**Overall expectancy 78.7 years in 2018**

**US life expectancy still lags behind, despite small increase**

In January, the public health workforce received seemingly good news: After three years of decline, life expectancy in the U.S. increased slightly in 2018, with the improvement at least partially associated with falling opioid overdose deaths, officials said.

But life expectancy in the U.S. is still too low compared to other high-income countries around the world, and it is not nearly as high as it should be based on past trajectories for the nation. And when it comes to reducing U.S. opioid overdose deaths, it may be premature to celebrate.

The one-year life expectancy uptick is “welcome, but certainly does not represent a definitive reversal of recent trends,” said Howard Koh, MD, MPH, a professor at the Harvard T.H. Chan School of Public Health and former

See **EXPECTANCY**, Page 15

**Cuts to CDC, HRSA**

**Trump budget proposal a disinvestment in US health**

Despite increasing health threats, the White House is calling for slashing hundreds of millions of dollars from the country’s lead public health agencies.

In February, President Donald Trump released his federal budget proposal for fiscal year 2021, calling for a cut of more than $693 million at the Centers for Disease Control and Prevention, as well as a $742 million cut to programs at the Health Resources and Services Administration. Overall, the president’s budget proposes a 9% funding cut at the U.S. Department of Health and Human Services, a 26% cut at the U.S. Environmental Protection Agency, massive cuts in Medicare and Medicaid spending, and funding decreases for safety net

See **2021 BUDGET**, Page 10

**COVID-19 response shows limitations**

**WHO process for declaring health emergencies scrutinized**

A worker checks temperatures at a railway station in Nanjing, China, in February to monitor for coronavirus illnesses.

Photo courtesy Feature China/Barcroft Media/Getty Images

IR TRAVEL has become so efficient that an adventurous person could visit the world’s seven continents within days. Such a traveler could also, in theory, spread a dangerous pathogen to every continent in that same short time.

The importance of preparedness for a global infectious outbreak motivated the World Health Organization to spend a decade rewriting its International Health Regulations, which gave WHO the ability to declare a public health emergency of international concern for an infectious disease outbreak, among other measures. The regulations took effect in 2005, and WHO has invoked the PHEIC declaration six times since, most recently on Jan. 30 to address the ongoing coronavirus outbreak that began in Wuhan, China, in December.

But debate has followed

See **PHEIC**, Page 12

**APHA institute engages sold-out crowd**

Physician and activist Abdul El-Sayed, MD, DPhil, speaks at APHA’s Policy Action Institute on Feb. 12. For highlights from the Washington, D.C., event, see Page 5.
Asbestos imports pose dangers

Asbestos is dangerous to human health, claiming 40,000 lives in the U.S. each year and should be banned from all uses, APHA and other organizations said in a Jan. 15 letter to leaders of the U.S. House of Representatives.

The advocates voiced support for H.R. 1603, the Alan Reinstein Ban Asbestos Act. It would end imports of raw asbestos and products containing the material. The bill would also require an assessment of the amount of asbestos still in U.S. buildings.

The legislation would also create a right-to-know program requiring importers and users of products containing asbestos over the last three years to inform the U.S. Environmental Protection Agency and the public of the use of the material.

If passed, the National Academy of Sciences would be called on to conduct a comprehensive study on the health risk of asbestos still in buildings. Home, businesses, factories, public structures and schools are among the buildings still containing the material, some of which was installed decades ago.

The academy could use the information to recommend policies to protect workers and the public from unsafe exposure.

Newborn advisory committee crucial

An advisory committee that advises federal health leaders on ways to reduce newborn deaths must be utilized and continued, APHA and 60 other organizations told the U.S. secretary of health and human services Dec. 19.

Newborn screening programs ensure that infants receive the best health care to treat heritable disorders. In a joint letter, the advocates asked that the Advisory Committee on Heritable Disorders in Newborns and Children have its term lengthened until its reauthorization occurs, which HHS has authority to do under the Public Health Service Act.

The committee provides evidence-based recommendations for screening newborns for heritable disorders. Formed in 2003 to advise the HHS secretary, the committee reviews technologies, policies, guidelines and standards that help newborns with disorders thrive. The work helps create the Recommended Uniform Screening Panel, which offers 35 screenings for treatable conditions.

All 50 U.S. states, the District of Columbia and Puerto Rico require screening for at least 30 of the conditions. The brief was in response to a joint lawsuit by environmental groups from California, New Jersey and New York filed against EPA on Aug. 1, 2019. The suit, filed in the U.S. 9th Circuit Court of Appeals, argues that science shows that EPA’s Dust-Lead Hazard Standards are not sufficient to protect children.

“Without further amendment, the current rule, which is based on antiquated and unproductive standards, will result in the preventable lead poisoning and permanent brain damage of children throughout the country,” the advocates said. “Overwhelming scientific evidence demonstrates that no amount of lead exposure is safe and even the lowest levels of exposure result in long-term poor health consequences.”

Prevention X plan deserves support

Many chronic health conditions that people suffer from could have been prevented through healthier living, underscoring the need for robust preventive health programs.

The U.S. Department of Health and Human Services is developing a program that focuses on clinical and community-wide prevention efforts called Prevention X. APHA and other health groups offered recommendations on Prevention X in a Dec. 19 letter to HHS.

APHA suggested that program organizers foster better collaboration between federal and state agencies, and generate more federal funding for chronic disease prevention programs.

Funding should also be directed to disadvantaged communities to promote equity and eliminate gaps in health outcomes.

“As communities across the nation continue to face serious, ongoing and costly health problems, the United States must focus increased attention on strengthening prevention strategies,” the advocates wrote.

— Mark Barna

To take action on public health, visit www.apha.org/advocacy.
Crossing sectors to improve public health: supporting Public Health 3.0

In my last column in The Nation’s Health, I explored how the challenges posed by social determinants of health call on us to join forces for change. When the drivers of health include social challenges, the puzzle is more complex than any one sector can tackle alone.

Local public health agencies have the capacity to address policy, environmental and system-level drivers of health challenges by bringing varied partners to the table. Convening cross-sector stakeholders from education, technology, business, faith, housing and health care can help create the conditions in which everyone can be healthy.

We can partner with people beyond traditional public health to frame and address community concerns, with everyone doing the part they do best. Communities will succeed when they are able to make use of their own data in their own backyards.

As defined in the Institute of Medicine’s important 1988 report, “The Future of Public Health,” public health is “what we do as a society to ensure the conditions in which everyone can be healthy.” Public Health 3.0 is an example of how we do this.

Coined in 2016 by U.S. health leaders as a call to action to modernize the nation’s public health infrastructure, the Public Health 3.0 movement calls on us to:

- Make available timely, reliable and actionable data for communities.
- Public health knows how to bring stakeholders to the table — or to many tables — where everyone has a seat. Cross-sector synergy will help foster the conditions in communities in which the healthy choice is the easy choice and where everyone can be healthy.
- What does synergy look like? One great example is Air Louisville, a partnership among government, nonprofit and technology sector stakeholders to address asthma. Putting electronic sensors in inhalers, partners created heat maps of areas of concentrated pollution. As a result, they not only changed care plans, but also made policy changes, planted trees, changed zoning and re-routed trucks.
- There are resources to help promote this synergy. For example, the de Beaumont Foundation published its “Practical Playbook II” as a roadmap for health-focused partnerships.
- This type of approach — crossing sectors for public health — is the way to make real change in the challenges we face. The future of public health is bringing together all of those concerned with the different facets of social determinants of health to talk about how they are all linked. We need to work with people beyond traditional public health to frame and address our collective concerns.
- One sector can’t do it alone, but together we can improve public health.

Lisa M. Carlson
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Plan your NPHW events using fact sheets, toolkit, resources
Celebrate National Public Health Week April 6-12

National Public Health Week is right around the corner, and this year’s celebration is extra special because it marks a major anniversary. For 25 years, APHA has guided and supported the public health celebration. NPHW is where health advocacy, creativity and fun come together.

To be held April 6-12, NPHW is a time when advocates tout the importance of public health and improving the health of people across the nation. Honoring NPHW’s anniversary, the theme this year is “NPHW@25: Looking Back, Moving Forward.”

This year, there will be different themes for each day of the week for participants to showcase. Monday is mental health, Tuesday is maternal and child health, Wednesday is violence prevention, and Thursday is environmental health.

Thursday is also Public Health Student Day. Students nationwide are planning events to raise awareness about the value of public health and the work needed to create a healthier nation. Students and educators can check out the NPHW website for tips and ideas for campus and community activities. In conjunction with Public Health Student Day, APHA’s Student Assembly will host a webinar with APHA Executive Board members, topics that include student participation in APHA, and “This is going to be a great way to virtually connect with leaders to learn more about their journey into the field of public health and how to become further involved with APHA.”

Students are great advocates, and we are excited to be leaders and innovators in public health. Encouraging and engaging students is how we empower generation public health.”

Also on Thursday, APHA is partnering with Howard University students for a Washington, D.C., event on finding a job after graduation.

Three themes will close out NPHW. Friday is education, Saturday is healthy housing and Sunday is economics. Organizers can build anticipation for their events by adding their public health celebration to the online NPHW calendar.

The Billion Steps Challenge, which began Jan. 1 and ends April 12, is also part of NPHW. Walkers can share steps stories on Twitter and Instagram at #APHABillionSteps.

APHA is leading several events during NPHW. On Monday, April 6, the NPHW Forum will be held 1-3 p.m. EDT in Washington, D.C. The forum, “NPHW@25: The Future of Public Health Is Now,” will focus on health disparities. People who cannot attend can watch the event live online.

Among the panelists are Lili Farhang, MPH, co-director of Human Impact Partners, and David Grosso, JD, chair of the Committee on Education of the Council of the District of Columbia. The keynote speaker is Devin Reaves, MSW, executive director and co-founder of the Pennsylvania Harm Reduction Coalition.

APHA is also hosting its popular NPHW Twitter Chat. Participants can join the chat at 2 p.m. EDT on Wednesday, April 8, using the #NPHWchat hashtag. Questions for the chat are online now.

“National Public Health Week is a great opportunity to become involved at the local, state and national level,” Bartlett said.

Learn more about NPHW and get involved at www.nphw.org.

— Mark Barna

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Fatal crashes rise in marijuana states

U.S. states that decriminalized marijuana show an increase of fatal traffic crashes in their cities, a study in the March issue of APHA’s American Journal of Public Health finds.

Researchers examined 2010-2017 city data from the Fatality Analysis Reporting System, a census of crash deaths, that included drug or alcohol levels in drivers’ blood.

States with marijuana decriminalization laws enacted within the time period showed a 13% increase in fatal car crashes among 15- to 24-year-old males in their cities, the study said. Crashes in which a driver tested positive for marijuana were more frequent in the months immediately after decriminalization. There was no increase in fatal car crashes among women of any age and men ages 25+.

The same study method was applied to states with medical marijuana laws. In those states, researchers found a decrease of fatal car crashes. The decline occurred across both genders and all age groups, the most pronounced being a 14% decrease among 15- to 24-year-old males.

Researchers said the difference may be linked to the ways marijuana policies influence behavior. Medical marijuana laws require that the drug be taken at home, so people are less likely to be driving while under the influence, researchers said.

But in the states with decriminalized marijuana, drivers may think they can use the drug whenever they want, including before or while driving.

Families of jailed have poor health

People who have been incarcerated are not the only ones to have poorer health. Their relatives are more likely to as well, experiencing more chronic ailments than other families, a study in the March issue of AJPH finds.

Researchers examined data from more than 10,000 people who participated in the 2017 New York City Community Health Survey, then randomly chose survey participants to interview and self-report on their health history. Among those, 17% were personally involved or had a family member personally involved in the city’s criminal justice system.

Other studies have shown that people who have been incarcerated have poorer health than people who have never been incarcerated or on probation. The new AJPH study is one of the first to show that families of people with criminal records also have poorer health, researchers said.

Family members of people who have been incarcerated were more likely to be depressed and drink heavily and to have hyper-tension, diabetes and obesity, among other health and behavioral outcomes. They were also more likely to be black or Hispanic and live in poverty in a disadvantaged neighborhood.

The findings suggest that the family of someone who has been imprisoned or on probation may experience ill health on a level similar to that of the convicted person, creating a broad population needing intervention and health care.

Hospital records track homelessness

State hospital records that show if a patient is homeless may provide a better count of the population than traditional means, a study in the March issue of AJPH finds.

Researchers examined data from more than 100 inmates within the Washington State Department of Corrections in 2017 who spent time in solitary confinement.

Researchers suggested the wide discrepancy may be because health providers are identifying the population on admittance forms more consistently, or because of Medicaid expansion.

Solitary confinement harms mental health

Half of inmates in solitary confinement show significant symptoms of depression and anxiety, with some suffering serious mental illness and self-harming behavior, a study in AJPH’s January supplemental issue of APHA’s AJPH finds.

Police avoidance causes depression and anxiety in black men, especially if they are unemployed, have been formerly incarcerated or both.

The study examined self-reported data on police encounters from almost 900 black men in Washington, D.C. Previous studies have shown that black men are often targeted by police, including for stop-and-frisk searches. One study found that black men in D.C. accounted for 85% of police searches, even though they represent a much lower percentage of the city’s population.

The study, conducted in 2015-2016, found “significant” stress, trauma and depression among black men ages 18 to 44 regarding the possibility of police encounters.

Interaction between police and black men needs to be examined from a public health perspective, the researchers said.

Imprisoned pregnant women show bias

Nurses who work with incarcerated pregnant women would benefit from interventions to reduce negative biases toward their patients, a study in AJPH’s supplement on incarceration and health finds.

Nearly 700 U.S. nurses who have cared for incarcerated pregnant women took an online survey in 2017 to gauge their adherence to health care standards. Rather than agree to the individual responses of nurses, the study generalized from the survey’s results, finding bias against patients.

“Incarcerated women’s pregnancy status and impending motherhood conjure deep judgment against them,” the study said, which may detract from meeting professional standards of maternal care.

Interventions to help nurses overcome or understand their biases would improve care, researchers said. Education should include instruction on health disparities and inequity.

About 5% of women are pregnant when incarcerated, the study noted.

― Mark Barna

For studies and podcasts from AJPH, visit www.ajph.org.
APHA event shares lessons from field, inspires action
Policy can be used to make positive changes to community health, Policy Action Institute shows

A N ELDERLY MAN who lived for years on the streets of Oakland, California, finally got a permanent residence, thanks to an outreach program at Kaiser Permanente.

Kaiser is part of a health consortium that in 2019 found homes for hundreds of disadvantaged people in Oakland. But Kaiser also understands that there are many social determinants, not just homelessness. It conducts follow-ups on patients to gauge their health and well-being.

Late last year, Bechara Choucair, MD, Kaiser’s chief community health officer, checked in with the newly housed Oakland man. To his surprise, the 72-year-old was not happy.

“Homelessness is terrible, tough,” he told Choucair over breakfast. “But you know what will kill me? Loneliness. And I am still feeling lonely.”

Choucair told the story at APHA’s Policy Action Institute on Feb. 12 in Washington, D.C. The daylong event, “All Hands on Deck: Improving Community Health,” featured public health leaders from across the nation.

Participants at the sold-out event learned about community-based health programs that address multiple social determinants, the importance of health organizations working together to fulfill common goals, and how deep dives into communities can generate strong local and national public health policy.

For Choucair, the Oakland man underscored how health care systems need to address not only health and behavioral needs, but also social determinants that include, in his case, the stress and despair of social isolation.

“When we build physical health and mental health programs, we do lots of research,” Choucair said. “We need that rigor for social health. Health systems have to address social health needs in this country.”

Creating effective public health policy to improve community begins with understanding and engaging communities. Mick Cornett, MBA, who served four terms as mayor of Oklahoma City, did just that when he set out to lower the obesity rate of city residents.

The city had been named one of the most obese in the nation, so he challenged residents to lose at least 1 million collective pounds.

“This city is going on a diet,” Cornett told Oklahomans.

Cornett worked with local policymakers to build a pedestrian-friendly city. People started relocating downtown, and the city population increased.

To create strong local public health policy, relationships are important. In Kansas City, Missouri, the positive relationship between local health organizations has garnered health benefits for city residents.

Rex Archer, MD, MPH, director of the Kansas City Health Department, and Scott Hall, JD, MBA, senior vice president for civic and community initiatives at the Greater Kansas City Chamber of Commerce, have formed a working relationship with community benefits. Together they helped pass the Tobacco21KC, a city ordinance requiring purchasers of tobacco products to be 21 or older.

“Building relationships between chambers of commerce and public health leaders can advance community health,” Archer, an APHA member, said during a discussion at the event.

Compromise is part of policymaking, speakers said. But sometimes thinking big on health policy can be the right strategy.

This happened in Atlanta regarding the city’s smoking policy.

In recent years, as many large U.S. cities instituted broad smoking bans, Atlanta did not. Shelly Hearne, DrPH, a principal investigator at CityHealth, a nonprofit that helps people live healthier through evidence-based policy solutions, initially sought to have Atlanta make incremental changes to curb public smoking. She hoped Atlanta would win a Silver Award from CityHealth.

Relationships grew among advocacy partners. And on Jan. 2, Atlanta’s new smoking law took effect — prohibiting smoking and vaping in enclosed public spaces. CityHealth awarded Atlanta the Gold this year.

“It took a combination of partners working together, but also audacious policy ideas,” Hearne, an APHA member, said during a panel discussion. The event can now be watched on demand via APHA Live.

For more on the institute, visit www.apha.org/policy-action-institute.

— Mark Barna
Congress must act to protect US health workers, general public

Controlling COVID-19 will require flexibility, funding, says APHA’s Georges Benjamin

Georges Benjamin, MD, APHA’s executive director, shares insights on COVID-19, the coronavirus disease that was first detected in Wuhan, China, in December 2019. As of the end of February, there were about 80,000 confirmed cases of the disease, with more expected around the world. U.S. health officials have been working to detect, prevent and contain the disease within the nation’s borders.

How can public health workers and clinicians talk to the public about the risks?
The usual precautions apply. Cover your mouth when you cough or sneeze, wash your hands, clean surfaces. I get that people are nervous: This is a tricky virus because symptoms range from mild to severe, including death. It’s hard to know if you have a cold, the flu or a coronavirus.

Yes, we should be concerned. But right now, most of the cases are in China, and we’ve isolated people in the U.S. who have come from there with symptoms. People here are more likely to get hurt by not getting a flu shot or wearing a bicycle helmet.

Health officials around the world are working to address the outbreak. What is the U.S. doing?

U.S. public health officials have been preparing for an infectious disease outbreak like this long before the first case was diagnosed. We have plans and workers in place. The Centers for Disease Control and Prevention has identified the virus’ genetic strain, which allowed them to make a diagnostic test and begin vaccine production, which can take a long time. In the meantime, we’re screening travelers and quarantining and isolating people as needed.

Every day we’re going to learn more and more. This is a rapidly changing situation. We’re going to have to be flexible and fluid, innovative in our thinking.

Our public health system is working hard to keep people in America safe. But everyone needs to be prepared — there are things that schools, business, households and others can do to help stop infections from spreading.

What do public health workers in the U.S. need to know?

Stay informed. With an event like this, I encourage checking the CDC website when you wake up and before you go to bed to see what we know and what’s changed. If you’re not in the CDC Health Action Network, get on the email list for information on clinical activity, screening issues, virus locations.

Does this have the potential to overburden our public health system?

Every public health officer in this country will be involved in this outbreak, whether they have a case in their area or not. And that work will be ongoing as the U.S. is dealing with their other public health demands — the folks who were dealing with the opioid epidemic last week are dealing with COVID-19 this week.

We need to be able to safeguard both the public and the public health workforce. During the SARS outbreak, a lot of people who were infected were health workers. Reports from China show that there have been at least 1,700 health care workers infected with COVID-19 there, and some have died. We have to protect the people who are working to save lives and end this outbreak.

Our federal emergency fund is rapidly being depleted. Congress needs to act.

— Interview conducted, edited and condensed by Louise Dettman

For information to share, download APHA’s easy-to-read COVID-19 fact sheet in both English and Spanish at www.aphagetready.org.

A version of this interview was published on Public Health Newswire.
The Affordable Care Act brought health coverage to more people, reducing racial and ethnic health disparities, a study says.

New surgeon general report shares most effective ways to quit tobacco

PUBLIC HEALTH work to reduce smoking in the U.S. has lowered the number of adults who smoke to about 14%. But given the evidence-based health dangers of the habit, and that e-cigarettes pose a serious risk to a new generation, more work remains.


“I’m calling on health care professionals, health systems, employers, insurers, public health professionals and policymakers to take action to put an end to the staggering — and completely preventable — human and financial tolls that smoking takes on our country,” Adams said in a news release.

The report also updates the science on nicotine addiction and genetic factors that may impact smokers’ behaviors. And it discusses clinical and population-based interventions scientifically shown to increase smoking cessation.

Researchers have developed many successful products to help people quit. The U.S. Food and Drug Administration, for example, has approved five nicotine replacement therapies — patches, gum, lozenges, inhalers and nasal sprays — and two oral medications to help smokers quit. They are safe and effective, but the report found that many smokers do not utilize them.

Behavioral therapies have also worked, but are underutilized as well, the report said. Behavioral therapy can help people learn how to cope with nicotine withdrawal and the urge to smoke. Counseling can be one-on-one, in a group setting or over the telephone through a quitline.

“We know more than ever before about effective ways to help Americans quit,” Alex Azar, JD, secretary of the U.S. Department of Health and Human Services, said in a news release. “Working together, we can make tobacco-related disease and death a thing of the past.”

Other effective ways to encourage people to quit are indirect. These include increasing cigarette prices, implementing smoke-free policies in public places, mass media campaigns, package health warnings with images and maintaining fully-funded statewide tobacco control programs. Some adult smokers are interested in e-cigarettes as a step toward quitting the habit. But the report stated there is inadequate evidence to support using e-cigarettes to quit traditional cigarettes.

For more information on the report, visit www.surgeongeneral.gov.

— Mark Barna

Medicines and behavioral therapies can help smokers quit, but the methods are underutilized, a new report says.

— Kim Krisberg

Research: ACA drove coverage progress, but gains are eroding

NEW RESEARCH shows that the Affordable Care Act successfully reduced racial and ethnic disparities in health coverage — a key objective of the law.

Released in January, a new data brief from the Commonwealth Fund found that the gap in uninsured rates between black and white adults dropped by more than four percentage points between 2013 and 2018, while the difference between white and Hispanic uninsured rates narrowed by over nine percentage points. Such disparities narrowed in states that both expanded Medicaid eligibility and those that did not, but disparities were generally smaller in expansion states.

In addition, five years after the ACA’s implementation, black adults living in Medicaid expansion states reported coverage rates and access to care measures that were either as good or better than those of white adults living in states without Medicaid expansion. Unfortunately, the brief, which is based on data from the American Community Survey and Behavioral Risk Factor Surveillance System, also reported that such progress has stalled out since 2016.

“Our findings on the positive effects of expanding Medicaid also offer a window into the potential impact that current congressional reform bills and proposals could have on disparities,” the authors wrote.

In related news, January poll results from the Gallup National Health and Well-Being Index show the nation’s uninsured rate is ticking back up. Based on responses from 28,000 randomly selected adults per quarter, the poll found that the U.S. adult uninsured rate hit 13.7% in the fourth quarter of 2018, versus 11.8% in the first quarter of 2018.

People with low incomes who live in states where lawmakers rejected Medicaid expansion were hit especially hard by the rise in uninsurance, with decreases in coverage and access four to five times greater in nonexpansion states than in expansion ones.

The study also found that while the gap in health care access between higher- and lower-income people narrowed between 2013 and 2016 by about 8.5% in both expansion and nonexpansion states, the gap widened by 2.6% in nonexpansion states between late 2016 and late 2017. The gap, however, continued to decrease in expansion states.

“Medicaid expansion seemed to be a really great way for states to insulate themselves from some of the damage of these federal policies,” said study co-author Kevin Griffith, MA, of the Boston University School of Public Health, in a university news release.

“For states considering Medicaid expansion, this shows that it’s a good way to take care of your residents, even regardless of what’s going on in Congress.”

For more information on the disparities data brief, visit www.commonwealthfund.org.

— Kim Krisberg
**NATION IN BRIEF**

**Measures needed for Healthy People 2030**

Healthy People 2030 should track civic engagement, residential segregation and the health effects of climate change, according to a new report from the National Academies of Sciences, Engineering and Medicine.

Released in January at the request of the U.S. Department of Health and Human Services, the NASEM report offers a slate of Leading Health Indicators to be considered by officials as they develop and finalize Healthy People 2030, the nation’s health objectives for the next decade. Healthy People 2030, to be released in March, will contain 55 core objectives, as well as LHI sets, which are a set of objectives selected to elevate high-priority health issues.

Overall, the report recommends a set of 34 LHIs for Healthy People 2030, including voting as a measure of civic engagement, the health effects of climate change, and indicators of racial and ethnic residential segregation.

Other LHIs the report recommends include adverse childhood experiences, increasing immunization rates and reducing poor mental health days.


**New plan addresses addiction treatment**

Early intervention and treatment is part of a new U.S. plan to expand access to addiction treatment.

In February, the U.S. Office of National Drug Control Policy released its National Treatment Plan for Substance Use Disorder 2020, which aims to address key treatment gaps. According to the report, in 2018, an estimated 21.2 million Americans ages 12 and older needed treatment for a substance abuse disorder, but only 3.7 million received any kind of treatment and only 2.4 million received treatment at a specialty facility.

ONDCP’s treatment plan relies on three pillars composed of 22 areas of focus.

The three pillars are improving efforts to expand early intervention, treatment and recovery support services; improving delivery systems, provider efforts, and services for people with substance use disorders; and improving quality of treatment.

For a copy of the plan, visit www.whitehouse.gov.

**Health services need better integration**

Workforce shortages, stigma, and financial and policy barriers are making it difficult to integrate opioid addiction and infectious disease services, finds a new report from the National Academies of Sciences, Engineering and Medicine.

Opioid addiction is driving a surge in infectious diseases such as HIV, hepatitis C and sexually transmitted infections. For example, in the four states hit hardest in the opioid epidemic, acute hepatitis C infections have gone up by 364%, according to the report. However, a lack of integrated care at settings such as methadone clinics, primary care clinics and prisons — places that typically come in contact with people struggling with both opioid addiction and infectious disease — means prevention and treatment opportunities are likely being lost.

For a copy of the new report, visit www.tfah.org.

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**Study: US has highest suicide rate compared to 10 other rich nations**

The U.S. is home to the highest suicide rate of any wealthy nation, with 14 suicide deaths per 100,000 people.

The sobering statistic is part of “U.S. Health Care from a Global Perspective, 2019: Higher Spending, Worse Outcomes,” which the Commonwealth Fund released in January. The report, which compared the U.S. to 10 other high-income nations in the Organization for Economic Cooperation and Development, said contributors to the high suicide rate likely include a high burden of mental illness, lack of investment in social services and the high costs of mental health care.

The report also found that the U.S. continues to spend more on health care than any other rich nation, spending nearly 17% of its gross domestic product on health care in 2018, which is nearly double what the average OECD nation spent. U.S. health spending now totals more than $10,000 per person, with private insurance costs driving much of the spending. When compared to its rich peers, the U.S. also had the lowest life expectancy. And while Americans tended to visit the doctor less frequently, they used expensive medical procedures more often.

On a more positive note, the U.S. did better than many of its high-income peers on preventive measures such as flu immunizations and breast cancer screenings.

For a copy of the new report, visit www.commonwealthfund.org.

— Kim Krisberg

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**Redlining linked to greater climate risks**

Past racist housing policies mean minority neighborhoods will likely bear the brunt of warming temperatures, a new study finds.

Published in January in Climate, the study examines the relationship between redlining — the historical practice of refusing home loans and insurance to entire neighborhoods based on the racial makeup of residents — and present-day heat extremes. Using a spatial analysis of more than 100 U.S. urban areas, researchers found that 94% of the areas studied were home to consistent patterns of elevated land surface temperatures in formerly redlined communities — when compared to neighboring non-redlined communities — by as much as seven degrees.

“Crafting climate equity-centered policies that recognize decades of disproportionate exposure to environmental stressors can help any new discoveries in urban design get implemented with focus and rapidity,” the study stated.

— Kim Krisberg

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**In the case of a public health emergency, many states would have difficulty ensuring clean water supplies and other vital services, according to an annual report from Trust for America’s Health.**

For more, visit www.trfah.org.

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**A Healthy People 2030 objective on voting and civic engagement should be one of the report’s top indicators, a committee says.**

Photo by Adamkaz, courtesy stockphoto

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**For a copy of the new report, visit www.whitehouse.gov.**

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apha.org/annualmeeting
Plan cuts CDC chronic disease prevention, health promotion by $426 million

2021 BUDGET, Continued from Page 1

programs such as food and housing assistance.

“This budget, put simply, is a disinvestment in the health of Americans,” said APHA Executive Director Georges Benjamin, MD, in a news release, “We have an incredibly dedicated public health workforce that is ready to act. But we need federal investments to make that happen. An adequate and rational investment in the health of Americans is missing from this budget.”

Within the CDC budget proposal, the White House is calling for a more than $426 million cut to chronic disease prevention and health promotion, a $152 million cut at the National Institute for Occupational Safety and Health, and a more than $85 million cut to emerging and zoonotic infectious diseases work. It proposes more than $48 million in cuts to CDC’s National Center on Birth Defects and Developmental Disabilities, and would cut over $38 million for global health activities, reduce funding for public health preparedness and response by more than $25 million, and shear nearly $32 million from environmental health work, including a proposal to eliminate CDC’s crucial Climate and Health Program. The Agency for Toxic Substances and Disease Registry faces a more than $14 million cut.

On the flip side, the president’s budget requests an additional $231 million for HHS’ Ending the HIV Epidemic Initiative, $50 million more for global health security, $40 million more for flu planning and response, and more than $13 million in additional funds for vector- and tick-borne disease. It also proposes an additional $48 million for infectious disease and opioid addiction, $50 million more for CDC’s Infectious Diseases Rapid Response Reserve Fund, and an extra $10 million for public health lab capacity. The budget proposal also calls for an increase of $12 million to support CDC’s work to expand Maternal Mortality Review Committees to every state and Washington, D.C. Within the budget proposals are typically considered dead on arrival — meaning the final budget that makes it out of congressional negotiation is signed into law will likely look nothing like Trump’s proposal — health advocates warn that it still serves as a starting point for negotiations.

“Even if the entire budget isn’t approved as submitted, having certain budget cuts proposed by the administration means they’re more likely to be taken seriously by Congress,” said APHA member John Auerbach, MBA, president and CEO of Trust for America’s Health. “It certainly wouldn’t be surprising if any of these cuts were approved.”

Auerbach said the president’s proposed 9% cut to CDC’s budget would be “devastating” for the nation’s public health system, as about two-thirds of CDC’s budget goes out to state, local and tribal health agencies. Of particular concern, Auerbach said, are proposals to cut public health preparedness funding — funds that have already been on the decline for many years.

For instance, the budget proposal partially would restore funds for the Infectious Diseases Rapid Response Reserve Fund, which was established to support public health in quickly responding to threats without waiting for Congress to approve emergency funds. However, the proposed restoration would still leave the fund with much less money than before HHS tapped it for its COVID-19 response.

“Unless we put more money into this reserve, we’ll find ourselves less prepared for the next emergency,” Auerbach told The Nation’s Health. “If we’ve learned anything from coronavirus and other infectious disease emergencies, it’s that you have to respond quickly and we have to have resources pre-approved.”

Another point of concern is the White House proposal to block grant CDC funds for preventing chronic diseases, which are key drivers of health spending and remain leading causes of death and disability in the U.S. The shift would eliminate specific, line-item funding for chronic disease issues such as obesity, tobacco use and instead gives states a block of money they can spend as they choose. Administration officials argue that the change gives states more flexibility, but in reality, block granting is “really just a mask for budget cuts,” said APHA member Emily Holubowich, MPH, vice president for federal advocacy at the American Heart Association.

“With consolidation, there’s always cutting,” she told The Nation’s Health.

Trump’s budget also aims at tobacco control, proposing to move the Center for Tobacco Products out of the U.S. Food and Drug Administration and create a new HHS agency instead. In essence, the proposal would undermine the regulatory authority FDA gained over tobacco via the landmark Family Smoking Prevention and Tobacco Control Act of 2009. Holubowich said the proposal could threaten years of work on tobacco regulation and potentially open the door to increased pressures from the tobacco and vaping industry.

“It opens up the risk that the person appointed to direct (the new center) will be from the very industry we’re trying to regulate,” she said. “Now is no time to rearrange the deck chairs, especially when we’re facing an epidemic of youth e-cigarette use.”

Other decreases in the White House budget proposal include a nearly $3 billion cut to the National Institutes of Health, more than $100 million in cuts at the Substance Abuse and Mental Health Services Administration, and zeroing out funding for the Agency for Healthcare Research and Quality. It also calls for cutting the Supplemental Nutrition Assistance Program by more than $180 billion over 10 years, and slashing public housing funding by $3.2 billion in 2021.

On health care access and coverage, Trump’s budget calls for $1 trillion less funding for Medicaid and the Affordable Care Act overall. According to the Center on Budget and Policy Priorities, by 2030, such cuts would be akin to eliminating the ACA’s Medicaid expansion and coverage subsidies altogether. Such a loss, the center estimated, would cause 20 million Americans to lose health coverage. Trump’s budget also reduces Medicare spending by $500 billion over 10 years, mostly in the form of decreasing payments to health providers.

Angela Ostrow, JD, executive director of the Coalition for Health Funding, of which APHA is a member, noted that CDC is already “woefully” underfunded and still operating below the highmark funding levels of 2010. If Trump’s budget cuts came to fruition, she said, it would put an incredible strain on the nation’s public health infrastructure. She, like fellow advocates, called on supporters to educate lawmakers on the critical role of public health.

“The president’s budget may be dead on arrival, but it’s still so important for advocates of public health and health care to remain vigilant,” Holubowich said. “When it comes to the budget, you have to keep calm, but advocate on. We can’t rest on our laurels.”

For a copy of the president’s new budget proposal, visit www.whitehouse.gov.

— Kim Krisberg
Climate justice and health: Working together to achieve change

Kresge, RWJF supporting climate work

Programs foster community resilience, health equity

FOUNDATIONS do not usually collaborate, even when the institutions have common interests and goals. But that is not the case for two major U.S. foundations focused on climate, health and social equity.

The Kresge Foundation and Robert Wood Johnson Foundation are exchanging ideas, reviewing each other’s plans, sharing staff and collaborating at conferences to help ensure smooth operations and success of their respective public health and climate funding projects.

“They have separate funding, we are very aligned to what we are doing,” said Alonzo Plough, MA, MPH, PhD, chief science officer and vice president of research, evaluation and learning at RWJF.

Both foundations are funding multiple projects devoted to fostering community resilience and improving health equity, responding to mountains of scientific evidence confirming that climate change is harming human health. The projects use a community-based approach to better understand health and climate, then build on the knowledge to advance human health outcomes.

“Climate change is a major threat to any vision of an equitable health future to anyone in the country or around the globe,” Plough told The Nation’s Health. “We recognize that climate change is the No. 1 health issue threatening the world. It is also a health equity issue that impacts marginalized communities the most.”

The Kresge Foundation’s health and environment programs are involved in a multi-year effort dedicated to building climate resilience through policies and practices that also improve community health. For several years, Kresge has had two national health and climate programs underway: one helps health systems and local health departments promote climate resilience and advocate for climate policies, and a second educates health care and public health practitioners on climate change’s human health impact.

Launched in January 2019, Kresge’s third national program is the Climate Change, Health and Equity Initiative, which is funding 15 organizations as they develop work plans to expand advocacy efforts in climate, health and equity.

“They are tasked with identifying policies in the places in which they work that would accelerate climate resilience and reduce health inequity,” Shamar Bibbins, Kresge senior program officer of environment, told The Nation’s Health.

In February, APHA staff joined Kresge grantees in Atlanta for discussions on the urgency of climate and health action across communities, health care systems and practitioners. “I walked away from the convening with a sense that Kresge Foundation’s multi-strategy approach aims to build power to promote equity and spur social change to address the health impacts of climate change,” said Surili Patel, MS, director of APHA’s Center for Climate, Health and Equity, which serves on the Kresge Foundation’s Climate Change, Health and Equity Advisory Committee.

Among the work funded by the Kresge Foundation grants is Physicians for Social Responsibility in Los Angeles. Established in 1980, PSR-LA advocates for policies and practices that improve public health and reduce health disparities. Its early years focused on educating the public about dangers of nuclear war and weapons. In the 1990s, PSR’s Los Angeles office broadened its work to include environmental issues. Today, a large share of its work involves climate and health.

PSR-LA provides support to physicians and health professionals who want to connect their work to climate change.

Photo by Mike Painter, courtesy RWJF

People mix compost at Covenant Pathways Health and Climate Solutions project in Vanderwagen, New Mexico. Covenant Pathways received a grant from RWJF for the agriculture program.
Climate change affects us where we live, work, worship and play. This makes it very personal and emotional.

At APHA, we believe that climate change is the biggest public health challenge of our time. I also believe that climate change offers an opportunity for hope and reinvention. It offers the chance to rethink what it means to be healthy and live in a community that supports this end.

But there are irrefutable challenges. Climate change poses catastrophic risks to children’s health and well-being. I often say that climate change is blind. It is blind to age, income, geography, race, gender and more because it will impact us all in one way or another over the course of our lifetimes.

What makes us different is our ability to bounce back after a climate event. Some communities have the resilience to recuperate after a major storm. Others will remain devastated for a long time and then face another weather event before fully recovering.

Some populations — such as children, the elderly and the poor — will also find it difficult to build resilience in the face of climate disaster. Children, for example, drink more water and breathe in more air per body unit than adults. Their organs and systems are still developing, and they depend on an adult for their care. All of these factors make them vulnerable to climate events, such as poor air quality following a wildfire.

On the other end of the age spectrum are older adults. They are prone to injuries and falls and may have preexisting health conditions, which could make it more difficult for them to navigate a flood. Then there are communities of color, who on a regular day could be faced with health inequities or literacy limitations, making it far more challenging to navigate threats such as mosquitoes. Low-income communities often lack infrastructure or capital investment, and have less resources to evacuate if necessary.

These are just a few examples of climate-sensitive populations in a long list that includes pregnant people, young athletes, people who are homeless and farmworkers. And no matter what population you are part of, mental health is at risk.

Extreme storms or heat events can lead to depression, anger, aggression and even violent behavior.

So why can’t we solve this with a pill or a visit to the doctor’s office? It’s because at least 80% of what it takes to achieve good health takes place outside of clinical interventions.

The ability to achieve a high school diploma, earn a living wage, live in an affordable home and enjoy green outdoor spaces influences our aptitude to achieve good health — as does access to medical care, reliable transportation and nutritious foods.

This special section of The Nation’s Health is one avenue that offers a deeper dive in the climate and health equity discussion. The goal is to galvanize the public health field and share knowledge at the intersection of climate change and social justice.

There is strength in your voice, and power in our collective voices, to achieve climate justice.

— Surili Patel

Patel is director of APHA’s Center for Climate, Health and Equity.

For young children, climate change can be overwhelming. Hearing about floods, droughts, fires and other increasing threats can make them feel afraid and hopeless.

But if kids learn about climate change in a non-threatening way and are shown what they can do about it, it can empower them instead.

Educating and inspiring children on climate change is one of the goals of APHA’s new Early Climate Optimists Bookworms club. Launched in February by APHA’s Center for Climate, Health and Equity, ECO Bookworms is geared toward readers ages 8 and younger.

On the second Tuesday of each month, a new book selection will be released, along with discussion questions that parents, teachers and other caregivers can discuss with children.

“We were very careful in selecting our books,” said Surili Patel, MS, director of the Center for Climate, Health and Equity. “We looked for books that send a message of hope or action, are available in the public library system, include a diversity of characters and have a take-away that isn’t scary or alarming. We also asked other parents to share their favorite climate change, environmental or health books with us.”

The first ECO Bookworms selection is “The Pout-Pout Fish Cleans Up the Ocean” by Deborah Diesen, which is published by Farrar, Straus and Giroux. In the book, a group of fish notice pollution in the waters they live in and work to clean it up.

“That is one of my kids’ favorite books and the one I talk most about with other parents,” Patel said. The inspiration for the book club came from discussions Patel had with other parents as she traveled around the U.S. for environment-related meetings. She and other parents would share ideas about books they read with their kids and realized that others would also be interested.

“Being a parent myself, I’m inspired by today’s youth climate activists,” she said. “We want the center to offer a way to talk about these issues with younger children as well.”

ECO Bookworms fits in with work by the APHA center to train future generations to understand and take action on climate change. The center recently funded five student groups to create college campus experiences during National Public Health Week to elevate climate justice and health conversations.

In April, the Center for Climate, Health and Equity will launch a teaching climate change toolkit.

“It’s geared to high school students and will offer teachers, school administrators and parents an appropriate way to discuss the health impacts of climate change at this grade level,” Patel said.

For more information on ECO Bookworms, visit www.apha.org/climate.

— Michele Late
Health inequities, social determinants exacerbated by climate change

Minority communities harmed worst and first: Q&A with climate justice expert Adrienne Hollis

Communities of color are often on the front lines of the impacts of climate change. Adrienne Hollis, PhD, JD, is the senior climate justice and health scientist at the Union of Concerned Scientists, a nonprofit science advocacy organization. Hollis, an APHA member, works to monitor how rapidly the changing climate harms historically disenfranchised people.

Abigail Maldonado stands in ankle-deep water in her Puerto Rico home after heavy rains following Hurricane Maria in 2017. Flooding has become a growing health problem in the U.S. and its territories as global temperatures hit record levels.

Climate change has long been recognized as an environmental crisis. Why is it also important to acknowledge it as a public health crisis?

You can’t talk about climate change without talking about public health. Climate change affects our health in a number of ways. Rising temperatures, sea levels, extreme weather — they affect us.

You see increased incidents of asthma in children. In adults, there are increased chronic obstructive pulmonary diseases, increased cardiac effects. It affects our food, and the ability to eat healthy foods. If you’re allergic to certain things — in the presence of increased heat, those things may be exacerbated. Water quality is an issue. We could see more contaminated drinking water or the lack of drinking water.

I also want to point out that when we talk about public health, we also want to include mental health issues. People don’t normally think about that, how forced migration can affect a person, increased depression and increased violence against women, increased civil conflicts, or how needed medications and medical care is unable to be accessed by the homeless population or people who are forced to migrate.

What is climate justice, and how does it relate to public health?

I view climate justice as a smaller part of environmental justice. If you could imagine an umbrella and that would be environmental justice — climate justice, immigration justice, criminal justice and so on under that because those are the areas we live, play, pray, work and just carry on our daily lives.

When we talk specifically about climate justice, we’re talking about the effect of manmade changes in our environment, like increased greenhouse gases, increased heat and melting glaciers. And how those changes have greater impact on vulnerable communities, communities of color and lower socioeconomic communities.

People don’t realize that contamination, climate change, water infiltration, rising seas don’t stay contained in the environmental justice community. Just like contamination doesn’t know to stay behind the fence line. If it’s not impacting you now, it will. The communities are hit first and worst. It doesn’t mean they’ll be the only ones impacted. If for no other reason than to save yourself, we’ve got to save each other.

How are communities of color disproportionately affected by climate change?

Let’s take a step back to how communities have been segregated into communities of color. It’s mostly the way that we have been segregated and forced into certain areas of the country — and then to certain parts of a city or town — that has put us at risk. Through redlining and things of that nature, people have been placed in areas once considered to be less desirable.

For example, I’m from Mobile, Alabama, and a number of communities are located near waterways that have since become at high risk of flooding due to sea level rise and extreme weather. Some of my colleagues in Carolinas along the coastline live in areas that were not originally designated as floodplains but are now because of sea level rise.

And not to mention the fact that because of those redlining issues, we have been victims of economic oppression.

We can’t afford to raise our homes as required by some insurance companies. Or we live in areas that consist of high-rise buildings, so we are exposed to increased heat through the urban heat island effect. The areas we live in don’t have, for the most part, access to green space, so we’re not able to experience relief from extreme temperatures because we can go to the park or sit under a tree. And that is because of where we have been concentrated, either in cities or low-lying areas or places that just aren’t really recognized as economically viable.

Is there anything that can or should be done from a policy standpoint?

Yes, there are things that can be done from a policy perspective. And to do that, policymakers first have to all accept that climate change is real, right? And once we’ve crossed that hurdle we’re on our way to enacting the change that we need. Policymakers are going to need to work with all of the stakeholders — the people who are going to be affected adversely by climate change. You’ve got to hear from people who are impacted. And then you work with the scientific community on ways we can mitigate the adverse effects of climate change.

The overall goal is to decrease the carbon dioxide in the environment and decrease the greenhouse gas production. These things affect everybody, really. We’ve got to make a concerted effort to work together to clean up the environment. That’s really the bottom line.

How can people working in public health mitigate the dangers that climate change brings to these communities?

Education. Outreach and education is the first step. Part of that is health professionals recognizing what the threat looks like so that they can educate their communities. And in that way people have more information, and they can make more informed decisions. For example, you would expect to see increased cases of asthma, say, in California, particularly during wildfires. For public health professionals, no matter what area you are engaged in, make sure that an integral part of your work is environmental justice. Particularly as it relates to climate change, some of your activities need to be focused on vulnerable communities, homeless, those in prisons, gender issues and issues around the availability of shelters. I just want everybody to think outside the box and ask questions: “Who is most likely affected first? And what do we need to do to stop that? And what do we need to do to educate people and increase the whole base of people that we work with?”

— Interview conducted, edited and condensed by Aaron Warnick

For more information, visit www.ucusa.org

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— Interview conducted, edited and condensed by Aaron Warnick

For more information, visit www.ucusa.org
Community-led programs focusing on climate resilience, health equity

FOUNDATIONS, Continued from Page 51

experience and education to environmental policy objectives. The organization uses a variety of tools to impact public policy outcomes, including policy development, legislative education, media advocacy and litigation.

Another program receiving a Kresge planning grant is the Coalition for Environment, Equity and Resilience in Houston, Texas, made up of over 20 nonprofits that came together in the aftermath of Hurricane Harvey.

The hurricane struck Louisiana and Texas in August 2017. Flooding in the Houston area contaminated water and land systems and damaged homes, particularly in low-income communities. The coalition works to influence Houston decisionmakers and promote equity and resilience. Of particular interest is improving housing policies in disadvantaged neighborhoods.

“I think they are doing some fantastic work,” Bibbins said. “The city is in the process of developing a climate action plan, so they are really in a square dead-on position to influence what the city actually puts in that climate action plan.”

In October, 12 of the 15 organizations will receive Kresge funding for three years to implement their work plan. Overall, we are looking to increase public support and political will that will drive the adoption and implementation of climate policy and programs and investments at the local and regional level,” Bibbins said. “The goal is that programs will improve public health for low-income urban communities.”

The Robert Wood Johnson Foundation also is funding several health and climate programs. One is the Health and Climate Solutions project, which is supporting seven organizations with two-year grants. Six are receiving $350,000 and one is receiving $200,000, Priya Gandhi, MS, RWJF research associate, told The Nation’s Health.

Similar to Kresge’s program, RWJF’s grantees already have a strong track record of effective climate, health and equity advocacy, but they are in need of funding to expand their work.

Each grantee seeks to achieve three goals: create opportunities for better health, advance health equity and develop ways to lessen the impact of climate change on people, Plough said. The programs develop and amplify the evidence around a set of approaches that improve community health and well-being and advance health equity.

Understanding each program’s community-driven model for success is a big part of the Health and Climate Solutions project. “We are studying them to understand how they were able to make a change both in broader awareness about the impact of climate on health, particularly as an equity issue, and more awareness of the practical importance of addressing climate change,” Plough said. “We make sure we can disseminate and share the knowledge from our grants to catalyze other activities.”

The community-based programs are focused on air quality, energy sources, transportation and mobility design, food and water systems, housing, health systems, and other areas related to health and the environment.

One grantee is the Alaska Native Tribal Health Consortium in Anchorage, Alaska. Climate change is causing rising seas and melting permafrost, and some Alaska coastal villages are now puddled in salt water, polluting fresh water storages. Meanwhile, village land is eroding and damaging infrastructure. The consortium is evaluating the health impact of installing portable water sanitation systems in 69 homes in two low-income coastal Alaska Native communities.

As seas continue to rise globally, the work could offer ways to help people at coastal sites in the continental U.S.

Another grantee is the City of Austin for its Green School Parks program, a collaboration between Austin schools, the Parks and Recreation Department and two Texas universities.

Climate change is creating higher temperatures in many parts of the U.S., including Texas, causing heat stress and other heat-related human health problems. Higher temperatures can also mean children and adults stay in their homes more, getting less exercise.

Three elementary schools have been chosen for the Green School Parks program. All are in low-income Hispanic neighborhoods with little green space and few sidewalks. Workers are planting trees and gardens in school playgrounds to create a shady canopy to lower daytime temperatures.

In addition, several grantees in the Health and Climate Solutions project are developing better agriculture practices to improve the quality of crops, enrich soil, reduce the climate footprint of agriculture, and fortify crops to withstand flooding, drought and heat caused by climate change.

One of the agriculture programs is the Covenant Pathways Health and Climate Solutions project in Vanderwagen, New Mexico. Based on a Navajo reservation, it is centered at Spirit Farm, a working demonstration agriculture site involved in soil conservation and restoration. The work is important because much of U.S. soil has been degraded by agriculture, and well being soil means healthier crop production.

Covenant Pathways is led by Navajo people who teach regenerative agricultural practices to traditional Navajo farmers at a time when climate change is making agriculture difficult in the region. As Navajo farmers learn modern farming and conservation, scientists are also learning as well.

At Spirit Farm, organizers “value guardianship of the land, including the soil, as something sacred,” Ed Maibach, PhD, MPH, director of the George Mason University Center for Climate Change Communication, said in a blog post after a recent visit to Spirit Farm. The center has an RWJF grant to provide strategic communication and administrative support to the seven grantees.

“It’s a powerful reminder of the humbling and perhaps most fundamental insight: Native American culture shares with the social determinants model in the era of climate change, that our health and well-being are inextricably dependent on the health of the world we inhabit,” Maibach wrote.

For more information on the Kresge program, visit www.kress.org/OCHE. For more on the RWJF climate program, visit www.rwjf.org. Learn about APHA’s work on climate change and health at www.apha.org/climate.

— Mark Barna

WE ACT for Environmental Justice, one of 15 organizations to receive a grant from the Kresge Foundation, marches in Washington, D.C., in 2017. WE ACT advances policy solutions to improve climate resilience and human health.
Public health needs to play crucial role in energy justice

E NERGY JUSTICE is a public health issue, which is why APHA is working to elevate public health and health equity in discussions to create a cleaner energy economy. By pursuing energy justice as a priority, public health professionals can play a role in both challenging health inequities and mitigating climate change.

The U.S. energy sector is in a massive state of transition. The coal industry has been declining for decades due to increased use of lower-cost natural gas, more renewable energy options and policies designed to control greenhouse gas emissions. At the same time, the global production peak for petroleum is becoming imminent.

As alternative energies become cost competitive, there is a need to monitor, evaluate and support a transition to a healthier energy supply. In the same way that climate change dis-proportionately affects certain populations, so does energy access.

Communities that are most affected by environmental harms and risks — such as people of color and low-income households — are further impacted by energy-related inequities. For example, people who live near extraction and combustion sites often have health effects from air pollution and improper waste disposal. There are also disparities in energy access. In 2015, 31% of U.S. households said they struggled to pay energy bills or to maintain adequate heating and cooling in their homes. About 20% said they skipped or cut back on basic necessities such as food and medicine to pay an energy bill. Energy-insecure populations have poorer health, fewer educational opportunities, limited political representation, fewer economic opportunities and inadequate access to health care.

With these health impacts in mind, APHA’s Center for Climate, Health and Equity hosted a discussion with public health and climate action leaders at APHA’s 2019 Annual Meeting and Expo. We examined public health’s role in the energy justice space and what a just energy future would look like.

The clearest priority that emerged was the need to support a culture change that prioritizes a just energy economy. Across our policy and financial systems, leaders must shift to a paradigm that values human well-being and an equal sharing of the risks and benefits of energy production and consumption.

As APHA pursues energy justice, we can serve as cross-sectoral conveners and elevate voices from affected communities. We can develop resources and trainings on energy justice to equip public health professionals with the tools to confront related health inequities, and work to develop and support national and state energy policy that centers on health, equity and justice.

Working on energy justice as a public health issue is a win-win for everyone, and we are only beginning our commitment on the topic.

With a strong foothold in the climate adaptation sphere, APHA is expanding its climate mitigation portfolio through energy justice. We are eager to build and deepen partnerships to strengthen our efforts. With the passion and expertise of APHA’s membership and partners behind this issue, we can make significant, lasting progress toward an energy-just future.

— Rachel McMonagle

McMonagle is climate change program manager within APHA’s Center for Climate, Health and Equity.

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**C D C framework supports resilience**

BRACE helping health agencies prepare for climate change effects

A S S C I E N T I F I C E V I D E N C E mounts showing the impact of climate change on human health, U.S. public health agencies are stepping up to develop programs to reduce and prevent risks.

To aid them, the Centers for Disease Control and Prevention created the Building Resilience Against Climate Effects framework. BRACE helps health leaders pinpoint and even predict how climate change will affect their respective regions, then formulate a plan to protect residents, especially people who are most vulnerable.

CDC’s Climate-Ready States and Cities Initiative is funding 18 U.S. BRACE programs in 16 states over five years. Among them is BRACE-Illinois, based at the University of Illinois at Chicago’s School of Public Health. The five-step program is helping local health departments prevent and contain tick- and mosquito-borne diseases, which warming temperatures from climate change have made a growing concern.

Meanwhile, the Oregon Climate and Health Program, overseen by the Oregon Health Authority, is tackling the health effects of the state’s wildfires, which create thick smoke that can cause respiratory and cardiovascular illnesses. The program is also creating resources on how to protect people from smoke inhalation and working with community-based organizations that serve populations most vulnerable to climate risks, such as seniors and people with asthma.

“Climate change will undoubtedly increase health disparities,” Surili Patel, MS, director of APHA’s Center for Climate, Health and Equity, told The Nation’s Health. “And a lot of what goes into achieving good health occurs outside of the clinical setting. These social determinants of health are addressed by many of the climate adaptation plans developed across the country.”

The BRACE framework enables programs to identify and flesh out projects involving climate and public health. Among the goals are to anticipate climate impacts, assess vulnerabilities and create plans to address them. For example, participants use data sources to gain insight into how climate change is harming human health in their states, such as through flooding and air pollution.

In Florida, health officials are concerned with issues that include extreme weather, wildfires and water-borne diseases, which are linked to allergies, asthma, stroke and more. The Florida Building Resilience Against Climate Effects Program began its funding period in 2017. Based at Florida State University, the program covers the entire state, an ambitious task as Florida has three climate regions with distinct challenges. FL BRACE offers assistance and funding for county health departments, FL BRACE told FL BRACE, told The Nation’s Health. “And a lot of what goes into achieving good health occurs outside of the clinical setting. These social determinants of health are addressed by many of the climate adaptation plans developed across the country.”

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The BRACE system has worked with county health departments to develop plans that increase mobility in the event of a storm.

“Climate change presents challenges and threats to everyone’s health, but some groups are more impacted. Those populations are of concern during a disaster.” — Chris Uejio

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Heavy rains cause major flooding in Hollywood, Florida, in December 2019. The Centers for Disease Control and Prevention has created a framework to aid state health agencies in helping people with climate-related health and social issues.

Photo by Joe Raedle, courtesy Getty Images

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**SPECIAL SECTION: APRIL 2020**

**THE NATION’S HEALTH**

S5
When climate change is framed in terms of the personal health effects, people are more receptive to messaging on the topic.

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Making climate change personal improves understanding

CLIMATE STORIES,
Continued From Page S1

urgent, finding effective methods for talking about it in ways that resonate, engage and motivate people to action has become increasingly important. Initially, such conversations were more challenging, as climate impacts often seemed remote and far off, said Meghan Speiser, executive director of ecoAmerica. Now, as communities around the world face new extremes in temperature, weather and disasters, such impacts are no longer so abstract. The unfortunate silver lining is that it also makes it easier to personalize the climate story, which is a particularly effective form of engagement.

“Climate change has come home to roost, and people are experiencing it in their daily lives,” Speiser said. “We’re in a moment right now in which good communication is absolutely key.”

Based on research and the real-life experiences of its grassroots partners, ecoAmerica recommends a number of steps for effective climate communication, such as identifying and connecting on common values, focusing on local realities, avoiding doom and gloom, and emphasizing solutions. Health, in particular, tends to resonate with people, Speiser said. In fact, an ecoAmerica poll released last year found that over half of Americans reported experiencing climate-related health impacts, and 90% believed people have a “moral responsibility” to ensure a safe and healthy climate. Sixty-six percent agreed that if the U.S. took steps to prevent climate change, it would also benefit health.

Not only does health resonate with audiences, public health professionals are particularly good climate messengers as well, said Edward Maibach, PhD, MPH, director of the Center for Climate Change Communication at George Mason University.

“We (health professionals) are trusted,” said Maibach, an APHA member. “But we need to get on with the business of sharing what we know much more frequently, much more assertively. Other voices are working hard to confuse the public and policymakers about climate change. We need to speak up and speak out.”

While public health professionals may be well-versed in the research behind climate change, Maibach cautioned against leading with climate science. Instead, he recommended simple, clear explanations about the myriad ways climate change is already harming people’s health, as well as equally clear and simple explanations about actions people can take to protect their health — “numbers numb, but stories sell,” he added. At the same time, he said lies and misinformation about climate change should not go unchallenged.

“We should tackle them head on and set the record straight,” he said. “(Health professionals) are highly trusted, so it’s absolutely critical that we debunk and rebut.”

Maibach noted that only one-third of Americans see themselves as environmentalists, while almost everyone cares about health.

“The way to make climate change personal is to show people how climate change threatens the health of their loved ones and other members of their community, especially children,” he told The Nation’s Health. “Even more importantly, the way to get people excited about climate solutions is to show them how such solutions — like clean energy — will immediately help everyone live more healthfully and breathe more easily.”

Until relatively recently, many scientists believed that if people simply understood the science on an issue, it would be enough for them to take action, said Julia Hathaway, PhD, MEM, a postdoctoral researcher with the Alda Center for Communicating Science at Stony Brook University. The theory is known as the information deficit model and assumes that people are “empty vessels and if we just provide them with the right information, it’ll make a difference,” she said. But research shows that facts are not always successful at changing hearts and minds. On top of that, some people have been effective at sowing doubt about climate change.

“We tend to interpret facts in accordance with our cultural attachments — we want the world to be as we understand it,” Hathaway told The Nation’s Health. “It’s really hard to communicate science in a way that people can engage with on a personal level. In that way, the public health frame can be a great way to connect.”

Putting a public health frame on climate change reaches people where they are and offers them actionable information, she said, such as suggestions to walk more and drive less, which produces benefits for both personal health and the local environment.

“We all know people who are being affected by climate change right now, but the challenge is to help them validate what they’re feeling with the science,” Hathaway said. “Those personal stories are so meaningful — they reach us at a level that’s really, really powerful.”

The Nation’s Center for Climate, Health and Equity is helping public health professionals learn how to more effectively use personal stories to talk about climate change through its new workshop. Previewed at a national environmental conference in January, APHA’s Making Climate Change Personal workshop illustrates how stories about climate change’s impact on human health, and the solutions that address it, can be a more effective advocacy tool. The workshop will be taught at several more conferences this year.

“When told well, stories change lives,” said Louise Dettemer, an AHA communications specialist. “We all have a responsibility to share what we know and what can be done about climate change in a way that everyone can hear.”

Like so many other communication challenges, talking effectively about climate change means knowing one’s audience, said Olena Alec, MPA, director of engagement at the Climate Reality Project, which supports more than 21,000 climate activists in 154 countries. For too long, she said, the complexity of climate science may have scared people away from becoming effective climate action in their communities. But the reality is that climate change is now part of common experience.

When training local climate advocates, Alec said the project emphasizes two main points. First, learn about the climate impacts and solutions most relevant to the audience and “that’s how you make it personal.” Second, relay the urgency of climate change while also offering hope.

“Every single person can be an effective communications expert about the climate crisis,” Alec told The Nation’s Health.

For more on climate change communication, visit www.climatechangecommunication.org. For more on work by AHA’s Center for Climate, Health and Equity, visit apha.org/climate.

— Kim Krisberg
Livelihoods, economies at growing risk
US tribes working to adapt in face of climate change threats

NOT FAR FROM the Arctic Ocean in the middle of one of Alaska's busiest oil fields, the small village of Nuiqsut is at the epicenter of the climate crisis, facing threats from both the cause and effects of climate change.

“We’re seeing it firsthand,” said Rosemary Ahtuangaruak, an Inupiaq activist and member of the Nuiqsut City Council. “The amount of change we’re going through is very concerning.”

Nuiqsut is already experiencing shifts in the local environment, such as earlier thaws and warmer temperatures, which are making it harder to sustain traditional ways of survival, Ahtuangaruak said. Ice cells, for example, have been used for generations to safely store food in leaner months, are succumbing to erosion and flooding. Unseasonable weather is making it harder to dry fish and meat, and it is getting more difficult to hunt whales and caribou, both key sources of affordable food and nutrition.

“The town has grocery stores, but prices are high because everything has to be airlifted in. You could spend your whole paycheck and still not feed your family,” Ahtuangaruak, an APHA member, told The Nation’s Health. “And it doesn’t even have the nutritional value we need for our harsh environment.”

As climate change continues, tribal communities like Nuiqsut are especially vulnerable to its direct and indirect impacts. According to the U.S. Global Change Research Program, the changes threaten indigenous peoples’ livelihoods and economies. Such disproportionate impacts, coupled with existing disparities in health and opportunity, make climate planning and adaptation critical.

“Because of the unique relationship that tribal communities have with the land, climate change poses a real threat to their ways of life,” said Ivana Castellanos, a policy analyst at APHA’s Center for Public Health Policy, which convenes the Tribal Public and Environmental Health Think Tank. “We have to do more to be inclusive of traditional knowledge as a valuable resource in the fight against climate change.”

At the National Indian Health Board, the Climate Ready Tribes Initiative, a program funded by the Centers for Disease Control and Prevention, has supported 10 tribes in conducting local climate work and research, according to Angelica Al Janabi, MPH, the initiative’s public health project coordinator. Efforts range from climate-related health research to community outreach and education.

For example, Blackfeet Nation in Montana convened a climate-health advisory team of tribal representatives, and developed a climate communications plan to guide their outreach. The Swinomish Indian Tribal Community in Washington indigenized CDC’s Building Resilience Against Climate Effects framework to make it more relevant to tribal needs and created modules fellow tribes can use. And the Lummi Nation, also in Washington, used funds to boost monitoring and education related to harmful algal blooms.

“In many ways, tribes are leading the way in this area,” Janabi told The Nation’s Health. “But at the same time, we do need more funding to maintain and grow this work.”

In the northwest corner of California, traditional knowledge and practices are key to the Karuk Tribe’s new climate adaptation plan, which it released last year. For example, the plan elevates traditional fire use as a solution to increasing wildfire risks, said Bill Tripp, deputy director of ecosystem revitalization at the tribe’s Department of Natural Resources. For a century, he said, the tribe has been prohibited from maintaining local forests using indigenous fire regimes and over time, that absence helped create the conditions for massive wildfires.

“What’s unique about our plan is our proposal to once again embrace fire as a part of our natural system,” Tripp told The Nation’s Health.

The tribe’s first demonstration project, created in concert with the new climate plan, is now underway and focuses on integrated fire management.

For more on tribal health and climate change, visit bit.ly/healthtribes. For more on the fire think tank, visit www.apha.org.

— Kim Krisberg

Photo by Bonnie Jo Mount, courtesy The Washington Post/Getty Images

Eunice Brower cleans waterfowl with her daughter in their home in Nuiqsut, Alaska, in May 2019. Warmer temperatures in the village caused by climate change make it more difficult to hunt certain animals and keep food fresh in ice cells.

Children and older adults tend to be particularly vulnerable to such impacts, especially those related to stress and anxiety. First responders, such as fire-fighters and health workers, also face an increased risk of climate-related mental health consequences, including short- and long-term substance use.

In 2016, the U.S. Global Change Research Program described the threat of climate change as a “key psychological and emotional stressor,” with people impacted by both direct experiences with climate-related events and via exposure to climate change information and news.

“We’re certainly seeing a lot of anxiety around climate change,” Bufka told The Nation’s Health. “Especially among young people, there’s lots of fear about what the future holds.”

While progress is being made to consider mental health needs in climate planning, Bufka noted that the country’s mental health workforce is already struggling to meet everyday needs. In the meantime, there are ways to cope, such as taking personal actions to mitigate climate change, Bufka said.

“You can’t stamp out hope for change,” she said. “If people feel hopeless, it’ll be very hard to make the changes that are needed.”

For more on climate and mental health, visit www.apa.org.

— Kim Krisberg

Photo by Josh Edelson, courtesy AP/ via Getty Images

The Spainhower family lost their home in the Camp Fire in Paradise, California, in 2018. Climate-related extreme weather is harming the mental well-being of many people, a study says.

Climate change threatens mental health of vulnerable communities

MORE THAN two-thirds of U.S. adults say they have some anxiety about climate change, while nearly half of young adults say stress about the global phenomenon impacts their daily lives.

The polling statistics — released by the American Psychological Association in early February — are among the latest to highlight the mental health effects of a changing climate. The numbers build on previous work showing several pathways through which climate change impacts mental well-being, from the mental health consequences of more severe and frequent natural disasters to research finding that people already living with mental illness face greater health risks due to extreme heat.

Like so many other climate impacts, mental health stressors will likely hit disadvantaged communities the hardest.

“Communities with fewer resources also have a harder time dealing with events like floods and fires,” said Lynn Bufka, PhD, senior director for practice research and policy at the American Psychological Association. “If a community doesn’t have the resources it needs to recover from climate-related problems, that’s an added layer of stress.”

Climate-related mental health impacts include increases in the incidence of stress, anxiety and depression, as well as increases in more severe mental health problems such as post-traumatic stress disorder. Women,
Access to water linked to health equity

Water quality, availability made worse by climate change in US

Protecting the nation’s drinking water is already a daunting task, and climate change is expected to make it even harder.

“Climate change isn’t necessarily causing all the drinking water problems we experience, but it is exacerbating them,” said Laura Feinstein, PhD, a senior researcher at the Pacific Institute in Oakland, California. “It’s going to take advantage of the vulnerabilities already in the system.”

The institute is one of many organizations and agencies studying the impacts of climate change on water and the systems charged with pumping safe drinking water into people’s homes. According to the U.N., water is the primary way people will experience the effects of climate change, with warmer temperatures shaping the amount, distribution and quality of available water.

In the U.S., for example, communities in the Northeast and Midwest are likely to experience more rain and runoff, which can lead to greater flood risks. In other parts of the country, longer, more severe droughts are expected.

Compounding climate effects on the natural water cycle is an aging drinking water infrastructure and a patchwork of water systems of varying capacity and preparedness. In California, for instance, the vast majority of water systems are medium to small ones, Feinstein said, with about 400 systems serving most of the state’s population.

The problem is that systems that serve only a few thousand residents typically lack the resources to prepare for and adapt to climate change.

During California’s hottest drought on record, which lasted from 2012 to 2016, about 150 small- and medium-sized utilities reported impending shortages and many had to rely on water being trucked in from elsewhere, she said, while residents had to restrict their water use. The strain was especially acute in already disadvantaged communities, some of which were forced to pay drought surcharges, exacerbating affordability issues.

“The communities most vulnerable are relatively small, rural and economically disadvantaged,” Feinstein told The Nation’s Health. “There’s a compounding effect when you have a small number of paying customers — it limits the system’s capacity to do things like build in access to emergency water supplies and maintain the water treatment infrastructure.”

A solution, she said, is to consolidate smaller water systems into larger ones — an idea the U.S. Environmental Protection Agency supports as well. Last year, California lawmakers created the Safe and Affordable Drinking Water Fund to help water systems in the state maintain an adequate and safe supply of water, and to support consolidation efforts.

Among the many groups that support California’s new drinking water fund is the Water Equity and Climate Resilience Caucus, which launched in 2018 to build a national network focused on frontline communities of color and low-income communities.

According to the caucus, millions of Americans are already being served by water systems with health-based violations, while federal funding for water and wastewater utilities has declined nearly fourfold between 1980 and 2014.

Climate change will only exacerbate such vulnerabilities, with low-income and minority communities hit disproportionately hard, said Ronda Chapman, a senior associate at Policy-Link, which co-convenes the caucus.

To confront the problem, the caucus is organizing face-to-face meetings between its members and members of Congress in the hopes of elevating equity issues within climate planning and mitigation efforts.

“This is a question of access,” Chapman told The Nation’s Health. “When we have communities already living through these realities, they don’t have the time or relationships to make these demands. But the caucus can help make sure they get heard.”

Both Chapman and Feinstein said there is room for change; however, the time to act is now.

“This work needed to happen decades ago, so that’s the level of urgency we’re at now,” Chapman said. “We need to get moving.”

To learn more, visit www.pacinst.org or www.policylink.org.

― Kim Krisberg
**HEALTH FINDINGS**

The latest public health studies and research

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**Doctors unaware of gun protection law**
While Maryland has a law in place that clinicians can use to protect people from gun violence, most doctors are unaware of it, according to a new study.

Published in December in JAMA Network Open, the study found over 70% of physicians in Maryland who participated in a survey said they were not familiar with the state’s extreme risk protection order law. The Maryland law authorizes health care providers to initiate civil proceedings that could restrict a person behaving dangerously from possessing or purchasing guns. The law, passed in 2018, was the first in the U.S. to authorize physicians to initiate an extreme risk protection order.

After study researchers provided the study participants with a brief description of the state law, over 90% said they had encountered patients that they might consider as qualifying for an order and around 60% said they would be likely to file one. However, the study also found that physicians were concerned about the time they would need to commit to request such an order, such as court attendance.

“The low number of clinicians filing ERPO petitions in Maryland is concerning given that physicians in our sample reported treating patients who meet ERPO criteria and that most would likely use the law when encountering such a patient,” the study said.

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**Poverty associated with youth suicides**
U.S. counties with higher concentrations of poverty have higher rates of youth suicide, according to a new study.

Published in January in JAMA Pediatrics, the study found a correlation between counties with higher poverty concentration and rates of suicide by youths ages 5 to 19. Study researchers organized the nearly 21,000 youth suicides from 2007 to 2016 into five levels of poverty at the county level. They found that higher concentrations of poverty were associated with higher rates of suicide.

“The results were consistent in a step-wise fashion,” Lois Lee, MD, MPH, study author, said in a news release. “As poverty increased, so did the rate of suicide.”

The researchers also found that youth in the counties with highest poverty concentration were more likely to die by suicide from a firearm than other methods such as poisoning or suffocation. Suicide firearm attempts are the most lethal.

The study authors said that the disparity in suicide rates could be due to a number of environmental factors, including long-term exposure to toxic levels of stress, increased exposure to adverse childhood experiences and reduced access to quality schools, sustainable jobs, health care and mental health care.

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**Violence linked to climate change**
A growing scarcity of environmental resources is worsening global violence against women, a new report finds.

The report “Gender-Based Violence and Environment Linkages: the Violence of Inequality,” released in January by the International Union for Conservation of Nature, found that resource scarcity caused by climate change is fueling more instances of gender-based violence.

The report draws from over 1,000 case studies where violence against women was linked to environmental factors.

For example, in Kenya, where climate change is worsening environmental conditions, women have to travel farther to find water and firewood, making them more vulnerable to sexual assault, and in some parts of Southern and Eastern Africa, food has become scarcer, women are forced by fishermen to engage in sex to gain fish.

The report shared policies and strategies to reduce instances of gender-based violence, including enforcing rights-based, gender-responsive international policies, conducting safety audits and improving research and data sharing to inform policymaking.

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**2019 second hottest year ever recorded**
The past five years have been the hottest on record worldwide, with 2019 being the second hottest overall since 1880, according to new data.

NASA and the National Oceanic and Atmospheric Administration released data from scientists from NOAA’s National Centers for Environmental information on Jan. 15. According to the data, nine of the 10 warmest years on record have all occurred since 2005. Last year was only slightly cooler — just 0.07 degrees — than the hottest year on record, 2016. In 2019, the average global temperature was 1.71 degrees above the 20th-century average.

The data reported that 2019 had the highest recorded level of ocean heat content — which refers to heat stored in upper-levels of the ocean that contributes to rising sea levels. The report also highlighted a continued decline in polar sea ice coverage, a near-record warm December and near-record high sea temperature.

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**Gun owners not storing guns safely**
Gun owners are failing to properly lock firearms, even with children in the home, according to a new study.

Published in February in Preventive Medicine, the study examined surveys at firearm safety events where participants were given free firearm storage devices. Of the nearly 3,000 gun owners surveyed, 40% reported that they kept at least one gun in their home that was not safely stored and locked.

“Even in this population, which clearly had some interest in or awareness of firearm safety, there was a high prevalence of unlocked firearms,” said APHA member Aisha King, MPH, the study’s lead author and project coordinator at Columbia University.

Further, the researchers found that there was no significant difference in firearm safety if children lived in the home. Safely storing firearms reduces the risk of unintentional and intentionally self-inflicted injuries among children.

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**Long work hours linked to illnesses**
Office workers who put in extra hours are more likely to have high blood pressure than those who work regular hours, a new study said.

Published in December in Hypertension, the study found that employees over a five-year period who worked more than 35 hours per week increased their risk of high blood pressure.

Office workers who worked any amount of overtime were at least 54% more likely than those working regular hours to have masked hypertension, a type of high blood pressure that is often missed during medical visits. People working the most overtime were 70% more likely to have a masked form of hypertension.

“People should be aware that long work hours might affect their heart health, and if they’re working long hours, they should ask their doctors about checking their blood pressure over time with a wearable monitor,” lead study author Xavier Trudel, PhD, assistant professor at Laval University, said in a news release.

Working more than 35 hours per week was also associated with sustained high blood pressure, which is more easily diagnosed. Both forms are linked to higher risk of cardiovascular disease. People working 49 or more hours were at greatest risk of sustained hypertension.

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Photo by Porta, courtesy iStockphoto
Office employees who work more than 35 hours a week are at higher risk of elevated blood pressure, according to a new study.

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**A heat wave in Coney Island in Brooklyn, New York, hit record temperatures in 2019. Last year was the second hottest on record globally, according to new data released in January.**

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![A heat wave in Coney Island in Brooklyn, New York, hit record temperatures in 2019. Last year was the second hottest on record globally, according to new data released in January.](Photo by Andrew Lichtenstein, courtesy Corbis News/Getty Images)
the WHO declarations from the start. Perceived delays in declaring an emergency — or decisions not to declare one at all — have been ongoing criticisms. And there have also been questions over whether a PHEIC actually accomplishes what it was designed to do.

In response, some global health leaders are calling for a reassessment of the 15-year-old regulations and the decisionmaking process leading to a PHEIC.

Among the reform advocates is WHO’s own emergency committee, a group of public health and medical experts who recommend to WHO’s director-general whether to make a declaration. On Jan. 23 — at a time when 600 cases of COVID-19 had been identified globally, with most cases in China — committee members announced they were split on a PHEIC recommendation on the outbreak. In a public statement, members said “WHO should consider a more nuanced stance, which would allow an intermediate level of alert.”

“There does seem to be something not working, with our current system for declaring global health emergencies,” said Steven Hoffman, PhD, JD, MA, a professor of global health, law and political science at Toronto’s York University, who is not a member of the emergency committee. “I think there is disagreement about how (a PHEIC) should be used.”

The 2005 International Health Regulations update was designed to improve global surveillance of emerging infectious diseases, representing a major advancement in international law and global public health. Over 190 countries adopted the regulations, legally binding member nations to have adequate public health and surveillance mechanisms in place. In addition, member nations must report emerging infectious diseases to WHO that could spread internationally, and develop a plan for containment, such as traveler screening or quarantine.

The regulations state that WHO’s director-general can declare a PHEIC for “an extraordinary event” that constitutes “a public health risk...through the international spread of disease” and requires “a coordinated international response.”

A PHEIC gives WHO authority to make formal recommendations to contain an outbreak. The declaration is intended to raise public awareness and can galvanize funding, expertise and resources from other member nations, said Lawrence Gostin, JD, an international health law professor at Georgetown University.

In July 2019, a PHEIC was declared for the Ebola outbreak in the Democratic Republic of Congo. Over the next seven months, more than $155 million was donated by countries and entities to address the crisis — an increase of over $40 million compared to donations in the 12 months preceding the PHEIC, according to WHO.

This year, on Feb. 5, less than a week after a PHEIC was declared for the COVID-19 outbreak, WHO called for $675 million to fund a public health strategy to respond to the outbreak. Days later, the U.S. said it would give up to $100 million to fight the disease.

But while a PHEIC offers positives for funding and mobilization, it also has limitations. A PHEIC does not automatically provide funding, and it cannot enforce member countries to comply with the International Health Regulations, Gostin said.

“You could say from a legal point of view, it is toothless,” Hoffman said. “It is The Nation’s Health.”

Moreover, factors other than science play a role in decisionmaking. Before declaring a PHEIC, a WHO director-general would likely consider the economic impact of trade and travel restrictions, said Jennifer Nuzzo, DrPH, SM, an associate professor of global health at the Johns Hopkins Bloomberg School of Public Health and senior scholar of the Johns Hopkins Center for Health Security. A director-general might hold off on a declaration at the behest of a country wanting to avoid economic fallout.

“They believe it is bad for countries in crisis and could hinder WHO’s partnership with the country, particularly if done as an easy hammer to wield,” Nuzzo told The Nation’s Health.

WHO was criticized for causing undue public fear when it declared its first PHEIC in 2009 for H1N1, also known as swine flu. Several years later, some thought WHO stumbled for not calling a PHEIC for the 2013-2015 Middle East respiratory syndrome outbreak, which caused nearly 600 deaths. In 2018 and 2019, the emergency committee met four separate times over months before the director-general declared the PHEIC on the Ebola epidemic in the Democratic Republic of Congo, generating questions about the decision-making process.

In an unpublished analysis of the first five PHEICs since 2005, Nuzzo and colleagues found that WHO does not consistently apply International Health Regulations criteria when making a PHEIC decision. Sometimes they don’t say in the reporting even if the criteria was met,” she said.

In a 2018 study in the American Journal of Public Health, researchers examined PHEIC declarations for H1N1 in 2009, Ebola in West Africa in 2014, and Zika in Latin America in 2016. They found quicker WHO responses when U.S. citizens were infected and delayed responses when outbreaks worsened over holidays, suggesting staff availability plays a role.

“According to International Health Regulations, it is clear that the director-general has discretion on when to call a public health emergency of international concern,” said Hoffman, lead author of the study. “But if the legal criteria are met and people wonder whether or not it might be called and what shadow criteria might be applied, then the system is not as useful as it could be.”

Given the controversies, some global health leaders want a formal review of the declaration and of the 2005 regulations in general. And a subset back WHO’s emergency committee in considering a new alert level.

An intermediate alert might be used when circumstances do not rise to the level of a PHEIC, emboldening WHO to take major action sooner to fight emerging infectious diseases, Hoffman said. That could translate into saving more lives and containing an outbreak faster.

“Because there is no gradation, there is a hesitance to flip the switch, even when it is clear that an international coordinated response is needed,” Hoffman said.

WHO’s internal grading system for operational response to public health issues, set forth in its “Emergency Response Framework,” might serve as a template for intermediate response, Hoffman said. Grade 1 is limited oversight of an event managed by a country’s health system, Grade 2 is moderate oversight and external support, and Grade 3 is major oversight and external support.

“It would be easy to adapt that system to also consider the response and operational capacity needed from other entities,” Hoffman said.

For several years, Gostin and other health leaders have advocated for an intermediate alert. It would give WHO “a tool to be more subtle and nuanced in its response,” Gostin said. An intermediate alert would require renegotiating the 2005 regulations with all member nations — a bridge Gostin thinks WHO may not want to cross now.

While adding an alert seems like an uphill battle, there is some agreement for a review of the regulations. Nuzzo said it is time for a formal examination and for WHO to standardize its PHEIC response. If member nations think PHEIC decisionmaking is overly political and arbitrary, Nuzzo worries that noncompliance will become a problem.

Michael Baker, a WHO consultant on emerging infectious diseases who helped develop and implement the 2005 regulations, said a review was needed but in general supported the current PHEIC protocol.

“I would argue it is already nuanced because at every point there is judgment,” Baker, a global public health professor at New Zealand’s University of Otago-Wellington, told The Nation’s Health. “And if something reaches a threshold for a PHEIC, there is also huge potential to adjust the response.

“But there is a high need to review (2005 IHR) now that it has been around for 15 years. And it only gets to be fine-tuned,” he said. “And that is what you would expect from a system as comprehensive and complex as this.”

For more information, visit www.who.int/ihr. — Mark Barna
ON THE JOB BRIEFS

Hospitals investing in social determinants

Using community health workers to address social determinants of health can lead to dramatic Medicaid cost savings, a study in February’s Health Affairs finds.

Researchers examined cost savings for Individualized Management for Patient-Centered Targets, a standardized community health intervention that customizes social support for high-risk Medicaid patients.

They relied on data gathered for another study on the program that was conducted from July 2013 to October 2014. In that study, researchers enrolled 302 Medicaid patients, half to an intervention group and half to a control group. All patients had been diagnosed with at least two chronic conditions, such as diabetes, tobacco dependence, obesity or hypertension.

Their social needs, such as housing, food security and health outreach, were addressed. After one year, people in the control group had been hospitalized 98 times, while people in the intervention group were hospitalized only 68 times—a 30% difference.

The intervention program saved Medicaid over $1.4 million in medical costs, the study in February’s Health Affairs found. When program expenses were applied, researchers discovered a return of $2.47 for every dollar invested by a Medicaid payer.

The program, established by the Penn Center for Community Health Workers, is a viable model, showing “a favorable return on investment for Medicaid payers by effectively responding to the social determinants of health.”

A second study in February’s Health Affairs showed that more U.S. health systems are investing in social determinants, though more investment is needed.

Researchers identified social determinant programs in over 900 hospitals, with investment from health systems of at least $2.5 billion from 2017 to 2019. Programs involved employment, education, food security, social opportunities, transportation and housing.

Housing accounted for two-thirds of total investment, which the researchers said was an important social determinant investment because of its potential return.

Nurse practitioners more than double

Nurse practitioners have more than doubled in recent years, aiding U.S. hospitals but also leaving a vacuum in other nursing positions, a study in the February issue of Health Affairs finds.

Researchers examined data from the U.S. Census Bureau’s American Community Survey. They found that between 2010 and 2017, nurse practitioners rose from 91,000 to 190,000. Growth was due to efforts in the health care industry to increase nurse practitioners in the workforce, which led to expansion of nursing education programs. Over the period, salaries in the field increased by 5.5% after inflation adjustment.

Many nurse practitioners are former registered nurses. Nurse practitioners tend to have more education, usually a master’s in the field, and autonomy when interacting with patients. But the rise of nurse practitioners has reduced the number of registered nurses nationwide by about 80,000, the study said.

Registered nurses, who tend to have an associate’s degree, also play a crucial role in health care. While most nurse practitioners work in primary care, registered nurses commonly work at in-patient hospital settings. Therefore, the decrease in registered nurses could cause personnel shortages at hospitals, especially in acute care, the study said.

State officials lack public health degrees

Many state health officials lack a formal public health degree, according to a study in the January/February Journal of Public Health Management & Practice.

Researchers sent surveys and conducted interviews with almost 150 current and former state health officials in 2017. They found that while almost 65% had a medical degree, only about 48% had a formal public health degree.

Seventy percent had public health government experience at some point in their career. And two-thirds worked in governmental public health just before they became state health officials.

The study also found there are more women serving as state health officers. In the 1970s, nearly 6% of state health officials were women. In the 2010s, that increased to 56%, the study said.

Gender plays role in public health pay

Though two-thirds of leadership roles in state government public health are held by women, they are less likely than men to earn top pay, according to a study in the January/February Journal of Public Health Management & Practice.

Researchers examined the 2014 Public Health Workforce Interests and Needs Survey, a national representative cross-sectional study of state governmental public health agency employees. They found that women accounted for 72% of state public health workers and 67% of leadership positions.

When adjusting for education and years in management, women had 45% lower odds of holding executive leadership positions than men, the study said. Gender disparities were also found when examining reasons for pay differences. Female leaders were 36% less likely than male leaders to earn annual salaries of $95,000 or more.

“With public health’s commitment to social justice and the benefits of diversity to an agency’s policies and programs, it is important to ensure that women’s voices are equally represented at all levels of leadership,” the researchers wrote. “State governmental public health agencies should implement human resources practices that reduce representation and compensation disparities among women in leadership positions.” — Mark Barna

NACCHO toolkit shows health agencies how to get most out of social media

Local public health departments do well at sharing health in their communities, but many do not excel at promoting their work through social media.

To help them succeed, the National Association of County and City Health Officials recently published “Social Media Toolkit: A Primer for Local Health Department PIOs and Communications Professionals.” The best practices primer explains social media platforms such as Facebook, LinkedIn, Flickr and Pinterest — and how they can be used for effective strategic communications. The toolkit also explains how to use social media to build audiences for agency materials, including risk and emergency communication.

Public information officers who need help committing to daily social media posts on multiple platforms, developing social media policies, training a social media staff, advertising on social media or developing an editorial calendar can find information in the guide.

“Successful organizations have found ways to leverage social media to improve internal and external communications, recruitment, employee engagement, and professional development,” an essay in the January/February issue of Journal of Public Health Management & Practice said. “Beyond traditional health education, social media provides an opportunity to make public health relevant, accessible and even fun.”

For more information on NACCHO’s social media toolkit, visit bit.ly/nacchotoolkit. — Mark Barna
Laboratory Practice is a new complement to the Control of Communicable Diseases Manual, a book published by APHA Press for over 100 years and also the primary resource for disease control specialists. This new book addresses the laboratory aspect of disease control and prevention while presenting the material in an easy-to-use format.

Laboratory Practice gives an overview of the latest laboratory procedures for each disease, as well as information on laboratory safety practices, the critical role of quality assurance in all testing and the importance of laboratory informatics and rapid reporting processes. With in-depth detail for each disease, this is a must-have for all laboratory scientists, epidemiologists and others involved with communicable disease control. Laboratory Practice supports both planning and response for disease control.


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**US life expectancy trails behind other high-income nations**

**EXPECTANCY, Continued from Page 1**

U.S. Health and Human Services assistant secretary. “We need much evaluation and years of evidence before we can say that the country has returned to a norm of steadily rising life expectancy,” Koh told *The Nation’s Health.*

The new life expectancy data was released Jan. 30 by the National Center for Health Statistics. “Mortality in the United States, 2018” reported that overall U.S. life expectancy is now 78.7 years. From 2017 to 2018, U.S. life expectancy at birth increased 0.1 year, and the age-adjusted death rate decreased 1.1%, according to the data brief. Another NCHS data brief released in January, “Drug Overdose Deaths in the United States, 1999–2018,” found that overdose deaths decreased by 4.1% between 2017 and 2018 — an early sign that interventions may have slowed the nation’s opioid crisis. The rate of overdose deaths has increased rapidly since 2015, with an average increase of 14% through 2016.

Increased access to naloxone and improved attention to medication-assisted treatment for people with opioid use disorders is reflected in the decrease in deaths, Koh told *The Nation’s Health.*

But we need much more societal effort to overcome the longstanding stigma attached to substance use and build a true system of care and prevention. While the decline was heralded widely as a hopeful sign that progress was being made in combating the U.S. opioid epidemic, the applause may have come too soon. Provisional data released by NCHS on Feb. 12 showed that over the first half of 2019, fatal overdoses across the nation were rising again, with much of the increase in the western U.S., where fentanyl overdoses are a growing problem.

Though provisional drug overdose death data are often incomplete, the February release shows that the U.S. may still have a long way to go back on course with increasing its life expectancy.

For decades, U.S. life expectancy had been on the rise, increasing steadily between 1950 and 2014. However, the growth fell behind other wealthy nations around 1980 and has since lagged behind. The U.S. ranks 28th in life expectancy, according to the latest edition of the “America’s Health Rankings Annual Report.”

The U.S. Census Bureau reported Feb. 17 that life expectancy should continue to inch up in the U.S. over the coming decades, it will still lag internationally. Even with a projected increase of 6.6 years for men and 5.3 years for women by 2060, growth will continue to fall behind other high-income nations, according to the latest edition of the “America’s Health Rankings Annual Report.”

Though the U.S. Census Bureau reported Feb. 17 that life expectancy should continue to inch up in the U.S. over the coming decades, it will still lag internationally. Even with a projected increase of 6.6 years for men and 5.3 years for women by 2060, growth will continue to fall behind other high-income nations, according to the latest edition of the “America’s Health Rankings Annual Report.”

The new reporting method is a promising step to the information on overall U.S. deaths, NCHS released new data on maternal mortality for the first time in more than a decade. While the new statistics showed that maternal mortality has increased — 17.4 maternal deaths per 100,000 live births in 2018, versus 12.7 in 2007 — CDC linked the increase to changes in reporting.

NCHS found that maternal deaths were highest among black women, with 57.1 deaths reported per 100,000 births — 2.5 times the rate of white women and 3.1 times the rate of Hispanic women. By including a pregnancy checkbox on a national standard death certificate, significantly more instances of pregnancy-related death were identified.

The new method adheres to World Health Organization guidelines, which measure deaths to be pregnancy-related up to 42 days after pregnancy ends.

The new reporting method is a promising step toward achieving more accurate estimates. Whitney, PhD, MPH, chair of APHA's Maternal and Child Health Section, told *The Nation's Health.*

“The report further confirms the public health significance of these largely preventable deaths,” said Witt, dean of Lehigh University’s College of Health.

For more information, visit www.cdc.gov/nchs.

— Aaron Warnick
Eating less meat? Good for you! And good for the planet

By Aaron Warnick

Reducing the amount of meat you eat can be good for your health, good for the environment and even good for your budget.

While the majority of Americans eat meat regularly — only 5% of U.S. adults considered themselves vegetarians as of 2018 — almost a quarter say they are eating less meat. The main reason they report cutting back is health concerns — and they have good reason to be worried. Eating a lot of red and processed meats is linked to higher risks for heart disease, stroke, colon cancer and early death.

Scaling down meat consumption, on the other hand, can help reduce obesity, increase life expectancy and improve the nutritional quality of your diet. That’s because when people cut back on meat, they’re more likely to replace it with healthier options.

Fortunately, you don’t have to give up meat altogether to get some health improvements. You can start by cutting back the amount of meat on your plate at each meal, or eat meat in just one meal a day, for example.

You can even challenge yourself to go meatless one day a week. Mondays is the perfect day to do it, according to the Meatless Mondays initiative. Research shows that when people do something healthy at the start of the week, they’re more likely to continue it.

“Making a one-day change or trying a new plant-based dish once a week often leads to other changes, such as trying a vegetarian meal when eating out, eating less meat the rest of the week, trying new recipes at home or eating more vegetables,” says Becky Ramsing, MPH, RDN, a Meatless Mondays advisor and senior program officer at Johns Hopkins University Center for a Livable Future.

While cutting down your meat consumption is good for your health and heart, there’s even greater benefits if you introduce more vegetables to your diet. Ultimately, a diet that reduces meat in favor of veggies, fruits, legumes, whole grains and nuts is better for your health.

A common fear from those looking to reduce their meat intake is that they won’t get enough protein. The truth is most people consume much more dietary protein than their body needs. And there is plenty of protein in non-meat foods.

6 strategies to cut back on meat

If you’re used to eating meat at every meal, it may be hard to decide where and how to cut down. Check out these tips to get started:

◆ Make half of your plate fruits and vegetables.
◆ Load up on greens: Green vegetables such as broccoli, spinach and green beans will not only fill you up, they will give you a big nutritional boost. If you’re eating lettuce, steer yourself toward Romaine and darker leaves, as they have more nutrients than iceberg.
◆ Choose whole grains — such as brown rice or oatmeal — as they’re more filling than refined grains.
◆ Seek out new recipes. There are many international dishes in particular that aren’t built around meat, such as curries, soups and pasta.
◆ Think differently: When making chili or meat-based stews, reduce the amount of meat and add a can of beans. Check out plant-based proteins, such as legumes, beans, peas and lentils. Try nuts, seeds and hummus as snack options.
◆ Be a more mindful eater. Instead of quickly shoveling food into your mouth, think about the positive impact you’re making, whether it’s on your health, the environment or your wallet.

Good plant-based sources of protein include beans, nuts and lentils. Eggs and dairy also contain protein. The key is to make sure that you’re getting some of these protein-rich foods throughout your day, Ramsing says.

Besides health benefits, another reason people say they’re cutting back on meat is to help protect the environment. Producing, processing and transporting meat requires massive supplies of pesticides, fertilizer, feed, water and fuel. The meat industry also creates greenhouse gases that add to climate change and manure that pollutes water.

Simply put, “reducing the amount of meat you eat is better for the planet,” Ramsing says.

Eating less meat doesn’t have to be expensive. In fact, you will probably save money. As Ramsing puts it, “On average, it costs several times more to purchase a pound of meat than pound of beans.”

You don’t have to go to expensive, high-end grocery stores to get quality ingredients for your new veggie cuisine. If you’re worried about fresh produce spoiling before you can eat it, make dishes in advance and freeze them to use throughout the week. Casseroles, stews and soups all freeze well and taste just as good when heated up.

For people who feel they need a big serving of protein, meat substitutes are an option. But a less-expensive product such as barbeque mushrooms can also satisfy your hunger. Or you can make your own falafel. With the right recipe, you may never miss meat at all.