COVID-19 even if your test is negative, it's best to follow the current CDC recommendation. Stay home for 10 days if you think you are sick. Stay six feet away from others ("social distancing") and wear a cloth mask. Contact your healthcare provider if your symptoms worsen. Contact your healthcare provider when your symptoms improve – don't decide on your own if it's safe for you to be around others.

MANAGEMENT AND TREATMENT

What medications are currently approved to treat COVID-19?

Currently, only one drug has received Food and Drug Administration (FDA) approval. Remdesivir (Veklury®) is approved to treat hospitalized patients with COVID-19 infection.

What treatments do people receive if they have COVID-19?

One authoritative organization – The National Institutes of Health COVID-19 Treatment Guidelines Panel – recommends the following treatments based on the severity of COVID-19.

If you're not in the hospital or don't need supplemental oxygen:

- No specific antiviral or immunotherapy is recommended.

If you're in the hospital:

- You may be given IV remdesivir with or without the oral (by mouth) corticosteroid dexamethasone (or other steroid) or dexamethasone alone if remdesivir can't be used.
- Depending on the severity of your COVID infection, you may need:
  - Supplemental oxygen (given through tubing inserted into your nostrils).
  - Mechanical ventilation (receive oxygen through a tube inserted down your trachea). You are given medications to keep you comfortable and sleepy as long as you're receiving oxygen through a ventilator.
  - Extracorporeal membrane oxygenation (ECMO). You continue to receive treatment while a machine pumps your blood outside your body. It takes over the function of your body's lungs and heart.

The National Institutes of Health COVID-19 Treatment Guidelines Panel recommends AGAINST the following treatments:

- Chloroquine or hydroxychloroquine with or without azithromycin for the treatment of hospitalized and non-hospitalized patients (except in a clinical trial).
- Lopinavir/ritonavir or other HIV protease inhibitors (except in a clinical trial).
- Ivermectin (except in a clinical trial).

What other medications have been given FDA emergency use approval for treating COVID-19?

The FDA granted emergency use authorization (EUA) for the investigational monoclonal antibody bamlanivimab for the treatment of mild-to-moderate COVID-19 infection in adults and children aged 12 and older who weigh 88 pounds (40 kg) who are not in the hospital. Patients must be at high risk of worsening to severe status and/or need hospitalization. The drug is administered through your vein (IV).

EUA status has also been granted for the combination of two monoclonal antibody drugs -- casirivimab and imdevimab -- in adults and children aged 12 and older who

weigh 88 pounds (40kg). The combination is recommended for use in patients with mild-to-moderate COVID-19 who are at high risk of worsening to severe status.

The FDA has also granted EUA for convalescent plasma to treat COVID-19. This is blood donated from people who have a confirmed case of COVID-19 and have recovered.

What vaccines are in use or in late-stage development to prevent COVID-19?

The Food and Drug Administration has granted Emergency Use Authorization for two coronavirus vaccines. One created by Pfizer and BioNTech and a second created by Moderna. Initial doses of the vaccine were distributed in the United States (and worldwide) beginning in December 2020. The Pfizer vaccine is administered as two doses, 21 days apart and was authorized for use in those age 16 and older. The Moderna vaccine is administered as two doses, 28 days apart and was authorized for use in those age 18 and older. Both vaccines have shown similar efficacy levels of near 95%.

More than 50 vaccines continued to being studied to prevent COVID-19. They are now in late-stage (phase three) development and enrolling participants in the United States. Information on some of these vaccines includes:

- Johnson & Johnson's one-dose vaccine trial has enrolled 60,000 people.
- AstraZeneca and the University of Oxford are testing their two-dose vaccine in 30,000 trial enrollees. They are reporting that their vaccine is up to 90% effective.
- Novavax has a two-dose vaccine being tested in a trial enrolling 40,000 people.
- Janssen's vaccine candidate is enrolling 60,000 participants in its single-dose trial.

For more information on the nearly 4,000 clinical trials of medications and vaccines under development anywhere in the world, visit clinicaltrials.gov.

If I've tested positive for COVID-19 and do not need hospitalization, what can I do to best manage my symptoms at home?

If you have mild COVID-19 symptoms, you will likely need to manage your health at home. Follow these tips:

- **If you have a fever,** drink plenty of fluids (water is best), get lots of rest, take acetaminophen (Tylenol®).

- **If you have a cough,** lie on your side or sit up (don't lie on your back). Add a teaspoon of honey to your hot tea or hot water (don't give honey to children under one year old). Gargle with salt water. Call your healthcare provider or pharmacist for advice about over-the-counter, comfort care product, like cough suppressants, cough drops/lozenges. Have a friend or family member pick up any needed medicines. You must stay at home.
- **If you are anxious about your breathing, try to relax.** Take slow deep breaths in through your nose and slowly release through pursed lips (like you're are slowly blowing out a candle). **If you are having trouble breathing, call 911.**

If you have a mild case of COVID-19, you should start to feel better in a few days to a week. If you think your symptoms are getting worse, call your healthcare provider.

PREVENTION

How can I prevent getting the novel coronavirus (COVID-19)?

Right now, the best defense to prevent getting COVID-19 is to follow some of the same steps you would take to prevent getting other viruses, such as the common cold or the flu.

- Wash your hands for at least 20 seconds— especially before eating and preparing food, after using the bathroom, after wiping your nose, and after coming in contact with someone who has a cold.
- Avoid touching your eyes, nose and mouth to prevent the spread of viruses from your hands.
- Cover your mouth and nose with a tissue when sneezing and coughing or sneeze and cough into your sleeve. Throw the tissue in the trash. Wash your hands afterward. Never cough or sneeze into your hands!
- Avoid close contact (within six feet) with those who have coughs, colds or are sick. Stay home if you are sick.
- If you are prone to sickness or have a weakened immune system, stay away from large crowds of people. Follow the directions of your healthcare authorities especially during outbreaks.
- Clean frequently used surfaces (such as doorknobs and counter tops) with a virus-killing disinfectant.
- Use hand sanitizers that contain at least 60% alcohol if soap and water are not available.
- Greet people with a friendly gesture instead of shaking hands.

- Get enough sleep, eat a healthy diet, drink plenty of liquids and exercise if you are able. These steps will strengthen your immune system and enable you to fight off infections easier.

Should I wear a face mask?

The CDC recommends wearing a cloth face coverings in public, especially in places where it's hard to maintain at least six feet of distance between yourself and another person. Face masks protect both you and the people around you. Cloth face masks are being recommended because we now know individuals with COVID-19 could have mild or no symptoms, while still spreading the virus to others.

The cloth face coverings recommended by the CDC are not surgical masks or N-95 respirators, which should be reserved for healthcare workers and first responders.

The Global Economic Outlook During the COVID-19 Pandemic: A Changed World

https://www.worldbank.org/en/news/feature/2020/06/08/the-global-economic-outlook-during-the-covid-19-pandemic-a-changed-world

The COVID-19 pandemic has spread with alarming speed, infecting millions and bringing economic activity to a near-standstill as countries imposed tight restrictions on movement to halt the spread of the virus. As the health and human toll grows, the economic damage is already evident and represents the largest economic shock the world has experienced in decades.

The June 2020 **Global Economic Prospects** describes both the immediate and near-term outlook for the impact of the pandemic and the long-term damage it has dealt to prospects for growth. The baseline forecast envisions a 5.2 percent contraction in global GDP in 2020, using market exchange rate weights—the deepest global recession in decades, despite the extraordinary efforts of governments to counter the downturn with fiscal and monetary policy support. Over the longer horizon, the deep recessions triggered by the pandemic are expected to leave lasting scars through lower investment, an erosion of human capital through lost work and schooling, and fragmentation of global trade and supply linkages.

The crisis highlights the need for urgent action to cushion the pandemic's health and economic consequences, protect vulnerable populations, and set the stage for a lasting recovery. For emerging market and developing countries, many of which face daunting vulnerabilities, it is critical to strengthen public health systems, address the challenges posed by informality, and implement reforms that will support strong and sustainable growth once the health crisis abates.

Historic contraction of per capita income

The pandemic is expected to plunge most countries into recession in 2020, with per capita income contracting in the largest fraction of countries globally since 1870.

Advanced economies are projected to shrink 7 percent. That weakness will spill over to the outlook for emerging market and developing economies, who are forecast to contract by 2.5 percent as they cope with their own domestic outbreaks of the virus. This would represent the weakest showing by this group of economies in at least sixty years.

"The crisis highlights the need for urgent action to cushion the pandemic's health and economic consequences, protect vulnerable populations, and set the stage for a lasting recovery."

Most countries are expected to face recessions in 2020

Share of economies in recession, 1871-2021
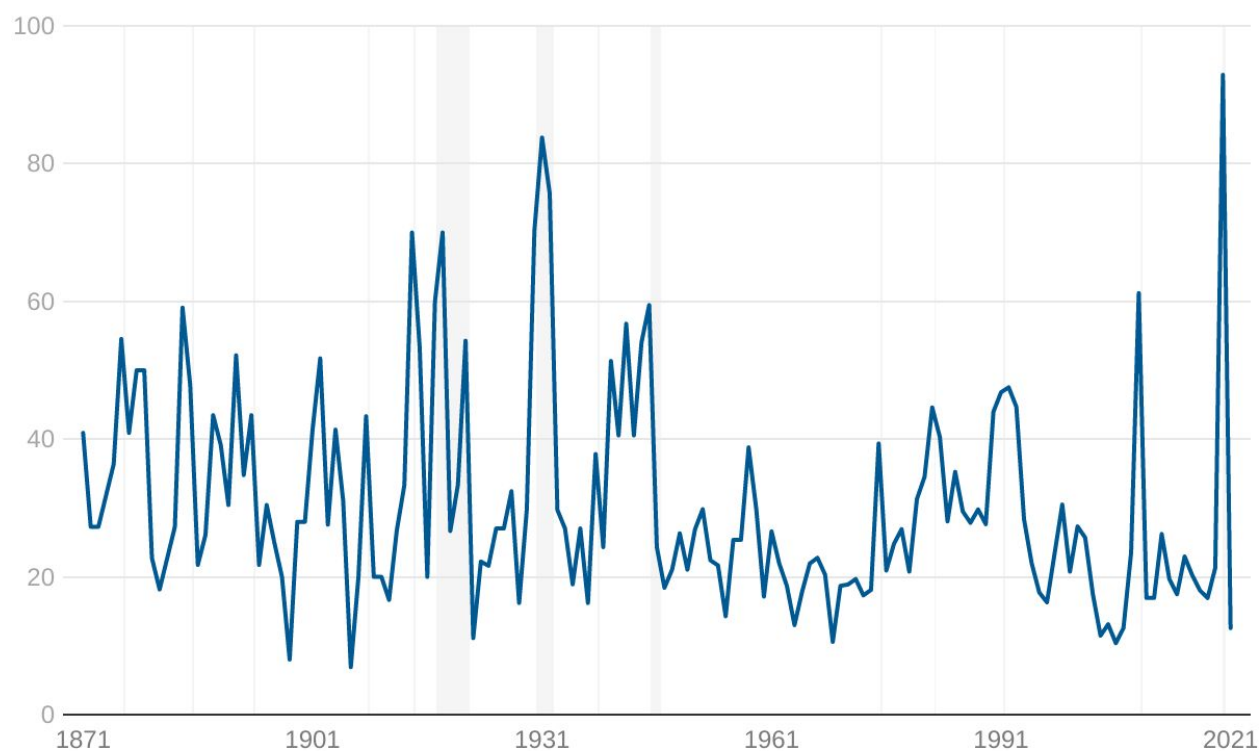
The proportion of economies with an annual contraction in per capita GDP. Shaded areas refer to global recessions. Data for 2020-21 are forecasts.

Source: World Bank

Every region is subject to substantial growth downgrades. East Asia and the Pacific will grow by a scant 0.5%. South Asia will contract by 2.7%, Sub-Saharan Africa by 2.8%, Middle East and North Africa by 4.2%, Europe and Central Asia by 4.7%, and Latin America by 7.2%. These downturns are expected to reverse years of progress toward development goals and tip tens of millions of people back into extreme poverty.

Emerging market and developing economies will be buffeted by economic headwinds from multiple quarters: pressure on weak health care systems, loss of trade and tourism, dwindling remittances, subdued capital flows, and tight financial conditions amid mounting debt. Exporters of energy or industrial commodities will be particularly hard hit. The pandemic and efforts to contain it have triggered an unprecedented collapse in oil demand and a crash in oil prices. Demand for metals and transport-related commodities such as rubber and platinum used for vehicle parts has also tumbled. While agriculture markets are well supplied globally, trade restrictions and supply chain disruptions could yet raise food security issues in some places.

A possibility of even worse outcomes

Even this bleak outlook is subject to great uncertainty and significant downside risks. The forecast assumes that the pandemic recedes in such a way that domestic mitigation measures can be lifted by mid-year in advanced economies and later in developing countries, that adverse global spillovers ease during the second half of 2020, and that widespread financial crises are avoided. This scenario would envision global growth reviving, albeit modestly, to 4.2% in 2021.

However, this view may be optimistic. Should COVID-19 outbreaks persist, should restrictions on movement be extended or reintroduced, or should disruptions to economic activity be prolonged, the recession could be deeper. Businesses might find it hard to service debt, heightened risk aversion could lead to climbing borrowing costs, and bankruptcies and defaults could result in financial crises in many countries. Under this downside scenario, global growth could shrink by almost 8% in 2020.

Looking at the speed with which the crisis has overtaken the global economy may provide a clue to how deep the recession will be. The sharp pace of global growth forecast downgrades points to the possibility of yet further downward revisions and the need for additional action by policymakers in coming months to support economic activity.

The COVID-19 recession has seen the fastest, steepest downgrades in consensus growth projections among all global recessions since 1990

Consensus forecasts of global GDP (percent)

— 1991 — 2009 — 2020
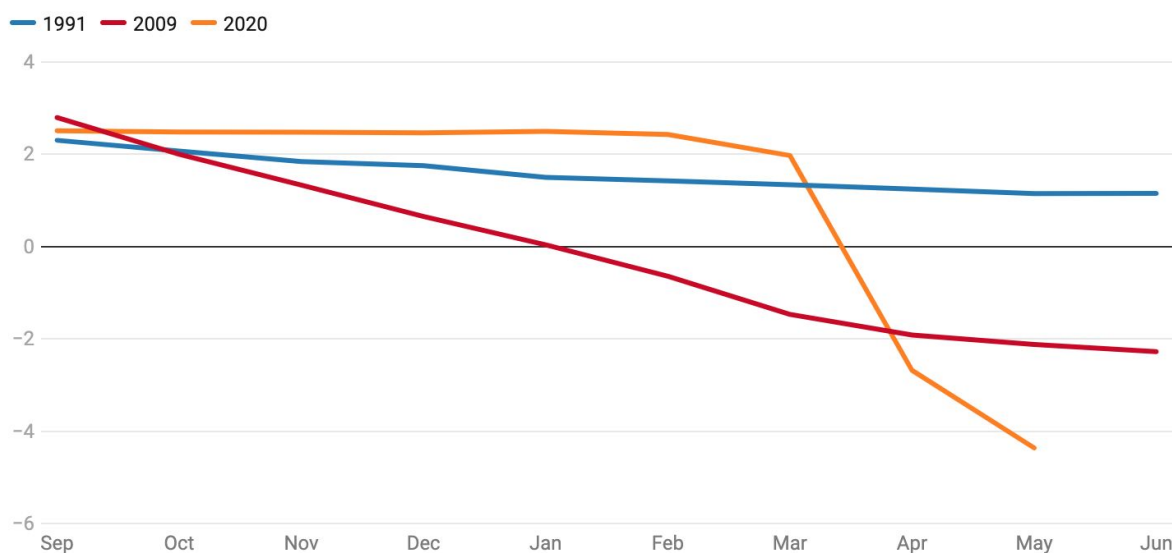
September to December shows forecasts made in the previous year, while January to June shows data for the current year. Data for 1991 are for advanced economies only due to data availability.

Source: Consensus Economics, World Bank

A particularly concerning aspect of the outlook is the humanitarian and economic toll the global recession will take on economies with extensive informal sectors that make up an estimated one-third of the GDP and about 70% of total employment in emerging market and developing economies. Policymakers must consider innovative measures to deliver income support to these workers and credit support to these businesses.

Long-term damage to potential output, productivity growth

The June 2020 *Global Economic Prospects* looks beyond the near-term outlook to what may be lingering repercussions of the deep global recession: setbacks to potential output—the level of output an economy can achieve at full capacity and full employment—and labor productivity. Efforts to contain COVID-19 in emerging and developing economies, including low-income economies with limited health care capacity, could precipitate deeper and longer recessions—exacerbating a multi-decade

trend of slowing potential growth and productivity growth. Many emerging and developing economies were already experiencing weaker growth before this crisis; the shock of COVID-19 now makes the challenges these economies face even harder.

With the recession having deep effects on potential output, reforms that bolster long-term growth prospects will be essential

Cumulative EMDE potential output response after recessions (percent)
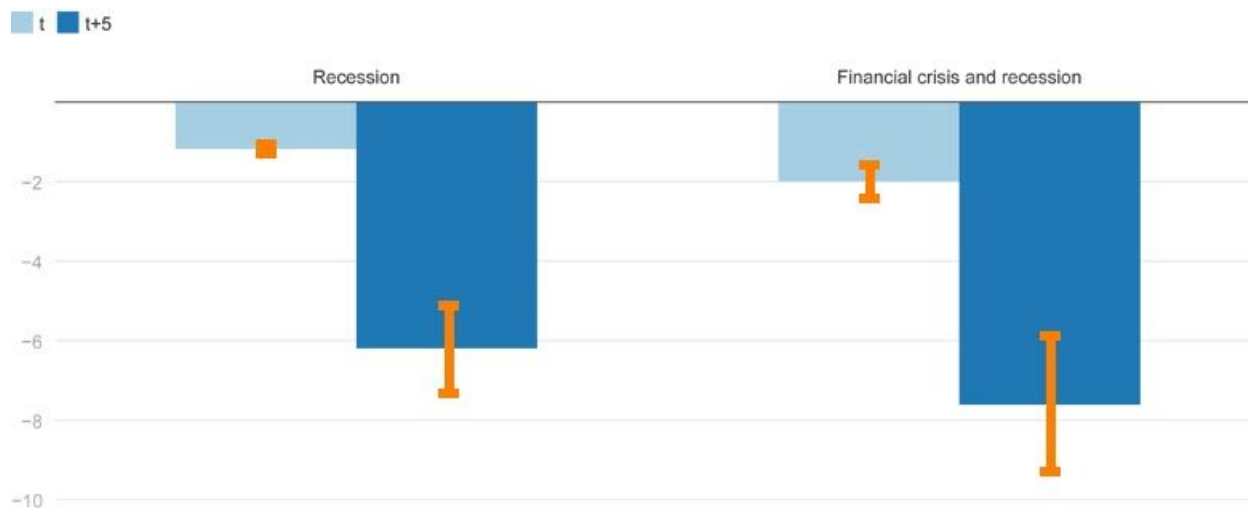
EMDE = Emerging Market and Developing Economies. Data and methodology are detailed in Chapter 3 Box 3.1 and Annex 3.4. Charts show impulse responses for 75 EMDEs from a local projections model. Dependent variable is cumulative slowdown in potential output after a recession or financial crisis. Year t is the year of the event. Bars show coefficient estimates; vertical lines show 90 percent confidence bands.

Source: Ha, Kose and Ohnsorge (2019); World Bank

Another important feature of the current landscape is the historic collapse in oil demand and oil prices. Low oil prices are likely to provide, at best, temporary initial support to growth once restrictions to economic activity are lifted. However, even after demand recovers, adverse impacts on energy exporters may outweigh any benefits to activity in energy importers. Low oil prices offer an opportunity to oil producers to diversify their economies. In addition, the recent oil price plunge may provide further momentum to undertake energy subsidy reforms and deepen them once the immediate health crisis subsides.

In the face of this disquieting outlook, the immediate priority for policymakers is to address the health crisis and contain the short-term economic damage. Over the longer

term, authorities need to undertake comprehensive reform programs to improve the fundamental drivers of economic growth once the crisis lifts.

Policies to rebuild both in the short and long-term entail strengthening health services and putting in place targeted stimulus measures to help reignite growth, including support for the private sector and getting money directly to people. During the mitigation period, countries should focus on sustaining economic activity with support for households, firms and essential services.

Global coordination and cooperation—of the measures needed to slow the spread of the pandemic, and of the economic actions needed to alleviate the economic damage, including international support—provide the greatest chance of achieving public health goals and enabling a robust global recovery.

Impact of COVID-19 on people's livelihoods, their health and our food systems

Joint statement by ILO, FAO, IFAD and WHO

The COVID-19 pandemic has led to a dramatic loss of human life worldwide and presents an unprecedented challenge to public health, food systems and the world of work. The economic and social disruption caused by the pandemic is devastating: tens of millions of people are at risk of falling into extreme poverty, while the number of undernourished people, currently estimated at nearly 690 million, could increase by up to 132 million by the end of the year.

Millions of enterprises face an existential threat. Nearly half of the world's 3.3 billion global workforce are at risk of losing their livelihoods. Informal economy workers are particularly vulnerable because the majority lack social protection and access to quality health care and have lost access to productive assets. Without the means to earn an income during lockdowns, many are unable to feed themselves and their families. For most, no income means no food, or, at best, less food and less nutritious food.

The pandemic has been affecting the entire food system and has laid bare its fragility. Border closures, trade restrictions and confinement measures have been preventing farmers from accessing markets, including for buying inputs and selling their produce, and agricultural workers from harvesting crops, thus disrupting domestic and international food supply chains and reducing access to healthy, safe and diverse diets. The pandemic has decimated jobs and placed millions of livelihoods at risk. As breadwinners lose jobs, fall ill and die, the food security and nutrition of millions of women and men are under threat, with those in low-income countries, particularly the

most marginalized populations, which include small-scale farmers and indigenous peoples, being hardest hit.

Millions of agricultural workers – waged and self-employed – while feeding the world, regularly face high levels of working poverty, malnutrition and poor health, and suffer from a lack of safety and labour protection as well as other types of abuse. With low and irregular incomes and a lack of social support, many of them are spurred to continue working, often in unsafe conditions, thus exposing themselves and their families to additional risks. Further, when experiencing income losses, they may resort to negative coping strategies, such as distress sale of assets, predatory loans or child labour. Migrant agricultural workers are particularly vulnerable, because they face risks in their transport, working and living conditions and struggle to access support measures put in place by governments. Guaranteeing the safety and health of all agri-food workers – from primary producers to those involved in food processing, transport and retail, including street food vendors – as well as better incomes and protection, will be critical to saving lives and protecting public health, people's livelihoods and food security.

In the COVID-19 crisis food security, public health, and employment and labour issues, in particular workers' health and safety, converge. Adhering to workplace safety and health practices and ensuring access to decent work and the protection of labour rights in all industries will be crucial in addressing the human dimension of the crisis. Immediate and purposeful action to save lives and livelihoods should include extending social protection towards universal health coverage and income support for those most affected. These include workers in the informal economy and in poorly protected and low-paid jobs, including youth, older workers, and migrants. Particular attention must be paid to the situation of women, who are over-represented in low-paid jobs and care roles. Different forms of support are key, including cash transfers, child allowances and healthy school meals, shelter and food relief initiatives, support for employment retention and recovery, and financial relief for businesses, including micro, small and

medium-sized enterprises. In designing and implementing such measures it is essential that governments work closely with employers and workers.

Countries dealing with existing humanitarian crises or emergencies are particularly exposed to the effects of COVID-19. Responding swiftly to the pandemic, while ensuring that humanitarian and recovery assistance reaches those most in need, is critical.

Now is the time for global solidarity and support, especially with the most vulnerable in our societies, particularly in the emerging and developing world. Only together can we overcome the intertwined health and social and economic impacts of the pandemic and prevent its escalation into a protracted humanitarian and food security catastrophe, with the potential loss of already achieved development gains.

We must recognize this opportunity to build back better, as noted in the Policy Brief issued by the United Nations Secretary-General. We are committed to pooling our expertise and experience to support countries in their crisis response measures and efforts to achieve the Sustainable Development Goals. We need to develop long-term sustainable strategies to address the challenges facing the health and agri-food sectors. Priority should be given to addressing underlying food security and malnutrition challenges, tackling rural poverty, in particular through more and better jobs in the rural economy, extending social protection to all, facilitating safe migration pathways and promoting the formalization of the informal economy.

We must rethink the future of our environment and tackle climate change and environmental degradation with ambition and urgency. Only then can we protect the health, livelihoods, food security and nutrition of all people, and ensure that our 'new normal' is a better one.

Racial Disparities in COVID-19: Key Findings from Available Data and Analysis

By: Samantha Artiga, Bradley Corallo, and Olivia Pham

https://www.kff.org/racial-equity-and-health-policy/issue-brief/racial-disparities-covid-19-key-findings-available-data-analysis/

Over the course of the COVID-19 pandemic, there has been a growing focus on its disproportionate impacts on people of color, particularly as availability of data to understand racial disparities has increased. This brief summarizes key findings from data and analyses examining COVID-19 related cases, deaths, hospitalizations, and testing by race and ethnicity as of early August 2020 to provide increased insight into these disparities. Key findings include the following:

Multiple analyses of available federal, state, and local data show that people of color are experiencing a disproportionate burden of COVID-19 cases and deaths. They show particularly large disparities in cases and deaths for Black and American Indian and Alaska Native (AIAN) people and widespread disparities in cases among Hispanic people compared to their White counterparts. For example, KFF analysis of state reported data showed that, as of August 3, 2020, Black individuals accounted for more cases and deaths relative to their share of the population in 30 of 49 states reporting cases and 34 of 44 states reporting deaths. Other analysis of state-reported data finds that, as of August 4, the COVID-19 related death rate among Black people was over twice as high as the rate for White people, while the mortality rate for AIAN people was nearly two times that of White people. Data also reveal disparities for Asian and Native Hawaiian and Pacific Islander (NHOPI) individuals in certain areas and show a sharp, recent rise in mortality rates for NHOPI and Hispanic people. Analyses further find that disparities in COVID-19 related deaths persist across age groups and that people of color experience more deaths among younger people relative to White individuals. There is limited data and research to understand of impacts for subgroups, such as immigrants, who may be at increased risk.

Data show that Black, Hispanic, and AIAN people are at increased risk of hospitalization due to COVID-19. For example, data from Coronavirus Disease 2019-Associated Hospitalization Surveillance Network (COVID-NET) show that, from March through July 18, 2020, age-adjusted hospitalization rates due to COVID-19 for Black, Hispanic, and AIAN people were roughly five times higher than that of White people. Several studies using health system data also point to a higher risk of hospitalization for Black and Hispanic patients. Reflecting these higher hospitalization rates, analyses show that people of color make up a disproportionate share of COVID-19 hospitalizations relative to their share of the population or total hospital visits.

Studies find racial/ethnic disparities in COVID-19 among Medicare beneficiaries, nursing home facilities, pregnant women, and children. Preliminary Medicare COVID-19 data show that Black, Hispanic, and AIAN Medicare beneficiaries had higher rates of infection and hospitalization compared to White beneficiaries. Analysis finds that nursing homes where a higher share of residents are people of color are more likely to report a COVID-19 case. Studies also find disproportionate shares of infection among Hispanic and Black pregnant women and a higher risk of hospitalization among Black and Hispanic children.

Data to understand variation in testing by race/ethnicity remains very limited but suggest people of color may face increased barriers to testing. Very few states report testing data by race/ethnicity. Data on testing within community health centers analyzed by KFF show that people of color represented more than half of all people tested (57%) and confirmed cases (56%) at health centers, and that Hispanic patients made up a higher share of positive tests compared to their share of total tested patients. Analyses suggest that testing sites in and near predominantly Black and Hispanic neighborhoods are likely to face greater demand than those near predominantly White areas, which could contribute to longer wait times, and the share of people of color in an area is associated with an increase in travel time to a testing

site. One study also found that, in New York City, more tests were performed in neighborhoods with a higher share of White residents, while the highest shares of positive tests were in neighborhoods with more people of color and lower socioeconomic measures. Reporting on testing site locations in Texas suggests that testing sites are disproportionately located in areas with larger shares of White residents.

Together, these data show that people of color are bearing a disproportionate burden of COVID-19 cases, deaths, and hospitalizations and that they may face increased barriers to access testing. Other analyses also suggest that the COVID-19 pandemic is taking a larger economic toll on people of color. These disparities in COVID-19 reflect and compound longstanding underlying social, economic, and health inequities that stem from structural and systemic barriers across sectors, including racism and discrimination. For example, prior to the pandemic, people of color had higher rates of health conditions, were more likely to be uninsured and face barriers to accessing health care, and were more likely to have lower incomes and face financial challenges. These underlying disparities put people of color at increased risk for exposure to the virus, experiencing serious illness if they are infected, and facing barriers to accessing testing and treatment.

The health and economic impacts of COVID-19 could further widen racial disparities at a time when there is a growing focus on and call for racial justice and health equity. Overall, the findings highlight the importance of considering how COVID-19 relief and response efforts will address inequities, including in decisions related to distribution of treatments and vaccines once they become available. Prioritizing equity will be key for addressing the current gaps in COVID-19 and health care more broadly and preventing widening of disparities in the future.

An Education System, Divided: How Internet Inequity Persisted Through 4 Presidents and Left Schools Unprepared for the Pandemic

By: Kevin Mahnken

https://www.the74million.org/article/an-education-system-divided-how-internet-inequity-persisted-through-4-presidents-and-left-schools-unprepared-for-the-pandemic/

As COVID-19 shut down its schools, Hamilton County, Tennessee, was ideally situated for the switch to virtual learning. At least in theory.

Home to the regional tech hub of Chattanooga, Hamilton County has been celebrated for its pioneering, municipally owned fiber-optic network and the economic revival it has powered over the past decade. The area's schools have played their part as well, launching an initiative to provide every student access to a Chromebook beginning in sixth grade. Even as classrooms began migrating online in March, the district's coordinator of instructional technology, Greg Bagby, oversaw a push to lend out more laptops to families splitting their home computers between online school assignments, parents' work responsibilities and incessant Netflix bingeing.

There was a hitch, though: About one-quarter of local students, particularly those in the county's rural north, don't have high-speed internet at home, forcing some parents to set out in the middle of the workday in search of parking lots where their kids could use free Wi-Fi. Local authorities leaped into action, quickly seeding the community with 27 wireless hotspots, but their work was delayed when a series of tornadoes ripped through Chattanooga on Easter Sunday. In the meantime, schools are delivering printed homework packets — what Bagby calls "treeware" — where they are needed.

A wireless hotspot in Hamilton County, Tennessee. (Greg Bagby)

"It's hard for the teachers to figure out exactly how to live in both the digital and analog world, and we're doing the best we can," he said. "There are some things we just cannot do with pencil and paper that we can do with a device."

The case of Hamilton County, a remarkably forward-looking area still adapting to the COVID shutdown, reflects a fundamental unfairness of American life: Access to the internet, the most vital technological resource imaginable in the present circumstances, is walled off from vast swaths of the country.

Before 2020, it would have been nearly impossible to foresee the emergence of a novel, fast-spreading plague forcing school authorities to cease regular operations and move to a universal model of distance learning. But the longer story of how millions of families were left unequipped to adapt to that model — scouring for wireless signals in

churches and McDonald's — developed over decades. Its origins implicate both the public and private sectors in a prolonged failure to extend the blessings of modern technology to countless Americans. Experts and government officials who have worked around the issue for over three decades told The 74 that internet providers haven't sought to compete in poor and hard-to-serve communities, resulting in higher prices and narrower choice. And when it has acknowledged the problem at all, government has addressed it inadequately, through patchwork programs conceived largely during the time of landline telephones.

The existence of this fissure has long been perceived as a niche problem, receiving attention only sporadically outside the jargon-heavy circles of telecommunications policy. The millions of predominantly low-income Americans without reliable internet connectivity, living in rural and urban homes alike, are said to inhabit a "digital divide"; students who can't log on to supplement their studies fall into a "homework gap."

"I think the large-scale tolerance for inequity in this country gave rise to an inequitable telecommunications system."

—Shelley Pasnik, director of the EDC's Center for Children and Technology

But today, with more than 50 million school children receiving education outside of school, what was once esoteric has become existential. For most, no or limited internet access means a substantial reduction in learning, if not an outright halt. In a recent survey of more than 5,000 teachers, 55 percent said that less than half of their students were attending the online classes made necessary by COVID-19. National

media have surfaced similar accounts of disadvantaged and special needs students unable to receive schooling, all while education observers wonder how it is possible that the digital divide has persisted this far and caused this much harm.

The clearest manifestation of that harm is the reproduction of inequality. Cleavages of class, race and geography have been carried over from the physical world to the internet, conceived by its creators as an egalitarian space offering information and opportunity to all. The neediest students, who stand to benefit the most from the learning opportunities the internet provides, are the least likely to experience them.

Shelley Pasnik, director of the EDC's Center for Children and Technology, sees the digital divide as a mirror of more fundamental injustices.

"I think the large-scale tolerance for inequity in this country gave rise to an inequitable telecommunications system," she said in an interview.

Bagby said that while his district has risen to the challenge of transitioning to online instruction, it pains him to consider how many children are still separated from their classmates and teachers by virtual barriers, both in Tennessee and across the country. The failure is captured in the fragmented image of a Zoom classroom, where adjoining windows show children living and learning in vastly divergent homes — if they're able to make it to class at all.

"They're in the Zoom meeting together, one person living in poverty and the other living in luxury. And that's happening with the folks that *actually have* the devices. Just think about taking the device away. … Think about those kids that are missing it, and your heart goes out to them, because they're part of a group that's going to get left behind."

Lost in the 'information superhighway'

The uneven distribution of internet users has never been a secret. In fact, technology leaders in government noticed it by the middle of the 1990s.

"In those days, if you were a fireman or a policeman, or you owned a grocery store, you weren't using the internet — but if you were a lawyer or a doctor or a professor, you

might have it," said former assistant commerce secretary Larry Irving. "So the divide was a gap of class and income."

Irving served for seven years as administrator of the National Telecommunications and Information Administration, becoming one of the main architects of telecommunications policy in the Clinton White House. He came to the executive branch after working on Capitol Hill as legislative director for U.S. Rep. Mickey Leland. In 1985, the Texas Democrat and former anti-poverty activist was instrumental in creating Lifeline, the first federal program to subsidize home telephone service for the poor.

The birth of Lifeline was an acknowledgment that national telephone penetration rates were lower for poor and minority consumers. With the millennium approaching, technocratically inclined policymakers like Irving worried that the same disparities would be reinscribed on the budding realm of cyberspace. The goal of the incoming Clinton administration — part of its oft-invoked mandate to build a bridge to the 21st century — was to hasten the spread of internet usage in every corner of American life, including education.

Then-Assistant Secretary of Commerce Larry Irving, with President Bill Clinton, Vice President Al Gore and internet pioneer Vint Cerf. (Larry Irving)

"At the time, the internet was kind of a hobbyist initiative, basically people using things like Compuserve and AOL," Irving remembered. "President Clinton and Vice President Gore said, early on, 'We're going to make sure that every school, hospital, library in America is connected to the internet.'"

To that end, it successfully pushed for the enactment of the landmark Telecommunications Act of 1996, the first comprehensive overhaul of the industry since the New Deal. The law lowered regulatory barriers to media concentration with the aim of broadening access and lowering prices.

It also authorized the program commonly known as E-Rate, which allowed schools and libraries to receive internet service at discounts of up to 90 percent. To pay for the initiative, the new law codified a Universal Service Fund, financed by mandatory contributions from telephone companies (which are, themselves, passed on to customer telephone bills). Though originally capped at $2.25 billion per year, E-Rate's subsidies would grow in the coming years as the program linked more classrooms to what was still breathlessly described as the "information superhighway."

Nicol Turner-Lee, a fellow at the Brookings Institution's Center for Technology Innovation, was an early witness to the internet's extraordinary pull on young people. As a graduate student in Chicago in the late '90s, she helped establish several community technology centers — another flight of Clintonian ambition funded throughout the country by Education Department grants. The centers were designed to bring computers and internet access into underserved spaces, and Turner-Lee periodically found herself helping students with their homework in churches and public housing. Over 20 years later, she described the elation they felt when presented with a shipment of Encarta virtual encyclopedias.

Nicol Turner-Lee

"I remember taking them out of the box and these kids going crazy because none of them had grown up in a house like mine, where we had an encyclopedia collection every year," she recalled. "At the time when Encarta came out, in gang-ridden Chicago, a lot of these kids weren't comfortable going out to the library. It opened up a whole world that did not exist for them before."

At the same time that internet activity was exploding, Irving's National Telecommunications and Information Administration kept assiduous track of user demographics in a series of reports called *Falling Through the Net*. In each volume, the agency noted alarming breaches in telephone and internet penetration that were dividing society into "information haves and have-nots." The 1999 dispatch found that a two-parent family earning more than $35,000 was between two and six times as likely to have home internet access as a similarly situated family making less than that amount.

But increasingly, Irving found himself discouraged from flagging those trends, and even from using the phrase "digital divide" in official publications. Senior officials in the Department of Commerce believed it to be "a fractious term," he said, in part because "it disparaged this new Information Age that was being created."

Irving added that the disapproval came even from Commerce Secretary Bill Daley, leading him to directly petition President Clinton's office for permission to keep banging the drum. It was ultimately granted, but Irving was searching for other jobs before long.

"Mr. Daley was not a fan of the term," he said. "It was not a coincidence that I left shortly after that last report."

Daley's office did not respond to a request for comment from The 74.

The Clinton presidency reached its end soon after, and on a melancholy note for its techno-enthusiasts; rather than being succeeded by Vice President Al Gore, a true believer who had trumpeted the internet's potential going back to the 1980s, the president was ushered out of office by Texas Gov. George W. Bush. Mark Cooper, research director of the nonprofit consumer advocacy consortium Consumer Federation of America, said that the administration's expansive designs, and its nascent focus on inequities in internet access, were ultimately unfulfilled.

"We were having this great debate about the divide because it was quite clear that connectivity was income-dependent," he said. "The Clinton administration talked about it, they used the concept, [but] they never did much about it. Al Gore was going to fix that; well, we didn't get Al Gore."

An era of missed opportunities

The first mention of a digital divide came early in the new Bush administration. In his first press conference, newly designated FCC chair Michael K. Powell invoked the problem of unequal internet access — though only jokingly, analogizing it to a "Mercedes-Benz divide: I'd like to have one, but I can't afford it." He went on to concede the importance of the issue but argued that the expectation of rapid, equivalent access to technological innovation for all of society verged on "the socialization of deployment of infrastructure."

The remark was interpreted as a signal that concern about unequal connectivity would be much more muted under Bush. Irving considers the era to be one of missed opportunities, during which "the digital divide, both rural and urban, was ignored for an eight-year period."

The change in direction was anticipated by Bush's 2000 campaign, when he promised to block-grant nine different educational programs, including E-Rate, in a single fund to be distributed to the states. The suggestion spooked the initiative's supporters, who warned that it would mean stepping back from the effort to bring schools and libraries online. While the move never took effect, Bush did consolidate or shrink several Clinton-era education and technology programs.

E-Rate survived the reshuffle and saw its footprint grow, with 30,000 schools and libraries applying for discounts each year. But beginning in the early 2000s, it was also targeted by FCC investigations that brought to light serious financial improprieties and governance issues. One report memorably alleged that E-Rate was "honeycombed with

fraud and financial shenanigans." Republicans began referring to the beleaguered program as a "Gore tax" lurking at the bottom of your phone bill.

And while an increasing share of Americans were going online to work, shop and play games, the goal of bringing high-speed internet to every American home went unrealized. When Bush began pledging, during his re-election campaign, that his administration would wire "every corner" of the country by 2007, observers noted that it was the first time he had spoken about broadband in nearly two years.

High-speed internet spread widely over the same period, especially in the middle-class suburbs, and smartphone-crazed Americans began consuming ever-greater quantities of data. Pew Research found that the proportion of Americans who said they used the internet every day rose from 55 percent in 2001 to 74 percent in 2008.

% of U.S. adults who use the internet
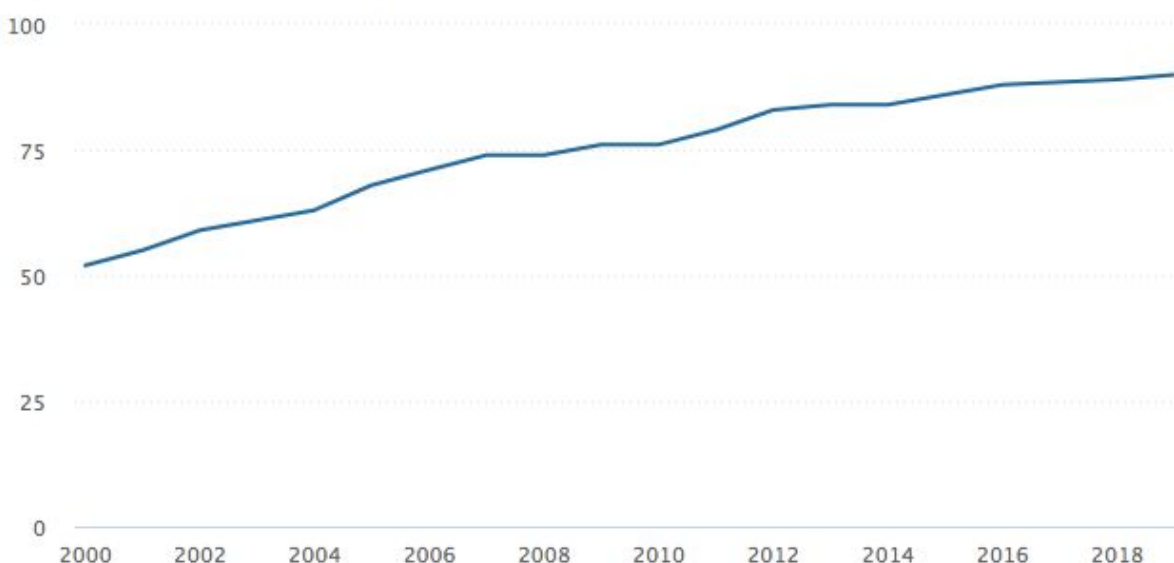
Pew Research Center

But during those years, and even into the decade that followed, some sections of the country — notably rural and low-income communities, and especially places where those designations overlapped — saw much lower broadband subscription rates. One

recent study found that, in 2015, roughly one-quarter of Americans lived in neighborhoods where fewer than 40 percent of households had broadband. Nearly 18 million school-age children lived in such neighborhoods.

To many technology advocates, those coverage gaps are evidence of a market failure: Big internet service providers like AT&T, Comcast and Spectrum are less likely to compete against one another in rural areas, where it costs more to provide services to fewer customers. In the words of Brookings's Turner-Lee, if you live in a locale deemed undesirable by such companies, "your choices are slim."

The Denver Post / Getty Images

A damning Wall Street Journal analysis of thousands of telephone bills from all 50 states found that residents of rural and low-income communities received slower internet speeds while paying similar prices to their more affluent and urban

counterparts. Moreover, in the vast majority of cases, the customers had no second option of a fiber or cable internet provider.

Providers, the Consumer Federation's Cooper remarked simply, "will not go where profit is not sufficiently attractive. They don't go to high-cost areas like rural America, and they don't go to lower-income areas; it costs too much to serve the former, and the latter is not an attractive market."

To Thomas Hazlett, who served as the FCC's chief economist under President George H.W. Bush, that's faulty reasoning. A longtime skeptic of universal service programs like E-Rate, he said it was only logical that high infrastructure costs deterred some companies from offering more and better service in hard-to-reach communities.

"It's not a market failure to have the market not provide a service where customers are not willing to pay its cost of provision," he said. "In fact, you don't want suppliers to waste society's resources by doing that. And that means that not every place in Alaska is going to be wired for fiber to the home. That's actually what the market's supposed to do."

But some students in Placer County, California, experience patchy internet access as a major stumbling block. Superintendent Gayle Garbolino-Mojica has spent the past month attempting to transition the county's roughly 73,000 students, spread over 19 school districts, to online learning. Most of those districts fall in the suburbs outside Sacramento, where, as she said, "we have a couple of [broadband] plans available." But farther east, where bedroom communities give way to the mountain towns of what used to be called the Gold Country, some families get by with glacial internet or none at all.

"It's not a market failure to have the market not provide a service where customers are not willing to pay its cost of provision. In fact, you don't want suppliers to waste society's resources by doing that. And that means that not every place in Alaska is going to be wired for fiber to the home. That's actually what the market's supposed to do."

—*Thomas Hazlett, the FCC's chief economist under President George H.W. Bush*

"Probably 10 percent of our population is [in] more remote areas, and their connectivity is either very limited or, in some cases, nonexistent," Garbolino-Mojica said. The abruptness of California's school shutdown caught local leaders unaware, producing an arms race for much-needed devices that pitted districts against one another. While Garbolino-Mojica immediately contacted her distributors to procure as many as she could, COVID-fueled demand now greatly outstrips the supply. According to one recent report, roughly 200,000 California households with school-age children are currently without the computers and/or hotspots they need.

"I had a Montessori charter school in our county call last week," she said. "They said, 'Turns out I've got a kid who spends half his time with Mom and half with Dad. When he's with Mom, he has internet, but not when he's with Dad. Can we just get one hotspot?' And we could not find one. We're all exhausted and waiting for shipments."

Along with other county superintendents, Garbolino-Mojica makes semi-annual trips to Washington, D.C., to lobby national politicians to spend more on local priorities like Head Start and the Individuals with Disabilities Act. Initially she questioned the necessity of their trips to meet with FCC staff.

"When they'd say, 'We're going to the FCC,' I'd go, 'Ugh, why? Can't we just go to the Hill and talk to some congressmen?'" She subsequently learned what was motivating the

advocacy; between 15 and 20 percent of families in Placer County are eligible to receive telephone discounts under the Lifeline program.

Hazlett, who has written scathingly of the cost of federal internet subsidies, is nevertheless concerned about the situation facing students stuck at home with no way to access teachers or classmates. His own niece, a high school senior who had recently moved across the country, found herself without broadband access when her school closed. She was able to visit his home until the situation was resolved, but many others won't be as lucky.

"They couldn't get anybody to come out and hook them up, so she came to our place and spent the last week because we have internet access," he said. "If your parents don't have internet access, then how are you supposed to perform against your peers in the classroom? That's been going on, and now it's forced on millions of students."

'They need to do whatever it takes'

In the first decade of the new millenium, some thought was given to the prospect of a wide-scale disaster, either natural or man-made, that might threaten communications networks and shutter schools for longer than a few days. Several such events — the 9/11 attacks and subsequent anthrax scares, Hurricane Katrina in 2005 — offered previews of the COVID era. But planning for a response "was primarily a hodgepodge of different organizations and groups at the local level," said Thomas Chandler, a research scientist at the National Center for Disaster Preparedness at Columbia University.

It was only in the first few months of the Obama administration, when a swine flu pandemic closed more than 700 schools across the United States, that school districts began to reckon with the limits of their continuity-of-operations planning.

"After the H1N1 pandemic in 2009, a lot of those plans were activated in different schools, and more schools began to adopt that as part of their planning processes. But it was really only from a logistical standpoint, rather than focusing on the aims of what

a distance learning program would actually be for the long term, or what learning outcomes would be. There was this lack of a needs assessment to determine who would actually have access, what is the digital divide in the community, what students wouldn't be able to log in at all."

In a broader sense, Obama's election brought a return to more muscular interventions to spread home broadband. But they seemed to be buried under a heaping progressive agenda that included health care reform, climate change, Wall Street regulation and, even within telecommunications policy, a lengthy debate around the issue of network neutrality.

In his last years in office, the administration launched a pilot program that offered low-cost wireless internet, digital literacy classes and steeply discounted devices to 275,000 households in 27 cities. By the spring of 2016, Obama had set a goal of subscribing another 20 million Americans to broadband by the end of the decade; in his announcement, the president specifically cited the need for students "to get online, no matter where they live or how much their parents make."

Most importantly, the FCC voted to expand Lifeline to cover stand-alone broadband. The decision would theoretically give millions more people access to affordable internet at home, but it came after an enervating fight in Congress, where Republicans branded the Reagan-vintage initiative an "Obamaphone" giveaway and loudly considered defunding it.

Thomas Hazlett, the FCC's chief economist under President George H.W. Bush
(Clemson University)

Hazlett has been particularly critical of the Obama-era FCC's decision to increase the
yearly cap on E-Rate spending, especially after finding in a 2016 study of North
Carolina high schools that the program's subsidies were not correlated with student
achievement gains. On top of that, he added, is the central irony of the COVID
shutdowns: After spending billions of dollars over several decades to wire schools,
virtually every student in the United States is now shut out of them.

"We've had a very big investment in subsidizing internet access for the schools," he
said. "Multiply $2.25 billion a year since shortly after the 1996 Telecommunications
Act — you're almost at 25 years on that, and it's since been increased in the last few
years — plus interest and whatever else. And as I've found, as just about anybody

who's objectively looked at the system has found, that money has been largely wasted."

Even vocal defenders, such as Democratic FCC Commissioner Jessica Rosenworcel, have argued in favor of revamping the initiative to connect schools and libraries. While celebrating E-Rate for helping connect 95 percent of public schools to the internet (compared with 14 percent in 1996), Rosenworcel has pushed for reforms to ensure better governance and less fraud.

Other commentators, like Boston College law professor Daniel Lyons, object to the FCC operating the programs (and their revenue source, the Universal Service Fund) outside of the congressional appropriations process. Partly because the funding takes place, as it were, off the books, the surcharge on customers' phone bills has grown from 3 percent in 1998 to nearly 25 percent today — akin to "the tax cities put on hotel rooms to fleece out-of-town suckers," in Lyons's reckoning.

Figure 1

Quarterly USF Contribution Factor

Daniel Lyons, American Enterprise Institute
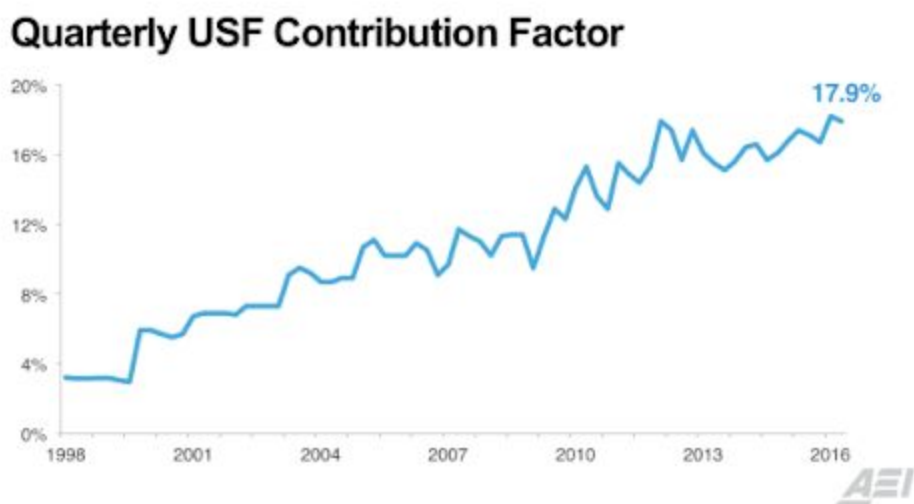
Much of what Lyons objects to in the federal government's digital strategy has to do with what he considers the ad hoc way in which policy has evolved. The 1996 Telecommunications Act was passed when the internet had barely gained public acceptance, and broadband — let alone mobile technology — was barely a glimmer. Lifeline is a benefit originally intended to expand access to landline phones, its $9.25 monthly subsidy offering recipients paltry choices when selecting internet service.

In response to the program's recent expansion, Lyons has advocated overhauling it into a targeted voucher system — perhaps even a more generous one, including costs for home computer equipment that many low-income consumers lack.

"I'm a right-of-center guy, but I do think that there is a role of government to play in closing the digital divide," he said. "My biggest critique has been that the role that government has played thus far has not been a smart one. Much of what's happening seems to fall under the syllogism of 'We need to do something, here's something, let's do it.'"

Irving said that the resistance to a program of Lifeline's modest scope was a reflection of a political divide pitting rural areas against cities for technology resources. Republican legislators were sympathetic to the connectivity needs of farmers and small towns, he said, but when it came to Lifeline, which is designed to serve poor people, they combed budgets for evidence of scandal. Ads lampooning a Black "Obamaphone lady," aired by the Tea Party during Obama's 2012 re-election campaign, contributed to the program's marginalization by inflaming political prejudices, he said.

"I've got 15-20 million urban and suburban Americans who can't afford broadband internet, and that program is being nibbled to death by ducks," he said. "There's this thing about waste, fraud and abuse, and welfare cheats, and it has to do with low-income people. It has dynamics to it — race, class, education — that are just unfortunate."

Skepticism toward Lifeline has extended into the Trump White House as well. FCC Chairman Ajit Pai speaks much more openly about the existence of the digital divide than his Republican predecessors, but one of his first moves was to reverse an earlier decision that would have allowed nine new companies to participate in Lifeline. Last year, reports surfaced that hundreds of E-Rate applications from schools were stuck in "limbo" due to a cumbersome review process.

"They need to do whatever it takes to make sure that they can get learning into the homes of these kids. We haven't been thinking creatively. If the Department of Health can set up tents in Central Park with hospital beds and air systems and drive-up testing sites, and we can't find ways to promote internet access for our kids to get online for school, then we've failed."

—Nicol Turner-Lee, a fellow at the Brookings Institution's Center for Technology Innovation

Even the spread of coronavirus has not yet produced agreement over what measures are needed to connect students to virtual learning while their schools are locked down. While the House of Representatives allocated $2 billion to E-Rate for remote learning in their original stimulus proposal, the funding boost didn't make it into the law signed by President Trump.

In the meantime, districts are attempting to patch holes at the local level. Placer County's Gayle Garbolino-Mojica said that parents in her most far-flung districts have been willing to sit in school parking lots while their children use free Wi-Fi to finish homework assignments.

"I have a small rural school district of less than 100 kids, and a great percentage of their students don't have access to reliable internet," she said. "The superintendent has had to be really creative and say, 'A family of four can come into the school on X, Y and Z days at times when no one else is here to do online learning.'"

Other leaders have sent school buses into largely unwired neighborhoods to act as mobile hotspots. Big districts like Los Angeles and Washington, D.C., have made use of public television as a delivery mechanism for lessons. Pasnik, of the Center for Children and Technology, pointed to the experience of schools in Africa, many of which relied on radio stations to broadcast educational content while students were kept out during the Ebola outbreak of 2015.

"This is definitely a time to think creatively about what tools we have, what tools are in people's pockets and homes," she said. "Broadband television can be that, and radio can be that. It's unfortunate that it's happening in a very ad hoc way, but it also speaks to the tenacity and spirit of many educators."

Turner-Lee said that the pandemic showed clearly that a more ambitious approach was necessary to connect students with online learning opportunities. Once the crisis passes, she said, educators and policymakers should adopt some of the urgency shown by the public-health sector to solve a problem that has lingered too long.

"They need to do whatever it takes to make sure that they can get learning into the homes of these kids. We haven't been thinking creatively. If the Department of Health can set up tents in Central Park with hospital beds and air systems and drive-up testing sites, and we can't find ways to promote internet access for our kids to get online for school, then we've failed."