

ECONOMIC ASPECTS OF THE OPIOID CRISIS

HEARING

BEFORE THE

JOINT ECONOMIC COMMITTEE CONGRESS OF THE UNITED STATES

ONE HUNDRED FIFTEENTH CONGRESS

FIRST SESSION

—————
JUNE 8, 2017
—————

Printed for the use of the Joint Economic Committee



U.S. GOVERNMENT PUBLISHING OFFICE

26-119

WASHINGTON : 2017

For sale by the Superintendent of Documents, U.S. Government Publishing Office
Internet: bookstore.gpo.gov Phone: toll free (866) 512-1800; DC area (202) 512-1800
Fax: (202) 512-2104 Mail: Stop IDCC, Washington, DC 20402-0001

JOINT ECONOMIC COMMITTEE

[Created pursuant to Sec. 5(a) of Public Law 304, 79th Congress]

HOUSE OF REPRESENTATIVES

PATRICK J. TIBERI, Ohio, *Chairman*
ERIK PAULSEN, Minnesota
DAVID SCHWEIKERT, Arizona
BARBARA COMSTOCK, Virginia
DARIN LAHOOD, Illinois
FRANCIS ROONEY, Florida
CAROLYN B. MALONEY, New York
JOHN DELANEY, Maryland
ALMA S. ADAMS, PH.D., North Carolina
DONALD S. BEYER, JR., Virginia

SENATE

MIKE LEE, Utah, *Vice Chairman*
TOM COTTON, Arkansas
BEN SASSE, Nebraska
ROB PORTMAN, Ohio
TED CRUZ, Texas
BILL CASSIDY, M.D., Louisiana
MARTIN HEINRICH, New Mexico, Ranking
AMY KLOBUCHAR, Minnesota
GARY C. PETERS, Michigan
MARGARET WOOD HASSAN, New Hampshire

WHITNEY K. DAFFNER, *Executive Director*
KIMBERLY S. CORBIN, *Democratic Staff Director*

CONTENTS

OPENING STATEMENTS OF MEMBERS

Hon. Patrick J. Tiberi, Chairman, a U.S. Representative from Ohio	1
Hon. Martin Heinrich, Ranking Member, a U.S. Senator from New Mexico	3
Hon. Margaret Wood Hassan, a U.S. Senator from New Hampshire	4

WITNESSES

Statement of Richard G. Frank, Margaret T. Morris Professor of Health Economics, Department of Health Care Policy, Harvard Medical School, Boston, MA	5
Statement of Lisa N. Sacco, Crime Policy Analyst, Congressional Research Service, Library of Congress, Washington, DC	7
Statement of Hon. Mike DeWine, Ohio Attorney General, Columbus, OH	9
Statement of Sir Angus Deaton, Laureate of the Nobel Prize in Economic Sciences, Senior Scholar and the Dwight D. Eisenhower Professor of Economics and International Affairs Emeritus, Woodrow Wilson School of Public and International Affairs and the Economics Department, Princeton University, Princeton, NJ	12

SUBMISSIONS FOR THE RECORD

Prepared statement of Hon. Patrick J. Tiberi, Chairman, a U.S. Representative from Ohio	34
Prepared statement of Hon. Martin Heinrich, Ranking Member, a U.S. Senator from New Mexico	36
Prepared statement of Hon. Margaret Wood Hassan, a U.S. Senator from New Hampshire	37
Prepared statement of Richard G. Frank, Margaret T. Morris Professor of Health Economics, Department of Health Care Policy, Harvard Medical School, Boston, MA	38
Prepared statement of Lisa N. Sacco, Crime Policy Analyst, Congressional Research Service, Library of Congress, Washington, DC	48
Prepared statement of Hon. Mike DeWine, Ohio Attorney General, Columbus, OH	55
Prepared statement of Sir Angus Deaton, Laureate of the Nobel Prize in Economic Sciences, Senior Scholar and the Dwight D. Eisenhower Professor of Economics and International Affairs Emeritus, Woodrow Wilson School of Public and International Affairs and the Economics Department, Princeton University, Princeton, NJ	87
Response from Richard G. Frank to Questions for the Record Submitted by Senator Klobuchar	91
Response from Richard G. Frank to Questions for the Record Submitted by Senator Lee	91
Response from Richard G. Frank to Questions for the Record Submitted by Senator Heinrich	91
Response from Lisa Sacco to Questions for the Record Submitted by Senator Lee	93
Response from Mike DeWine to Questions for the Record Submitted by Senator Klobuchar	95
Response from Mike DeWine to Questions for the Record Submitted by Senator Lee	95
Response from Sir Angus Deaton to Questions for the Record Submitted by Senator Lee	97

ECONOMIC ASPECTS OF THE OPIOID CRISIS

THURSDAY, JUNE 8, 2017

HOUSE OF REPRESENTATIVES,
JOINT ECONOMIC COMMITTEE,
Washington, DC.

The Committee met, pursuant to call, at 10:01 a.m., in Room 1100, Longworth House Office Building, Hon. Pat Tiberi, Chairman, presiding.

Representatives present: Tiberi, Paulsen, Schweikert, Comstock, LaHood, Delaney, and Beyer.

Senators present: Sasse, Portman, Heinrich, Klobuchar, and Hassan.

Staff present: Louis Agnello, Breann Almos, Theodore Boll, Doug Branch, Kim Corbin, Whitney Daffner, Barry Dexter, Connie Foster, Martha Gimbel, Colleen Healy, Adam Hersh, Karin Hope, Matt Kaido, Brooks Keefer, John Kohler, AJ McKeown, Victoria Park, Jana Parsans, Russell Rhine, and Alex Schibuola.

OPENING STATEMENT OF HON. PATRICK J. TIBERI, CHAIRMAN, A U.S. REPRESENTATIVE FROM OHIO

Representative Tiberi. Good morning, and welcome. I want to welcome especially our ranking member, Senator Heinrich, and our vice chairman, Senator Lee, as well as other members of the committee who join me in expressing the importance of holding a hearing on the threatening increase in opioid abuse. Drug abuse has become rampant in America and may be the worst the country has ever experienced.

It is devastating families, degrading communities, and undermining several parts of our economy. For several states and districts represented by members of this committee, the problem is acute, as the map displayed shows. As figure 1 indicates, the crisis has a regional character. My hometown of Columbus, Ohio, is part of the crisis' epicenter east of the Mississippi.

Figure 2 shows the 2015 drug overdose death rates by State, which range from 40 per 100,000 in West Virginia to 6 per 100,000 in Nebraska. The states represented by the members of this committee, among the 10 highest rates, are highlighted in red, including my home State of Ohio, which ranks third.

Drug markets, both legal and illegal, can be analyzed from the demand and supply side. The exact reasons for the extent of drug abuse are not clear at this point. With respect to demand, a changing perception of pain as a health problem in the 1980s by the World Health Organization in particular laid the ground for more intensive treatment.

The labor market and the economy can have a major impact on demand, although not necessarily in ways one might expect. Some research shows less substance abuse when unemployment increases, for instance, and while the prolonged downturns in labor market and economic conditions are associated with social, behavioral, and health problems, they do not necessarily affect all groups in the same way or to the same degree.

All of society is vulnerable to this epidemic. It is compounding the economic distress that certain parts of the country and segments of the population already have been experiencing. Some areas of high employment tend to have higher rates of substance abuse. The Economic Innovation Group, a representative of which testified at our last hearing, "The Decline of Economic Opportunity: Causes and Consequences," developed an economic distress index consisting of several economic indicators, a national map of which is shown alongside the map of overdose deaths in the TV screens in figure 3. The darker the red, the worse the distress. Striking correlations are visible. But it is also apparent from figure 3 that some economically distressed areas are not experiencing high overdose death rates.

From a supply side, the particular locations where new, potent drugs initially happened to be become most readily available, and the path of geographic market expansion they took, track a visible trail of destruction in figures 1 and 3. Without question, new developments in the sourcing, cost of production, potency, and retail delivery have moved the supply of both legal and illegal addictive drugs substantially to the right. Newly effective pain medication, OxyContin, introduced in the 1990s, had initially unacknowledged addictive qualities and was overprescribed.

So-called black tar heroin, which Senator Heinrich and I were just talking about, more powerful and less expensive than other kinds, expanded its market share just as OxyContin was reduced in potency around the country.

The prescription drug explosion started in the Appalachian part of my State and spread to parts of Kentucky and West Virginia. Black tar heroin started in the Southwest and spread westward but eventually also eastward, crossing the Mississippi in 1998.

Illegally distributed variations and counterfeit forms of prescription drugs like fentanyl can be poisonous and kill a person even in small doses, some by mere contact with the skin, as Attorney General DeWine informed me earlier this year. We now face pure poisons masked as narcotics that are shipped across our borders. Senator Portman and I introduced the STOP Act, which aims to stop dangerous synthetic drugs from being shipped through our own postal service, keeping them out of the hands of drug traffickers in the United States. Half the members of this committee have signed on as cosponsors in a bipartisan way, and we should continue to build support for this important legislation.

It would be a mistake to blame these drugs entirely for the rise in mortality that some groups and regions are suffering. There are other causes apparently emanating from long-term challenges in the composition of the economy and skill requirements.

Determining cause and effect is obviously critical to reaching the right conclusions. Feedback effects often complicate causality and

make a clear understanding of major causes that we are experiencing difficult. For example, does a bad economy lead to drug abuse or does drug abuse to a bad economy by lowering productivity, labor force participation, and social cohesion? We will hear about the economic decline of certain groups leading to despair and self-destructive behavior; of damage drug abuse causes individuals, families, and communities in all segments of society; and of developments in the production and marketing of addictive drugs which have made them more dangerous, affordable, and available.

I look forward to the statements of our witnesses.

I will now yield to the ranking member, who has another hearing. Mr. Heinrich is recognized.

[The prepared statement of Chairman Tiberi appears in the Submissions for the Record on page 34.]

OPENING STATEMENT OF HON. MARTIN HEINRICH, RANKING MEMBER, A U.S. SENATOR FROM NEW MEXICO

Senator Heinrich. Thank you, Chairman Tiberi.

And thank you so much for holding this incredibly important and timely hearing.

Thanks to our panel for being here today.

Addiction to both heroin and prescription opioid pain relievers is a public health epidemic that is devastating families and communities across our Nation.

Every day, 91 Americans die from opioid overdose. Over-prescription is partially responsible for this epidemic. Since 1999, the amount of prescription opioids sold in the U.S. nearly quadrupled, and so too has the number of overdose deaths from opioids. The economic costs of that addiction are incredible, totaling more than \$80 billion in 2013, from increased healthcare costs, higher rates of incarceration, and lost productivity.

New Mexicans know all too well the devastation that heroin and prescription opioids can wreak. For years without adequate treatment resources, communities in New Mexico have suffered through some of the highest rates of opioid and heroin addiction and overdose deaths in the Nation. Rio Arriba County has a drug overdose death rate of 81 per 100,000, five times the national rate.

I am reminded of a young man named Josh from Espanola, who I met at a roundtable I hosted last year in Rio Arriba County. At 14, Josh became addicted to prescription opioids. Over time, he moved to heroin. He stole from his family and his friends to maintain his growing addiction. Josh spent time in jail where he went through the pains of withdrawal. He even attempted suicide.

Now in his 20s, Josh has turned his life around because he finally got access to treatment and services. For millions of Americans proven substance use treatment is available because of, one, behavioral health parity laws and, two, the Medicaid program. In New Mexico, Medicaid, called Centennial Care, is at the forefront of our fight against the opioid crisis, accounting for 30 percent of lifesaving medication-assisted treatment payments for opioid and heroin addictions.

At exactly the time that Congress should be giving states more tools to fight this epidemic, House Republicans passed a bill that

would repeal Medicaid expansion, artificially cap the program, and shift the burden about who and what to cut onto individual states.

More than a million people who have been able to secure treatment for substance abuse would lose their coverage. Repealing Medicaid expansion would cut about \$4.5 billion from treatment for mental health and substance abuse. We cannot fight a public health crisis with grant dollars alone. Grant dollars run out. Block grants lose their buying power over time, and private investment dollars, which are critical in this fight, won't come without certainty that the foundation is funded.

Unfortunately, I will not be able to stay here to hear the important testimony of our witnesses today because of a hearing you may have heard about in the Intelligence Committee, but I will be leaving you in the very capable hands of my colleague Senator Hassan. New Hampshire loses at least one person every day to a drug overdose. As Governor, Senator Hassan used every tool at her disposal to fight the epidemic, including turning to the flexibility of the Medicaid program to gain ground in her State's fight. I will tell—I will let her tell you more, but I leave you with this: When a community faces a public health crisis, it is not long before a State turns to the Medicaid program to stem the tide.

Thank you, Senator Hassan, I will turn over the rest of my time to you.

And thank you, Mr. Chairman, for holding this critical hearing.

[The prepared statement of Senator Heinrich appears in the Submissions for the Record on page 36.]

**OPENING STATEMENT OF HON. MARGARET WOOD HASSAN, A
U.S. SENATOR FROM NEW HAMPSHIRE**

Senator Hassan. Well, thank you, Mr. Chairman and Ranking Member Heinrich.

And to our witnesses today, thank you for being here as well.

As I travel across my home State of New Hampshire, I hear from countless families and those on the front lines about how the heroin, fentanyl, and opioid crisis has devastated communities across our State. And I know that many of our colleagues have heard of the impacts in their states as well.

I am proud that, during my time as Governor, Republicans and Democrats in New Hampshire put our differences aside and came together to pass and reauthorize our State's bipartisan Medicaid expansion plan. Medicaid expansion is providing quality affordable health coverage to more than 50,000 Granite Staters, including coverage for behavioral health and substance use disorder treatment. Experts have said it is the number one tool we have to fight this crisis.

We should be coming together here, just as we did in my home State, to support those on the front lines and help those who are struggling with addiction. And while members of both parties and the administration have discussed the severity of this crisis, we need these words to be matched by action. What we cannot do, however, is end Medicaid expansion and institute deep and irresponsible cuts to the traditional Medicaid program.

This crisis is a public health and law enforcement issue, but it is also an economic one. I believe the investments in helping people

recover are a far better use of our dollars than the long-term cost of addiction, both in terms of State budgets but also in ensuring that individuals are healthy enough to contribute to the economy.

I am pleased that we are having this hearing today and very grateful to the chair for calling it, but we need to continue to hold hearings on how proposals made here in Washington would affect our ability to stem and ultimately reverse the tide of this epidemic. This is an issue that rises above partisanship, and this is the work that we need to be doing because the lives of our people in our states depend on it.

I am going to continue to work with my colleagues on solutions, while standing firm against any policy that will pull us backwards. With that, I thank you, and I look forward to hearing from our witnesses.

[The prepared statement of Senator Hassan appears in the Submissions for the Record on page 37.]

Representative Tiberi. Thank you.

Let me introduce our first witness. Richard G. Frank is the Margaret T. Morris Professor of Health Economics at the Department of Healthcare Policy at Harvard University Medical School. He has held several positions at the Department of Health and Human Services. Most recently, he served as the Assistant Secretary for Planning and Evaluation.

Dr. Frank served as an editor for the Journal of Health Economics. He is the recipient of awards from the Southern Economic Association and the American Public Health Association and others, and he is the coauthor of the book "Better But Not Well."

Dr. Frank, you are recognized for 5 minutes.

**STATEMENT OF RICHARD G. FRANK, MARGARET T. MORRIS
PROFESSOR OF HEALTH ECONOMICS, DEPARTMENT OF
HEALTH CARE POLICY, HARVARD MEDICAL SCHOOL, BOS-
TON, MA**

Dr. Frank. Good morning, Chairman Tiberi and Senator Hassan. Thank you for inviting me to participate in this discussion of the opioid epidemic that is plaguing our Nation. Just over 33,000 people died in 2015 from opioid overdoses. In the time I have with you today, I want to focus on the gap between the need for treatment and the receipt of care.

In 2015, there was an estimated 2.66 million people with an opioid use disorder in the country. The illness is concentrated in the low-income population. That is, 51 percent of people with an opioid use disorder, or OUD, have incomes below 200 percent of the Federal poverty line. Only 26 percent of the people with an OUD receive treatment for that disorder. That means that 1.97 million people who needed care did not get it. This is tragic because they are treatments that work. Medication-assisted treatment has been shown to be the most effective treatment for OUDs. They are combinations of pharmaceuticals, psychotherapy or counseling, and drug testing to monitor treatment adherence.

Now, national survey data show that over half the people that did not get treatment because they either couldn't afford it or there were no providers available. Other reasons for not getting care

were not being ready to stop using substance, stigma, and the denial of the problem.

Now, policy tools are most amenable for addressing the affordability and availability reasons. I will focus on three areas that are helping to make the treatment gap smaller: They are Medicaid, private insurance, and Federal grants.

Medicaid covers about 34 percent of people with an OUD. Recent policy changes in Medicaid have bolstered Medicaid's impact. The combination of the Mental Health Parity and Addiction Equity Act that requires comparable coverage for mental health and substance abuse disorders with medical surgical care, the Medicaid expansions, and the essential health benefit that includes substance abuse treatment all have driven Medicaid to a growing role. Together, these provisions have resulted in large increases in the use of medication-assisted treatment.

A number of states have been using Medicaid as a central part of their attack on the opioid epidemic. The State of Ohio recently reported substantial increases in access to care for people with opioid use disorder. And in Ohio, Medicaid now pays for nearly half of all the buprenorphine prescriptions in that State, which is one of the key drugs in medication-assisted treatment.

Let me now turn to private insurance. Private insurance covers about 42 percent of people with an opioid use disorder. Recent changes there have bolstered the ability of private insurance to shrink the treatment gap. They are the Parity Act applied to private insurance, the essential health benefit provisions in the small group and individual market, and the availability of subsidized insurance policies for low income.

In 2011, a survey of individual market insurers revealed that 34 percent of policies sold did not cover substance use disorders. Today that is no longer the case.

Finally, grants to states. The recently enacted 21st Century Cures Act appropriated \$1 billion over 2 years that was intended to focus on closing the treatment gap by expanding capacity and expanding direct treatment. Just under \$500 million of that money has been recently allocated to the states.

Let me take a moment to put the Cures money into context using the State of Kentucky's experience. Kentucky is receiving a grant of about \$10.5 million under Cures. That buys about 1,900 full-year treatments with medication-assisted treatment. Currently, Medicaid pays for 4,200 person years of treatment in Kentucky, and three-quarters of that is for the expansion population. That means if Medicaid cuts at the magnitude proposed occur, the Cures funds would likely not be used to expand capacity and treatment, but would instead backfill for Medicaid losses and wouldn't even be able to cover two-thirds of those.

I now touch on availability. Since policy changes that I have described have begun, there has been a surge of new private money into this sector. There have been 170 private equity deals between 2012 and 2015, some as large as \$100 million. These private investments are aimed at scaling up evidence-based practices, and the investment community acknowledges it is directly linked to the flow of new funds, both on the private and the public sides.

So the last 10 years have brought—have set a platform for closing the treatment gap. The evidence suggests we are starting to see important expansions in both capacity and treatment that will pay dividends in the future. Turning back now doesn't make economic sense and likely leads to tragic consequences. Thank you.

[The prepared statement of Dr. Frank appears in the Submissions for the Record on page 38.]

Representative Tiberi. Thank you, Dr. Frank, for your testimony.

Our next witness, Dr. Lisa Sacco, has been an analyst in crime policy with the Congressional Research Service since 2011. The past 5 years with CRS, she has specialized and published reports on domestic drug enforcement, synthetic drugs, prescription drug abuse, and various other drug and crime policy issues.

Prior to working at CRS, she received her doctorate in criminology and criminal justice from the University at Albany, held several drug-related research positions, and taught college courses on drugs and crime.

Dr. Sacco, welcome. You are recognized for 5 minutes.

STATEMENT OF LISA N. SACCO, CRIME POLICY ANALYST, CONGRESSIONAL RESEARCH SERVICE, LIBRARY OF CONGRESS, WASHINGTON, DC

Dr. Sacco. Thank you.

Chairman Tiberi, Senator Hassan, and distinguished members of the committee, my name is Lisa Sacco, and I am a CRS crime policy analyst. Thank you very much for inviting me to speak with you. My testimony will focus on the scope of the supply of opioids in the United States. I will begin by stating three points from my written testimony that I will expand upon today.

First, heroin, fentanyl, and controlled prescription drugs have been ranked as the most significant drug threats to the United States. While the reported availability of controlled prescription drugs has declined over the last several years, the reported availability of heroin and illicit fentanyl has increased. The availability of these drugs is a contributing factor to rising consumption. Second, the supply of opioids varies by region of the United States. Third, while the Federal Government has generally concentrated on reducing the supply of illicit drugs, Federal drug control funding for supply reduction has remained relatively flat over the last several years while funding for demand reduction has increased.

While opioids have a long history in the U.S., this testimony focuses on the last several decades, as the market for these drugs has shifted a great deal. In the 1990s, availability of prescription opioids increased as the legitimate production of these drugs and ensuing diversion from lawful use increased sharply. This continued into the early 2000s as users obtained their prescription drugs through means such as doctor shopping, pill mills, the internet, and through family and friends.

The Federal Government and State and local governments undertook a range of approaches to reduce the unlawful prescription drug supply, including diversion control through prescription drug monitoring programs, the crackdown on pill mills, the increased

regulation of internet pharmacies in 2008, the reformulation of OxyContin in 2010, and the rescheduling of hydrocodone in 2014.

Some experts have highlighted a connection between the crack-down on the unlawful supply of prescription drugs and the subsequent rise in heroin supply and abuse. Heroin is a cheaper alternative to prescription drugs that is often more accessible to some who are seeking an opioid high. While most users of prescription drugs will not go on to use heroin, accessibility and price are central factors cited by drug treatment patients in their decision to turn to heroin.

The trajectory for heroin supply over the last several decades is much different compared to prescription opioids, but the stories of their supply are connected. In the late 1990s and early 2000s, white powder heroin produced in South America dominated the market east of the Mississippi River, and cheaper black tar and brown powder heroin produced in Mexico dominated the market west of the Mississippi.

Price and purity varied considerably by region. In 2000, most of the heroin seized was from South America while a smaller percentage was from Mexico. In recent years, this has dramatically changed. Over the last several years, heroin prices have declined while purity, in particular the purity of Mexican heroin, has increased. Over 90 percent of the heroin in the U.S. seized is from Mexico, and a much smaller portion is from South America. Mexican traffickers dominate the U.S. market because of their proximity to the U.S., their established transportation and distribution infrastructure, and their ability to satisfy U.S. heroin demand. Increases in Mexican heroin production have ensured a reliable supply of low-cost heroin, even as demand for these drugs has increased. Mexican traffickers have increased their production of white powder heroin and may be targeting those who abuse prescription opioids.

Compounding the current opioid problem is a rise of non-pharmaceutical fentanyl on the black market. Fentanyl is often mixed with or sold as heroin, and it is 50 to 100 times more potent than heroin. Non-pharmaceutical fentanyl largely comes from China and is reportedly cheaper than the cost of heroin. The increased potency of synthetic fentanyl compounds is extremely dangerous, and law enforcement expects that the fentanyl market will continue to expand in the future as new fentanyl products attract additional users.

The threat posed by opioids has increased since 2007, and the threat varies by region. In 2016, approximately 45 percent of law enforcement agencies that responded to the National Drug Threat Survey reported heroin as the greatest threat in their area. In contrast, 8 percent of respondents reported heroin as the greatest threat in 2007. Reports of heroin as the greatest threat are concentrated in the Northeast, Midwest, and mid-Atlantic regions.

Opioids are the main cause of drug overdose deaths. Reports indicate that increases in overdose deaths are most likely driven by fentanyl and heroin. The increasing availability of heroin and other opioids throughout the U.S., largely, but not entirely, corresponds to the increases in drug overdose deaths around the country. For example, New Hampshire ranks second in the country in drug

overdose deaths, and they have reported high availability of heroin in the area. New Mexico and Utah, on the other hand, rank eighth and ninth, respectively, but only 4.7 percent of survey respondents in the Southwest reported heroin as the greatest threat, and 22.6 percent reported high availability of the heroin. This discrepancy may be explained by a number of factors, including lethality of fentanyl.

Historically, the Federal Government has concentrated on reducing the supply of illicit drugs, but in recent years, efforts to reduce the demand for these drugs have increased. Federal drug control dollars largely go toward addressing the supply side. However, Federal drug control funding for supply reduction has remained relatively flat over the last several years while funding for drug treatment and prevention has increased. Thank you.

[The prepared statement of Dr. Sacco appears in the Submissions for the Record on page 48.]

Representative Tiberi. Dr. Sacco, thank you for your testimony.

It is an honor to introduce my attorney general, Senator Portman's attorney general, Mike DeWine, who has served as a State senator in Ohio, as a Member of the United States House of Representatives, as a U.S. Senator, and now as Ohio's 50th Attorney General. Your tough—Ohio's tough drunk driving law has been a leading proponent for highway safety and has advocated for victims of crime.

He has assisted local law enforcement, advanced the use of DNA evidence for victims of crime, made efforts to assure prescriptions are safe, and worked tirelessly to fight the opioid epidemic in our State. I have known Mike for decades. I am pleased you were able to come today to testify and give us your thoughts.

You are recognized for 5 minutes.

**STATEMENT OF HON. MIKE DeWINE, OHIO ATTORNEY
GENERAL, COLUMBUS, OH**

Attorney General DeWine. Chairman Tiberi, Senator Hassan, and members of the committee, thank you so much for inviting me today.

The most visible sign of opioid epidemic in Ohio, of course, is the number of deaths that we have. Last year, the official total was eight per day. I think it was, frankly, more than that. Today, at least, it is clear that that number is going up.

But the cost is so much more. Every day, in Ohio, we have babies who are born who are addicted. We don't know what the developmental cost for each of those children will be, what that will impact that particular child, but we know that many of them will in fact be impacted. We do know what the cost is. The cost in the hospital neonatal intensive care unit, the average child there I think spends about 14 days there at very tremendous cost.

Our foster care system is bursting at the seams; our children services are. Fifty percent of all the foster care children—people—children who are in foster care are there because one or both parents are drug addicts. Seventy percent of the infants that are in foster care are there because one or both parents are drug addicts.

Our jails in Ohio are overflowing. We have more women in our jails and our prison system than we ever had by far to date. Our jails in Ohio in our 88 counties are really detox centers, something that they were not really designed for at all.

Narcan. All responders carry Narcan. As we move in that—it is a great thing, and we have advocated for that, but as we move from pain meds to heroin to fentanyl to carfentanil, it takes more and more dosages. I had an officer tell me the other day that it took 12 different dosages to bring someone back to life.

But the number—the big cost that we really—I think it is much more difficult to determine, but it is huge, absolutely huge—is the number of people who are in Ohio who cannot pass a drug test and, therefore, cannot have a number of jobs. You could never hire someone who can't pass a drug test to be around machinery. Never hire someone to even be in charge of the local McDonald's or the Burger King. You cannot have someone to drive a truck.

The missed opportunities, the fact that these people are not living up to their God-given potential with the tremendous impact it has on their own family but also the impact it has on the State of Ohio is just absolutely huge. I do kind of a little quiz when I talk to employers, and I say, "Do you drug test?" If they say, "Yes, I drug test," I say, "Well, what percent of the people who come in here—and you tell them they have to take a drug test—leave before they take the drug test and then add to that the percentage of people who come in here and are so arrogant or stupid or both that they take the test and fail it?" The average that comes back when you put those two numbers together almost every single time is 40 percent. It is not scientific. It is anecdotal. But it tells us, I think, some of the great loss we have.

What do we do about it? We start, I think, with the premise that most people who are addicted today of heroin, fentanyl, et cetera, started with pain meds. The first thing that we did is we took the licenses of over 100 doctors in the State of Ohio. These were bad people. These were drug dealers. They needed to go away.

But what remains is a lot of good doctors who are still, frankly, influenced by a culture that we believe the evidence shows was caused by the drug companies purposely to indicate that someone who has long-time chronic pain that is not terminal, that they are an appropriate candidate for pain meds. These doctors still, I think, some believe that pain meds are appropriate for that circumstance. I think that is a problem. We are slowly changing that culture, Mr. Chairman, and I think making improvement.

Local communities must own the problem. There must be an admission that there is in fact a problem. What follows that should be an inventory. What are the assets that we have? What are the challenges that we face? And then all the community has to go together. The business community, the law enforcement, the educators, and the churches. One of the things we have emphasized in our office is the faith-based community needs to be involved.

Another thing that is happening in Ohio, Mr. Chairman, is law enforcement is doing something it never did before, and that is helping get people into treatment. Just amazing stories. Senator Tharp—excuse me, I gave him an increase in title. Sheriff Tharp in Lucas County does an amazing job. They go to the emergency

room. They take people from the emergency room if they are ready for treatment, and they work with them and get them into treatment.

Let me talk about two other things, if I could, Mr. Chairman, and then I will conclude. I believe that we need to move to a K through 12, every year, talking about—to kids in school about this problem. I think it should be repetitive, comprehensive, and school-based. And it must be age appropriate. You are not going to talk to kindergarten kids about heroin, but you will talk to them about maybe good choices and health. And if you see a pill, don't pick that up.

I was on Reagan's National Commission on Drug Free Schools. Every expert who came in said you have to start in kindergarten; you have to do something every single year. We had a study commission that put this out, and I would make this available to anyone who is watching this or any members of the committee, it is on 23 or 24 page. We have mailed this to every superintendent in the State.

Finally, Mr. Chairman, I think in this country we need to do something. And I think it really needs to be on a national scale. We have to change the culture. When I was a county prosecuting attorney in the 1970s, heroin was something that even people who were doing drugs, most people wouldn't touch heroin. There was a psychological barrier there. That barrier is simply gone today and no longer exists.

I think what we need is a media blitz, a social media blitz on TV that is aimed at really two people—two groups of people. One are kids, and one are parents and adults. Get all the experts together. I am not an expert in this, but put them together, put the best media people we can put together, and let's try to change the culture. Because the irony is that as we have changed the culture in regard to tobacco—it took a long time; we have gone in the right direction—in regard to opiates, we have gone in absolutely the opposite direction. We can turn this around.

Thank you, Mr. Chairman.

[The prepared statement of Attorney General DeWine appears in the Submissions for the Record on page 55.]

Representative Tiberi. Thank you.

Our last witness is Professor Sir Angus Deaton, who is a senior scholar and Dwight D. Eisenhower Professor of Economics in International Affairs Emeritus at Princeton University's Woodrow Wilson School. He is also Presidential Professor of Economics at the University of Southern California. He is a member of the National Academy of Sciences, the American Philosophical Society, and an Honorary Fellow of the Royal Society of Edinburgh. He was president of the American Economic Association in 2009.

In 2015, he received the Nobel Prize in Economic Sciences. In 2016, he was knighted by Prince William at a Buckingham Palace ceremony.

Thank you for joining us today, Professor Sir Angus Deaton. You are recognized for 5 minutes.

STATEMENT OF SIR ANGUS DEATON, LAUREATE OF THE NOBEL PRIZE IN ECONOMIC SCIENCES, SENIOR SCHOLAR AND THE DWIGHT D. EISENHOWER PROFESSOR OF ECONOMICS AND INTERNATIONAL AFFAIRS EMERITUS, WOODROW WILSON SCHOOL OF PUBLIC AND INTERNATIONAL AFFAIRS AND THE ECONOMICS DEPARTMENT, PRINCETON UNIVERSITY, PRINCETON, NJ

Professor Deaton. Thank you, Chairman Tiberi, Senator Hassan, and the other members of the committee for holding this hearing on economics and the opioid crisis.

Deaths from legal and illegal drugs are contributing to an almost unprecedented increase in overall mortality among middle-aged white non-Hispanics. A century of mortality decline came to a halt at the end of the 20th century, and mortality rates for this mid-aged group were higher in 2015 than in 1998. Driven by these developments, life expectancy at birth, a key indicator of how well a society is doing, fell for white non-Hispanics from 2013 to 2014, and for the whole population of the United States from 2014 to 2015.

Opioids are a big part of the story. Supplies of opioids have stoked and maintained the epidemic. Selling heroin is profitable and illegal. Selling prescription drugs is profitable and legal. Pharmaceutical companies have made billions of dollars in profits on prescription opioids.

Opioids have a legitimate, if limited, role in treating pain, but perhaps it would have been better had they never been approved. Physicians are far from infallible in detecting which patients are likely to become addicted, and once patients are addicted, treatment is difficult and often unsuccessful.

My work with Anne Case has examined opioid deaths as part of an epidemic of mortality, what we call deaths of despair. These are suicides, deaths from alcoholic liver disease and accidental overdoses from legal and illegal drugs. The opioid deaths are the largest component. In 2015, for white non-Hispanic men and women aged 50 to 54 without a college degree, who were much more seriously at risk than those with a college degree, deaths of despair are around 110 per 100,000, of which 50 are accidental overdoses, 30 are suicides, and 30 are from alcoholic liver disease and cirrhosis.

There has recently been turn-up in mortality heart disease after many years of decline. And if obesity is the cause, some of these deaths might be deaths of despair, which would put a total at levels approaching deaths from cancer or from heart disease, the two major killers in midlife.

Figure 1 shows the all-cause mortality rate for white non-Hispanics, the red line aged 45 to 54, together with mortality rates for selected comparison countries. The mortality rates in midlife in other countries continued to decline at the rates that prevailed in the United States before 1998.

Americans are killing themselves by drinking, by accidentally overdosing, by overeating, or, more quickly and more straightforwardly, by committing suicide.

Deaths of despair have risen in parallel for men and women, see figure 2. Such deaths, like all suicides, are lower for women than

for men, but the increases have marched in lockstep. The key distinction here is not between men and women, but rather between those with and without a college degree.

Deaths of despair cannot be explained by the economy. They were increasing before the Great Recession and continue to increase afterwards.

We think of all of these deaths as suicides of a kind, and suicides respond more to prolonged economic conditions and to the associated social dysfunctions and loss of meaning in the interconnected worlds of work and family life.

Workers who entered the labor market before the early 1970s, even without a college degree, could find good jobs in manufacturing, jobs that came with benefits and on-the-job training, that could be expected to last, and that brought regular increases in earnings, and a road to middle class prosperity. Not so today.

With fewer good jobs, there has been a decline in marriage rates, though couples often cohabit and have children out of wedlock. Those cohabiting relationships are less stable than marriages so that many fathers do not live with or even know their children, and many children have lived with several “fathers” by their early teens, “fathers” in quotes.

Heavy drinking, overeating, social isolation, drugs, and suicide are plausible outcomes of these processes that have cumulatively undermined the meaning of life for white working class people. Within this context, we tend to see the opioid epidemic as an accelerant, as something that has poured fuel on the fire of something that was already very bad already. Thank you very much.

[The prepared statement of Professor Deaton appears in the Submissions for the Record on page 87.]

Representative Tiberi. I would like to thank you all for your testimony today.

Before I begin asking my questions, just two notes. In the spirit of bipartisanship, I allowed the Democratic witness to go first. I hope that is noted, as we move forward and continue bipartisanship on this panel. And I allowed the former Senator and former Member of this body, House, a little few extra minutes out of professional courtesy.

With that, Mr. Attorney General, you hit on something in your testimony that I hear about all the time in the seven counties in my district, whether it be urban, suburban, rural, or small town, and that is the impact that this is having on the economy, employers who are saying: You know, I have three positions open and I can't find anybody to fill the position who can pass a drug test.

From your perspective and all the work that you have done in this area, whether it is heroin or opioids or whatever type of drug abuse, where do you see in our State, the problem being the worst in terms of the economic conditions? Is it places that have historically been left behind? Does geography not make a difference? Can you give us your thoughts on it?

Attorney General DeWine. Mr. Chairman, I think if we analyze this, what is different about this drug problem that we have is how pervasive it is. It is absolutely everywhere: It is in our smallest communities. It is in our cities. It is in our most affluent suburbs.

I think if you go back historically, you could trace the beginnings of this to southern Ohio or Appalachian counties in regard to the pain med problem. We think that most of the addiction, although some people may start on heroin, most people become addicted to the pain meds, and they move to the heroin because, at some point, they can't get the pain med anymore and because heroin is so cheap. They move then possibly to fentanyl and carfentanil. So, if you go back 10 years, where you would see—where the biggest problem would be is in southern Ohio with the pain med problem.

I am not a sociologist. I am not sure I can—I can guess, but I don't have a great deal of expertise in this area at all, but it starts with that. But it is absolutely everywhere.

And part of the challenge, I think, always, as you look at this problem, and I know that some states are at a different stage than we are—we are well down the path—what I would suggest is the biggest challenge you have is getting people to understand that this is a problem in their community. Their community. And for the last 5 years, every interview I have done on this, I have looked into the camera, if it was a TV camera, and I have said: If you are watching this, you have an opioid problem, you have a drug problem in your community.

Representative Tiberi. So just one followup, you mentioned a demand problem and talking to kids as early as kindergarten. How about the supply problem? Is there any way to deal with that? You said you see it everywhere in our State; law enforcement is seeing it everywhere. Any thoughts on the supply issue?

Attorney General DeWine. Well, of course, you are talking to somebody who was a county prosecuting attorney. And what we do in the Attorney General's Office is assist local law enforcement. So we always look first to the law enforcement problem. And what we did 5 years ago is we created what we call the Law Enforcement Heroin Group—Unit out of BCI, and I can't really talk in public about exactly what we do, but we will go in and help the local sheriff or the local prosecutor or the local police. Once they have already started their drug investigation, we will help them take it to a higher level and to get the bigger fish and the bigger drug dealers. That remains an essential part of what we do.

I have talked to the Attorney General of the United States about cooperation with information coming off the border, and that is a work in progress, so that we get real-time information coming off the border back into Ohio. So we do work with our Federal partners and the FBI, Drug Enforcement Administration, and we have a very close and good working relationship with them.

So law enforcement is a key component part, but we are not going to arrest our way out of this problem. We have to deal with it holistically, which is do a better job in regard to treatment and getting people into treatment and keeping them in treatment. And we have to do a better job, a much better job, with prevention, which—where I think is the most opportunity. If you look at this from the long run, where are we going to be in 10 years, 15 years, 20 years? Start today in kindergarten, and very few schools are doing this.

Representative Tiberi. Thank you.

Professor Deaton, you talked about the deaths of despair, the economic conditions that cause it. Are those economic conditions, from your perspective, getting worse or trending better, or is it geographically different?

Professor Deaton. I think they have gotten somewhat better in the short run, but I don't think of this as being a short-run problem. I think this is a deep problem to do with, you know, what people who don't have a university degree are going to do with their lives. And the world that they used to inhabit is a world that is broken. And I think the meaning—the things that gave meaning to their lives, the steady jobs, are really not there anymore. And I am not particularly optimistic.

I don't think it is a good idea for everyone to go to college. I mean, I just think maybe things like apprenticeships may be a new way of thinking about that world of work really would help. I should say, though, that I de-emphasized the opioids because that was my shtick here. But I think doing something about the opioids in some sense is the easy part of this, though, God knows it is hard enough and that we really have to do that. We really have to change this culture of doctors that believes that pain should be treated with heroin, essentially, which is something we never used to do.

Representative Tiberi. Thank you, Professor. I appreciate that. My time has expired.

Ms. Hassan is recognized for 5 minutes.

Senator Hassan. Thank you very much, Mr. Chair.

And, again, thank you all for your testimony.

Dr. Frank, Medicaid has served as a lifeline for states that have been hit hardest by the opioid epidemic, and experts have said it is the number one tool we have in combating this crisis. As a former Governor, I certainly understand how critical it has been in ensuring that Granite Staters struggling with addiction have access to treatment and recovery services.

So I am obviously concerned that the Republican bill that passed out of the House in May would fundamentally change the Medicaid program as we know it. Instead of being a guaranteed benefit for states and their residents, the per capita cap in the plan would result in massive cuts that would set limits on Federal contributions regardless of the need for care and services. That will mean less buying power over time and leave states with far fewer resources to provide services to their citizens.

Could you address how a per capita cap approach to Medicaid would impact a State's ability to fight this epidemic and/or future public health emergencies?

Dr. Frank. Sure. Thank you for that question. The per capita cap essentially is set up so that it locks in 2016 per capita spending patterns and then inflates them forward at what the Congressional Budget Office predicts is about 3.7 percent, which is the expected consumer price medical component. And so what that does is it allows you to keep up with general inflation based on the 2016 patterns of treatment.

Now, as we know, mortality from opioids is growing at 15 percent a year; hospital admissions at about 6 percent; drug treatments for opioid addiction is growing at 10 to 12 percent a year.

And so what happens is, when you have a per capita cap that is based on that 2016 pattern and new things happen or old things grow faster, you start to fall behind very quickly.

Senator Hassan. Thank you.

Dr. Sacco, we know, to your point, that we need to attack the supply side of this epidemic, something that we have been working on in New Hampshire. And we know how law enforcement plays a critical role in cutting off supply side of illegal opioids and other drugs into our communities. But in New Hampshire, our law enforcement officials will be the first to say, just as Attorney General DeWine just did, that we can't arrest our way out of this problem. I still remember the colonel of my State Police calling me when I was a new Governor and saying, could I testify in favor of Medicaid expansion, because we need it?

So we need to treat this as the public health crisis that it is, and focus on addressing the demand side, which means having an effective public health response that could be more cost efficient and effective. Oftentimes, Medicaid—medication-assisted treatment is less costly than simply incarcerating someone with a substance use disorder, not to mention, being more effective at addressing the problem and reducing recidivism.

Dr. Sacco, do you agree that the opioid epidemic requires both public health and law enforcement responses to address in the crisis? Do you agree with the law official—the law enforcement officials in my State and the attorney general here that we can't simply arrest our way out of the problem?

Dr. Sacco. Senator Hassan, if you are seeking to address both the supply and the demand, then, yes, there should be a comprehensive approach. Generally, law enforcement addresses the supply issue. Right now, the response seems to be one that is comprehensive.

Senator Hassan. And would you agree that working on expanding prevention, treatment, and recovery programs, including Medicaid, is important to helping address the entire crisis?

Dr. Sacco. CRS does not take a position on the advisability of that. I am sorry.

Senator Hassan. Okay.

Dr. Frank, proposals coming out of the House would undermine the essential health benefits of the ACA that requires the coverage of substance use disorder services. CBO says that that could increase out-of-pocket costs by thousands of dollars.

Do you believe eliminating substance use treatment places a barrier to access to care for people struggling with substance use disorders?

Dr. Frank. Absolutely. We have seen in the states, for example, that expanded Medicaid and in states where there has been dramatic decreases in the uninsured rate from private insurance, we see those are the states that have responded most strongly with medication-assisted treatment in serving people with opioid use disorders.

Senator Hassan. Thank you very much.

And I see my time is up.

Representative Tiberi. The gentleman from Minnesota is recognized for 5 minutes.

Representative Paulsen. Thank you, Mr. Chairman, for holding this hearing on such an important issue that is having such a significant impact on communities across the country. This is certainly, as has been mentioned in the testimony, a problem that is everywhere. And, unfortunately, Minnesota has not been able to escape the devastating effects, economic and otherwise, of opioid addiction and the opioid crisis.

Just last month, I spoke to a mother from Maple Grove, Minnesota, whose son bought acrylfentanyl, an analogue of fentanyl, online, consumed it, and died. And it goes without saying that she was devastated by the loss of her son. But she was also devastated by the ease with which he was able to purchase the opioid online. While it may not be within the scope of today's hearing or committee, there is certainly a role for Congress to play to ensure that opioids are not so easily accessible.

Unfortunately, Minnesota was also the home to a much higher profile opioid overdose case on April 21st of last year. Prince, one of the most successful pop artists of all time, passed away in Chanhassen after taking fentanyl.

My point is that this is a problem that affects many different types of people, old and young, rich and poor, your neighbor down the street, as well as an international celebrity. And while it is important that we understand and address the physical and emotional effects of the opioid crisis on Americans, there is also value in coming to grips with the economic toll it is taking on the country as well, which is why I appreciate having such a great panel of witnesses here with us today.

Let me just start with a few questions. Mr. DeWine, the synthetic opioid fentanyl is 100 times more potent than morphine. And carfentanil is similar but is 10,000 times as strong as morphine, and it was developed for tranquilizing elephants and other large mammals. In just the past few years, fentanyl deaths have skyrocketed. Ohio, as you have mentioned, averaged four fentanyl deaths per year from 2007 to 2011. And in 2015, there were 1,155 fentanyl overdose deaths.

Do you have insight into the reasons for this development in Ohio in particular, and are there parallels or lessons that can be drawn for other states?

Attorney General DeWine. Congressman Paulsen, thank you for the question. You know, carfentanil is so dangerous—and fentanyl as well, but carfentanil certainly much more—that about a year ago we sent a bulletin out to every chief of police and every sheriff in the State, telling him and her and their officers, men and women of these departments, don't field test drugs any more. Stop it. Don't touch it. We had an experience in Ohio within the last month or so where an officer overdosed literally because he was in the presence of this and somehow it got into his system. So it is highly dangerous.

We believe a couple things are happening. We believe that the fentanyl is coming in primarily from China, although certainly some could be—actually be made in Ohio, but we think mostly it is coming in. I know Senator Portman has been directly involved in that concern, and Members of the House and the Senate have been.

I think you see the drug dealers, they are great marketers. I mean, it is amazing. This whole system is all about customer service. And it is all about delivery. I mean, I tell people that, if you look at heroin, Mexican drug cartels have developed a perfect business model: They grow the poppies in Mexico. They ship it across our southern border into Ohio. They could control it down to the street level. At some point, they may sell it off to the local dealers. And then what kicks in is what I call a pizza delivery system. You pick up the phone, you call, and they will deliver it. You get it in half an hour, and you are going to get it cheap, but they get you started.

I am told—I am not a medical expert—but I am told that the ratio between an early stage heroin addict and maybe a late stage heroin addict, the amount taken could be as high as hundred to one. So what starts as a \$10-a-day habit may go to \$1,000-a-day habit. They are always chasing a high.

And the reason I think you get to fentanyl is two things. One, it is easier for the drug dealers to get, and it is cheaper for them, and they can make more money on it. And, number two, it is a way to broadcast that, you know, this is something different. This is a better high. The irony is that when we get a situation where five, six, seven people die in a weekend in some city in Ohio, obviously, because they were on fentanyl or they were on carfentanil and it is a different potency or something is there, the demand appears to go up.

So we worry—you know, we put the bulletin out, and local law enforcement says, “Look, be very, very careful.” What we worry about is that we are just encouraging people to go seek a higher high. It is just—nothing makes sense about this. I think it is clear that people’s brains are being altered, and the person who is buying it is not looking at it rationally or the way you and I would be looking at it today, not being addicts.

Representative Paulsen. Thank you, Mr. Chairman.

Representative Tiberi. Mr. Delaney is recognized for 5 minutes.

Representative Delaney. Thank you, Mr. Chairman. I want to thank you for holding this hearing on obviously a very important issue that affects all of our districts.

As Mr. DeWine said, this is in every community in the country. And the fact that you have assembled such a terrific group of witnesses, I am grateful for that.

And, in particular, I want to thank Mr. DeWine for what he is doing in holding the pharmaceutical industry accountable. You will make them pay like other people will, and that won’t solve the problem, but it is the right thing to do, and it will send a message that we are going to start thinking about these things differently.

And we believe in a capitalistic system in this country, I certainly do, but we want it to be just at some level, and efforts like what you are doing will help make that happen.

And it is fairly obvious what we need to do, and the witnesses have very eloquently covered it here today. Whether we have the commitment and conviction to do it is a question. But the steps that Mr. DeWine is taking are obviously incredibly important, making sure we manage ourselves through the situation by having the

healthcare system in place that can support the people afflicted by this. And I associate myself with the Senator from New Hampshire and her eloquent comments about the importance of Medicaid.

Dr. Frank, your comments were very encouraging when you talked about how private investment sees this, as effectively, a very large business opportunity, and they are putting a lot of money and resources against it, and there will be a lot of innovation. So the same forces of capitalism that caused the problem here hopefully will be directed toward solving the problem. And so, if we are optimistic, perhaps we see a path out of the opioid crisis.

Professor Deaton, your comments were the most sobering in many ways. These deaths of despair are a manifestation of something that is going on in our society, something very broad and very significant and vexing in terms of how we deal with it.

You know, we have allowed globalization and technological innovation to occur, which have been extraordinarily positive for the state of humankind, but they have been very negative—very, very negative for certain communities in particular who weren't prepared for it; it happened too fast. And it has been negative for pockets really in every community and how we confront that and the isolation, lack of security the human beings have. You touched on it. They are not getting married. This opioid situation was really kind of a perfect storm or the confluence of events, almost like a match to fire based on that. They are not moving. There is no mobility. These people are frozen. They lack security. They are not engaging in society the way Americans have historically engaged.

And the cost of doing nothing against this is obviously not nothing. So, as an economist, how do you think about how we should approach this, because it seems to me a transformative investment is required in these communities if we are actually going to jump start them and the citizens of these communities out of the condition that they are in right now, which will obviously be very expensive? But how do you think about that in terms of not doing something?

Professor Deaton. Thank you, Representative Delaney. I wish I knew the answer to that question. I don't—I think globalization has been the issue. I think automation in some ways is more of a threat to many of those jobs. There has not been much of a decline. In fact, in most industries, there has been substantial increase in American manufacturing output, but the jobs are not there anymore because we don't need the labor to do that.

I don't know. I mean, I think, you know, you saw the slides I showed. This is not happening in Europe. And Europe is facing the same challenges. Globalization is happening to Europe. The pressure in jobs is the same in Europe. And one of our research topics—I don't know the answer. I mean, my friends on the left tend to say Europe has a much better social safety net than we do. One of the policies that people talk about is mothers—children get State allowances on a regular basis, which stops mothers having to shop around for men all the time, and this sort of merry-go-round of marriage has slowed down. But there is a lot of dysfunction going on.

Representative Delaney. What is the cost to us if we don't solve this problem?

Professor Deaton. Well, I think the opioid problem will get solved.

Representative Delaney. Yeah, putting aside the opioid problem. The more structural problem that you identified.

Professor Deaton. Well, the cost to us depends on what the counterfactual is. I mean, do you actually think we can do something about this? And what is that something that we can do? And I certainly think we need to think through all possibilities and look at some of the things that are happening in Europe.

The German apprenticeship system seems to really hold people together in a way that doesn't happen in this country, for instance. I know a lot of employers are upset about the labor force coming out of college or below is not trained for what they want, and some sort of apprenticeship system may help that. But I really—I don't have any surefire solution to solve this.

Representative Delaney. That you, sir.

Representative Tiberi. The gentleman from Arizona is recognized for 5 minutes.

Representative Schweikert. Thank you, Mr. Chairman.

Have you ever had one of those evenings where you can't sleep, so you are up reading about what is—and I read over all of here. I want to find an eloquent way to say because, being from Arizona, a border State, we at least document a couple lost lives every single day in Arizona. But in not talking—the book from my friends on the left. I would love to actually take a step backwards because there are things in the data—I actually built some charts off of Dr. Frank's information. And in some ways, I couldn't make parts of your argument work with the chart. You know, on saying during time of Medicaid expansion, my numbers are going up still double digits.

Are there any data sets—if we were to just wipe our minds clean of our partisan angst and say, give me something to look at that would help us do policy of—is it an economic driver? Is it the synthetics that are so small they are easy to transport and ship? Is it border? Is it demographics of the aging of my society? If I were to try to build a number of charts and say, here is my inflection, here is where we are going to build our policy goal, please, someone help me build what that policy is.

And I was going to go to Dr. Sacco. You live in this. You have been doing this for years. You had some real interesting stuff in your write-up. Where would you take us if you were building the policy?

Dr. Sacco. I think some things have already started. As you are aware, most of the fentanyl is coming from China. China recently announced its intent to schedule four fentanyl products. It remains to be seen whether this has an effect on what is coming over from China.

There is, as I think I mentioned, an increased production of heroin in Mexico and declining production in South America. It may be worthwhile to take a look at reducing the poppy supply in Mexico.

Representative Schweikert. But my fear is that is not my global solution. I am just now chasing a substitution of product.

Dr. Sacco. I am speaking to the supply side today. Absolutely, you should speak to my colleagues about this issue.

Representative Schweikert. Dr. Frank, you have something to say about this?

Dr. Frank. Yeah. In a sense you are asking: There is the sort of growth problem, and there is the levels problem. On the levels problem, if we cut the number of opioid prescriptions in this country by 90 percent, we would still be the largest consumer of opioids in the world.

Representative Schweikert. So, in that model, one of the first things you would do is—let's say we could wave a wand and elimination of prescription opioids.

Dr. Frank. No. I think it is more making sure that all our providers are trained in the best possible practices, because I don't think we can ignore the pain problem. We have a real pain problem in this country.

Representative Schweikert. Okay.

Dr. Frank. So I think that we need to sort of balance the two. And, so far, we have tipped the scale too far the other way.

Representative Schweikert. And just from a, you know, a junior standpoint, just looking at what the chemical compounds were in the synthetics, it is not that hard to make. I mean, the precursors—I am still not hearing a global—professor, from an economist's standpoint, what is my global solution?

Professor Deaton. I wish I knew. I am more skeptical than Dr. Frank is about treatment. I think, you know, somehow we have to choke back the supply. I mean, it is interesting to look back 30 years ago what happened with the crack epidemic, which devastated a different set of communities. And I think that that's—

Representative Schweikert. Is there a parallel we can learn from that?

Professor Deaton. Well, I think the communities dealt with it in the end, and it became sufficiently pervasive that the communities—you know, it is what Attorney General DeWine was talking about. We can educate the communities to the point where this becomes completely intolerable. And I think we need to be able to do that. And the schools would be a place. But the police are working on this. And it is still true that not all that many people know about it.

And I think the doctors really have to be choked back. I do believe there is a genuine pain epidemic in this country. I don't know how much of it was stoked by opioids, how much of it was stoked by the pharma companies, but I think there is something else there. And we have no idea how to treat that.

Representative Schweikert. Thank you, Professor.

Mr. Chairman, I am generally prone to believe this is one of those, we do everything, from economic, to information, to restrictions to access, to it may be there is not a magic bullet; it needs to be an armory.

Thank you, Mr. Chairman.

Representative Tiberi. Thank you.

The gentlelady from Minnesota is recognized for 5 minutes.

Senator Klobuchar. Thank you very much. Thank you to all of you.

I see Senator Portman is here, and along with Senator Hassan, we have been working hard on these issues for many years. We passed our bill last year, which, of course, set the framework out.

And I really look at this as three different things. One is trying to stop people from being addicted in the first place. And that is things like getting the drugs out of the medicine cabinet, changing doctor prescribing practices, and doing something on stopping the huge amount of drugs out there that are legal but aren't being used in the right way.

The second is treatment, of course.

And the third is then going after the illegal drugs. And we are going to see more use of that as we hopefully can reduce the number of legal drugs that are going out and getting people hooked.

So, along those lines, Attorney General, I was really interested and happy to see that you brought that lawsuit against five opioid manufacturers alleging that the drug companies engage in fraudulent, deceptive marketing campaigns about the risks and benefits of these opioids. I know there was a settlement in West Virginia on a similar case. The idea is the money, of course, goes into treatment. And it seems to me that the people responsible for marketing these drugs should pay for the human costs of what has happened here. So can you talk about what you can about that lawsuit and how you think it could be replicated across the country? Because all the education we are doing isn't getting us the money we need for treatment, and it is not stopping the bad guys from getting people hooked. And by that, I don't mean illegal drugs.

Attorney General DeWine. Senator, thank you for the question.

You know, I made it plain last week when I held a press conference that—when I explained what we were doing and why we were doing it. One thing I said to my Ohio citizens is this is not a substitute for the hard work at the local level. I am convinced that the work has to be done at the local level.

I started seeing 5 or 6 years ago, when we were dealing primarily with the pain med problem, that the communities that were making the most progress were communities where it had gotten so bad, they just got sick of it. And it was usually a grassroots effort led by a mom. Sometimes a dad, but it is usually a mom. And they just go and they try to transform the culture in that community.

Senator Klobuchar. But do you think a lawsuit, which I believe, like in the tobacco industry, the lawsuits actually got the information out there and—

Attorney General DeWine. Sure. Yeah.

Senator Klobuchar [continuing]. It stopped people from doing bad things?

Attorney General DeWine. Yeah. Let me get to the second part, Senator. Thank you, very much.

We believe this lawsuit is a fair lawsuit. We believe that what the evidence will simply show is that the pharmaceutical companies, beginning in the late 1990s, tried to change the culture. The culture, historically, had been, for pain meds, that they are used for acute pain. You have your tooth taken out, you take it for a

day, 2 days, 3 days, or it is used at the end of life when you have someone who is terminally ill.

What the pharmaceutical companies did is they tried to convince doctors, and did convince doctors, that, hey, it was just okay to use it for a third purpose. And that third purpose was for pain—

Senator Klobuchar. Pain management.

Attorney General DeWine [continuing]. That goes on day after day after day but is not terminal. And they did it, and they were very successful in doing it.

In response to your question, one of the things I would like to see these companies do—and they can do it tomorrow and start, lawsuit or no lawsuit—is to spend some money to change the culture back to where the culture should be, which, as several of you have said, is somewhere in the middle.

Senator Klobuchar. Thank you.

And we also have a bill with Senator Manchin that would put a fee on some of these drugs, and have, again, that go, per milligram, have that go to treatment.

And so I guess, Professor Deaton, congratulations on your good work. Can you comment on what the attorney general has done here, which I think is commendable, and how sometimes lawsuits can change the economic situation if companies are afraid of getting sued, that it is not just public shaming but actually out of their bottom line, that that can make a difference in how they behave?

Professor Deaton. Thank you, Senator.

Yes, I think it can make a difference. I mean, I don't have the figures, but the LA Times reported that family that owned OxyContin had made \$31 billion from it by the middle of last year. This is at a time where that drug is killing large numbers of people, and I think, you know, we ought to make it clear that this cannot be tolerated.

I also agree with the attorney general that the local effort is where the culture will be changed. But we don't need pharma companies trying to push doctors to prescribe addictive opioids for lower back pain.

Senator Klobuchar. Right. It just makes me cry when you see all these rehab people and small town mayors and cops are all trying to do the right thing, and then these people are getting a different message either on TV or when they go into the doctor's office. And it just has to change.

Thank you.

Representative Tiberi. Thank you.

It is an honor to introduce my Senator, who has been a national leader, as you know, Attorney General, on this issue, and talked to me last session of Congress about introducing a bill, which I did, that you have been a leader on, the STOP Act, deals with this issue of fentanyl coming in from China.

Mr. Portman, you are recognized for 5 minutes.

Senator Portman. Thank you, Chairman Tiberi, and thanks for your leadership all along and more recently taking the lead on the STOP Act. I think you have 165 cosponsors, I am told. And thanks to CRS for helping us with that situation, and to Mike DeWine for his help, both as the top law enforcement official in the State of

Ohio who cares a lot about the supply side and keeping this poison out of our communities, but also someone who gets it, that this is ultimately going to be solved through a comprehensive approach focusing on the local community. I was in this room 20 years ago as a House Member trying to get legislation through called the Drug-Free Communities Act, which is now a law that has helped spawn over 2,000 community coalitions. Our whole focus was local, including one that I founded and chaired in Cincinnati.

And yet here we are: The worst drug crisis in our history, by any measure, worse than it has been in the past. And I think what we have learned today from this terrific panel of experts and also from some of our colleagues, including Congressman Schweikert, is that, Mr. Chairman, the comprehensive approach that you have been advocating is the only way, and it has to be at every angle. And it has to include much more aggressive prevention and education efforts. Senator Klobuchar and I are cosponsors and authors of this STOP Act. Senator Hassan, one of our original four cosponsors, by the way, is here too. Senator Klobuchar, along with me, Whitehouse, and others, pushed this comprehensive approach in the Comprehensive Addiction and Recovery Act, called CARA. It includes a big component of education and prevention that has yet to be implemented, including a national awareness campaign on making this connection, as Attorney General DeWine has made clear today, between prescription drugs, and heroin, fentanyl, and other opioids. And I think Professor Deaton is right: A lot of people don't make that connection because they are not aware of the information. So, when you go to a doctor and someone who you trust prescribes opioid pain medication and says, "Here is 60 Percocets, take this for this oral surgery you have had," you trust that doctor, and you do that. And for some people, there is, obviously, a change in their brain, which is the disease of addiction.

And there are other aspects of the CARA legislation that need to be implemented, and I have urged the Obama administration, as I am now urging the Trump administration to move quickly in implementing these things in the face of this crisis.

Couple quick questions, one to Attorney General DeWine—and, again, as the chief law enforcement officer in our State, you know much better than I what is going on. But I just got an email yesterday from the coroner in Cuyahoga County, Chief Medical Officer Dr. Gilson, who was here testifying about the week before last over in the Senate, and he reported to me that 43 people have died in Cleveland in the couple of weeks since Memorial Day. He believes it is fentanyl-driven. By the way, this is in contrast even to the horrible rate of overdoses and deaths last year of being, you know, more in the 20 to 30 range. We are now even this year—in April, it was under 40. Now, in 2 weeks, over 40.

So can you talk a little bit about what has happened in Ohio and maybe specifically what I am hearing back home, which is this notion, to Professor Deaton's point about who is being affected, that this is now being spread into the African American community more now with regard to these evil traffickers sprinkling fentanyl in cocaine and starting a whole other series of addictions? If you could just speak to that a little bit, I would appreciate it.

Attorney General DeWine. Well, Senator, thank you very much for the question. Thank you for the great work that you have done. You have been a real leader in this field.

You know, I think there is a natural progression which starts generally with the pain med, 35-year-old, 40-year-old, blue-collar male hurts his back, is prescribed pain meds, becomes addicted to it, and everything goes downhill from that. He moves over to the heroin because it is cheaper and it is maybe more available.

And then the other thing that you have, as you point out, going on, is fentanyl now. And the fentanyl, we are finding fentanyl a lot more now, more, and more, and more, and less and less heroin. It used to be it was sprinkled in with it. One of the things that we are seeing in our crime lab is that these cases are much more complex and take longer to do because, instead of it being all heroin or all fentanyl, it is all mixed up. And so it slows that down.

But I go back to something I said a moment ago. I think it is a marketing technique. And these people who are selling this stuff, who are killing people, they are good marketers. And it is all about service. And it is all about getting the best high. And part of the marketing is, "Hey, we got something new," and that something new may, in fact, be fentanyl.

As far as it moving more into the African American community, I don't have any data on that, but, sure, it would appear that. That anecdotally would appear that it is getting pushed out.

And, you know, as I look at this problem from maybe a big-picture point of view, sometimes people will ask me, "You know, Mike, what keeps you awake at night as the attorney general?" My quick answer is "the opiate problem." I think it is a bigger problem. It has been alluded to by several people here today. The opiate problem is a subset of a bigger problem. The bigger problem is that we have a large number of people in Ohio and other states who are not living up, for many reasons, to their God-given potential. And we have got a problem with people not having the right skills, and that does impact this some—not in every case. We are seeing a lot of middle class people who everything would appear to be going fine in their life, but there is something going on there that causes that person to become addicted.

But a related problem is the fact that we have got Ohioans, and people, I am sure, in other states, who are not living up to their God-given potential because they are addicted or—and/or, usually, many times—they don't have the education. As the professor said, they do not have the education. They do not have the set of tools to make it. And part of it is we do have to, I think, start saying to people, and we have to start—parents need to be saying to their kids: We want you to live up to your full potential. Maybe you are working with your hands, and you don't go to college, but maybe you go to, instead, an apprentice program or something else where you can become a welder or you can become a machinist and make a very good salary.

So I think all of these things are tied into each other. And part of our challenge in Ohio and other states, I think, is to focus on kids who are growing up—because it is easier to impact them than it is to—it is not that we are not going to try to impact someone older—but the kids that are growing up, and make sure that they

have all the opportunities that are there no matter where they are born and no matter what their income or who their dad is or who their mom is. And I think, to me, that is part of our solution as we look at the pain med problem.

Senator Portman. Thank you. My time has expired.

Thank you, Mr. Chairman, for your indulgence.

I am going to have some questions for you, Professor Deaton, for the record, about the economic impact of what you described. And I think the notion of opioids being an accelerant to what you and Attorney General DeWine just talked about is actually an apt description.

Thank you, Mr. Chairman.

Representative Tiberi. Thank you.

The gentleman from Virginia is recognized for 5 minutes.

Representative Beyer. Thank you, Mr. Chairman.

And thank all of you, very much, for being here.

It is fascinating. It at least looks like a triangle in terms of there is the supply problem, as argued by Attorney General DeWine and Dr. Sacco. There is the economic dislocation, the hopelessness, from Professor Deaton, and then the treatment side from Dr. Frank.

Dr. Frank, can you cite the reasons why those with an opioid abuse disorder would not seek treatment?

Dr. Frank. Yeah. About a little over half don't seek treatment because either they can't afford it, which is the biggest chunk, or there are no providers available to them. And so that is a little bit more than half.

And then the other main reasons have to do with stigma in the workplace, in the community, and also there are a lot of people who deny that they have a problem.

If I could take one other second, I just want to kind of clarify the issue around treatment, which is medication-assisted treatment is really the most effective treatment we have. But only about a quarter of the people who get treatment get that. And so we are under-shooting our potential by a great deal. And that is what, in a sense, causes us to underachieve.

Representative Beyer. Thanks.

You know, we have the ObamaCare reform, replacement, repeal bill, is in the Senate right now. I think Cassidy said he wants to make sure it passes the Jimmy Kimmel test, which the House bill clearly didn't pass. But I am hoping that, based on all that we are learning now, and Senator Portman talked about this is the worst addiction crisis in the Nation's history, that whatever bill comes out of the Senate would pass the opioid epidemic test.

Professor Deaton, you said this really hasn't hit Europe yet. That might just be a temporary reprieve. Can you explain why the fentanyl from China and others hasn't affected that population at least yet?

Professor Deaton. At least yet.

I mean, that is for us—I guess it used to be the \$64,000 question, now the \$64 billion question. You can see some of this in the English-speaking countries of the world. You see some of it in Canada. There is a little bit in Britain and in Ireland and Australia, perhaps a little bit in Denmark. And if you looked at those countries just by themselves, you would be worried about it. But when

you put it in the context of the U.S., there is nothing happening there.

Partly, I think, it is because the prescription drugs are controlled much more carefully in Europe, and they are used in clinical, acute settings, and they are not prescribed in the community—yet. But, I mean, there is a concern that they will spread out into the community.

And I think the fentanyl thing, I don't know. But the black tar heroin, for instance, is coming from Mexico, and they have very easy targets here, and maybe fentanyl will come to Europe in the same way too.

So I think the Europeans ought to be worried, and they ought to—you know, they ought to make sure that they don't get to where we have gotten to. And they want to be very careful about it. But we don't see the signs of this epidemic, and I think part of it is the control of—

Representative Beyer. Thank you.

Dr. Sacco, you have been, it looks like, studying this drug thing for many, many years, academically and in CRS. What did we learn from the crack epidemic that is relevant to fighting the opioid epidemic?

Dr. Sacco. I am sorry. You said what did we learn from the crack epidemic?

Representative Beyer. Yeah. Are there lessons from the crack epidemic that are relevant here?

Dr. Sacco. I am not sure I can offer an opinion on that today.

Representative Beyer. Okay.

Dr. Sacco. It is a little bit outside of the scope of what I am prepared for. But I am happy to follow up with you. Is there anything specific to the crack epidemic?

Representative Beyer. Well, for example, we seemed to have responded to the crack epidemic, for example, with lots of incarceration. We were pretty harsh about that.

You know, there has been a movement, bipartisan, in the criminal justice, away from, you know, criminalizing essentially non-violent drug offenders or the harshness of it; perhaps not with the Attorney General recently. But is that a solution here, too, or do we tilt toward the treatment side?

Dr. Sacco. I can't advise one way or the other. I can tell you that drug offenses account for the majority of Federal offenses carrying a mandatory minimum, if that is what you are speaking to. Mandatory minimums did come out of that era of the crack epidemic. And there are different ways of looking at the efficacy of mandatory minimums. From an economic standpoint, research says that lengthy mandatory minimums are not cost-effective and that other factors, such as certainty of arrest and prosecution, have a greater deterrent effect than the severity of the punishment. So, in other words, a 1-year sentence has the same deterrent effect as a 10-year sentence. On the other hand, incapacitation prevents an individual from committing harm to society for that set period of years.

At the same time, it is not clear if that punishment reduces crime. Often, low-level drug offenders are easily and quickly replaceable.

Representative Beyer. Thank you very much.

Mr. Chairman, yield back.

Representative Tiberi. Thank you.

The gentlelady from Virginia is recognized.

Representative Comstock. Thank you, Mr. Chairman.

And thank the witnesses for being here today.

We have seen in my district—and I am in northern Virginia, here just over the bridge here. And we have had a rise in MS-13 gangs getting more involved now in trafficking of heroin and opioids. And so we are seeing this convergence of, you know, very violent gang, and them preying upon some very young people, both trying to recruit younger people into the gangs but then also getting them involved in these various things.

You know, what kind of effect—are you seeing anything like that? Are you seeing that elsewhere? Or how that is going to impact the economy? And what we see, you know, particularly when you get these young people, that they are getting into these gangs, and it is a whole lifestyle, and that is how they are making a living. They are not getting educated, and it will be even a worse situation.

Attorney General DeWine. I am sorry. Is that addressed to me?

Representative Comstock. Sure. That would be great, Attorney General.

Attorney General DeWine. I am not sure I can really answer that question. What I can say is that, when we look in Ohio, you know, our violent crime in our cities, a great extent of that is driven by gangs. And there is, many times, a connection between drug trafficking and the gangs.

Representative Comstock. And I know we have been focusing on the lower income, and how we have seen the rise there, but I know we have seen—in my district, we have, you know, very high—a lot of high-income areas in this region, and we are seeing it hitting everywhere. So I did want to make sure here today, even though it was focusing on that lack of opportunity, we are seeing this in every community and with every aspect. And so what is the difference when you are seeing, say, you know, a college-educated kid who maybe just got addicted to these from a sports injury and then just, you know, took it too far, and then they are in this lifestyle? What are you seeing, the difference between, you know, somebody like that versus, you know, this expansion in a lower income area?

Professor Deaton. Thank you very much.

Representative Comstock. Professor, thank you.

Professor Deaton. I think income is not the best marker of this, partly because African Americans tend to be—there are a lot of low-income African Americans, and until recently, African Americans have been largely exempt from this epidemic. That does seem to be changing, and there is a tick up in the last 2 or 3 years in mortality of African Americans from opioids. And that may be fentanyl, and that may be spilling over into those communities. But low education has certainly been an issue. And what you say is true, that higher education are suffering from this too but nothing like to the same degree. I mean, this huge explosion has been

among people with only a high school or even some college, but with a B.A., it is much, much less. You certainly find people, for sure. It is everywhere. But it is throughout the community.

I think, also, some of the standard protective forces from people have sort of broken down. I mean, one example I like to give is Utah has always been a very healthy place compared with Nevada and for sort of obvious reasons. But Utah has not at all been exempt to this epidemic. And that is because, you know, Mormons tend not—they don't drink. They don't smoke. They don't do things that are bad for your health. But when your doctor gives you pills, that is not something you are programmed to resist, and the church has not been very good at dealing with that.

Representative Comstock. So the education efforts and the comprehensive approach that Senator Portman and others were talking about and the attorney general was talking about, really, at that young age, kindergarten, and making sure—education efforts really needs to go everywhere then.

Professor Deaton. But stop the docs pushing this—

Representative Comstock. Yeah.

Professor Deaton [continuing]. So that people know it is dangerous.

Representative Comstock. Thank you.

I yield back, Mr. Chairman.

Representative Tiberi. Thank you.

The gentleman from Illinois is recognized for 5 minutes.

Representative LaHood. Thank you, Mr. Chairman, for this hearing today and for this subject matter.

And I want to thank the witnesses for your valuable testimony here today. I have seen the devastating effects of opioid abuse and heroin deaths in my own district. I represent a district of 19 counties in central and west central Illinois, a very rural district, and did a series of townhall events related to this issue with all the stakeholders, and it continues to be a problem.

We have talked a little bit here today about some of the analogies to this epidemic, and we talked a little bit about crack cocaine. I spent 10 years as a State and Federal prosecutor. And I think back to, in Illinois, 20, 25 years ago, we had a real problem with drunk driving. It was the number one killer in Illinois of young people.

And so what happened? We had an aggressive law enforcement effort. We raised awareness, a lot of tragic deaths. But we also had Mothers Against Drunk Driving, which played a significant role from an organic level, kind of like what you talked about, Attorney General DeWine. We also used technology, ignition interlock.

So, today, we have some of the lowest levels of drunk driving deaths anywhere in the country. And that is because of an effort. And it was a movement at the time to do that. And I think about that analogy here today.

The addiction is much different here. But we are able to reduce that problem and solve that in a variety of ways. And I think you have to—we have talked about this—holding everybody in the chain accountable all the way through. And I am not sure we are doing enough of that right now. And we have touched on some of those things.

Attorney General DeWine and then Dr. Frank, you want to comment on that?

Attorney General DeWine. Well, Congressman, I totally agree with you. This comes at the local level, comes at the State level. Certainly the Federal Government can play a role. But, ultimately, I think it comes back to the individual community. And, you know, what we have seen in Ohio in this area is the communities that have started to make some real progress, number one, admit they have a problem. Number two, there is a citizens group that is put together by a mom who has lost a son and lost a daughter. And they go out, and they just—they change the culture. Now, you still have a problem. But they make some progress.

I saw it in my own career. I introduced a bill in the Ohio legislature, a drunk driving bill, and people were laughing at it. It was back in the early, early 1980s. And it was the Mothers Against Drunk Driving, frankly, who got it passed,

Representative LaHood. Yep.

Attorney General DeWine. And it just shows that—you know, it is the example I think we can all use with people: look, you can make a difference. You can change the culture. You can change what people are talking about by a very active citizens group, either at the local level or the State level or the national level.

Representative LaHood. Dr. Frank, you know, people also remember when we talk about drunk driving about, you know, the TV commercials that talked about these tragic deaths and highlight of just how horrific some of these were. And I am not sure that we have that level. And if we have, maybe there are some states or local areas that we can use as a success model on that.

Dr. Frank. Yeah. I do want to offer a ray of hope, because we haven't had much here today. And that is one area that we have been really successful on is in reducing the number of prescriptions on methadone for pain. It used to be that they were 6 percent of the prescriptions in opioids and 30 percent of the deaths. And we have turned that around. And the way we have turned it around is, I think, by being very aggressive in training and educating of the physician community, making sure that our prescription drug monitoring programs really focused on that, and then CMS, through the Medicaid program and through Medicare, took measures to issue guidance to states and to do edits in the prescription drug plans under part D. And together they really brought down those prescriptions. And I think that, you know, in a sense, that is a reflection of the sort of multipronged approach. And I do think that that offers us a bit of hope here.

Representative LaHood. Professor Deaton, you touched a little bit on how we maybe hold doctors accountable and what we need to do. And much of that oversight on doctors and physicians is done at the State level. Is there an example of a State that has done a pretty good job in terms of holding doctors accountable?

Professor Deaton. I am afraid I don't have an answer to that. We have done very little work on the geographic aspects of this epidemic. So I can't answer that. Thank you.

Representative LaHood. Thank you.

Thank you, Mr. Chairman.

Representative Tiberi. Thank you.

I really appreciate all four of you being here. What great testimony we were able to hear today.

I am going to allow the acting ranking member, the gentlelady from New Hampshire, have some final comments as well.

Senator Hassan. Thank you, Mr. Chair.

And thank you all on behalf of Ranking Member Heinrich and myself for being here and for your testimony.

And I just wanted to close with the thought of a particular constituent of mine who is now in recovery from heroin addiction, because I think it is important, as we have had this discussion, to remember that ultimately this addiction is a disease. It is caused by a chemical reaction in the brain. And it is because people like my constituent, Ashley, who woke up one morning to find her husband having overdosed and died next to her, went and got treatment under Medicaid expansion, that she has gotten well. And she now is working. And she is getting her health insurance through her private employer. She is off of Medicaid expansion.

And I think it is really important that we—also to acknowledge the comments we have had about the importance of community response—thank the people who have this disease who have stood up, who have identified themselves as people suffering from addiction, have done the hard work of getting better, and then have turned their efforts to make sure that they help with the prevention and recovery efforts that we need to undertake.

So I am going to keep Ashley in my thoughts today. She is about 17 or 18 months in sobriety now. She continues to get treatment for recovery. She is going to be reunited with her 3-year-old son soon. There is hope if we go at this with the all-of-the-above approach.

Thank you so much.

Representative Tiberi. Thank you, Senator.

Thank you again. There are stories like that that we all can share. Attorney General DeWine has shared many with me, as he is on the front lines. And I appreciate, and I think this entire panel, if you couldn't tell, appreciates the time you put into this testimony. You all complemented each other quite well. This is a battle that we are going to continue to fight in a comprehensive way, and I appreciate the knowledge that you were able to share with us today. And we look forward to working with you in the future.

The record will be open for 5 business days for any Member that would like to submit questions to the four panelists for the record, and our hope is that you would respond as well.

This hearing is adjourned

[Whereupon, at 11:37 a.m., the committee was adjourned.]

SUBMISSIONS FOR THE RECORD

PREPARED STATEMENT OF HON. PATRICK J. TIBERI, CHAIRMAN, JOINT ECONOMIC COMMITTEE

Good morning and welcome. I want to welcome especially our Ranking Member Senator Heinrich and our Vice Chairman Senator Lee, as well as the other Members of this Committee, who have joined me in expressing the importance of holding a hearing on the threatening increase in opioid abuse.

Drug abuse has become rampant in America and may be the worst the country has experienced. It is devastating families and degrading communities, and undermining parts of the economy.

For several states and districts represented by members of this committee, the problem is acute. As Figure 1 indicates, the crisis has a regional character. My hometown of Columbus, Ohio is part of the crisis' epicenter east of the Mississippi.

Figure 1

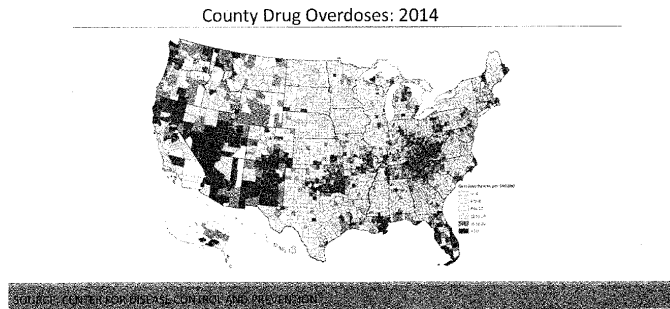
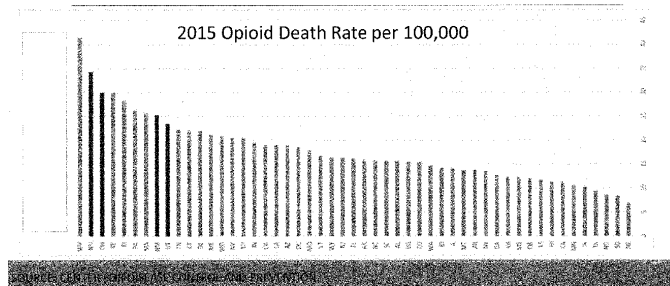


Figure 2 shows the 2015 drug overdose death rates by State, which ranged from 40 per 100,000 in West Virginia to six per 100,000 in Nebraska. The states represented by members of this committee among the ten highest rates, are highlighted in red, including my home State of Ohio, which ranks third.

Drugs markets, both legal and illegal, can be analyzed from the demand and the supply side. The exact reasons for the extent of drug abuse are not clear at this point. With respect to demand, a changing perception of pain as a health problem in the 1980s by the World Health Organization in particular laid the ground for more intensive treatment.

The labor market and the economy can have a major impact on demand, although not necessarily in ways one might expect. Some research shows less substance abuse when unemployment increases, for instance. And, while prolonged downturns in labor market and economic conditions are associated with social, behavioral, and health problems, they do not necessarily affect all groups in the same way or to the same degree.

Figure 2



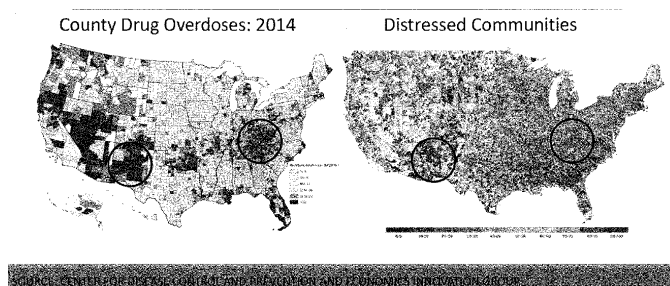
All of society is vulnerable to the opioid epidemic, but it is compounding the economic distress that certain parts of the country and segments of the population already have been experiencing. Some areas of high unemployment tend to have higher rates of substance abuse. The Economic Innovation Group, a representative of which testified at our last hearing, *The Decline of Economic Opportunity: Causes and Consequences*, developed an economic distress index consisting of several economic indicators, a national map of which is shown alongside the map of overdose deaths in Figure 3. The darker the red, the worse the distress. Striking correlations are visible.

But it is also apparent from Figure 3 that some economically distressed areas are not experiencing high overdose death rates.

From the supply side, the particular locations where new, potent drugs initially happened to become most readily available, and the path of geographic market expansion they took, track a visible trail of destruction in Figures 1 and 3. Without question, new developments in the sourcing, cost of production, potency, and retail delivery have moved the supply of both legal and illegal addictive drugs substantially to the right. Newly effective pain medication, OxyContin, introduced in the mid-1990s had initially unacknowledged addictive qualities and was overprescribed. So-called black tar heroin, more powerful and less expensive than other kinds, expanded its market share just as OxyContin was reduced in potency.

The prescription drug explosion started in the Appalachian part of Ohio and spread to parts of Kentucky and West Virginia. Black tar heroin entered the Southwest and spread westward but eventually also eastward, crossing the Mississippi in 1998.

Figure 3



Illegally distributed variations and counterfeit forms of prescription drugs like fentanyl can be poisonous and kill a person even in small doses, some by mere contact with the skin. We now face pure poisons masked as narcotics that are shipped across our borders. Senator Portman and I have introduced the STOP Act, which aims to stop dangerous synthetic drugs from being shipped through our own postal service, keeping them out of the hands of drug traffickers in the United States.

But it would be a mistake to blame these drugs entirely for the rise in mortality that some groups and regions are suffering. There are other causes apparently emanating from long-term changes in the composition of the economy and of skill requirements.

Determining cause and effect is obviously critical to reaching the right conclusions. Feedback effects often complicate causality and make a clear understanding of major causes difficult. For example, does a bad economy lead to drug abuse or does drug abuse to a bad economy by lowering productivity, labor force participation, and social cohesion? We will hear perspectives that run in both directions today.

We will hear about the economic decline of certain groups leading to despair and self-destructive behavior; of damage drug abuse causes individual lives, families, and communities in all segments of society; and of developments in the production and marketing of addictive drugs, which have made them more dangerous, affordable, and available.

I look forward to most insightful testimony from our panel of experts.

OPENING STATEMENT OF HON. MARTIN HEINRICH, RANKING DEMOCRAT, JOINT
ECONOMIC COMMITTEE

Thank you, Chairman Tiberi, and thank you to our panel for being here today. Addiction to heroin and prescription opioid pain relievers is a public health epidemic that is devastating families and communities across the country.

Every day, 91 Americans die from an opioid overdose.

Over-prescription is partially responsible for the epidemic.

Since 1999, the amount of prescription opioids sold in the U.S. nearly quadrupled and so too has the number of overdose deaths from opioids.

The economic costs of addiction are enormous—totaling more than \$80 billion in 2013 from increased health care costs, higher rates of incarceration, and lost productivity.

New Mexicans know too well the devastation heroin and prescription opioids can wreak.

For years, without adequate treatment resources, communities in New Mexico have suffered through some of the highest rates of opioid and heroin addiction and overdose deaths in the Nation.

Rio Arriba County has a drug overdose death rate of 81 per 100,000—five times the national rate.

I'm reminded of Josh from Espanola, who I met at a round table I hosted in Rio Arriba County last spring.

At 14 years old, Josh became addicted to prescription opioids.

Over time he moved to heroin. He stole from family and friends to maintain his growing addiction.

Josh spent time in jail where he went through the pains of withdrawal. He even attempted suicide but his gun didn't go off.

Now in his 20s, Josh has turned his life around because he finally got access to treatment and services.

For millions of Americans, proven substance use treatment is available because of 1) behavioral health parity laws, and 2) the Medicaid program.

In New Mexico, Medicaid—called Centennial Care—is at the forefront of our fight against the opioid crisis, accounting for 30 percent of life-saving medication-assisted treatment payments for opioid and heroin addictions.

At exactly the time Congress should be giving states more tools to fight this epidemic, House Republicans passed a bill that would repeal Medicaid expansion, artificially cap the program, and shift the burden about who and what to cut onto states.

More than a million people who have been able to secure treatment for substance abuse would lose their coverage.

Repealing Medicaid expansion would cut about \$4.5 billion from treatment for mental health and substance abuse.

We can't fight a public health crisis with grant dollars alone. Grant dollars run out. Block grants lose their buying power over time.

And private investment dollars—which are critical in this fight—won't come with-out certainty that the foundation is funded.

Unfortunately, I won't be able to stay to hear your important testimony because of a hearing in the Intelligence Committee.

But I will be leaving you in the very capable hands of my colleague, Senator Hassan.

New Hampshire loses at least one person every day to a drug overdose. As Governor, Senator Hassan used every tool at her disposal to fight the epidemic, including turning to the flexibility of the Medicaid program to gain ground in her State's fight.

I will let her to tell you more, but I leave you with this: when a community faces a public health crisis, it's not long before a State turns to the Medicaid program to stem the tide.

What will our states and communities do for this public health crisis—and the next one—without the guarantee of Federal Medicaid dollars to support them?

Thank you, Senator Hassan.

Mr. Chairman, I'd like to yield my remaining time to Senator Hassan for brief remarks.

OPENING STATEMENT OF SENATOR MARGARET WOOD HASSAN

Thank you Chairman Tiberi, Ranking Member Heinrich, and to our witnesses for being here today.

As I travel across my home State of New Hampshire, I've heard from countless families and those on the front lines about how the heroin, fentanyl, and opioid crisis has devastated communities across our State.

And I know that many of our colleagues have heard of the impacts in their states as well.

I'm proud that during my time as the Governor of New Hampshire, Republicans and Democrats put our differences aside and came together to pass—and reauthorize—our State's bipartisan Medicaid expansion plan.

Medicaid expansion is providing quality, affordable health coverage to more than 50,000 Granite Staters, including coverage for behavioral health and substance use disorder treatment. And experts have said it is the number one tool we have to fight this crisis.

We should be coming together—just as we did in my home State—to support those on the front lines and help those who are struggling with addiction. And while members of both parties and the Administration have discussed the severity of this crisis, we need the words to be matched by strong action.

What we cannot do, however, is end Medicaid expansion and institute deep and irresponsible cuts to the traditional Medicaid program.

This crisis is a public health and law enforcement issue, but it is also an economic issue. I believe the investments in helping people recover are a far better use of our dollars than the long-term costs of addiction, both in terms of State budgets but also in ensuring that individuals are healthy enough to contribute to our economy.

I am pleased that we are having this hearing today, but we need to continue to hold hearings on how proposals made here in Washington would affect our ability to stem and reverse the tide of this epidemic.

This is an issue that rises above partisanship, and this is the work that we need to be doing—because the lives of people in our states depend on it.

I am going to continue to work with our colleagues on solutions, while standing firm against any policy that would pull us back.

Thank you, and I look forward to hearing from our witnesses.

**Testimony of Richard G. Frank before the Joint Economic Committee
Hearing: Economic Aspects of the Opioid Crisis**

I. Introduction

Chairman Tiberi and Ranking Member Heinrich, thank you for inviting me to participate in this discussion of the opioid epidemic that is plaguing our nation. This epidemic is especially devastating to low-income communities as the prevalence of opioid use disorder is higher in low-income groups and financial access to treatment is more precarious. My focus today will be on the policy tools available to close the gap between the number of people suffering from an opioid use disorder and the number receiving treatment. New policy tools developed in the last decade, offer a unique opportunity to close what is a deadly treatment gap. I will touch on three main points about key policy instruments at the disposal of the Congress and the Administration for closing the gap. The first is that Medicaid is fundamental to promoting access to treatment of opioid use disorders. Medicaid has been especially instrumental in lowering barriers to effective treatment for high need low income groups. The second is that recent policies aimed at improved private insurance coverage for treatment of mental illnesses and substance use disorders such as subsidized private insurance, the Essential Health Benefit and Parity legislation have dramatically enhanced the ability to close the *treatment* gap. The third is that private investment has responded to the new funding sources by expanding treatment capacity and so new funding initiatives like the *21st Century Cures Act* offer an opportunity to make targeted public investments in treatment capacity that are designed to complement the private market.

II. The Opioid Epidemic

Drug overdoses claimed 52,404 lives in 2015.¹ It is estimated that in 33,091 of those cases, or 63%, opioids were implicated. The growth in opioid related deaths grew 15.5% between 2014 and 2015. It is important to recognize that the epidemic is evolving. Since the late 1990s, most of the growth in opioid related mortality has been driven by the use of prescription opioids. In recent years, the rise in deaths stemming from prescription opioids has leveled off, and the actual number of opioid prescriptions has begun to decline, although it remains high. This is, in part, due to greater vigilance by insurers, pharmacists and clinicians. Changes in formulary design, prescription drug lists, and investments in prescription drug monitoring programs have been influential. The effectiveness of these programs is seen in the changes in opioid-related mortality trends. Recent increases in mortality, however, have been driven by illicit opioids, like heroin, Fentanyl and counterfeit Oxycontin. Heroin dependence has been growing at up to 11% per year across the country in recent years, and opioid related hospitalizations grew at an average of about 6% over the last 10 years.

¹ Rudd RA, P Seth, F David, L Scholl; Increases in Drug Overdoses and Opioid-Involved Deaths—United States 2010-2015; *Morbidity and Mortality Weekly Report*, December 16, 2016

The number of heroin, Fentanyl and counterfeit Oxycontin users is growing and those drugs are more lethal than prescription opioids. This indicates an increasing urgency to engage more people suffering from Opioid Use Disorders (OUD) in treatment. Fortunately, important strides have been made to improve financial access to treatment for OUD.

While the rate of opioid use disorder among the population with incomes 200% of the Federal Poverty Line (FPL) is significant (11.4 per 1,000 people), Table 1 highlights the fact that the rate is substantially higher among low-income populations. The highest rates of opioid use disorder for Americans between 18 and 64 years of age is among those with incomes of less than 100% of the FPL (16.8 per 1,000 people). This rate is 47% higher than the rate for the non-poor (incomes > 200% of FPL). People with incomes between 100% and 199% of the FPL have a prevalence rate for OUDs that is roughly 32% higher than that of the group with incomes greater than 200% of the FPL. The implication is that 51.4% of all people in the U.S. with an opioid use disorder have incomes below 200% of the FPL even though they make up only 32% of the nation's population.²

Table 1 also indicates that people between 26 and 34 years of age also have elevated levels of OUD (17.0 per 1,000 people). The prevalence of OUD is generally higher among young, white non-Hispanic males compared to their older, female, minority counterparts.³ Those most affected by OUD and SUD, more generally, have historically also been the least likely to have coverage for and access to adequate treatment options. For example, the uninsured rates for low income adults 18-64 years of age prior to ACA implementation of coverage expansions were 39.3% for those below the FPL and 38.5% for those between 100% and 200% of the FPL compared to 11.4% for people above 200% of the FPL.

² The income distribution figure is based on the March 2016 Current Population Survey.

³ The opioid epidemic has meant that even though the rates of disorder are relatively low for older adults (ages 50-64) there has been notable growth in the rate of disorder—this is consistent with recent results on mortality by cause. See Case A, A Deaton; Mortality and Morbidity in the 21st Century, *Brookings Papers on Economic Activity* (conference version), March 2017

Table 1: Prevalence of Opioid Use Disorder (OUD) and Substance Use Disorder (SUD) for Selected Demographic Characteristics, United States, 2015

	OUD prevalence (per 1,000)	SUD prevalence (per 1,000)
Total Income		
0 – 100% FPL	16.8	47.1
101 – 200% FPL	15.0	36.8
>200% FPL	11.4	28.4
Age		
18-25	14.7	52.8
26-34	17.0	34.0
35-49	10.9	19.7
50-64	7.2	12.4
Gender		
Male	16.5	43.3
Female	10.4	26.3
Race		
Non-Hispanic White	15.2	35.8
Non-Hispanic Black	8.1	32.6
Hispanic	10.7	28.5
In Treatment	3.4	4.8
Overall Prevalence	13.3	34.2

Source: Author's Tabulations from NHSDUH, 2015

The shift to heroin and other illicit drugs also implies that there is a complicated interplay between public safety and public health. For example, in considering the shifting of the epidemic towards heroin, it is important to recognize that between 24% and 36% of people addicted to heroin pass through jails or prisons in a year.⁴ People with histories of addiction that are re-entering their communities from jails and prisons are at especially high risk of mortality due to overdose. The mortality rate for re-entering prisoners is 1840 per 100,000 prisoner years compared to an overall mortality rate for the population of 747 per 100,000.⁵ This is a rate that is about 2.5 times that for the rest of the population.⁶ It is estimated that 80% to 90% of these people have incomes below 150% of the FPL and are thus eligible for Medicaid in expansion states and also subsidized private insurance (across the country). OUD is also linked to higher risks for HIV related illnesses, suicide and Hepatitis C. Finally, it is estimated that 1.5 million adults have a serious mental illness and also misuse opioids.⁷

In addition to its public health consequences, the opioid epidemic makes large claims on resources. One recent estimate puts the total treatment costs for the nation at \$28.9 billion

⁴ Boutwell AE, A Nijhawan, N Zaller, J Rich; Arrested on heroin: a national opportunity, *Journal of Opioid Management* 3(6): 328-332, 2006

⁵ Binswanger IA, MF Stern, RA Deyo et al, Release from prison—a high risk of death for former inmates; *New England Journal of Medicine* 356 (2): 157-165, 2007

⁶ Note that most of the post release mortality occurs in the first month post release.

⁷ SAMHSA, *The CBSQ Report*, January 25, 2017.

in 2013.⁸ Adding in costs related to lost productivity, incarceration and other legal expenses yields an estimated total cost to society of \$78.5 billion.

III. Closing the Treatment Gap

Untreated Opioid Use Disorder

According to the 2015 National Survey on Drug Use and Health (NSDUH), about 2.66 million individuals under the age of 65 met diagnostic criteria for an opioid use disorder (OUD). It is estimated that between 500,000 and 718,000 receive any treatment for those conditions.⁹ The remaining 1.9 to 2.2 million people with an OUD did not receive treatment for that condition.

What are the reasons for this vexing gap between need and receipt of care? The predominant reasons include: inability to afford treatment and lack of readiness to seek treatment. For persons suffering with drug use disorders, 36 percent reported that they had no health insurance coverage and could not afford the cost of treatment. 29 percent reported that they were not ready to stop using substances. Other commonly cited barriers to receiving treatment include the stigma of addiction in the work place and the community (22%), the lack of availability of providers (16%) and the belief that they do not have a problem that needs care.

What treatments work for OUD?

Medication Assisted Treatment (MAT) is the gold standard of treatment for OUD. This is based on dozens of randomized clinical trials of the three medications used in MAT: methadone, buprenorphine and long acting naltrexone.¹⁰ MAT combines medications with behavioral therapy (psychotherapy/counseling) and drug testing to track adherence with treatment. Methadone is an opioid that replaces other drugs and allows patients to function better. It is provided through a set of highly regulated clinics. Buprenorphine another opioid is also regulated but can be provided by trained physicians in their offices subject to limits on the number of patients treated. It too allows patient to function as they recover. Naltrexone is not an opioid and can be provided by any licensed physician. However, naltrexone is typically administered as a 30-day injection that requires that a patient be detoxified. These three approaches to MAT are recommended “first-line”

⁸ Florence CS, C Zhou, F Luo, L Xu, The Economic Burden of Opioid Overdose, Abuse and Deterrence in the United States, 2013; *Medical Care*, 54(10): 901-906, 2016. Note that these are social cost of illness estimates not spending estimates.

⁹ This range is based on the author's tabulations from the NSDUH and recent literature such as Wu LT, M Swartz; Treatment utilization among persons with opioid use disorder in the United States; *Drug and Alcohol Dependence* 169: 117-127, 2016.

¹⁰ See for example the Cochrane reviews of methadone and buprenorphine and PG Barnett, JH Rodgers, D Bloch, A meta-analysis comparing buprenorphine to methadone for treatment of opiate dependence, *Addiction*, 96:683-690, 2001

treatments in clinical guidelines. Note that only about 25% of people obtaining treatment (or about 2% of all people with an OUD) for an OUD get MAT.¹¹

Tools for addressing the treatment gap

The reasons highlighted for not obtaining treatment that are most amenable to being addressed through public policy are those related to **affordability** and **availability** of treatment. Recall 36% of those with an OUD not receiving treatment cited affordability as a key reason for not obtaining treatment. Important strides have been made recently to make treatment for OUD and other Substance Use Disorders for affordable.

Medicaid has always had a significant part in paying for treatment of OUDs. In 2014, the year the Affordable Care Act's (ACA) coverage expansion went into effect an estimated 21% of the health care costs from treating SUDs were paid by Medicaid. Since 2014, Medicaid has been playing an increasingly central role in paying for treatment of OUDs. There are three main reasons for this. First, the ACA coverage expansion including Medicaid expansion along with the creation of the health insurance Marketplaces has extended coverage to an estimated 220,000 people with an OUD or 8% of the population with an OUD.¹² Of these, we estimate that 45% or 99,000 were in the Medicaid expansion group. To put these figures into context there are a total of 1.37 million people with OUD with incomes below 200% of the Federal Poverty Line. The second is that the ACA applied the Essential Health Benefit to the Medicaid expansion and that included substance use disorder treatment coverage. The third reason that Medicaid's role has expanded is that the Mental Health Parity and Addictions Equity Act (MHPAEA) of 2008 requires Medicaid managed care plans to offer coverage for treatment of Substance Use Disorders (SUDs) that is no more restrictive than that for medical-surgical conditions. In addition the Affordable Care Act required that MHPAEA's provisions be extended to the Medicaid expansion population. This has meant a notable expansion of not only the number of people covered but also the extent of coverage. Thus, the Medicaid program, which covers about 34% of people with an OUD, has a central place in paying for their treatment. This is especially salient in considering the importance of Medicaid in paying for evidence based treatment in the U.S. generally and in the states hardest hit by the epidemic. Nationwide Medicaid paid for 24% of Buprenorphine prescriptions in 2016 and an average of 41% in the 5 states with the highest mortality rates (West Virginia 41.5 per 100,000), New Hampshire (34.3), Kentucky (29.9), Ohio (29.9) and Rhode Island (28.2).¹³ The evidence to date suggests that the reduced financial

¹¹ See Saloner, B, S Karthikeyan, Changes in Substance Abuse Treatment Use Among Individuals With Opioid Use Disorders in the United States, 2004-2013. *JAMA* 314(14): 1515-17; 2015

¹² Using Landscape File data from the Centers on Medicare and Medicaid Services for 2016 and estimates of the expansion population from the Council of Economic Advisors and applying prevalence rates by income classes from the National Household Survey on Drug Use and Health, we estimate that there are 220,000 people with an OUD that were covered by the Marketplaces and the Medicaid expansions in 2016. The Medicaid share is based on an estimate of the share of people with serious behavioral health problems in Medicaid in the estimated expansion populations.

¹³ For the Medicaid shares see IMS Institute for Healthcare Informatics, *Use of Opioid Recovery Medications*, 2016 and for the mortality data see CDC, Drug Overdose Death Data, December 16, 2016.

barriers to treatment produced by Medicaid policy changes are resulting in more evidence based treatment. A recent study shows that between the fourth quarter of 2013 and the third quarter of 2016 use of buprenorphine per 1000 population increased by 41.2% in states that expanded Medicaid while the corresponding increase in non-expansion states was 17.2%. Furthermore the evidence suggests that the Medicaid utilization increases were net gains in treatment as only a small part of the increase was due to shifts in source of payment.¹⁴ For these reasons proposals to scale back Medicaid coverage expansions and level of coverage requirements (by repeal of the Medicaid Essential Health Benefit provision) and to strictly limit spending growth based on 2016 spending patterns via per capita caps in the face of a rapidly growing epidemic would serve to widen not narrow the treatment gap.

Finally, an analysis by the State of Ohio's Department of Medicaid shows that people with an opioid use disorder that gained coverage under the state's Medicaid expansion reported the largest improvements in access to prescription drugs for treatment, mental health care and overall health care. Of particular note is the observation that people with SUDs saw important gains in access to care for other chronic conditions that frequently co-occur with an SUD.¹⁵

Private insurance is also an important source of payment for treatment of OUD and addressing the treatment gap. Private insurance covers about 42% of people with OUD and paid for nearly 20% of spending on SUD treatments in 2014.¹⁶ Private insurance too has taken an expanded role in treatment of OUDs and as a mechanism for closing the treatment gap. This expanding role also emanates from three sources: MHPAEA that applied to private insurance coverage for employers with 50 or more employees, the Essential Health Benefit provision in the Affordable Care Act that names coverage for treatment of SUDs as an Essential Health Benefit, and the extension of MHPAEA to the small group and individual health insurance markets.

As in the case of Medicaid, recent policy changes served to cover many people for care of OUD that were previously uncovered due either to being uninsured or holding a policy that did not cover SUDs, and to expand the extent of coverage. Together the combination of policy initiatives that started with MHPAEA in 2008 has affected the SUD coverage for at least 173 million people.¹⁷ It is important to recall that during the period prior to the implementation of the Affordable Care Act's Essential Health Benefit and underwriting provisions, based on a survey of insurance carriers, an estimated 34% of policies sold in the individual health insurance market did not cover care of SUDs.¹⁸ As noted earlier, a large segment of the population of people with an OUD hold private health insurance and

¹⁴ Clemans-Cope L, V Lynch, M Epstein, JM Kenney; *Medicaid Coverage of Effective Treatment for Opioid Use Disorder*, Urban Institute, May 2017.

¹⁵ Ohio Department of Medicaid, *Ohio Medicaid Group VIII Assessment: A Report to the General Assembly, 2016*

¹⁶ Author tabulations from the NHSDUH 2015; and SAMHSA, Behavioral Health Spending Accounts: 1986-2014.

¹⁷ Executive Office of the President, *A Report of the President's Parity Task Force*, October 2016.

¹⁸ Assistant Secretary for Planning and Evaluation, *Essential Health Benefits: Individual Market Coverage*, U.S. Department of Health and Human Services, December 16, 2011.

that coverage has recently improved notably thereby increasing the power of such coverage to be a tool for closing the treatment gap. History tells us that weakening the ACA's Essential Health Benefit and Parity provisions stands to substantially compromise the coverage for SUD care of about 48 million Americans in the individual (18 million) and small group markets (30 million).¹⁹ Altering the subsidies for low-income participants in the individual health insurance market would most strongly affect the estimated 120,000 people with an OUD that are covered in the Marketplaces currently.

The third area of federal policy change aimed at addressing the treatment gap is federal grants to states. Direct grants to providers by and through states accounted for about 41% of SUD spending in 2014, yet only totaled \$13.9 billion.²⁰ States stretch these discretionary dollars to attempt to meet the needs created by all substance use disorders not only OUDs, and as a result frequently maintain waiting lists as demand for care outstrips treatment capacity. The *21st Century Cures Act* appropriated \$1 billion over two years for targeted grants to states aimed at addressing the treatment gap among other aspects of the opioid epidemic. Just under \$500 million was recently allocated by the U.S. Department of Health and Human Services to the states. This was an important step forward but as President Obama noted in his 2016 budget proposal such grants were meant to serve as a complement to the insurance-based tools and existing grant mechanisms. That is, the funds were targeted at building capacity and serving people with OUD that remained uninsured, an estimated 18%.²¹ For example, substantial numbers of people that are not eligible for Medicaid with an OUD and incomes below the poverty line live in states that did not expand Medicaid.

Observations on Affordability and the Treatment Gap:

Earlier I highlighted the elevated prevalence of OUD in the population with incomes under 200% of the FPL. These populations have traditionally had the most significant financial barriers to treatment and affordability figures significantly in creating the treatment gap. The recent Congressional Budget Office score of the American Health Care Act highlights the large losses in coverage that would occur among people with incomes below 200% of the FPL.²² Because the prevalence of OUD and the coverage expansions for this population are concentrated in the group of people with incomes 200% of FPL or less, the likelihood of an expanded treatment gap both in percentage terms and in absolute numbers is likely if proposals such as the Americans Health Care Act advance.

The magnitude of these changes can be put into perspective by considering a case in point. The Commonwealth of Kentucky recently received a \$10.5 million grant stemming from the *21st Century Cure Act*. The average spending in Medicaid for MAT for OUD is

¹⁹ These estimates are based on the CBO January 2017 baseline.

²⁰ See SAMHSA spending accounts Note 11.

²¹ Author's tabulation from the NHSDUH 2015

²² Congressional Budget Office, *HR 1628 Americans Health Care Act of 2017*, May 24, 2017; see Figure 2.

estimated at about \$5,500.²³ That means that the grant to Kentucky if it were only used to treat OUD would buy a little over 1900 full year treatments with MAT.²⁴ ²⁵ IMSHealth reports that 44% of prescriptions for buprenorphine in Kentucky or 4180 person years of treatment were paid for by Medicaid.²⁶ Thus, should the Medicaid expansion in Kentucky be eliminated, the *21st Century Cures Act* grant would not be able to help expand state treatment capacity—as it was intended to do—instead it would have to backfill cuts to Medicaid because roughly 73% of all Medicaid SUD care was for the expansion population. Yet even Kentucky’s share of the \$1 billion is far too small to fill that gap. Given current treatment patterns, its grant would pay for less than 2/3 of lost Medicaid spending on Buprenorphine not counting other forms of MAT, and the thousands of opioid related SUD admissions paid for by Medicaid.²⁷ This is especially troubling given the rapid increases in opioid misuse morbidity and mortality taking place nationally and in Kentucky. Finally, the costs of treatment reported here put treatment out of reach for most low-income people without insurance. This is because a year of OUD treatment would claim 44% of the income of an individual at the federal poverty line.

I recognize that the Americans Health Care Act sets aside funds for mental health, substance use disorder and maternity services and support for premiums to aid in paying for premium underwriting of pre-existing conditions. My analysis suggests that those funds will simply not be close to adequate to fund the services that would be lost as a result of the elimination of the Medicaid expansion, the restructured subsidies, the flexibility with respect to Essential Health Benefits and underwriting practices and the Medicaid measures recently articulated in President Trump’s budget.

The second barrier to access to OUD treatment is availability of treatment providers. SUD treatment capacity in the U.S grew about 3.9% between 2003 and 2013, whereas patient demand drew about 14.4% during that same period. Patient demand has continued to increase since. This is in part because spending on SUD treatments was so reliant on grant based funding programs supported by federal and state funds and because public and private insurance programs offered limited coverage. One important consequence of the new coverage and revenue sources is that new private investment in treatment capacity has been spurred.

²³ Because Kentucky specific data were not available I make use of national data, data from Vermont and from the treatment system Recovery.org. See Stein BD, Pacula RL, Gordon AJ, et al. Where is buprenorphine dispensed to treat opioid use disorders? The role of private offices, opioid treatment programs, and substance abuse treatment facilities in urban and rural counties; *Milbank Quarterly* 93:561–583 2015; Note the estimates by Stein et al and by Recovery.org indicate yearly costs of \$6,000. Vermont estimates are lower at \$5,500.

²⁴ To put these figures into additional context, currently Medicaid in Kentucky pays for an estimated 11,000 SUD treatments for the Medicaid expansion population alone an increase of 700% since 2014. Medicaid also paid for an additional 4,000 treatments for people in traditional Medicaid.

²⁵ Foundation for a Health Kentucky, *Substance Abuse and the ACA in Kentucky*, December 2016. We obtain the person years of treatment by taking the reported doses and dividing by 365. We then apply the IMS spending share for buprenorphine by Medicaid in Kentucky.

²⁶ Kentucky’s KASPER monitoring system shows that in 2015 3.5 million doses of buprenorphine were dispensed. That amounts to a bit more than 9500 person years of MAT.

²⁷ This assumes the only Medicaid cuts would be those supporting the expansion. The President’s budget suggests substantially larger cuts to Medicaid.

Private equity deals that aim to purchase and scale existing treatment providers have multiplied. Between 2012 and 2015 there have been 170 private equity transactions in the behavioral health area. There were 40 deals in 2015 alone.²⁸ Of note is a \$100 million investment made by the private equity firm of Welsh-Carson. The industry attributes the impulse to invest directly to recent policy changes I have reviewed: MHPAEA, the creation of the subsidized private insurance Marketplaces and the Medicaid expansions under the Affordable Care Act. Thus, an important effect of the recent policy changes has been to promote private investment and scaling of provider systems in an industry that has been plagued by small scale and slow innovation. Thus, interrupting the coverage changes for OUDs risks halting the flow of investments and allowing demand to continue to outstrip supply. This would be further aggravated by the proposed reductions in support for behavioral health workforce training in President Trump's budget. It would also likely limit the impact of government efforts to seed capacity in high need low resource areas as was done with the \$100 million in grants to Federally Qualified Health Centers in 2015 and the new *21st Century Cures* funds. I estimate that the Medicaid expansion and the subsidized Marketplaces alone contribute about \$5.5 billion per year in treatment for behavioral health conditions (mental illnesses and SUDs). Withdrawing these funds that are well targeted to where the need sits—will dampen both our ability to close the treatment gap and our ability to expand and modernized the SUD treatment system.

IV. Concluding Observations

The last decade has seen a bipartisan consensus about the need to aggressively address the opioid epidemic and behavioral health issues more generally. Beginning with the Domenici-Wellstone Mental Health Parity and Addictions Equity Act and most recently the *21st Century Cures Act* those efforts have been aimed at putting more purchasing power into the hands of people that might suffer from an OUD and directing more attention to the capacity of the treatment system to supply treatments that work.

There is mounting evidence that MAT is growing and especially where insurance coverage has expanded such as in Medicaid expansion states. It is also the case that traditional Medicaid is also serves a critical function in reducing financial barriers to treatment access in a population that is at elevated risk of OUDs. The result is that the states that have been hit hardest by the opioid epidemic are using Medicaid to finance a response that aims to expand treatment using the gold standard for care MAT. These states rely more heavily on Medicaid than the national average.

The response to the opioid epidemic has been more sluggish than most would have hoped. This is in part due to the failure of treatment capacity to keep up with demand both in the aggregate and in specific geographic areas. Rural areas have lagged behind in the availability of treatment resources while experiencing relatively high rates of opioid misuse, abuse and overdose. In recent years we have seen both the public and private sector direct resources towards expanding capacity. The private market has done so in

²⁸ Duff and Phelps, Industry Insights: Behavioral Health, 2015

response to the expansion in the number of Americans insured against the costs of treating SUDs and the improvement in the extent of coverage. This permits the public sector to direct resources to where market forces are not creating new capacity to meet the threat of OUD.

Reversing the policies that have created the new purchasing power for treatment and in turn new investments in treatment capacity will likely drive the nation towards a period where the treatment gap will grow that carries with it upward pressure on mortality, infectious disease morbidity, and public safety threats from the epidemic. This would all come at a time when we are claiming a bipartisan assault on the opioid epidemic. My reading of the evidence is that it is good public health and good economics to keep our promises by using all the tools we have to fight this scourge.

June 8, 2017



Statement of

Lisa N. Sacco

Analyst in Illicit Drugs and Crime Policy

Before

Joint Economic Committee

U.S. Joint Committee

Hearing on

“Economic Aspects of the Opioid Crisis”

June 8, 2017

Congressional Research Service

7-5700

www.crs.gov

<Product Code>

Overview

Chairman Tiberi, Vice-Chairman Lee, Ranking Member Heinrich, and distinguished Members of the Committee, my name is Lisa Sacco, and I am a CRS analyst on crime and drug policy. Thank you very much for inviting me to speak with you. My testimony will focus on the supply of heroin and other opioids in the United States.

Heroin, fentanyl, and controlled prescription drugs have been ranked as the most significant drug threats to the United States.¹ While the reported availability of controlled prescription drugs has declined over the last several years, the reported availability of heroin has increased substantially. Further, there has been a rise in the availability of illicit fentanyl pressed into counterfeit prescription opioid pills.² The availability of these drugs contributes to rising consumption.³

The supply of heroin and other opioids varies by region of the United States. More than 60% of National Drug Threat Survey (NDTS) respondents in the Northeast, Midwest, and Mid-Atlantic reported high availability of heroin in their areas while just over 20% of respondents in the Southwest and Southeast reported high availability.⁴ Availability can vary within regions as well. For example, in 2015, the Drug Enforcement Administration (DEA) Field Division in Dallas reported high availability of controlled prescription drugs, while El Paso and Houston reported only moderate availability.⁵

Historically, the federal government has concentrated on reducing the supply of illicit drugs, but in recent years, efforts for drug treatment and prevention have increased.⁶

Brief History of Opioid Supply in the United States, 1990s-2017

Opioids have been available in the United States since the 1800s, but the market for these drugs shifted significantly beginning in the 1990s. This testimony focuses on this latter period (see **Figure 1**).

¹ Drug Enforcement Administration, *2016 National Drug Threat Assessment Summary*, November 2016.

² Executive Office of the President, Office of National Drug Control Policy, *National Drug Control Budget*, May 2017, p. 19.

³ National Institute on Drug Abuse, *Prescription Drugs and Heroin*, December 2015, p. 4.

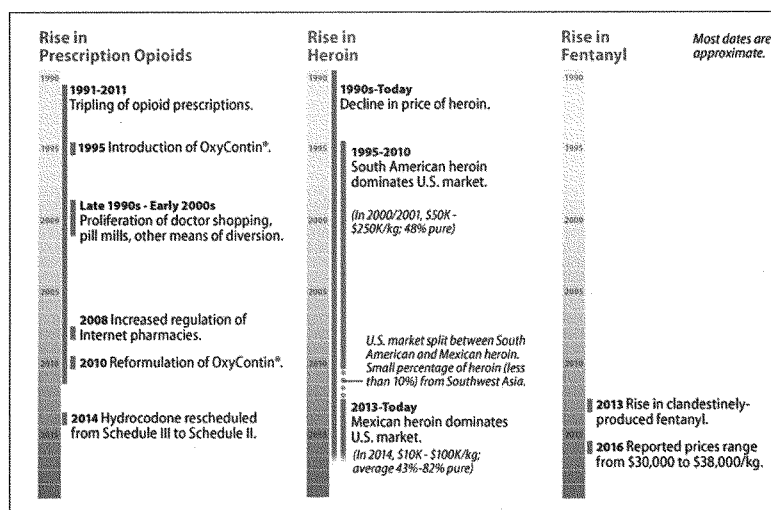
⁴ Drug Enforcement Administration, *2016 National Drug Threat Assessment Summary*, November 2016.

⁵ *Ibid.*, p. 26. Controlled prescription drugs include opioids, amphetamines, and other controlled substances.

⁶ Executive Office of the President, Office of National Drug Control Policy, *National Drug Control Budget*, May 2017.

Figure I. Timeline of Opioid Supply

1990s - Today



Source: U.S. Drug Enforcement Administration, National Institute on Drug Abuse, and National Drug Intelligence Center.

Notes: See text of testimony for further detail.

Prescription Drug Supply

In the 1990s, the availability of prescription opioids, including opioids such as hydrocodone and oxycodone, increased as the legitimate production of these drugs and diversion increased sharply.⁷ This continued into the early 2000s as abusers attained their prescription drugs through “doctor shopping,” bad-acting physicians,⁸ pill mills, the Internet, pharmaceutical theft, prescription fraud, and through family and friends.

Government Response to Proliferation of Prescription Drugs

Lawmakers undertook a range of approaches to reduce the unlawful prescription drug supply and abuse: diversion control through prescription drug monitoring programs,⁹ a crackdown on pill mills, the

⁷ National Drug Intelligence Center, *National Drug Threat Assessment 2005*, February 2005.

⁸ One such doctor was David Procter who established a pill mill operation from 1992 through 2001 in South Shore, Kentucky. He is viewed as the “godfather of pills.” See “How Heroin Made its Way From Rural Mexico to Small-Town America,” *NPR*, May 19, 2015.

⁹ For more information on prescription drug monitoring programs, see CRS Report R42593, *Prescription Drug Monitoring Programs*, by Lisa N. Sacco, Erin Bagalman, and Kristin Finklea.

increased regulation of Internet pharmacies in 2008,¹⁰ the reformulation of OxyContin® (oxycodone hydrochloride controlled-release) in 2010,¹¹ and the rescheduling of hydrocodone in 2014.¹²

Some experts have highlighted the connection between the crackdown on the unlawful supply of prescription drugs and the subsequent rise in heroin supply and abuse. Heroin is a cheaper alternative to prescription drugs that is often more accessible to some who are seeking an opioid high. While most users of prescription drugs will not go on to use heroin, accessibility and price are central factors cited by patients with opioid dependence in their decision to turn to heroin.¹³

Heroin Supply

The trajectory of the heroin supply over the last several decades is much different compared to prescription opioids, but the stories of their supply are connected.¹⁴ In the late 1990s and early 2000s, white powder heroin produced in South America dominated the market east of the Mississippi River, and black tar and brown powder heroin produced in Mexico dominated the market west of the Mississippi.¹⁵ Most of the heroin destined for the United States at that time came from South America, while smaller percentages were from Mexico and Southwest Asia.

Price and purity varied considerably by region. The average retail-level purity of South American heroin was around 46 percent, which was considerably higher than that of Mexican, Southeast Asian, or Southwest Asian heroin. At that time, Mexican heroin was around 27 percent pure, while Southeast and Southwest Asian heroin were around 24 and 30 percent pure respectively.¹⁶ Prices for heroin fell dramatically in the 1990s—heroin prices were 55 to 65% lower in 1999 than prices in 1989.¹⁷

¹⁰ In response to the problem of rogue Internet websites that illegally sell and dispense controlled prescription drugs, Congress passed the Ryan Haight Online Pharmacy Consumer Protection Act of 2008 (P.L. 110-425) which amended the Controlled Substances Act to expressly regulate online pharmacies. For more information, see CRS Report R43559, *Prescription Drug Abuse*, by Erin Bagalman et al.

¹¹ The Food and Drug Administration (FDA) approved the reformulation of OxyContin® to make it harder to crush and abuse. The FDA also required a label warning of its addictive quality.

¹² On August 22, 2014, the Drug Enforcement Administration published a final rule in the Federal Register that administratively reschedules hydrocodone combination products from Schedule III to Schedule II, which subjects anyone who manufactures, distributes, or dispenses hydrocodone combination products to the more stringent regulatory requirements and administrative, civil, and criminal sanctions that are applicable to Schedule II controlled substances. For more information on these actions, see CRS Report R43559, *Prescription Drug Abuse*, by Erin Bagalman et al.

¹³ National Institute on Drug Abuse, *Prescription Drugs and Heroin*, December 2015; Pradip K. Muhuri, Joseph C. Gfroerer, and M. Christine Davies, *Associations of Nonmedical Pain Reliever Use and Initiation of Heroin Use in the United States*, Substance Abuse and Mental Health Services Administration, Center for Behavioral Health Statistics and Quality, August 2013, <http://www.samhsa.gov/data/2k13/DataReview/DR006/nonmedical-pain-reliever-use-2013.pdf>; Theodore J. Cicero, Matthew S. Ellis, and Hilary L. Surratt, "Effect of Abuse-Deterrent Formulation of Oxycontin," *New England Journal of Medicine*, vol. 367, no. 2 (July 12, 2012), pp. 187-189; U.S. Department of Justice, National Drug Intelligence Center, *National Drug Threat Assessment 2003*, "Narcotics", January 2003; and U.S. Department of Justice, National Drug Intelligence Center, *National Drug Threat Assessment 2011*, August 2011, p. 37.

¹⁴ National Institute on Drug Abuse, *Prescription Drugs and Heroin*, December 2015, pp. 4-5.

¹⁵ Heroin has several different forms including black tar, brown powder, and white powder. For more information, see Drug Enforcement Administration, *Drugs of Abuse, 2015 Edition*, p. 38.

¹⁶ National Drug Intelligence Center, *National Drug Threat Assessment 2005*, February 2005.

¹⁷ Executive Office of the President, Office of National Drug Control Policy, *The Price and Purity of Illicit Drugs: 1981 Through* (continued...)

Over the last several years, heroin prices have further declined while purity, in particular the purity of Mexican heroin, has increased. The availability of Mexican heroin has also grown. Over 90% of the heroin seized now is from Mexico and a much smaller portion is from South America. Mexico dominates the U.S. heroin market because of its proximity to the U.S. and its established transportation and distribution infrastructure, which improves traffickers' ability to satisfy U.S. heroin demand. Increases in Mexican heroin production have ensured a reliable supply of low-cost heroin, even as demand for these drugs has increased. Mexican traffickers have particularly increased their production of white powder heroin and may be targeting those who abuse prescription opioids.¹⁸

Fentanyl Supply

Compounding the current opioid problem is the introduction of non-pharmaceutical fentanyl to the black market. Diverted pharmaceutical fentanyl represents only a small portion of the fentanyl market. Non-pharmaceutical fentanyl largely comes from China, and it is often mixed with or sold as heroin. It is 50 to 100 times more potent than heroin, and over the last two years, reported prices ranged between \$30,000 and \$38,000 per kilogram. The increased potency of synthetic fentanyl compounds, such as the recently-emerged, so-called "gray death,"¹⁹ are extremely dangerous, and law enforcement expect that the fentanyl market will continue to expand in the future as new fentanyl products attract additional users.²⁰

Supply of Opioids Across the United States

The supply of opioids varies by region of the United States. In 2016, approximately 45 percent of National Drug Threat Survey respondents reported heroin as the greatest drug threat in their area. In contrast, 8 percent of respondents reported heroin as the greatest threat in 2007. Reports of heroin as the greatest threat are concentrated in the Northeast, Midwest, and Mid-Atlantic regions.²¹

Opioids are the main cause of drug overdose deaths. Reports indicate that increases in overdose deaths are most likely driven by illicitly-manufactured fentanyl and heroin.²² The increasing availability of heroin throughout the United States largely, but not entirely, corresponds to high drug overdose deaths (see **Figure 2**). For example, New Mexico and Utah rank 8th and 9th, respectively, in the country in drug overdose deaths, but only 4.7 percent of NDTs respondents in the Southwest reported heroin as the greatest drug threat and 22.6 percent reported high availability of heroin in their region.²³ This discrepancy may be explained by a number of factors including the lethality of fentanyl.

(...continued)

the Second Quarter of 2003, November 2004, p. 11.

¹⁸ Drug Enforcement Administration, *2016 National Drug Threat Assessment Summary*, November 2016.

¹⁹ Gray death is a new illicit synthetic opioid mix that is reportedly 10,000 times more powerful than morphine. The ingredients of seized samples have varied.

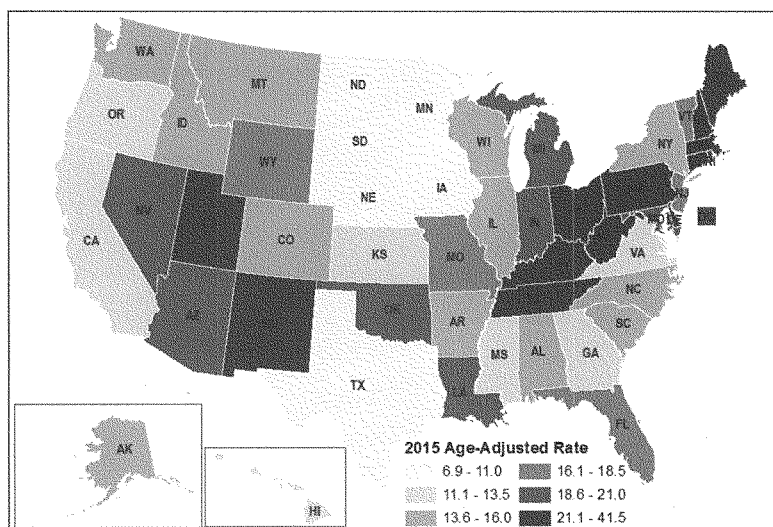
²⁰ Drug Enforcement Administration, *2016 National Drug Threat Assessment Summary*, November 2016. Current pricing information provided by the Drug Enforcement Administration.

²¹ Drug Enforcement Administration, *2016 National Drug Threat Assessment Summary*, November 2016.

²² Centers for Disease Control and Prevention (CDC), *Increases in Drug and Opioid-Involved Overdose Deaths — United States, 2010–2015*, Morbidity and Mortality Weekly Report, December 30, 2016, <https://www.cdc.gov/mmwr/volumes/65/wr/mm655051e1.htm>.

²³ *Ibid.*, pp. 156 and 158.

Figure 2. Age-Adjusted Rates of Drug Overdose Deaths
United States, 2015



Source: CRS presentation of data from the Centers for Disease Control and Prevention (CDC), *Drug Overdose Death Data*, 2016. <https://www.cdc.gov/drugoverdose/data/statedeaths.html>.

Notes: CDC calculated age-adjusted death rates as deaths per 100,000 population using the direct method and the 2000 standard U.S. population.

Federal Drug Control Spending and Recent Legislation

Historically, the federal government has concentrated on reducing the supply of illicit drugs, but in recent years, increased efforts have been placed on reducing demand. Federal drug control dollars largely go toward reducing supply, however, federal drug control funding for supply reduction has remained relatively flat over the last several years while funding for drug treatment and prevention has increased (see [Table 1](#)).

Similarly, over the last year, Congress has enacted comprehensive legislation—for example, the Comprehensive Addiction and Recovery Act (CARA; P.L. 114-198) and the 21st Century Cures Act (P.L. 114-255)—that promotes prevention, treatment, and law enforcement methods to address the opioid problem.

Table I. Federal Drug Control Budget by Function
FY2013-FY2017, amounts in billions of dollars

Function	FY2013	FY2014	FY2015	FY2016	FY2017
Treatment	\$7.889	\$9.482	\$9.553	\$9.845	\$10.580
Prevention	1.275	1.317	1.342	1.486	1.507
Domestic Law Enforcement	8.857	9.349	9.395	9.283	9.299
Interdiction	3.941	3.949	3.961	4.735	4.569
International	1.849	1.637	1.643	1.525	1.521
Total	\$23.811	\$25.734	\$25.894	\$26.874	\$27.476
Demand Reduction ^a	9.164	10.799	10.895	11.332	12.088
<i>Percent of Total Drug Control Budget</i>	38.5%	42.0%	42.1%	42.2%	44.0%
Supply Reduction ^b	14.646	14.934	14.998	15.543	15.389
<i>Percent of Total Drug Control Budget</i>	61.5%	58.0%	57.9%	57.8%	56.0%

Source: Amounts were taken from Office of National Drug Control Policy, *National Drug Control Budget: FY2018 Funding Highlights*, p. 19. Percentages were calculated by CRS.

Notes: Amounts may not add to total due to rounding.

- a. Demand reduction includes treatment and prevention
- b. Supply reduction includes domestic law enforcement, interdiction, and international.

PREPARED STATEMENT OF OHIO ATTORNEY GENERAL MIKE DEWINE

Thank you, Chairman Tiberi, Vice Chairman Lee, and Ranking Member Heinrich for inviting me to testify at this very important hearing today on the opioid epidemic in Ohio.

Ohio is facing the worst public health crisis in our lifetime, leading the Nation in opioid overdose deaths. In 2015, 85 percent of all accidental drug overdose deaths in Ohio were caused by an opioid. According to new data recently released by the Columbus Dispatch, 4,169 Ohioans died from accidental drug overdoses last year—that's a 36% increase over 2015.

Cuyahoga County Medical Examiner Dr. Thomas Gilson recently testified in front of a U.S. Senate Committee that those who are addicted to drugs in Cuyahoga County, which includes the City of Cleveland and suburbs, would fill the First Energy Stadium where the Cleveland Browns play (73,000-plus), and those who switch to fentanyl each year would fill the Quicken Loans Arena, home of the 2016 world champion Cleveland Cavaliers (20,000-plus).

We are seeing this scourge in the Ohio crime lab. In 2010, the Ohio Bureau of Criminal Investigation (BCI) had only 34 cases of fentanyl, but in 2016, we had 2,396 cases. In fact, more fentanyl came through BCI in 2016 than had come through in the previous five years combined. And BCI went from zero cases of carfentanyl—an elephant tranquilizer—in 2015 to 214 cases in 2016. Our organized crime drug task forces have already seized more fentanyl in 5 months of 2017 (30.8 pounds seized) than in all of 2016 (27 pounds).

Four out of five individuals now suffering from heroin or fentanyl addiction first started down this road by using prescription opioids. In 2010, when I first ran for Attorney General, my wife Fran and I both learned of the families who were ravaged by addiction to prescription pain meds and the pill mills that were fueling it, especially in southern Ohio. When I took office, we started going after the doctors who overprescribe these painkillers. Since that time, we have revoked the licenses of 90 doctors and 22 pharmacists.

Last week, my office filed a lawsuit against five of the leading prescription opioid manufacturers and their related companies in the Ross County Court of Common Pleas. The lawsuit alleges that these drug companies engaged in fraudulent, deceptive marketing campaigns about the risks and benefits of prescription opioids, leading doctors to believe that opioids were not addictive, that addiction was an easy thing to overcome, and that addiction could actually be treated by taking even more opioids. As a result, we believe the evidence will show that these companies got thousands and thousands of Ohioans addicted to opioid pain medications, which has all too often led to use of the cheaper alternatives of heroin and synthetic opioids.

This lawsuit is about accountability. It should not be looked at as a substitute for the many things we now must do to battle addiction—nor should it be looked at as a quick fix.

That's why my office is taking a holistic approach to combat the problem.

We must continue our efforts to go after drug dealers. We must continue our outreach work with local communities. And, we must implement our recommendations for early drug abuse prevention education in schools.

In 2013, we established a heroin unit in my office that includes lawyers, investigators, and community outreach liaisons. They fight the opioid battle on both the law enforcement side and on the community outreach side. Our community outreach team works on grassroots efforts that include bringing together law enforcement, schools, clergy, business leaders, and other citizens to help form a plan specific to that community to address the drug problem. This team helps communities identify needs and recommends resources to address those needs. And, earlier this year, we held an opiate conference in Columbus, with over 1,300 people in attendance, about the opioid crisis and talk about efforts that are working across Ohio to help families and communities.

To make a real difference in this fight we also need to teach our kids early about the dangers of drug use and how to make good decisions. In the 1980s, I served on President Reagan's National Commission on Drug Free Schools. The experts we talked to told us that repetitive, comprehensive, school-based education was necessary to successfully combat drug addiction.

I have often said that there has been a cultural shift in the wrong direction in how our society views drug abuse. The psychological barrier that once stood in the way of someone taking deadly drugs is simply gone. To address this, the Speaker of the Ohio House Cliff Rosenberger and the former Ohio Senate President Keith Faber and I convened a group of experts on education and drug prevention. They recently issued 15 recommendations, including the need for consistent, age-appropriate, evidence-based drug abuse prevention education in kindergarten through

12th grade. The recommendations are not mandates. However, if progress is not made, we must ensure communities are instituting prevention efforts to reach youth before it's too late.

Further, if we are serious about changing the culture around substance abuse, we must engage the best and brightest in the private and public sectors to create a statewide anti-drug campaign. We can change the public mind-set through messaging on social media, television, and other mediums.

Local law enforcement is doing some great things, and we need to replicate efforts that work—programs like Lucas County's Drug Abuse Response Team, created to help addicts navigate the treatment system. What's unique about this program is that law enforcement officers develop personal relationships with addicts, investing both time and compassion.

Ultimately, breaking free from addiction in the long-term requires access to services across a continuum of care—a holistic, wrap-around approach from overdose to sobriety. Most Ohio counties have gaps in that continuum, and we must address the different needs of each local community.

Tragically, children and babies are the silent victims of this epidemic. Babies born with neonatal abstinence syndrome because their moms were addicts spent approximately 26,000 days in Ohio hospitals in 2014, with health care costs totaling \$105 million. And our foster care system is overflowing with kids. At least 50% of kids and 70% of infants placed in Ohio's foster care system have parents with opiate addictions, costing the State an estimated \$45 million per year.

My office is funding an innovative new pilot program in 19 southern Ohio counties called START that increases resources to children's services agencies for intensive attention for both children and parents to promote recovery and family reunification. We hope to be able to expand this program to every county in Ohio.

The opioid epidemic is a human tragedy of epic proportion. No doubt the human toll would be much greater, though, but for the life-saving effect of the drug naloxone, which reverses overdoses. I've been very supportive of expanding access to naloxone for first responders. Naloxone was administered at least 74,000 times in Ohio between 2003 and 2012. In 2014, alone, EMS treated 12,847 overdose patients with naloxone.

I'm pleased to report that we've renewed our agreement with Amphastar Pharmaceuticals, Inc.—a manufacturer of naloxone—to provide rebates to consumers, such as police departments and other non-Federal Government agencies that distribute the drug in Ohio. So far, 117 Ohio agencies have applied for a total of \$539,986.00 in rebates over the past two years. Also, Adapt Pharma worked with my staff and agreed to freeze the Public Interest Price over the next year for its naloxone nasal spray for Ohio.

In 2015, the law changed in Ohio to allow pharmacies to sell naloxone over the counter without a prescription. Since then, we worked with several Ohio retail stores, including CVS, Kroger, and Walgreens, who have agreed to sell naloxone. This also will help families and friends who know someone who is addicted by letting them keep this life-saving medication on-hand.

My office will continue to support families, schools, law enforcement, the faith-based community, and others to bring hope and healing to those who struggle with substance abuse and addiction. Thank you again for the opportunity to testify today. I'm honored to be here with the other witnesses and have the opportunity to hear about their good work.

I'm happy to answer any questions at this time.

Protecting Ohio's Families



Ohio Joint Study
Committee on Drug
Use Prevention Education

Report
February 2017

 **MIKE DEWINE**
OHIO ATTORNEY GENERAL

 **SENATE PRESIDENT
LARRY OBHOF**

 **HOUSE SPEAKER
CLIFFORD A. ROSENBERGER**



February 2017

Dear Fellow Ohioans:

At least eight people are dying each day in Ohio from accidental drug overdoses. The opioid epidemic has spread to every county, city, and village in Ohio. Without question, it is the worst drug epidemic I've witnessed in my lifetime.

There has been a cultural shift in how our society views drug abuse. The psychological barriers that prevented someone from taking heroin or other deadly drugs are simply gone.

Substance abuse and addiction has a major impact on children. During my time in Congress, I served on President Reagan's National Commission on Drug Free Schools. We assessed the nature of the drug problem in our schools and colleges and recommended ways the problem could be addressed. The experts routinely told us that repetitive, comprehensive, school-based education was necessary to successfully combat drug addiction. While schools are making an effort to provide this education, time and resource constraints are often barriers to these comprehensive efforts.

We need a cultural shift in how we talk about drugs and how we can work to prevent future addiction. To address this, in August 2016, House Speaker Clifford Rosenberger, then-Senate President Keith Faber, and I created the Ohio Joint Study Committee on Drug Use Prevention Education, made up of 24 members from across the state, including teachers, superintendents, substance abuse preventionists, elected officials, law enforcement officers, and other professionals. The committee was charged with examining how communities can implement consistent, age-appropriate drug messaging, particularly in schools.

The following are the committee's report and recommendations. Copies are being shared with the governor and members of the Ohio General Assembly, so they can consider ways to support and implement the recommendations. Our hope is that schools and communities can use this report as a resource, with the goal of educating our children and preventing substance abuse.

I want to thank all the members of the committee. They served selflessly and devoted countless volunteer hours to create this report. I am grateful for their shared commitment to protecting Ohio's children.

Very respectfully yours,

Mike DeWine
Ohio Attorney General



**SENATE PRESIDENT
LARRY OBHOF**



**HOUSE SPEAKER
CLIFFORD A. ROSENBERGER**

February 2017

Dear Members of the Ohio Joint Study Committee on Drug Use Prevention Education,

As leaders of the General Assembly, we would like to thank you for the time and work you invested in this very important effort. We sincerely appreciate your commitment to the fight against addiction and the effort to educate and protect our children from the dangers of substance abuse.

We know that early education is key and that our schools play a vital role. We must be strong, unified, and consistent in our message to youth that drugs can devastate their lives and destroy their futures. They need to hear it from the Statehouse, in our homes, in our schools, in our churches and community centers, and on our ball fields — wherever there is a teachable moment.

This fight will remain a priority for the Legislature, and please know that our doors are always open to hear your feedback and ideas. We are very grateful for your insight and partnership and look forward to continuing to work with you on this endeavor.

Sincerely,

A handwritten signature in black ink, appearing to be "L. Obhof".

Senate President Larry Obhof

A handwritten signature in black ink, appearing to be "Clifford A. Rosenberger".

Speaker Clifford A. Rosenberger

TABLE OF CONTENTS

Executive Summary	1
Ohio Joint Study Committee on Drug Use Prevention Education	3
Members	
Mission	
Meeting Structure	
Introduction to the Substance Abuse Problem in Ohio	5
Recommendations	7
School Spotlight	12
Boardman School District	
Talawanda School District	
Cleveland Metropolitan School District	
Guidance for Implementation of Recommendations	14
Substance Abuse Prevention-related Services in Ohio	
Substance Abuse Prevention-related Laws	
Substance Abuse Prevention Cost Savings	
National Institute on Drug Abuse Prevention Principles	
Implementation Checklist	
Conclusion	25
Acknowledgements	26

EXECUTIVE SUMMARY

On August 11, 2016, Ohio Attorney General Mike DeWine, former Senate President Keith Faber, and Speaker of the House Clifford A. Rosenberger formed the Ohio Joint Study Committee on Drug Use Prevention Education (Study Committee). This committee examined appropriate education measures that schools and communities can take to reduce and help prevent substance abuse. After conducting meetings across the state, reviewing testimony, and performing research, the Study Committee issued 15 recommendations:

1. Kindergarten through 12th Grade Substance Abuse Prevention Education – The Study Committee concluded that Ohio schools should provide consistent, age-appropriate, evidence-based substance abuse education for all students, Kindergarten through 12th grade.¹ The Study Committee found many examples of prevention curricula that have been successfully implemented in schools, some of which are available at no cost. While some guidelines from the Ohio Department of Education (ODE) are necessary, the Study Committee believes the choice of a specific curriculum should be left to individual school districts.
2. Required Reporting for Schools – The Study Committee recommends that Ohio adopt a reporting system that requires schools to report and explain how they are fulfilling their requirements to provide substance abuse education. These reports should be electronically available to parents and the public.
3. Social and Emotional Learning Content Standards – Research has shown that incorporating social and emotional learning standards into the school day has positive effects on students and can reduce the likelihood of substance abuse.² While Ohio has incorporated these standards in grades Kindergarten through three, the Study Committee recommends that Ohio extend these standards through grade 12.
4. School and Community Surveys – The Study Committee recommends that Ohio schools implement student and community surveys both to monitor for warning signs of substance abuse or mental illness and to measure the success of their substance abuse prevention efforts.
5. Expand Substance Abuse Curriculum across Subjects – The Study Committee recommends that schools consider including substance abuse curriculum in other subjects beyond health, like science or language arts. For example, Brain Power, a free curriculum from the National Institute on Drug Abuse, examines the scientific effects of drugs on the body and is used in science classes.
6. Resources for Schools about Substance Abuse Prevention – The Study Committee recommends that the Ohio Department of Mental Health and Addiction Services (ODMHAS) provide guidance, training, and other resources to schools about curriculum and other policies that are useful with substance abuse prevention.

¹ Evidence-based is a research-based practice that has demonstrated effectiveness in achieving the designed outcomes for a particular population. For purposes of this report, we follow the definition of evidence-based provided by the Substance Abuse Mental Health Services Administration (store.samhsa.gov/snir/content/SMA09-4205/SMA09-4205.pdf, p. 13). Programs or policies which are research-based, yet not evidence-based, may also be referred to as evidence informed, or emerging or promising practices.

² Social and emotional learning (SEL) is the process through which children and adults acquire and effectively apply the knowledge, attitudes, and skills necessary to understand and manage emotions, set and achieve positive goals, feel and show empathy for others, establish and maintain positive relationships and make responsible decisions (casel.org).

7. Substance Abuse and Mental Health Intervention Training – The Study Committee recommends that state and local agencies provide free training resources to school personnel on how to detect substance abuse or mental illness in children.

8. Dedicated Prevention Personnel at the Department of Education – The Study Committee recommends that the ODE designate staff who would be prepared to assist local communities with implementing the recommendations in this report.

9. Continue to Involve and Strengthen Law Enforcement’s Role – Many schools utilize law enforcement through school resource officers and programs, such as Drug Abuse Resistance Education (D.A.R.E.)³ Communities should explore additional ways to partner with local law enforcement on substance abuse prevention efforts.

10. Support Before- and After-school Programs – Research shows that the hours immediately before and after school are some of the most likely for kids to use drugs. Effective before- and after-school programs minimize that time and help to promote healthy habits. For example, most Boys & Girls Clubs offer programming ranging from academic support to Smart Moves, a training about drug and alcohol prevention and healthy lifestyles. Clever Crazes for Kids is a free web-based STEM (Science, Technology, Engineering and Mathematics) program where students engage in learning, playing, and competing for scores and prizes, all of which contribute to students gaining a strong sense of self-esteem.

11. Community-based Prevention – Many Ohio communities have successful community coalitions that could serve as a resource to their local schools. The Study Committee recommends increased information-sharing and cooperation between schools and community coalitions promoting similar anti-drug abuse messages.

12. Engaging Families and Caregivers – Families and caregivers are the most important part of any child’s life. Schools should make an effort to involve families with the prevention messages the school is teaching in order to reinforce anti-drug messaging.

13. Youth-led Prevention – Research shows that prevention efforts led by youth can be particularly effective in reaching their peers. Schools should explore and adopt evidence-based peer programs.

14. Incorporate Prevention in Higher Education – Many students are first exposed to illegal substances in college. The Study Committee recommends that the Ohio Department of Higher Education work with colleges and universities to ensure prevention efforts don’t end in high school.

15. Future Work of the Study Committee – Given the vital importance of this issue, the Study Committee wishes to continue its work to monitor and study the implementation of these recommendations.

³ Developed in 1983, D.A.R.E. is a K-12 education program in which trained law enforcement officers instruct school youth on decision-making skills to resist peer pressure to use alcohol, tobacco, or harmful drugs. D.A.R.E. curricula also address violence, bullying, Internet safety, and other high-risk circumstances. In 2009, D.A.R.E. developed elementary and middle-school evidence-based curricula called “Keepin’ it REAL” (KIR). D.A.R.E. KIR curriculum is based on the social and emotional learning theory and identifies strategies to help youth stay away from drugs by preparing them to act decisively and responsibly in difficult situations (dare.org).

Ohio Joint Study Committee on Drug Use Prevention Education

Members

- Rep. Heather Bishoff (D-Blacklick)
- Sen. John Eklund (R-Munson Township)
- Rep. Terry Johnson (R-McDermott)
- Sen. Michael Skindell (D-Lakewood)
- Rep. Robert Sprague (R-Findlay)
- Sen. Joe Uecker (R-Miami Township)
- Lori Criss, associate director, Ohio Council of Behavioral Health and Family Services Providers
- Paul Gross, former commissioner, Madison County
- Tom Gunlock, member, Ohio State Board of Education
- Neil Gupta, director of Secondary Education, Worthington City Schools
- Bob Hannon, president, United Way of Youngstown and the Mahoning Valley
- Kevin Lorson, Ohio Association for Health, Physical Education, Recreation & Dance
- Krish Mohip, CEO, Youngstown City Schools
- Chris Monsour, teacher, Columbian High School, Tiffin
- Stephanie Nowak, teacher, Fairfax Elementary Schools, Mentor
- Chief Joe Morbitzer, Westerville Police Department
- Dean Nance, superintendent, Ironton City Schools
- Marcie Seidel, executive director, Drug Free Action Alliance
- Sarah Smith, director, Start Talking!
- Sheriff Al Solomon, Auglaize County
- Molly Stone, Prevention Bureau chief, Ohio Department of Mental Health & Addiction Services
- Betsy Walker, director of Community Relations, Cardinal Health
- Cheri Walter, CEO, Ohio Association of County Behavioral Health Authorities
- Sarah Wickham, senior policy advisor, Ohio Department of Education

Mission

Ohio Attorney General Mike DeWine, former Senate President Keith Faber and House Speaker Clifford A. Rosenberger formed the Ohio Joint Study Committee on Drug Use Prevention Education (Study Committee) on August 11, 2016. The Study Committee was charged with examining the status of substance abuse prevention education in Ohio schools and issuing recommendations on options for implementing consistent, age-appropriate substance abuse education in schools across all grade levels. As the Study Committee performed research and heard testimony from Ohioans, the mission broadened to focus on ways to reduce substance abuse risk factors and increase protective factors in youth to ensure they have the skills to resist alcohol, tobacco, and other drugs.⁴

⁴ Protective factors are defined as qualities and characteristics of the individual, peer system, family, community, and school known to be positively related to healthy youth development. Risk for substance abuse increases as the number of risk factors increases, and protective factors may reduce the risk of youth engaging in substance use that can lead to substance abuse. Example protective factors include: parental support and involvement, ability to make friends, good coping skills and problem solving skills, and high self-esteem (youth.gov/youth-topics/substance-abuse/risk-and-protective-factors-substance-use-abuse-and-dependence).

Study Committee Meeting Structure

The Study Committee began working on August 11, 2016, the day of the announcement of the group's formation. The group convened for at least 16 meetings in person or by phone to learn from a number of professionals about the types of substance abuse prevention programs schools are currently providing, what schools need to help expand their substance abuse prevention education efforts, and how to best provide this education across all grade levels and in communities. Of the meetings the Study Committee held, six were regional meetings in Akron, Celina, Chillicothe, Columbus, Dayton, and Jackson. At these meetings, the Study Committee heard testimony from drug coalition members, educators, law enforcement, criminal justice and prevention professionals, parents, researchers, representatives from higher education institutions, and young adults. Additionally, the Study Committee accepted and reviewed multiple submissions of written testimony from individuals who were unable to attend the regional meetings.

Introduction to the Substance Abuse Problem in Ohio

In 2015, 3,050 Ohioans died from accidental drug overdoses. This number represents a 20.5% increase from the 2,531 deaths in 2014. Of the eight individuals who died every day, three to four of those deaths were because of heroin.⁵

One reason for the increase in overdose deaths in 2015 was fentanyl – a drug up to 50 times more potent than morphine. The Ohio Attorney General's Bureau of Criminal Investigation (BCI) confirmed that in 2015, more fentanyl came through its labs than in the previous five years combined. In March 2016, BCI saw more reports of fentanyl than any month in its history. Last year, a particularly lethal, large-animal tranquilizer called carfentanil surfaced in Ohio and caused large waves of overdoses. Carfentanil is 100 times stronger than fentanyl and can be dangerous to touch without gloves.

Tragically, children are being impacted. Adults who are suffering from addiction may expose children to violence or other unpredictable behavior and also may fail to provide appropriate care. Ohio's child welfare system has seen a 19% increase in the number of children removed from parental custody since 2010, and now has close to 14,000 children in custody.⁶

Nationally in 2011, 90% of Americans who met the medical criteria for addiction started smoking, drinking, or using other drugs before age 18.⁷ In 2013, there were approximately 2.8 million new users of illicit drugs, or about 7,800 new users per day, with 54.1% under age 18.⁸

More youth drink alcohol instead of using tobacco or marijuana. The Health and Human Services Office of Adolescent Health reports that more than three out of 10 high school seniors drank alcohol in the past month, and one in six engaged in "binge drinking" daily in the past two weeks. Most youth do not smoke, but about one in 10 has smoked within the past month. By the 12th grade, about half of youth have abused an illicit drug at least once, and more than 20% will have used a prescription drug for a non-medical purpose.⁹

Alcohol and drug use among youth can often overlap with mental health issues. For example, youth may begin misusing substances because of undiagnosed depression or anxiety issues. Co-occurring addiction and mental health issues often complicate an ability to get an accurate diagnosis.¹⁰

Risk factors can influence drug and alcohol abuse.¹¹ Early aggressive behavior, lack of parental supervision, academic problems, undiagnosed mental health problems, peer substance use, drug availability, poverty, peer rejection, and child abuse or neglect are risk factors associated with

⁵ [Healthy.ohio.gov/-/media/ODH/ASSETS/Files/health/injury-prevention/2015-Overdose-Data/2015-Ohio-Drug-Overdose-Data-Report-FINAL.pdf?la=en](http://healthy.ohio.gov/-/media/ODH/ASSETS/Files/health/injury-prevention/2015-Overdose-Data/2015-Ohio-Drug-Overdose-Data-Report-FINAL.pdf?la=en).

⁶ wsws.org/en/articles/2016/12/29/fost-d29.html; Dispatch.com/content/stories/local/2016/10/23/poor-agencies-cant-help-all-kids-in-need-amid-drug-crisis.html.

⁷ Centeronaddiction.org/addiction-research/reports/adolescent-substance-use-america%E2%80%99s-1-public-health-problem.

⁸ Drugabuse.gov/publications/drugfacts/nationwide-trends.

⁹ Hhs.gov/ash/oah/adolescent-health-topics/substance-abuse/home.html; drugabuse.gov/publications/principles-adolescent-substance-use-disorder-treatment-research-based-guide/introduction.

¹⁰ Drugabuse.gov/publications/principles-adolescent-substance-use-disorder-treatment-research-based-guide/frequently-asked-questions/how-do-other-mental-health-conditions-relate-to-substance-use-in-adolescents.

¹¹ Drugabuse.gov/sites/default/files/preventingdruguse.pdf.

increased likelihood of substance abuse.¹² Not all youth who experience these risk factors will experience addiction, yet early introduction of substance use can increase the likelihood of a substance abuse disorder later in life.¹³

¹² *Youth.gov*.

¹³ Facing Addiction in America: The Surgeon General's Report on Alcohol, Drugs and Health, <https://addiction.surgeongeneral.gov/>.

Recommendations

The Study Committee recommendations focus on increasing protective factors and reducing risk factors among youth, so they have the knowledge and skills necessary to resist drugs and alcohol. While schools are a significant area of focus, prevention is a community effort.¹⁴ By working together, schools, families, and communities can partner to change the culture surrounding substance use and abuse for Ohio youth.

School and community efforts should also foster peer, family, and community norms that expect youth to not use drugs or alcohol and instead expect and encourage youth to engage in positive activities. While not an exhaustive list, the resources included within this report can help schools and communities implement the recommendations.

1. Recommendation – Kindergarten through 12th Grade Substance Abuse Prevention Education

Schools should provide consistent, age-appropriate, evidence-based substance abuse prevention education at each grade level from Kindergarten through the 12th grade level. While some guidelines from the Ohio Department of Education are necessary, schools should choose a curriculum that best represents individual school needs based on data analyzed from reliable surveys. This curriculum should address knowledge and skill-building, so students can stay drug free. The curriculum should also include social and emotional learning concepts to address emotional control, decision-making, resistance skills and social skill-building concepts.¹⁵ The Study Committee found many examples of prevention curricula that have been successfully implemented in schools, some of which are available at no cost.

2. Recommendation – Required Reporting for Schools

Schools are required to instruct on prescription opioid abuse prevention and the harmful effects of the use of drugs of abuse, alcoholic beverages, and tobacco as part of the health education requirement. However, there is no procedure for schools to demonstrate they are teaching substance abuse education. The Study Committee recommends that schools be required to report their substance abuse education efforts to the Ohio Department of Education, on a date certain, and the Ohio Department of Education should make this information available to the public.

Specifically, the information required to be reported should include: 1. How are schools providing this instruction; 2. What curricula are being used; and 3. During which grade levels are youth exposed to this content. While standards with testing would be the best mechanism to ensure drug and alcohol education and prevention principles are being taught annually in all Ohio schools, the Study Committee is not recommending this, which could add to schools' current testing burden. Instead, this reporting requirement would provide a statewide baseline of what students are being taught.

¹⁴ The Substance Abuse and Mental Health Services Administration (SAMHSA) has identified 12 stakeholder groups as vital to the success of any community-level prevention effort. These groups include youth, parents, businesses, media, schools, youth-serving organizations, law enforcement, religious or fraternal organizations, civic or volunteer groups, healthcare professionals, state, local or tribal government agencies with expertise in substance misuse or other organizations involved in reducing substance misuse.

¹⁵ [Drugabuse.gov/publications/preventing-drug-abuse-among-children-adolescents-in-brief/prevention-principles](https://www.drugabuse.gov/publications/preventing-drug-abuse-among-children-adolescents-in-brief/prevention-principles).

3. Recommendation – Social and Emotional Learning Content Standards

Research supports that social and emotional learning (SEL) has positive effects on students of diverse backgrounds. SEL helps empower students with the skills needed to make responsible decisions and handle difficult situations, including exposure to alcohol or other drugs. Example skills include: understanding and managing emotions, achieving positive goals, showing empathy for others, and making responsible decisions.

The Ohio Department of Education developed SEL content standards through the 3rd grade level. The Study Committee recommends these standards be continued in grades four through 12 and align with the existing SEL content standards. Coupled with evidence-based substance abuse prevention curriculum and prevention resources, these content standards should serve as benchmarks for schools, so they can ensure children are developing age-appropriate abilities to regulate attention, emotions, and behavior.

4. Recommendation – School and Community Surveys

Schools and communities should incorporate ongoing assessments to evaluate current trends and the effectiveness of prevention strategies. Surveys help assess risk factors, protective factors, and early signs of substance abuse and mental health issues. These surveys should influence school improvement planning processes and encourage schools to focus on academic learning and whole-child development.

5. Recommendation – Expand Substance Abuse Curriculum across Subjects

The Study Committee recommends inclusion of substance abuse education and mental health promotion programming in all appropriate content areas, in addition to health education. For example, Brain Power is a free curriculum from the National Institute on Drug Abuse that examines the physical effects of drugs on the body. Schools can integrate Brain Power into existing science lessons. Local, certified prevention providers, coalitions, university partners, or ADAMHS boards should assist schools by providing ideas on how substance abuse prevention and mental health promotion efforts can be integrated into other appropriate school subject areas.

6. Recommendation – Resources for Schools about Substance Abuse Prevention

Some schools are adopting substance abuse education and prevention resources with little to no direction. Many of these approaches, including mock crashes, one-time school assemblies, having individuals who are incarcerated speak to students, or other similar activities may be considered scare tactics.¹⁶ Research shows this approach is not effective at curbing substance abuse among youth and may do more harm than good.¹⁷

The Ohio Department of Mental Health and Addiction Services should provide guidance for schools about inclusion of appropriate substance abuse prevention resources. This guidance should suggest evidence-based resources and strategies shown to reduce risk factors, increase protective factors,

¹⁶ Scare tactics or fear appeals are intended to scare people into engaging in a desired health behavior (e.g., quit smoking, avoid drugs, stop speeding, exercise more). They often use shocking or graphic images and statistics and are not evidenced to be effective prevention strategies with youth (masstapp.edc.org/sites/masstapp.edc.org/files/Talking%20points%20about%20scare%20tactics_0.pdf; drugfreeactionalliance.org/scare-tactics).

¹⁷ [Cde.state.co.us/sites/default/files/documents/fedprograms/dl/ov_tiv_res_dontdoit.pdf](http://cde.state.co.us/sites/default/files/documents/fedprograms/dl/ov_tiv_res_dontdoit.pdf).

and decrease substance abuse and other problem behaviors. ODMHAS should work with the ODE and other appropriate agencies to develop this resource.

7. Recommendation – Substance Abuse and Mental Health Intervention Training

The Ohio Attorney General's Office, in partnership with ODE, ODMHAS, and other appropriate agencies should coordinate free training resources. This training would allow school personnel to learn how to detect signs and symptoms of substance abuse problems and mental illness among children, and professional development needs to support these recommendations.

In addition to training, the Study Committee recommends the use of proper screening techniques, such as the Screening, Brief Intervention and Referral to Treatment (SBIRT) to detect substance abuse needs or the Patient Health Questionnaire for depression to provide appropriate responses.¹⁸ Screening techniques should only be used by appropriate school personnel, such as a school nurse, school social worker, or school counselor along with identifying community-based resources. Along with involvement from parents and caregivers, school policies should address necessary action steps if they detect a student has a substance use disorder, is suicidal, or has signs of mental illness.¹⁹

8. Recommendation – Dedicated Prevention Personnel at the Department of Education

The Ohio Department of Education should designate personnel to support implementation of these recommendations at the local level and coordinate this support with other state agencies as appropriate.

9. Recommendation – Continue to Involve and Strengthen Law Enforcement's Role

Communities should continue to recognize and strengthen the vital role law enforcement plays in substance abuse prevention. In addition to teaching evidence-based programs, law enforcement officers serve as positive role models for students, mediate conflicts, and support parental responses to substance use. The study committee recommends continuing law enforcement presence in schools, anti-drug coalitions, and other avenues for officers to advocate for drug-free lifestyles.

Regular communication between law enforcement officers and certified prevention programs, ADAMH Boards, and other agencies at the local level will help ensure topics in prevention programs are tailored toward local community needs.

10. Recommendation – Support Before- and After-school Programs

Research suggests that risk factors for drug use and violence among youth are particularly prevalent during the hours between the end of the regular school day and the end of the parent or caregiver

¹⁸ Screening, Brief Intervention and Referral to Treatment (SBIRT) is an evidence-based practice used to identify, reduce, and prevent problematic use, abuse, and dependence on alcohol and illicit drugs. The SBIRT model was prompted by an Institute of Medicine recommendation that called for community-based screening for health risk behaviors, including substance use (integration.samhsa.gov/clinical-practice/SBIRT). The Patient Health Questionnaire is a simple diagnostic tool for mental health disorders used by health care professionals. (phqscreeners.com/select-screener/36).

¹⁹ Substance use disorders occur when the recurrent use of alcohol and/or drugs causes clinically and functionally significant impairment, such as health problems, disability, and failure to meet major responsibilities at work, school, or home. According to the DSM-5, a diagnosis of substance use disorder is based on evidence of impaired control, social impairment, risky use, and pharmacological criteria (samhsa.gov/disorders/substance-use).

work day, when many children are unsupervised.²⁰ After-school programs can offer a natural extension of a comprehensive drug and violence prevention strategy by providing a safe haven and promoting the development of social skills that help prevent drug use and violence.

Before- and after-school programs should coordinate with the school to reinforce academic, social, health, and drug-free messages in a safe, caring environment. Activities associated with lower drug use include sports and exercise, volunteer work, and spending more than two hours per day on homework. Additional extracurricular activities, such as student council or drama and art clubs also help build protective factors and reduce risk factors. Boys & Girls Clubs offer a safe, positive place for kids to spend their non-school hours and include programming, nutritious meals, academic support, and the Smart Moves program, which focuses on drug and alcohol prevention and healthy lifestyles. Free programs, such as Clever Crazes for Kids, employ STEM (Science, Technology, Engineering and Mathematics) concepts to help students integrate knowledge across disciplines and think in a more connected and holistic way.

11. Recommendation – Community-based Prevention

A community coalition is a group of community members who work together to solve problems and guide the community's future. By using evidence-based strategies, coalitions should work to reduce the risk factors in individuals, homes, schools, and the community that increase the likelihood of youth substance abuse. At the same time, they should work to increase protective factors that decrease the likelihood of youth substance abuse. Coalitions also have the ability to collaborate to maximize resources to promote prevention, leverage private sector investments, and change norms through public awareness campaigns. Community-based prevention efforts should coordinate and reinforce substance use prevention messaging promoted in schools.

12. Recommendation – Engaging Families and Caregivers

Parents and caregivers are a key part of any community prevention effort. Caregivers should reinforce the same coordinated substance use prevention messages at home that students are learning at school. Programs that stress positive relationships between parents and children and encourage children to look toward the future have a significant positive impact.²¹ State resources, such as Start Talking!, help encourage parents to have conversations with their children about substance use. Start Talking! resources or other parent guides that aid them in having discussions about substance abuse are also available through community coalitions, physicians' offices, and other community partners. These guides should contain simple, effective strategies that parents can use at home.

Law enforcement and other elected officials should work with Parent Teacher Organizations and Parent Teacher Association groups to help ensure that caregivers understand why substance use prevention education programming should be a priority at home.

13. Recommendation – Youth-led Prevention

Communities should support enhancement or formation of youth-led prevention programs that utilize evidence-based practices. Youth-led prevention involves youth hearing directly from their peers on how to deal with peer pressure and other issues. Using evidence-based principles, youth-led

²⁰ https://www2.ed.gov/pubs/After_School_Programs/Strong_Safe_Programs.html.

²¹ "A Component-centered Meta-analysis of Family-based Prevention Programs for Adolescent Substance Use," *Clinical Psychology Review* 45 (2016) 72–80, Mark J. Van Ryzin, Cary J. Roseth, Gregory M. Fosco, You-kyung Lee, I-Chien Chen.

prevention programming reduces risk factors and builds protective factors, promotes compassion and leadership abilities and develops a stable positive identity.²² Youth-led prevention also improves social norms and sets peer norms for prosocial behaviors.

14. Recommendation – Incorporate Prevention in Higher Education

Many students are also exposed or introduced to underage drinking or illicit drug use in college.²³ Consequences of this high-risk behavior can include sexual assault or other injuries, criminal charges for underage drinking or other infractions, or even death. For this reason, effective prevention strategies and evidence-based drug prevention programming should not end at the high school level. Schools should work with the Ohio Department of Higher Education to ensure prevention and treatment resources are available after high school.

Ohio's educator preparation programs should also help assist teachers, administrators, counselors, school social workers, and other school personnel in implementing the priorities outlined in this report.

15. Recommendation – Future Work of the Study Committee

The members of the Study Committee recommend keeping the group intact. In particular, the Study Committee members plan to help support the implementation of the recommendations in this report. Future Study Committee work also includes providing insight about grant funding, training, and other opportunities.

²² "Peer Helping/Involvement: An Efficacious Way to Meet the Challenge of Reducing Alcohol, Tobacco, and Other Drug Use Among Youth?," *The Journal of School Health* 68.3 (Mar 1998): 87-93, David Black, Nancy Tobler, John Sciacca; drugfreeactionalliance.org/files/oypn/toolkit/OYLPN-Toolkit-2014.pdf; Wade-Mdivanian, R., Anderson-Butcher, D., Newman, T., Ruderman, D., Smock, J., & Christie, S. (in press). Exploring the long-term impact of a positive youth development-based alcohol, tobacco, and other drug prevention program. *Journal of Alcohol and Drug Education*.

²³ Report.nih.gov/NIHfactsheets/ViewFactSheet.aspx?csid=21.

School Spotlights

The school districts listed below are already incorporating some of the Study Committee recommendations. Their efforts can be used as guides to learn more about incorporating substance abuse and social and emotional learning education within a curriculum, as well as involving the community to support students' health and well-being.

Boardman School District

The Boardman School District, located in Northeast Ohio, uses a science-based prevention curriculum developed by the National Institute on Drug Abuse called Brain Power. This curriculum is offered for Kindergarten through 12th grade. The science teachers integrate the Brain Power lessons into their curriculum in Kindergarten through 8th grade by one of the following: 1. Setting aside five to eight class periods per year for drug education or 2. Devoting one solid week to the lessons. In high school, science teachers select the companion program, "The Brain: Understanding Neurobiology by Studying the Process of Addiction," and teach five to eight classes in grades nine through 12, integrated into biology, chemistry, or anatomy. The program materials for Brain Power are free and available online through NIDA's website.²⁴

Talawanda School District

The Talawanda School District, located in Southwest Ohio, is committed to a comprehensive approach to addressing youth substance abuse. The philosophy of the district is to address the whole child; they believe that "healthy learners are better learners." Its curricular and evidence-based practices span Kindergarten through 12th grade and intentionally engage sectors of the community to achieve measurable outcomes.

The Talawanda Health Coordinating Council is based on the Center for Disease Control's Coordinated School Health Model. This body, within the school district, is comprised of faculty, staff, and community members who have a vested interest in the health and safety of Talawanda youth. The mission is to minimize the non-academic barriers to learning for students through policy, practice, and program. The Council acts as a clearinghouse to help ensure that proposals align with the district's health curriculum for Kindergarten through 12th grade and reinforce consistent messages. In addition, this body tracks new legislation and policy related to school and community wellness that may impact students and regularly makes recommendations to the Superintendent and Board of Education on these critical issues.

Evidence-based practices guide the district's drug prevention work. From the inception of a Student Assistance Program to youth-led prevention efforts to most recently exploring the adoption of SBIRT in the schools, Talawanda is continually looking for research-based strategies. The district's goal is to educate their students, provide them with necessary supports and alternatives, and continue to focus on strength-based models for youth.

²⁴ <https://www.drugabuse.gov/brain-power>; <https://drugpubs.drugabuse.gov/media/curricula>.

Cleveland Metropolitan School District

Cleveland Metropolitan School District students in grades Kindergarten through 12 receive Health and Physical Education courses that assist students in developing resilience and coping skills, learning and applying critical thinking skills, and building healthy relationships with others. The curriculum emphasizes the need for students to learn and apply factors that lead to a healthy lifestyle, including personal engagement and responsibility for lifelong health and wellness. The Cleveland Metropolitan School District also implements social and emotional learning concepts, which support students in gaining knowledge and skills in self-awareness, self-management, social awareness, relationship-building, and responsible decision-making.

Guidance for Implementation of Recommendations

Substance Abuse Prevention-related Services in Ohio

The following section provides brief background on state and local agencies and nonprofit and policy organizations that provide substance abuse prevention services at the state and local level in Ohio. It is important to have an understanding of the services available, as these agencies may play a role in the implementation of the Study Committee's recommendations.

Ohio Department of Mental Health and Addiction Services

Contained within ODMHAS is the Bureau of Prevention Services, which supports prevention services across the lifespan, with the goal of reducing the likelihood or delaying the onset of behavioral health problems. The bureau supports evidence-based initiatives, including community drug-free coalitions, youth-led programming, life and social skills programs, prevention of underage drinking, and programs that promote and teach self-regulation and social emotional learning competencies, as well as programs that reduce risks and promote other protective factors for healthy youth development.

The bureau is responsible for administering Strategic Prevention Framework (SPF) State Incentive Grants. To receive grant funding for prevention resources, the Strategic Prevention Framework requires states and communities to do the following: 1. Assess needs; 2. Build capacity; 3. Plan; 4. Implement; and 5. Evaluate progress. The SPF also includes two guiding principles of cultural competence and sustainability (www.samhsa.gov/capt/applying-strategic-prevention-framework; <http://www.mha.ohio.gov/Default.aspx?tabid=761>).

The ODMHAS Bureau for Children and Families has been awarded nearly \$9 million from the federal Substance Abuse and Mental Health Administration (SAMHSA) to implement the Safe Schools/Healthy Students (SSHS) initiative from 2014-2017. The goal is to engage youth, families, schools, and communities in building the local and statewide capacity to mitigate behavioral health problems in youth from preschool through 12th grade (www.mha.ohio.gov/Default.aspx?tabid=843).

ODMHAS also oversees "Start Talking!" – a youth drug prevention program that encourages conversations with children about the importance of being drug-free. Governor John Kasich's office created the program in 2014. It is based on national research that shows children are up to 50% less likely to use drugs when parents or other trusted adults talk with them about the dangers of drug use. Start Talking! provides parents, teachers, physicians, guardians, and community leaders with tools to start the conversation with Ohio's youth about the importance of living healthy, drug-free lives (www.starttalking.ohio.gov).

Ohio Department of Education

The Ohio Department of Education (ODE) oversees the state's public education system, which includes public school districts, joint vocational school districts, and charter schools. The department also monitors educational service centers, other regional education providers, early learning and child care programs, and private schools. The department's responsibilities include administering the school funding system; collecting school fiscal and performance data; developing academic standards and model curricula; administering the state achievement tests; issuing district and school report cards; administering Ohio's voucher programs; providing professional development;

and licensing teachers, administrators, treasurers, superintendents and other education personnel. The department is governed by the State Board of Education. The Superintendent of Public Instruction is charged with the administration of the department.

Among its many functions, ODE also provides guidance for two processes used in schools to address behavioral health needs: 1. The Ohio Improvement Process (OIP) and 2. Positive Behavioral Interventions and Supports (PBIS). Schools use the OIP to help raise student academic achievement levels and use the PBIS framework to teach and reinforce positive behaviors and provide targeted assistance for students who have specific behavior or academic needs (www.education.ohio.gov/).

Ohio Department of Health

The Ohio Department of Health (ODH) is a cabinet-level state agency whose mission is to protect and improve the health of all Ohioans. Its core priorities are Infectious Diseases, Preparedness, Health Improvement & Wellness, Health Equity & Access, Environmental Health, and Regulatory Compliance. Through its Violence & Injury Prevention Program, ODH promotes evidence-based strategies to reduce death and disability associated with intentional and unintentional injury, including those caused by drug overdoses.

ODH supports prescription drug abuse prevention efforts at the state and local levels, working with the Board of Pharmacy and clinicians to expand the use of Ohio's prescription drug monitoring program (OARRS) and reinforce responsible prescriber and consumer medication practices. The Department also administers the federal Center for Disease Control and Prevention's "Youth Risk Behavior Survey" as part of efforts to assess the burden of injury and violence in Ohio. The ODH is accredited by the Public Health Accreditation Board and works in collaboration with Ohio's local health departments (www.odh.ohio.gov/).

Ohio Department of Medicaid

Launched in July 2013, the Ohio Department of Medicaid (ODM) is Ohio's first cabinet-level Medicaid agency. With a network of approximately 90,000 active providers, ODM delivers health care coverage to more than three million Ohio residents on a daily basis. Many substance abuse and mental health services are covered by Medicaid (www.medicaid.ohio.gov/).

Ohio Department of Youth Services

The Ohio Department of Youth Services (DYS) is the juvenile corrections system for the state of Ohio. DYS is statutorily mandated to confine felony offenders, ages 10 to 21, who have been adjudicated and committed by one of Ohio's county juvenile courts. During their stay with DYS, youth are engaged in programming that is designed to address their criminological and behavioral needs. DYS oversees the Title II Formula Grant awarded by the federal Office of Juvenile Justice and Delinquency Prevention (OJJDP). This grant addresses juvenile crime and delinquency at the local level by funding anti-crime programs and services that include primary prevention and early intervention (www.dys.ohio.gov/Community-Programs/Other-Community-Initiatives).

Law Enforcement

The Ohio Attorney General's Office funds grants to law enforcement agencies to establish and implement drug abuse resistance education programs in public schools. During the 2014-15 program year, Attorney General DeWine provided approximately \$3 million in funding to 157 local

law enforcement agencies, including eight new grant recipients. The funds supported school-based programs and helped 265 Drug Abuse Resistance Education (D.A.R.E.) and school resource officers work with almost 362,000 students ([Ohio Attorney General 2015 Annual Report](#)).

Community Health Centers

Ohio's 46 Community Health Centers manage over 250 locations in both rural and urban areas in 62 of Ohio's 88 counties. This also includes mobile units. In 2015, Community Health Centers provided care to over 623,000 Ohioans and recorded over 2.1 million patient visits. Collectively, Community Health Centers are the largest health care system in the nation (www.ohiochc.org).

Alcohol, Drug Addiction and Mental Health Services Boards

Currently, 52 Alcohol, Drug Addiction and Mental Health Services (ADAMHS) boards serve 88 counties. These boards fund and monitor public mental health, alcohol, and other drug addiction services. ADAMHS boards are also responsible for providing substance abuse prevention services and opportunities (R.C. 340.03(A)(1)(b); www.OACBHA.org).

Local Departments of Health

Local departments of health support interventions aimed at reducing risks to health, including environmental health programs, immunization clinics, well-baby visits, pre-natal health screenings, dental services, health promotion activities, disease surveillance, and other services and programs (R.C. 3701.342; OAC Chapter 3701-36; www.odh.ohio.gov/localhealthdistricts/lhdmain.aspx).

Drug Free Action Alliance

Drug Free Action Alliance (DFAA) is a statewide nonprofit organization receiving support from federal, state, and private funds. DFAA delivers up-to-date information and develops initiatives that serve the immediate needs of those working to prevent substance abuse throughout Ohio and beyond. Through participation in DFAA's Ohio Center for Coalition Excellence and by becoming members of the Statewide Prevention Coalition Association, community groups have an opportunity to network and share knowledge with many other coalitions at unique stages of growth and development (drugfreeactionalliance.org).

The Ohio High School Athletic Association

The Ohio High School Athletic Association (OHSAA) is a statewide nonprofit athletic administration organization. OHSAA regulates and administers interscholastic athletic competition, while promoting the values of participation in interscholastic athletics as an integral part of a student's educational experience. The OHSAA represents its member schools by recognizing and promoting academics, the safety of participants, good citizenship, and lifelong values as the foundation of interscholastic athletics. OHSAA requires parents, students, coaches, and others to review issues concerning concussions and steroids and their school's Athletic Code of Conduct each sport season (www.OHSAA.org).

Universal Health Care Action Network of Ohio

Universal Health Care Action Network of Ohio (UHCAN Ohio) is a statewide health care advocacy organization whose mission is to achieve high quality, accessible, affordable health care for all Ohioans. UHCAN Ohio is directing its youth drug and alcohol use prevention efforts at expanding the use of Screening, Brief Intervention and Referral to Treatment (SBIRT) in youth settings, such as schools. The SBIRT process involves simple questions about alcohol and other drug use, followed by brief education or counseling where appropriate. If necessary, a referral to treatment is made. UHCAN Ohio is leading the "Somebody Finally Asked Me!" campaign to remove policy and financial barriers to the provision of SBIRT in schools (www.UHCANOHI.Org).

The Health Policy Institute of Ohio

The Health Policy Institute of Ohio (HPIO) is a nonprofit organization with a mission to partner with policymakers and other interested parties to provide the independent and nonpartisan analysis needed to create evidence-informed state health policy. Last year, the Ohio Department of Health contracted with HPIO to conduct the latest iteration of the state health assessment and subsequently prepare the state health improvement plan (SHIP). Mental health and addiction are priority topics identified in the SHIP. The SHIP is targeted for release in February 2017 and will include evidence-based strategies at the state and community level that can address reducing depression, suicide, drug dependency and abuse, and drug overdose deaths (www.healthpolicyohio.org).

Before- and After-school Programs

Before- and after-school programs are provided across the state by a variety of organizations. These programs aim to provide a safe and rich learning environment for youth, narrow achievement and opportunity gaps, and position students toward a bright future. Before- and after-school efforts also reduce risk factors, such as access to and availability of drugs and alcohol, as well as promote protective factors, such as social skills, self-esteem, aspirations, caring relationships with adults, and interactions with peers in healthy environments (www.occra.org; www.ohioafterschoolnetwork.org).

Substance Abuse Prevention-related Laws

This section details some of the federal and state laws that set the parameters and support for availability of substance abuse prevention education and services in Ohio. These laws helped to shape the direction of the Study Committee recommendations, shed light on the limitations in state law to providing substance abuse education in schools, and provided insight on potential federal resources.

Federal Laws and Grants

The Elementary and Secondary Education Act (ESEA) was passed in 1965. ESEA offered more than \$1 billion a year in aid to school districts to assist with costs of educating disadvantaged students. The No Child Left Behind Act (NCLB) was an update to the ESEA. The NCLB law defined education policy for students in kindergarten through high school, increased the federal role in holding schools responsible for the academic progress of students, and included targeted funding for drug prevention programs in schools.

In 2015, Congress replaced NCLB with the Every Student Succeeds Act (ESSA), which represents a shift toward increased state and local control of elementary and secondary education. Title IV, Part B of the law contains the “21st Century Community Learning Centers” grant program, which authorizes funding to support student health and wellness. This funding can include drug use prevention programs.

Ohio Law

Under Ohio law, health education includes six topics required for instruction, including the “harmful effects of and legal restrictions against the use of drugs of abuse, alcoholic beverages, and tobacco” and “prescription opioid abuse prevention, with an emphasis on the prescription drug epidemic and the connection between prescription opioid abuse and addiction to other drugs, such as heroin” (R.C. 3313.60(A)(5)(b) and (A)(5)(f)). Students are required to complete a minimum of 60 hours of health education to graduate. These 60 hours must be completed between 9th and 12th grades (R.C. 3313.603).

Ohio law does not permit the State Board of Education to adopt health education standards or health curriculum in Ohio without approval by both houses of the General Assembly (R.C. 3301.0718). Further, health is not one of the general topic areas indicated on the statewide achievement assessments required by law (R.C. 3301.071). Therefore, there is no current method of determining what type of substance abuse prevention education schools are providing.

Separately, in 2013, the State Board of Education created rules and policy to prevent the use of restraint and seclusion. This policy also references the use of Positive Behavior Interventions and Supports, or PBIS.²⁵ PBIS use evidence-based practices and data-driven decision making processes to foster a positive school environment and improve academic and behavioral outcomes.²⁶

Some schools expanded the use of the PBIS framework beyond the ties to restraint and seclusion to teach and reinforce positive behaviors for all students and provide targeted assistance for students who have specific behavior or academic needs. Representative members of the school focus on behavioral expectations that are positively stated and easy to remember. Rather than telling students what not to do, the school focuses on preferred behaviors.²⁷ One study of 48 public high schools from 11 states and one U.S. territory found that implementation of PBIS are associated with decreased illegal drug and alcohol use in high schools.²⁸

²⁵ PBIS language comes directly from 1997 reauthorization of the Individuals with Disabilities Education Act (IDEA).

²⁶ R.C. 3319.46; OAC 3301-35-15; education.ohio.gov/Topics/Other-Resources/School-Safety/Building-Better-Learning-Environments/PBIS-Resources/Ohio-Positive-Behavior-Interventions-Network-1; <http://education.ohio.gov/getattachment/Topics/Other-Resources/School-Safety/Building-Better-Learning-Environments/Policy-Positive-Behavior-Interventions-and-Support/Ohio-Department-of-Education-Policy-on-Positive-Behavior-Interventions.pdf.aspx>.

²⁷ pbis.org/school/swpbis-for-beginners.

²⁸ pbis.org/evaluation/evaluation-briefs/drug-and-alcohol-use-rate.

Substance Abuse Prevention Savings

The chart below lists the benefit-per-dollar cost ratios for various evidence-based substance abuse prevention programs. The Washington State Institute for Public Policy developed a standardized model using scientifically rigorous standards to estimate the costs and benefits associated with various prevention programs. Cost estimates are per participant, based on 2015 United States dollars.²⁹

Program	Benefit per Dollar Cost
Nurse-Family Partnership	\$1.61
Raising Healthy Children/SSDP	\$4.27
Good Behavior Game	\$64.18
LifeSkills Training	\$17.25
Keepin' it REAL	\$11.79
Strengthening Families Program 10-14	\$5.00
Guiding Good Choices	\$2.69
Positive Family Support/ Family Check Up	\$0.62
Project Towards No Drug Abuse	\$6.54
BASICS	\$17.61

National Institute on Drug Abuse Prevention Principles

The National Institute on Drug Abuse Prevention Principles provide research-based guidance for communities undertaking the development of a comprehensive substance abuse prevention plan.³⁰ These principles are summarized below:

Principle 1: Prevention programs should enhance protective factors and reverse or reduce risk factors.

²⁹ Note: It is not possible to estimate specific cost-benefits for every evidence-based intervention due to challenges in calculating accurate intervention effect sizes, the failure to document costs, the variation of methods used, and few mandates or incentives to complete this research. Reaching a consensus on standards for cost-benefit analyses and making them a routine part of prevention program evaluation could help policymakers choose evidence-based programs that both prevent substance misuse and ensure that investments return benefits over the life course. Source: Washington State Institute for Public Policy.

³⁰ [Drugabuse.gov/publications/preventing-drug-abuse-among-children-adolescents-in-brief/prevention-principles](https://drugabuse.gov/publications/preventing-drug-abuse-among-children-adolescents-in-brief/prevention-principles)

Principle 2: Prevention programs should address all forms of drug abuse.

Principle 3: Prevention programs should address the type of drug abuse problem present in the local community.

Principle 4: Prevention programs should be tailored to address risks specific to populations.

Principle 5: Family-based prevention programs should include drug education and enhance family bonding and relationships.

Principle 6: Prevention programs can be designed to intervene as early as preschool to address risk factors for drug abuse.

Principle 7: Prevention programs for elementary school children should target improving academic and social and emotional learning to address risk factors for drug abuse.

Principle 8: Prevention programs for middle or junior high and high school students should increase academic and social competence with areas including peer relationships, drug resistance skills, and reinforcement of anti-drug attitudes.

Principle 9: Prevention programs aimed at general populations at key transition points, such as the transition to middle school, can produce beneficial effects even among high-risk families and children.

Principle 10: Community prevention programs that combine two or more effective programs, such as family-based and school-based programs, can be more effective than a single program alone.

Principle 11: Community prevention programs reaching populations in multiple settings are most effective when they present consistent, community-wide messages in each setting.

Principle 12: Community programs should adapt programs to meet local needs, yet retain core elements of the original research-based intervention, including structure, content, and delivery.

Principle 13: Prevention programs should be long-term with repeated interventions (i.e., booster programs) to reinforce the original prevention goals.

Principle 14: Prevention programs should include teacher training on good classroom management practices, such as rewarding appropriate student behavior.

Principle 15: Prevention programs are most effective when they employ interactive techniques, such as peer discussion groups and parent role-playing.

Principle 16: Research-based prevention programs are cost-effective.

Implementation Checklist

The following checklist, provided in part by the substance abuse prevention organization Prevention First! will help schools and communities with implementing a comprehensive prevention program.

Step One: Define school substance abuse prevention components. These efforts should include, but are not limited to, school policies, substance abuse prevention curriculum, surveys, screenings and interventions, community engagement methods, and staff development training.

- For help with education content standards, refer to the Health Education Curriculum Analysis Tool (HECAT). The Alcohol and Other Drug Module in the HECAT can be used to ensure students are learning substance abuse prevention knowledge and skills at the appropriate grade levels ([cdc.gov/healthyyouth/hecat/pdf/hecat_module_aod.pdf](https://www.cdc.gov/healthyyouth/hecat/pdf/hecat_module_aod.pdf)).
- Information about Ohio Social and Emotional Learning standards through Grade 3 can be found here: www.education.ohio.gov/getattachment/Topics/Early-Learning/Early-Learning-Content-Standards/Birth-Through-Pre-K-Learning-and-Development-Stand/ELDS-Social-Emotional.pdf and www.education.ohio.gov/getattachment/Topics/Early-Learning/Early-Learning-Content-Standards/Ohios-Kindergarten-Through-Grade-3-Learning-and-D/K-3-Standards.pdf.aspx.
- Federal registries of evidence-based substance abuse programs and curriculum can be found here:
 - The Substance Abuse and Mental Health Services Administration National Registry of Evidence-Based Programs and Practices (nrepp.samhsa.gov/01_landing.aspx).
 - Office of Juvenile Justice and Delinquency Prevention Model Programs Guide (ojjdp.gov/mpg/Topic/Details/79).
 - Guide to Community Preventive Services sponsored by the Centers for Disease Control and Prevention (thecommunityguide.org).
- Schools and communities using a prevention resource other than evidence-based curriculum should consult with their local organizations with prevention expertise, such as an ADAMH Board, certified prevention program, college or university, or local health department for guidance on appropriate implementation. Examples of research-based prevention resources include:
 - Health and Opioid Abuse Prevention Education (HOPE) Curriculum (starttalking.ohio.gov/Prevention/HOPECurriculum.aspx).
 - Blueprints for Healthy Youth Development (blueprintsprograms.com/).
 - NIDA Lesson Plan and Activity Finder (teens.drugabuse.gov/teachers/lessonplans#/questions).
 - Generation Rx contains educational resources to help prevent the misuse of prescription medications (generationrx.org/).
 - D.A.R.E. of Ohio offers information about D.A.R.E. officer certification information, trainings, and other resources (dare-oh.org/).
 - Ohio School Resource Officers Association offers information about School Resource Officer educational opportunities and other resources (osroa.org/).

- Ohio Chapter of the American College of Emergency Physicians provides training to schools and parents on the dangers and physical effects of substance abuse, particularly opiates (ohacep.org).
- Signs of Suicide (SOS) Prevention Program educates students about dangers of mental health issues that may lead to suicide. Nationwide Children's Hospital may be able to assist with this training (sprc.org/resources-programs/sos-signs-suicide; www.nationwidechildrens.org/suicide-research).
- Mental Health First Aid (MHFA): Mental Health First Aid is an eight-hour course that teaches participants how to identify, understand and respond to signs of mental illness and substance use disorders (mentalhealthfirstaid.org/cs/).
- Below is a list of school and community survey resources:
 - The Youth Risk Behavior Survey (cdc.gov/healthyyouth/data/yrbs/)
 - Ohio Healthy Youth Environment Survey (ohyes.ohio.gov/)
 - PRIDE Survey (pridesurveys.com/)
 - The Ohio State University Community and Youth Collaborative Institute School Experience Surveys (cayci.osu.edu/surveys/)
 - National Center on Safe Supportive Learning Environments School Climate Survey Compendia (safesupportivelearning.ed.gov/topic-research/school-climate-measurement/school-climate-survey-compendium)
- Information about screening tools for depression, substance abuse, bipolar disorder or suicide risk can be found here: integration.samhsa.gov/clinical-practice/screening-tools#depression.

Step Two: Collect, analyze, track, and report student and community survey data. Contact the local ADAMHS Board, certified prevention program, or college or university to assist with this process.

Step Three: Work with ODE State Support Teams and Educational Service Centers to promote social and emotional learning and positive school climate efforts. Include Positive Behavioral Interventions and Support or Ohio Improvement Process teams, and other related school efforts, as appropriate.

Step Four: Coordinate with Before- and After-school programs on substance abuse prevention efforts.

- Information about Before-and After-school programs can be found below:
 - Boys & Girls Clubs provide a positive, affordable place for kids at a dedicated youth facility. Club programs and services promote and enhance well-being and healthy lifestyles (bgca.org/Pages/index.aspx).

- The Ohio Afterschool Network is a statewide advocacy organization with the goal of creating and supporting the development of quality, comprehensive child and youth programming (ohioafterschoolnetwork.org/).
- Clever Crazes for Kids is a free educational website that engages kids in learning about STEM (Science, Technology, Engineering and Mathematics) concepts (www.clevercrazes.com/).

Step Five: Connect with local colleges and universities to discuss and coordinate with their substance abuse prevention activities.

- Information about higher education programs can be found below:
 - Get details about alcohol or other drug prevention on college campuses (alcoholeducationproject.org/DOEModelPrograms2008.pdf).
 - Each public institution of higher education is required to provide incoming students with information about mental health issues, including depression and suicide prevention resources (suicideprevention.ohio.gov/).
 - Since 2013, the Ohio State Collegiate Recovery Community (CRC) has been supporting students in recovery from alcohol and other drug addictions to pursue their degrees while maintaining their recovery (swc.osu.edu/services/alcohol-tobacco-and-other-drugs/collegiate-recovery-community/).

Step Six: Develop, engage, and support community resources, including community coalitions, youth-led prevention, and parents and caregivers. Coordinate community efforts with school-based substance abuse prevention efforts.

- Information about community coalition resources can be found below:
 - Through participation in the Drug Free Action Alliance's Ohio Center for Coalition Excellence and by becoming members of the Statewide Prevention Coalition Association, community groups have an opportunity to network and share knowledge with many other coalitions at unique stages of growth and development (drugfreeactionalliance.org).
 - The Community Anti-Drug Coalitions of America Prevent Rx Abuse Toolkit provides information on preventing and reducing teen prescription drug abuse (preventrxabuse.org/).
- Information about youth-led prevention resources can be found below:
 - Ohio Youth Led Prevention Network is a joint-collaboration between Drug Free Action Alliance and The Ohio Department of Mental Health & Addiction Services. It is a network to assist youth with making positive life decisions (drugfreeactionalliance.org/oypn).
 - Youth to Youth (Y2Y) engages young people through meaningful activities and experiences to develop and implement their own ideas to create positive change (youthtoyouth.net/central-ohio/central-ohio-initiatives/).

- Information about resources for parents and caregivers can be found below:
 - The Partnership for Drug Free Kids parent toolkit contains information to help guide children of all ages toward a healthy lifestyle (drugfree.org/the-parent-toolkit/).
 - Parents and caregivers can receive free tips via email through the “Start Talking! KNOW Tips!” program. The tips contain current facts about alcohol, tobacco, and other drugs, as well as action steps parents and caregivers can take to help children resist peer pressure (startalking.ohio.gov/Prevention/KNOW.aspx).
 - The Strengthening Families Program is an evidence-based parenting and family strengthening program for high-risk and general population families (strengtheningfamiliesprogram.org/).

CONCLUSION

At least eight Ohioans die every day from accidental drug overdoses. Schools and communities are on the frontlines of this crisis, and their efforts to educate our children about the dangers of drug abuse will help build a better future. This report includes several recommendations to help build stronger, drug-free communities:

- By reducing risk factors and increasing protective factors, children will build resiliency and make positive life decisions.
- Screening for substance abuse and mental health issues needs to be followed by effective interventions and treatment.
- A comprehensive, community-wide substance abuse prevention program should include schools, parents and caregivers, before-and after-school efforts, law enforcement, community coalitions, and others to be effective.

The Study Committee was honored to develop this report, which includes recommendations and resources to help undertake comprehensive substance abuse education prevention efforts. But our work is not done. Our members are committed to playing a role in implementing the recommendations listed in this report. We would like to extend our thanks to Ohio Attorney General Mike DeWine, Ohio Speaker of the House of Representatives Clifford A. Rosenberger, Ohio Senate President Larry Obhof, and Representative Keith Faber for their guidance and leadership.

ACKNOWLEDGEMENTS

- Dawn Anderson-Butcher, PhD., LISW-S, The Ohio State University
- Kathleen Gmeiner, project director, UHCAN Ohio
- Mary Haag, president & CEO, Prevention First!
- Jill Jackson, education program specialist, Ohio Department of Education
- Emily Jordan, education program specialist, Ohio Department of Education
- Verne Larsen, education specialist, Utah State Office of Education
- Amy Mart, Manager of Universal Supports, Chicago Public Schools
- Greta H. Mayer, executive director, Mental Health and Recovery Board of Clark, Greene & Madison Counties
- Amy Rohling McGee, president, Health Policy Institute of Ohio
- Tracey Stute, director Programs & Communications, Mental Health and Recovery Board of Clark, Greene & Madison Counties
- Jennifer Thrasher, legislative liaison, Ohio Department of Education
- Julie Walburn, assistant director/chief of staff, Ohio Department of Health

The Ohio Joint Study Committee on Drug Use Prevention Education would like to recognize and thank all of the individuals who offered testimony at our meetings and who submitted written testimony.

Attorney General Staff:

Amber Aimar
Jennifer Biddinger
LeeAnne Cornyn
Jill Del Greco
Bob Fiatal
Ann O'Donnell
Will O'Gorman

Amy O'Grady
Randi Ostry
Lisa Peterson
Molly Rafeld
Ryan Stubenrauch
Erica Wilson

Economic Aspects of the Opioid Crisis
Testimony before the Joint Economic Committee of the United States Congress

Sir Angus Deaton¹
June 8, 2017

Thank you, Chairman Tiberi, Ranking Member Heinrich, Vice Chairman Lee, and the members of the committee for holding this hearing on economics and the opioid crisis.

Deaths from legal and illegal drugs are contributing to an almost unprecedented increase in overall mortality among middle-aged white non-Hispanics. A century of mortality decline came to a halt at the end of the 20th century and mortality rates for this group were higher in 2015 than in 1998. Driven by these developments, life expectancy at birth, a key indicator of how well a society is doing, fell for white non-Hispanics from 2013 to 2014, and for the whole population from 2014 to 2015.

Rising life expectancy in America, and around the world, is one of several key indicators that life today is so much better than 50 or 100 years ago. That this measure should go into reverse is both stunning and devastating. No such reversal has taken place in other rich countries, though there are warning signs in other English-speaking countries, such as Britain, Ireland, Canada, and Australia. Nor is it happening for Hispanics in the US, nor for African Americans, whose mortality rate remains higher than that for whites, but is rapidly declining.

Opioids are a big part of this story. Supplies of opioids—the new forms of heroin, of fentanyl, and prescription opioids—have stoked and maintained the epidemic. Selling heroin is profitable and illegal. Selling prescription drugs is profitable and legal. Pharmaceutical companies have made tens of billions on prescription opioids alone while life expectancy has fallen. Our health care system has sometimes been better at generating wealth than at generating health.

Opioids have a legitimate if limited role in treating pain. But a case can be made that it would have been better if they had never been approved; physicians are far from infallible in deciding which patients are likely to become addicted and, once patients are addicted, treatment is difficult and often unsuccessful. A stronger case can be made against the widespread prescription of opioids within the community, by general practitioners and dentists. Enough opioids are prescribed each year to give every American adult a month's supply. Other countries restrict opioid use more carefully, for example to acute hospitalization or end of life care. It is estimated that the US, with 5 percent of the world's population, consumes 80 percent of the world's opioids.

¹ Sir Angus Deaton, a Laureate of the Nobel Prize in Economic Sciences, is Senior Scholar and the Dwight D. Eisenhower Professor of Economics and International Affairs Emeritus, Woodrow Wilson School of Public and International Affairs and the Economics Department at Princeton University and Presidential Professor of Economics at the University of Southern California.

My own research, with my Princeton colleague Anne Case, has looked at opioid deaths as part of a broader epidemic of rising mortality. These are the deaths that we refer to as “deaths of despair.” They consist of suicides and deaths from alcoholic liver disease as well as accidental overdoses from legal and illegal drugs. The opioid deaths are the largest component, but the other two causes are not far behind. In 2015, for white non-Hispanic men and women aged 50 to 54 without a college degree—who are much more seriously at risk than those with a college degree—deaths of despair are around 110 per 100,000, of which 50 are accidental overdoses, 30 are suicides, and 30 are alcoholic liver disease and cirrhosis.

In the last year or two, there has also been a turn-up in the mortality rate from heart disease—after many years of decline—and if obesity is the cause, as many argue, some of these deaths might also be classed as deaths of despair, which would put the total deaths of despair at levels approaching deaths from cancer or from heart disease, the two major killers in midlife the US today.

Figure 1 shows the all-cause mortality rates for the somewhat broader 45-54 group of white non-Hispanics (WNH), together with mortality rates for selected comparison countries.

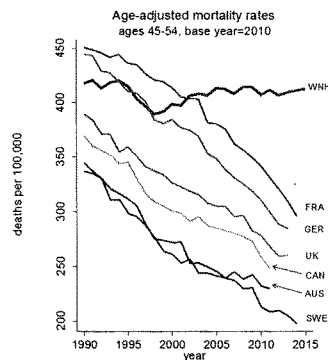


Figure 1: Age-adjusted mortality rates in midlife for the US and selected countries

with less education.

We note that deaths of despair among midlife whites have risen roughly in parallel for all levels of urbanization in the US, from inner-city MSA to rural counties. The *level* of deaths is lower, by about 20 per 100,000, or 70 compared with 90, in the fringe areas of large MSAs, but the growth over time has been the same as elsewhere

The mortality rates in midlife in those other countries continue to decline at the rates that were standard in the US prior to 1998. This turnaround in the US is driven by the opioid epidemic, by suicides, by cirrhosis, and by the slowing (and recent reversals) in the decline in heart disease. People are killing themselves by drinking, by accidentally overdosing, by overeating, or much more quickly, by committing suicide directly.

Deaths of despair have risen in parallel for men and women, see Figure 2. Such deaths, like all suicides, are lower for women than for men, but the increases for men and women have marched in lockstep. For all-cause mortality, there are differences that reflect the history of men’s and women’s smoking, and the long-term effects on lung cancer, but those are not part of my story here. Rather, the rise in deaths of despair is a story of contrast between those with more and those

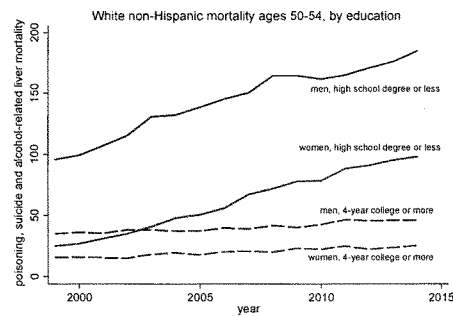


Figure 2: Deaths of despair (suicides, alcoholic liver disease, and accidental poisonings) by sex and education

Our work has also documented an increase in morbidity—especially pain, but also inability to function in various capacities—in the same age and ethnic group. Once again, people with less than a college degree do worse than those who have completed a four-year BA. One might have hoped that the increase in the use of opioids to combat pain might have *decreased* the prevalence of pain, but that has not happened. Perhaps the increase in pain would have been even larger without opioids, but that would leave us with a huge increase in pain to be explained.

We think of opioids, not as the fundamental cause of the epidemic of midlife mortality and morbidity, but as an accelerant, a set of drugs that added fuel to the fire, and made an already bad situation much worse. And it is in that broader context that we can begin to see the economic underpinnings of the epidemic.

Deaths of despair cannot be readily explained by the contemporaneous state of the economy, by the Great Recession, by unemployment, or by family incomes. There are many documented links between the economy and health, not always in the same direction, but neither the opioid epidemic nor the broader epidemic of deaths of despair can be matched to patterns of unemployment or income over the past 20 years. In particular, opioid deaths, and deaths of despair more broadly were increasing year on year prior to the Great Recession, and continued to increase year on year afterwards. This was in spite of large fluctuations in employment and in incomes. We tend to regard all of these deaths of despair as suicides in one form or another, and we believe that suicides respond more to prolonged economic conditions than to short-term fluctuations, and especially to the social dysfunctions, such as loss of meaning in the interconnected worlds of work and family life, that come with prolonged economic distress.

A longer-term perspective is more promising. Those who were in their early 50s in 2010 were born in the early 1960s. Raj Chetty and his collaborators have estimated that about 60 percent of this cohort had higher incomes at age 30 than did their parents at the same age, compared with 90 percent of those born 20 years earlier. This is the group that was first hit by the long-term decline in median earnings that set in after the early 70s, and those without a four-year college degree would not have benefited from the rising college wage premium.

Workers who entered the labor market before the early 70s, even without a college degree, could find good jobs in manufacturing, jobs that came with benefits and on the job training, and could be expected to last, and that brought annual increases in earnings, and a road to middle class prosperity. Such jobs have become steadily less prevalent over time.

The loss of good jobs for people with no more than a high school degree has come with a decline in other socially significant outcomes. There has been a decline in marriage rates, though couples often cohabit and have children out of wedlock. These cohabiting relationships are relatively unstable (more so than in Europe), so that many fathers do not live with their children, and many children have lived with several "fathers" by their early teens. Changing social views on marriage and out-of-wedlock childbearing have permitted these dysfunctional outcomes.

Heavy drinking, obesity, increasing social isolation, drugs, and suicide are plausible outcomes of these cumulative processes that deprive white working class lives of their meaning.

We do not know why it is that African Americans and Hispanics are protected from these outcomes nor why we do not see these events in Europe. The existence of more generous social safety nets in Europe is often noted as is the greater stability of cohabitation. Tighter control of opioids undoubtedly helps. But we do not know, and it is possible that the European reprieve is a temporary one.

RESPONSE TO QUESTION FOR THE RECORD FOR RICHARD G. FRANK FROM SENATOR
KLOBUCHAR

IMPORTANCE OF TREATMENT

What would be the economic costs for communities if funding for treatment from any of these programs was weakened?

The CDC estimates that the treatment cost of Opioid Use Disorder is \$28.9 billion and the overall cost to society is \$78.5 billion in 2013. Weakening funding would put new burden on communities for treatment costs. But perhaps more importantly weakening funding would likely reduce access to treatment. That would in turn increase other costs associated with opioid use disorders like disability costs, child welfare costs, and criminal justice costs among others.

RESPONSES TO QUESTIONS FOR THE RECORD FOR RICHARD G. FRANK FROM SENATOR
LEE

How prevalent is Medicaid program abuse by addicts and dealers? Is it more prevalent in certain parts of the country than others? Have any states or communities found ways of fighting back or preventing this potential risk?

In order to properly answer these questions it is important to put the sources of prescription opioid misuse into context. The National Household Survey on Drug Use and Health offers data on this issue. That survey allows for the tracking of the sources of drugs that were misused. Nearly 65% of misused prescription opioids were obtained from family and friends (55% free and 9.9% via purchase), 5% were stolen from family and friends. Roughly 17.6% were obtained through a prescription and just under 5% were obtained from a drug dealer. So 70% came from family and friends. All health care payment programs face the challenge of diversion. This includes private health insurance, Medicare, Medicaid, the VA, and the military health insurance programs.

As you know, the Affordable Care Act gave states new authority to fight fraud and abuse related to drug diversion. This enables states to take measures that focus on Medicaid but also on the range of insurers and other payers.

Specifically the new authorities include:

- Establish enhanced oversight for new providers.
- Establish periods of enrollment moratoria or other limits on providers identified as at high risk for fraud and abuse.
- Establish enhanced provider screening.
- Require states to suspend payment when there is a credible allegation of fraud, which may include evidence of overprescribing by doctors, over-utilization by recipients, or questionable medical necessity.

The result has been that states have adopted a variety of approaches aimed at stemming diversion of prescription opioids. Kentucky has put into place a State-wide data base of all controlled substances prescribed in the State. The Medicaid program has effectively used that tool to identify aberrant prescribing and has made investigations better targeted and more efficient. The State of Pennsylvania has implemented a pro-active drug utilization review process that targets drugs of abuse. Efforts in Florida and Oklahoma have focused more specifically on pain management clinics for all payers and have realized success in limiting diversions stemming from "pill mills." States are also using so-called lock-in programs and in some cases linking prescription drug monitoring programs to electronic health records. Again these are not specifically aimed at Medicaid but at all payers.

These efforts are meeting with some success as data reveal a decline in the level of opioid prescribing. In sum, states are fighting back and most of the efforts are aimed at prescribing broadly. Some of these efforts are the result of new tools created for states, under the Affordable Care Act.

RESPONSES TO QUESTIONS FOR THE RECORD FOR RICHARD G. FRANK FROM SENATOR
HEINRICH

MEDICAID CUTS

1. What would happen to patients if their treatment for an opioid addiction was interrupted because the patient no longer had coverage for SUDs?

There are several results that emerge clearly from the literature on treatment effectiveness that inform this question. First is that Opioid Use Disorders are most

effectively treated with Medication Assisted Treatment or MAT. Second, is that receiving and remaining in treatment with MAT reduces all cause overdose mortality. Third is that the likelihood of a relapse increases significantly when MAT is interrupted. In addition, relapse is associated with reduced functional status, increased likelihood of family disruption, spread of infectious disease, and contact with the criminal justice system.

2. Given that addiction is a lifelong disease, how would converting Medicaid to a per capita cap hinder State efforts to address the long-term health needs of people struggling with an SUD?

The consensus in the scientific community as recently summarized by the Surgeon General of the United States is that addictions generally and opioid use disorder specifically are chronic relapsing diseases of the brain. These illnesses also co-occur with a variety of other medical problems and chronic illnesses (depression, HIV, hepatitis C). The result is that the average cost of treating someone with an opioid use disorder in Medicaid is on the order of \$11,000 to \$12,000 per year compared to \$3,000 to \$4,000 for the average Medicaid recipient. A per capita cap changes the incentives to the states. Currently states receive matching payments from the Federal Government so that Federal payments increase with State spending increases. The per capita cap would change the incentives in that increased State spending would not longer be met with higher Federal payments, thereby rewarding aggressive cost cutting. One of the easiest ways to cut costs is to avoid the sickest people and enroll the healthiest. This is easy to do, especially with people suffering from a substance use disorder. That is, because these illnesses require outreach and ongoing support to engage and retain them in treatment. Curtailing such activities will reduce participation in Medicaid for people with SUDs. Thus because people with an opioid use disorder are much more costly than the average Medicaid enrollee, the incentives suggest that we would likely encounter less outreach and engagement activities in Medicaid and less aggressive follow-up efforts to retain people in treatment.

3. How would converting Medicaid to a per capita cap impact a State's ability to cover treatments for these co-occurring conditions?

In my answer to #2 above I touch on the basic economics that are at work in serving people with costly co-occurring conditions. In addition to the issues raised in that response, there is the matter of what happens when the population with addictions and co-occurring diseases is growing in size. There is a great deal of evidence indicating that the opioid use epidemic is growing. Recent evidence on emergency room growth and hospital use for opioid use disorders shows they have been growing at annual rates of 5.7% and 8%, respectively. Mortality from OUD has been increasing at roughly 9% per year since 1979 and at about 15% in recent years and prescribing of MAT drugs has grown rapidly as well. For this reason people with opioid use disorder can be expected to make increasing claims on the health care system and Medicaid. A per capita cap would lock in spending patterns using 2016 as the baseline and then increase Federal payments by either CPI or CPI-M. Thus the proposed growth in Federal payments is forecasted by CBO to be at 3.7% (CPI-M) or less. This heightens the incentives to avoid people with these illnesses that I described earlier.

4. How important is treating these conditions to supporting a person's long-term recovery?

Addictions and opioid use disorders specifically frequently are intertwined with mental health problems and other medical issues. For example, an estimated 30% of people with an opioid use disorder are also depressed. Misuse of drugs has been linked to self-medication for mental illnesses and pain. Thus, having coverage for the range of health needs is critical for populations that suffer from complex arrays of mental, addictive and other medical conditions.

5. Would this one-time investment sufficiently offset the harm the underlying bill would do to millions of Americans with SUDs?

The \$15 billion proposed in the AHCA to address mental health SUD and maternity care needs would not come close to compensating for the funding cuts that would result from package of coverage reductions in the AHCA. Let me illustrate with some relevant data. There are about 220,000 people with an opioid use disorder and an additional 1.2 million people with a serious mental illness that are currently covered through the Medicaid expansion and the Health Insurance Marketplaces. In addition, there are 713,000 people with an opioid use disorder with incomes below the poverty line, many of who are uninsured. Data collected from State Medicaid programs noted earlier indicate that today it costs about \$11,000 per person to treat someone with a serious mental illness or an opioid use disorder. If states apply all those funds only to people with these serious illnesses in the Medicaid expansion and Health Insurance Marketplaces, that would make up 1.42 mil-

lion people. If we make the conservative assumption that these individuals only use services in two out of the next five years, the total cost would exceed \$31 billion. This cost would exhaust these funds even assuming every dollar were spent only on such services for such individuals rather than all those who qualify. Thus, the new money added to the AHCA would fall short making up for the bill's reduced coverage of people with the most serious mental and addictive conditions let alone other conditions.

RESPONSES TO QUESTIONS FOR THE RECORD FOR LISA SACCO FROM SENATOR MIKE LEE

This memorandum responds to two questions submitted by Vice Chairman Mike Lee for the Joint Economic Committee Hearing, "The Economic Aspects of the Opioid Crisis":

- How have different states adapted their justice systems to deal with the opioid crisis?
- What impact have drug courts had?

While the information below is tailored to your specific questions, portions of it may be included in other Congressional Research Service products available to other Members of Congress. If you have any additional questions, please do not hesitate to contact me.

How have different states adapted their justice systems to deal with the opioid crisis?

Across the country, states have dealt with rising death rates linked to opioid overdoses. In response, they have adapted certain elements of their criminal justice responses—including police, court, and correctional responses¹—in a variety of ways. While this response does not provide a State-by-State analysis, it highlights several examples of how States' justice systems have responded to the opioid crisis.

One of the more widespread responses is increasing law enforcement officer access to naloxone, an opioid overdose reversal drug.² Officers receive training on how to identify an overdose and administer naloxone, and they carry the drug to be able to immediately respond to an overdose. As of December 2016, over 1,200 police departments in 38 states had officers that carry naloxone.³ In addition, most states that have expanded access to naloxone have also provided immunity to those who possess, dispense, or administer the drug. Generally, immunity entails legal protections from arrest or prosecution and/or civil suits for those who prescribe or dispense naloxone in good faith.⁴

Another criminal justice adaptation is the enactment of what are known as "Good Samaritan" laws to encourage individuals to seek medical attention (for themselves or others) related to an overdose without fear of arrest or prosecution. For example, this immunity would prevent criminal prosecution for illegal possession of a controlled substance in certain states and under specified circumstances. While these laws vary by State as to what offenses and violations are covered, as of June 2017, forty states and the District of Columbia have some form of Good Samaritan overdose immunity laws.⁵

Most states have drug diversion or drug court programs⁶ for criminal defendants with substance abuse issues including opioid abuse.⁷ Some states view drug courts

¹Not all states respond by adapting every component of the criminal justice system.

²National Conference of State Legislatures, Drug Overdose Immunity and Good Samaritan Laws, June 5, 2017, <http://www.ncsl.org/research/civil-and-criminal-justice/drug-overdose-immunity-good-samaritan-laws.aspx>.

³See North Carolina Harm Reduction Coalition (NCHRC), Law Enforcement Departments Carrying Naloxone, <http://www.nchrc.org/law-enforcement/us-law-enforcement-who-carry-naloxone/>.

⁴Some laws also provide disciplinary immunity for medical professionals.

⁵National Conference of State Legislatures, Drug Overdose Immunity and Good Samaritan Laws, June 5, 2017, <http://www.ncsl.org/research/civil-and-criminal-justice/drug-overdose-immunity-good-samaritan-laws.aspx>.

⁶Some specialized court programs are designed to divert certain defendants and offenders away from traditional criminal justice sanctions such as incarceration while reducing overall costs and helping these defendants and offenders with substance abuse issues. Drug court programs may exist at various points in the justice system, but they are often employed post-arrest as an alternative to traditional criminal justice processing. For more information, see CRS Report R44467, Federal Support for Drug Courts: In Brief, by Lisa N. Sacco.

⁷National Governors Association, States Expand Opioid Addiction Treatment in Drug Courts, Corrections, April 11, 2017, <https://www.nga.org/cms/news/2017/states-expand-opioid-addic>

as a tool to address rising opioid abuse and have moved to further expand drug court options in the wake of the opioid epidemic. In August 2016, representatives from several states that have been confronted with high opioid overdose death rates⁸ convened for the Regional Judicial Opioid Summit. Part of these states' action plans to address opioid abuse was to expand drug courts and other court diversion and sentencing options that provide substance-abuse treatment and alternatives to incarceration.⁹ Further, in April 2017, the National Governors Association announced that eight states would participate in a "learning lab" to develop best practices for dealing with opioid abuse treatment for justice-involved populations—including the expansion of opioid addiction treatment in drug courts.¹⁰

Further, in recent years, several states have enacted legislation increasing access to medication-assisted treatment for drug-addicted offenders who are incarcerated or have recently been released.¹¹

What impact have drug courts had?

Drug courts are specialized court programs that present an alternative to the traditional court process for certain criminal defendants and offenders. Traditionally, these individuals are first-time, nonviolent offenders who are known to abuse drugs and/or alcohol. While there are additional specialized goals for different types of drug courts, the overall goals of adult and juvenile drug courts are to reduce recidivism and substance abuse.¹²

Drug court programs may exist at various points in the justice system, but they are often employed post-arrest as an alternative to traditional criminal justice processing. Any drug courts, including some Federal drug court programs, are actually reentry programs that assist a drug-addicted convict in reentering the community while receiving treatment for substance abuse.

While drug courts vary in composition and target population, they generally have a comprehensive model involving

- offender screening and assessment of risks and needs,
- judicial interaction,
- monitoring (e.g., drug and alcohol testing) and supervision,
- graduated sanctions and incentives, and
- treatment and rehabilitation services.¹³

Drug courts are typically managed by a team of individuals from (1) criminal justice,¹⁴ (2) social work, and (3) treatment service.¹⁵

Jurisdictions have sought to utilize drug courts in efforts to treat individuals' drug addictions, lower recidivism rates for drug-involved offenders, and lower costs associated with incarcerating these offenders. Since the inception of drug courts, a great deal of research has been done to evaluate their effectiveness and their impact on offenders, the criminal justice system, and the community. Much of the research yields positive outcomes.¹⁶

Several studies have demonstrated that drug courts may lower recidivism rates and lower costs for processing offenders compared to traditional criminal justice processing.¹⁷ One group of researchers examined the impact of a drug court over

tion-treatment. For more information, see CRS Report R44467, Federal Support for Drug Courts: In Brief, by Lisa N. Sacco.

⁸These states include Kentucky, Illinois, Indiana, Michigan, Ohio, Pennsylvania, Tennessee, Virginia, and West Virginia.

⁹Michelle White and Tara Kunkel, National Center for State Courts, "Opioid Epidemic and the Courts," Trends in State Courts, 2017, <http://www.ncsc.org>.

¹⁰National Governors Association, States Expand Opioid Addiction Treatment in Drug Courts, Corrections, April 11, 2017, <https://www.nga.org/cms/news/2017/states-expand-opioid-addiction-treatment>.

¹¹National Conference of State Legislatures, American Epidemic: Overdose on Opioids, State Legislatures Magazine, April 2016, <http://www.ncsl.org/bookstore/state-legislatures-magazine/overdosed-on-opioids.aspx>.

¹²For more information, see CRS Report R44467, Federal Support for Drug Courts: In Brief, by Lisa N. Sacco.

¹³U.S. Department of Justice, National Institute of Justice, Drug Courts, March 2015, <http://www.nij.gov/topics/courts/drug-courts/>.

¹⁴Including judges, prosecutors, defense attorneys, and community corrections officers.

¹⁵U.S. Department of Justice, Office of Justice Programs, Drug Courts, June 2015, <https://www.ncjrs.gov/pdffiles1/nij/238527.pdf>.

¹⁶U.S. Department of Justice, National Institute of Justice (NIJ), Do Drug Courts Work? Findings from Drug Court Research, <http://www.nij.gov/topics/courts/drug-courts/Pages/work.aspx>; Douglas B. Marlowe, Painting the Current Picture: A National Report on Drug Courts and Other Problem-Solving Court Programs in the United States, June 2011, <http://www.ndci.org/sites/default/files/nadcp/PCP%20Report%20FINAL.PDF>.

¹⁷Steven Belenko, "Research on Drug Courts: A Critical Review," National Drug Court Institute Review, vol. 1, no. 1 (June 1998), pp. 15–16.

10 years and concluded that treatment and other costs associated with the drug court (investment costs)¹⁸ per offender were \$1,392 less than investment costs of traditional criminal justice processing. In addition, savings due to reduced recidivism for drug court participants were more than \$79 million over the 10-year period.¹⁹ A collaboration of researchers conducted a five-year longitudinal study of 23 drug courts from several regions of the United States and reported that drug court participants were significantly less likely than nonparticipants to relapse into drug use and participants committed fewer criminal acts than non-participants after completing the drug court program.²⁰

Still, some are skeptical of the impact of drug courts. The Drug Policy Alliance²¹ has claimed that drug courts help only offenders who are already expected to do well and do not truly reduce costs. This organization also has criticized drug courts for punishing addiction because drug courts dismiss those who are not able to abstain from substance use.²²

QUESTIONS FOR THE RECORD FOR HON. MIKE DEWINE SUBMITTED BY SENATOR AMY KLOBUCHAR

STATE TREATMENT PROGRAMS

Attorney General DeWine—Two weeks ago, I participated in a hearing at the Senate Permanent Subcommittee on Investigations on “Stopping the Shipment of Synthetic Opioids: Oversight of U.S. Strategy to Combat Illicit Drugs.” At that hearing the Policy Chief from Newtown, Ohio, testified on the importance of Medicaid when it comes to fighting this epidemic.

- *How much funding does the State of Ohio annually spend to reduce drug abuse and overdose deaths?*

I would refer you to the Ohio Office of Budget and Management for specific figures. The figures from OBM may not necessarily include dollars spent locally on the epidemic for items such as recovery services, support of law enforcement programs, coroner and funeral services, hospice care, the cost to business, costs related to increased crime, and medical care. In my office, we fund numerous efforts to support law enforcement such as lab services, technical equipment, and investigation support. We also provide funding for specialized programs to address the needs of children in the child welfare system and to address drug abuse education in schools.

- *How much of this funding comes from Medicaid—both as a percentage and in total?*

I would refer you to the Ohio Office of Budget and Management for specific figures.

- *How would you expect the elimination of the Medicaid expansion program to affect the ability of Ohio to continue fighting the opioid epidemic and the increasing treatment gaps that you mentioned during your testimony?*

Medicaid expansion has allowed many Ohioans to establish and maintain access to mental health and addiction services. Reductions in Medicaid would reduce Ohioans’ access to treatment services needed to recover from addiction.

QUESTIONS FOR THE RECORD FOR ATTORNEY GENERAL DEWINE SUBMITTED BY SENATOR MIKE LEE

Attorney General DeWine—Federal and State policymakers have not always responded in the most prudent or humane way in response to past drug epidemics. We have made some grave errors, some of which are reflected in today’s criminal code,

¹⁸These include costs associated with arrest, booking, court, jail, and probation.

¹⁹Michael W. Finigan, Shannon M. Carey, and Anton Cox, *The Impact of a Mature Drug Court over 10 Years of Operation: Recidivism and Costs*, NPC Research, Final Report, April 2007.

²⁰For a summary of and various publications discussing the Multisite Adult Drug Court Evaluation funded by NIJ and conducted by the Urban Policy Institute, Justice Policy Center, RTI International, and the Center for Court Innovation, see <http://www.nij.gov/topics/courts/drug-courts/Pages/madce.aspx>.

²¹The Drug Policy Alliance is a national advocacy group that advocates for drug law reform.

²²Drug Policy Alliance, *Drug Courts are Not the Answer: Toward a Health-Centered Approach to Drug Use*, March 2011, <https://www.drugpolicy.org/docUploads/Drug-Courts-Are-Not-the-Answer-Final2.pdf>.

for example. Given the wide-ranging expertise you bring to bear on these issues, what, in your view, is the most important mistake for us to avoid as we craft policy addressing this epidemic?

It is very important to always include different perspectives by those who are affected by the opioid crisis. For example, hearing from medical professionals, first responders, and individuals in recovery is very important. Considering the diversity among counties is also critical. A solution in a rural community may be vastly different from a solution in an urban community. We have been very fortunate to work on a grass roots level so that when programming is crafted it is done so that it fits who and where it was designed for.

The Federal Government and State governments obviously play important roles in combating the opioid crisis. But I'm particularly interested in what local communities and voluntary organizations are doing on this front. Can you point to any examples of local organizations or initiatives in Ohio that have been successful in helping people overcome opioid addiction?

Throughout the State of Ohio, numerous communities have implemented programs and services that have made a positive difference. One of the examples can be found in Pickaway County, just south of Columbus. Pickaway County has an Addiction Council that is comprised of approximately 60 individuals from a cross section of the community. Since their inception, they have developed an excellent website (<https://www.drugfreepickaway.com/>) and social media page, held numerous awareness and assistance events, produced a Parent Guide that has been distributed to approximately 3,000 parents, implemented drug prevention programming in the schools in addition to DARE, trained law enforcement on how to administer naloxone and how to better investigate an overdose scene, changed the approach in the judicial system, and designed a program in the jail that has reduced recidivism.

The jail program is an excellent example of how lives can be changed by community collaboration. The Pickaway County jail was crowded to overcapacity and the same people continued to cycle through. The jail administrator set up a program that has reduced the recidivism rate and led to a decline in the jail population.

Upon release an inmate has the opportunity to receive Vivitrol. To have this opportunity, the inmate must complete a questionnaire asking them how they plan to remain drug free. If the inmate is approved, a judge is asked to grant that the inmate will be released to a nearby treatment facility. Job and Family Services signs the inmate up for Medicaid the day of release. If the inmate and the team agree that additional help may be needed, the Sheriff's Office reaches out to a church who will have a member walk alongside the inmate upon release. The inmate is also provided a packet of information about a variety of support services. No additional dollars were needed for this program.

My office held our first faith conference in March of 2015. We have held seven faith conferences across the State with two in conjunction with the West Virginia Attorney General's Office. We have worked very closely with the faith community to develop "champions" across the State. Champions are individuals within a faith community who have been trained on how to provide support to those with the disease of addiction and to their families. We now have almost 200 champions across the State. These champions and others from the faith community have held events, provided resources, visited families after the overdose of a loved one, worked with law enforcement on their outreach efforts, provided a place of safety and comfort, and opened recovery homes.

*I and others are concerned about the state of social capital in America—the strength of our associational life and our connectedness to each other. A recent study published in the journal *Drug and Alcohol Dependence* found that counties across America with lower social capital also generally have higher drug overdose rates. The findings suggest that tight-knit communities possess a greater resiliency to drug epidemics. I would be interested to hear your thoughts as to the importance of healthy social relationships and a thriving civil society in mitigating the threat of the opioid crisis.*

I agree with Sam Quinones, author of *Dreamland*, who refers to the disease of addiction as a disease of isolation. He stated that as the addiction progresses, the person affected and often their family become isolated in their home (due to stigma and lack of services). The addicted individual remains isolated through their addiction and, unfortunately, the end result may be death.

We know that this epidemic has caused stress in our communities, leading to the destruction of families, the economic impact, and the compassion fatigue of those overwhelmed by what they have experienced.

But there is hope. When communities come together, stigma declines and people feel supported in their journeys to recovery. We hear from those in recovery that

they need places to go where they can be with others in recovery, not a treatment center or a recovery home. They need, as do many others, a place where they can build healthy social relationships and once again contribute to society.

QUESTION FOR THE RECORD FOR PROFESSOR DEATON SUBMITTED BY SENATOR MIKE LEE

Professor Deaton—In your research you've noted a connection between, on the one hand, low rates of marriage and high family instability among working-class whites and, on the other hand, "deaths of despair." Can you describe some of these trends in family instability and discuss how they may have played a role in the opioid epidemic?

Thank you, Senator Lee. It is a good question, and one to which, at this stage, we have only partial answers and a good deal of speculation. In my work with Anne Case, we have followed the findings of a number of sociologists and political scientists who have identified a long-term increase in dysfunctional family behaviors, particularly among those who do not have a university degree. Marriage rates are falling, and cohabitations are rising. Cohabitations often come with out-of-wedlock births. Cohabitations in the U.S. are unstable, at least compared with Europe, so many dads do not live with, or even know their kids, and many kids have many "father" figures, who are not their fathers. There is good evidence that one cause, though not the only one, is progressive failure in the labor market, where, for those without a BA, good, committed, long-term jobs with prospects have become ever scarcer, and where real earnings have not risen for 40 years. Other dysfunctions that have increased in parallel include withdrawal from the labor force, increased social isolation, and a range of morbidities, including physical pain. Many men and women without a BA, when they reach middle age, feel that their lives have failed; they have done worse than their parents, and they are missing the meaning and satisfaction that a good career and a good family life brings to people in late middle age. This raises the risk of suicide, of alcoholism, and the susceptibility to other addictions. Addictions, in turn, undermine family life and the ability to work. We think of opioids—both legal and illegal—as having thrown fuel on the flames, and they greatly aggravated a crisis that was already there. Of course, we do not claim that opioids are not incredibly dangerous on their own, nor that legal and illegal drug dealing is not reprehensible. As the example of Utah shows, a good family life and a supportive church may not protect people against over-enthusiastic physicians. But we believe that the slow erosion of white working class life has pre-disposed people to the epidemic.

