

PART 1 – Human Enhancement

The Pew Research Center, REPORT, MARCH 17, 2022

TEXT 1 -AI and Human Enhancement: Americans' Openness Is Tempered by a Range of Concerns

Public views are tied to how these technologies would be used, what constraints would be in place



Developments in artificial intelligence and human enhancement technologies **have the potential to remake American society in the coming decades.** A new Pew Research Center survey finds that Americans see promise in the ways these technologies could improve daily life and human abilities. Yet public views are also defined by the context of how these technologies would be used, what constraints would be in place and **who would stand to benefit – or lose –** if these advances become widespread.

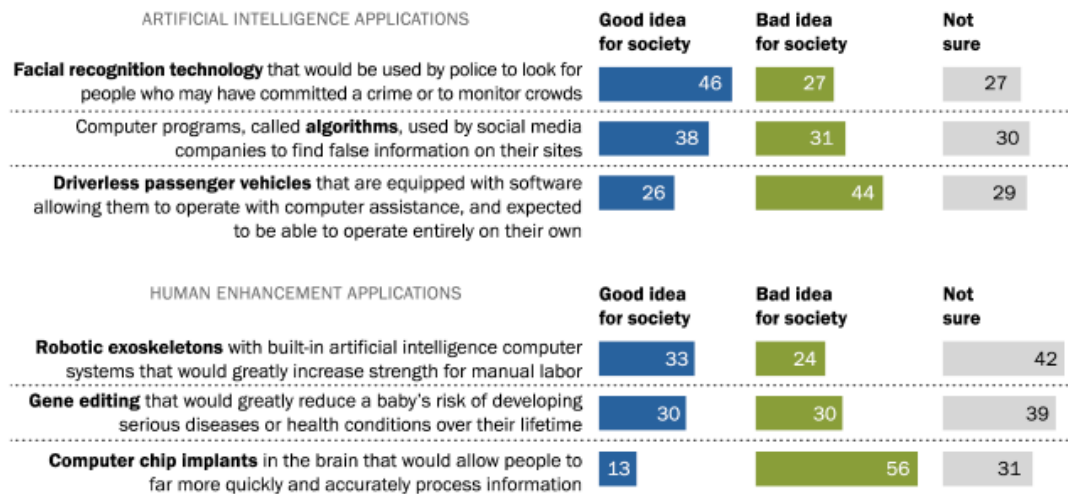
Fundamentally, **caution runs through public views** of artificial intelligence (AI) and human enhancement applications, often centered around concerns about autonomy, unintended consequences and the amount of change these developments might mean for humans and society. People think economic disparities might worsen as some advances emerge and that technologies, like facial recognition software, could lead to more surveillance of Black or Hispanic Americans.

This survey looks at a broad arc of scientific and technological developments – some in use now, some still emerging. It concentrates on public views **about six developments that are widely discussed** among futurists, ethicists and policy advocates. Three are part of the burgeoning array of AI applications: the use of facial recognition technology by police, the use of algorithms by social media companies to find false information on their sites and the development of driverless passenger vehicles.

The other three, often described as **types of human enhancements**, revolve around developments tied to the convergence of AI, biotechnology, nanotechnology and other fields. They **raise the possibility of dramatic changes to human abilities in the future: computer chip implants** in the brain to advance people's cognitive skills, **gene editing** to greatly reduce a baby's risk of developing serious diseases or health conditions, and **robotic exoskeletons with a built-in AI system** to greatly increase strength for lifting in manual labor jobs.

Majority says brain chip implants for improved cognitive abilities would be bad idea for society; public more open to other applications of human enhancement and AI

% of U.S. adults who say the widespread use of each of the following artificial intelligence and human enhancement applications has been/would be a ...



Note: Respondents who did not give an answer are not shown. Respondents were randomly assigned to answer questions about artificial intelligence applications or human enhancement applications.

Source: Survey conducted Nov. 1-7, 2021.

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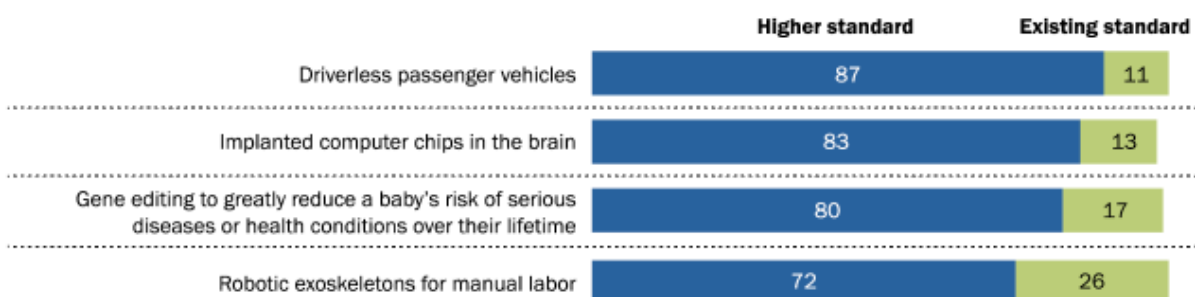
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Some of the key themes in the survey of 10,260 U.S. adults, conducted in early November 2021:

- A new era is emerging that Americans believe should have higher standards for assessing the safety of emerging technologies. The survey sought public views about how to ensure the safety and effectiveness of the four technologies still in development and not widely used today. Across the set, **there is strong support for the idea that higher standards should be applied**, rather than the standards that are currently the norm.

Majorities think higher standards should be used in testing the safety of some developing technologies, not just existing standards

% of U.S. adults who say that when it comes to ensuring safety and effectiveness, each of the following technologies should be tested using ...



Note: Respondents who did not give an answer are not shown. Respondents were randomly assigned to answer questions about artificial intelligence applications or human enhancement applications.

Source: Survey conducted Nov. 1-7, 2021.

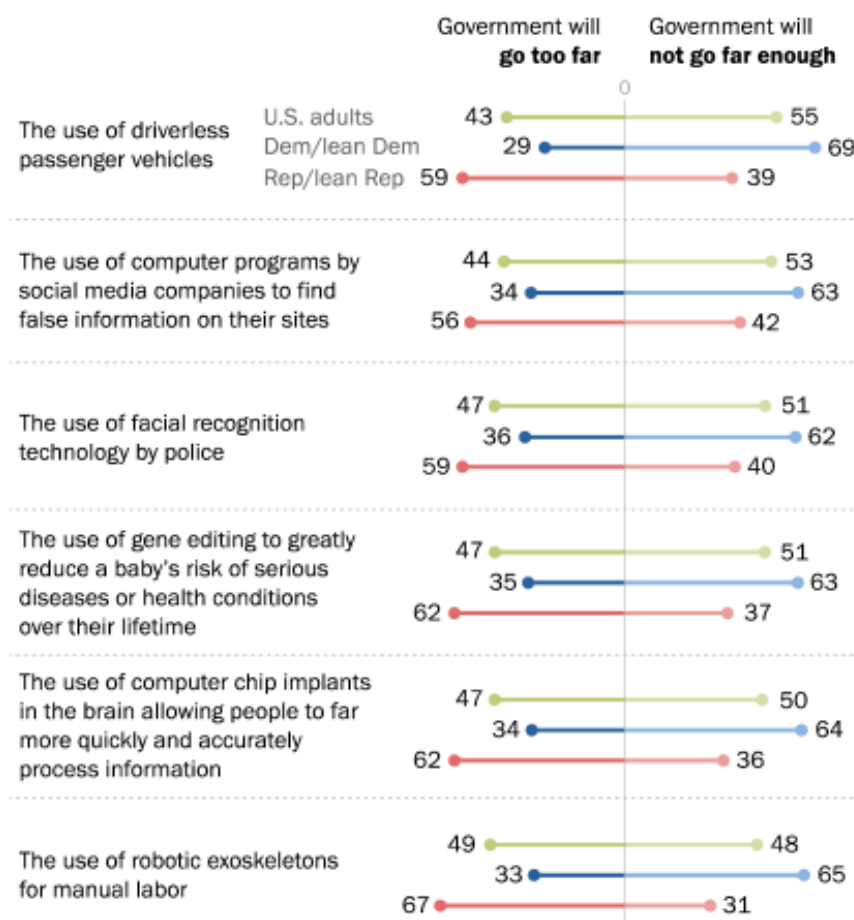
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- Sharp partisan divisions anchor people's views about possible government regulation of these new and developing technologies. As people think about possible government regulation of these six scientific and technological developments, which prospect gives them more concern: that government will go too far or not far enough in regulating their use?

Partisans differ in their concerns about government regulation of technologies for AI, human enhancement

% of U.S. adults who say that if/as each of the following becomes widespread, their greater concern about regulating their use is that ...



Note: Respondents who did not give an answer are not shown. Respondents were randomly assigned to answer questions about artificial intelligence applications or human enhancement applications.

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Majorities of Republicans and independents who lean to the Republican Party say they are more concerned about government overreach, while majorities of Democrats and Democratic leaners worry more that there will be too little oversight.

• **Less than half of the public believes these technologies would improve things over the current situation.** On these questions, less than half of the public is convinced improvements would result.

For example, 32% of Americans think that robotic exoskeletons with built-in AI systems to increase strength for manual labor would generally lead to improved working conditions. However, 36% think their use would not make much difference and 31% say they would make working conditions worse.

In thinking about a future with widespread use of driverless cars, 39% believe the number of people killed or injured in such accidents would go down. But 27% think the number killed or injured would go up; 31% say there would be little effect on traffic fatalities or injuries.

Another concern for Americans ties to the potential impact of these emerging technologies on social equity.

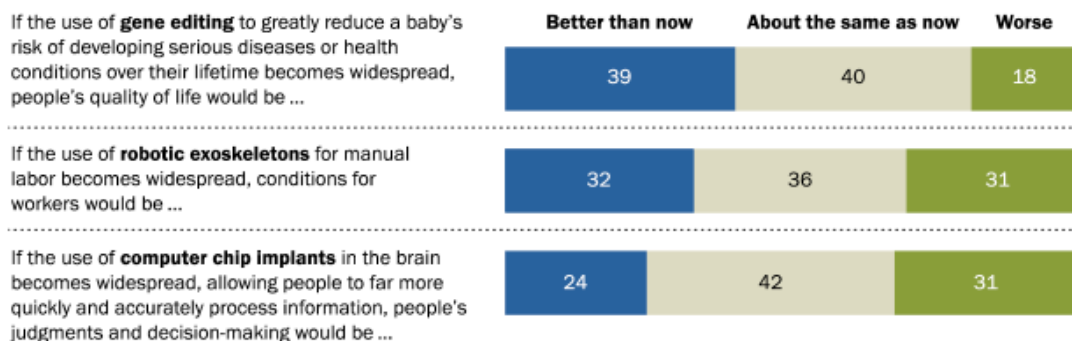
People are far more likely to say the widespread use of several of these technologies would increase rather than decrease the gap between higher- and lower-income Americans. For instance, 57% say the widespread use of brain chips for enhanced cognitive function would increase the gap between higher- and lower-income Americans; just

10% say it would decrease the gap. There are similar patterns in views about the widespread use of driverless cars and gene editing for babies to greatly reduce the risk of serious disease during their lifetime.

Public not convinced that certain physical and cognitive enhancements would lead to clear improvements in people's lives ...

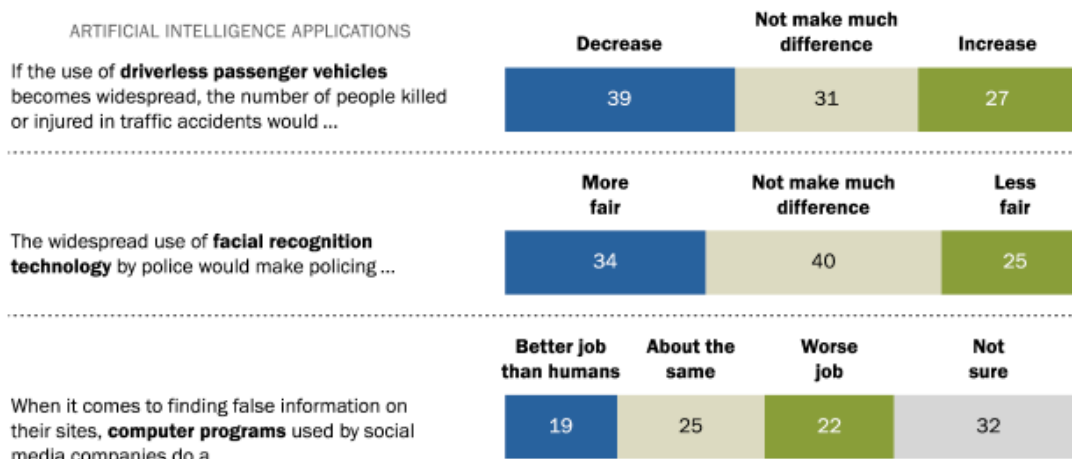
% of U.S. adults who say ...

HUMAN ENHANCEMENT APPLICATIONS



And some are skeptical that several AI applications would have a positive impact

ARTIFICIAL INTELLIGENCE APPLICATIONS



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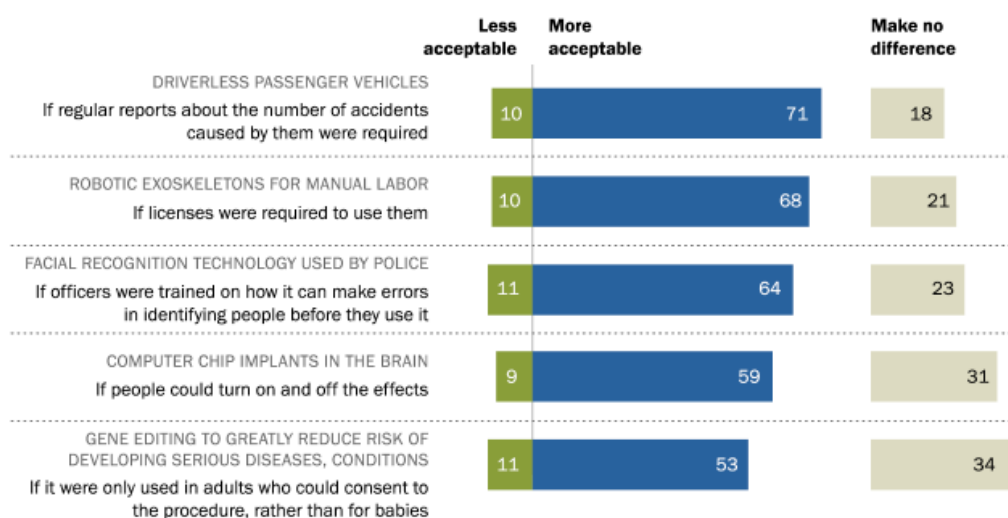
● Even for far-reaching applications, such as the widespread use of driverless cars and brain chip implants, there are mitigating steps people say would make them more acceptable. A desire to retain the ability to shape their own destinies is a theme seen in public views across AI and human enhancement technologies. For even the most advanced technologies, there are mitigating steps – some of which address the issue of autonomy – that Americans say would make the use of these technologies more acceptable.

Seven-in-ten Americans say they would find driverless cars more acceptable if there was a requirement that such cars were labeled as driverless so they could be easily identified on the road, and 67% would find driverless cars more acceptable if these cars were required to travel in dedicated lanes. In addition, 57% say their use would be more acceptable if a licensed driver was required to be in the vehicle.

Similarly, about six-in-ten Americans think the use of computer chip implants in the brain would be more acceptable if people could turn on and off the effects, and 53% would find the brain implants more acceptable if the computer chips could be put in place without surgery.

Across AI and human enhancement applications, public sees mitigating steps that would make their use more acceptable

% of U.S. adults who say for each technology, the following condition would make its use ...



Note: Respondents who did not give an answer are not shown. Respondents were randomly assigned to answer questions about artificial intelligence applications or human enhancement applications.

Source: Survey conducted Nov. 1-7, 2021.

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TEXT 2 - How far should we go with gene editing in pursuit of the 'perfect' human?

Robin McKie Science editor

The Observer, Sun 5 Feb 2023

The name He Jiankui is not listed as a registered delegate for the Third International Summit on Human Genome Editing, which is to be held at the Francis Crick Institute in London next month. Yet the disgraced Chinese scientist will be on the minds of most of those attending. He will be a ghost at the feast of science.

Jiankui was responsible for one of the most controversial acts in modern scientific history – as was revealed at the world's previous genome editing summit, which was held in Hong Kong in 2018. In front of stunned delegates, the researcher, then based at China's Southern University of Science and Technology in Shenzhen, announced he had changed the genetic make-up of three young girls in a bid to make them resistant to HIV. This modification – made when they were embryos – could then be passed on to future generations.

The experiment is without precedent in modern genetics and was deemed unethical by Chinese authorities. Jiankui was subsequently jailed for three years, though his influence at next month's science summit will still be profound, said Professor Robin Lovell-Badge, organiser of the forthcoming London summit.

"We will be discussing what has happened to the three children whose physiology he may have altered by genome editing," said Lovell-Badge, who also chaired the session at which Jiankui revealed his extraordinary biological intervention. "We will also have presentations about the changes that have occurred in China in terms of the law and the ethics governing gene editing. There have clearly been quite substantial changes – for the good. "And it is important these issues are raised. Genome editing has enormous power to benefit people but we should be transparent about how it is being tried and tested before the technology is put into practice."

Genome editing was transformed by Jennifer Doudna of the University of California, Berkeley, and Emmanuelle Charpentier, of Max Planck Institute for Infection Biology, in Berlin. Their research was rewarded in 2020 when the pair were given the Nobel prize for chemistry for creating "a technology [that] has revolutionised the molecular life sciences," in the words of the Royal Swedish Academy of Sciences, which made the award.

The technique developed by Doudna and Charpentier is known as Crispr-Cas9 and it acts like a

pair of molecular scissors that can cut a strand of DNA at a specific site. In this way, scientists can alter the structure of genes in plants, animals and humans and in turn induce changes in physical traits, such as eye colour, and disease risk. No introduction of genes from other organisms is involved, a crucial difference from previous forms of genetic manipulation.

Scientists are now looking at genome editing to develop new medical treatments, for example by making changes in individuals with diseases. Candidates include the inherited condition sickle cell anaemia, in which a single gene defect disrupts haemoglobin production with serious consequences for patients, who suffer anaemia because their bodies are starved of oxygen.



American biochemist Jennifer Doudna, left, and French microbiologist Emmanuelle Charpentier, who won the 2020 Nobel prize for chemistry for developing a method of genome editing likened to ‘molecular scissors’. Photograph: Alexander Hehl/AP

By removing a person’s stem cells and then genetically editing them so they start to produce foetal haemoglobin – a process that is normally switched off at birth – red blood cells can be restored to their bodies,

scientists believe. Trials are already being carried out at several centres.

In addition, doctors and researchers are investigating ways to use genome editing to tackle muscular dystrophy, cancer, diabetes, some forms of hereditary blindness, and many other debilitating conditions that have defied past attempts to cure them. At next month’s summit, hundreds of delegates will gather to hear the latest developments.

Other experts are looking even further into the future. One idea is to alter the physiology of astronauts so they are better protected against radiation and the effects of weightlessness, invaluable for travel to Mars and beyond.

“You could also think about modifying liver enzymes to make men and women better able to rid their bodies of toxins used in chemical warfare, or to make changes that make them more resistant to biological weapons,” added Lovell-Badge. “That is the kind of human enhancement that military researchers are thinking about now. “You could also contemplate altering humans so they could see in the infrared or the ultraviolet range, as some animals can do. Such enhancements would be ideal for troops fighting at night or in other hostile conditions.”

Just how far such human enhancements will be tolerated by society is a different matter – one that will be tackled at a separate event at the Francis Crick Institute. A public exhibition, titled *Cut + Paste*, will explore what changes can be made safely to humans using genome-editing technology; which ones should be rated priorities, and which ones might be considered morally unacceptable and excluded from future exploration.

PART 2 – The U.K.: the sick man of Europe? The NHS Crisis

TEXT 3 - A long-term illness crisis is threatening the UK economy

CNBC.COM, WED, DEC 28 2022

LONDON — Along with sky-high inflation and energy costs, a Brexit-related trade tailspin and a recession in progress, the U.K. economy is being hammered by record numbers of workers reporting long-term sickness. The Office for National Statistics reported that between June and August 2022, around 2.5 million people cited long-term sickness as the main reason for economic inactivity, an increase of around half a million since 2019.

The number of “economically inactive” people — those neither working nor looking for a job — between the ages of 16 and 64 has risen by more than 630,000 since 2019. Unlike other major economies, recent U.K. data shows no sign that these lost workers are returning to the labor market, even as inflation and energy costs exert huge pressure on household finances. (...)

In its report last month, the ONS said a range of factors could be behind the recent spike, including National Health Service waiting lists that are at record highs, an aging population and the effects of long Covid.

“Younger people have also seen some of the largest relative increases, and some industries such as wholesale and retail are affected to a greater extent than others,” the ONS said. Though the effects of the issues mentioned above haven’t been quantified, the report suggested the increase has been driven by “other health problems or disabilities,” “mental illness and nervous disorders,” and “problems connected with [the] back or neck.”

Legacy of austerity

Jonathan Portes, professor of economics and public policy at King’s College London noted that factors that hurt public health directly — such as increased waiting time for treatment — could have a knock-on effect: people may have to leave the workforce to care for sick relatives. (...)

Although the pandemic has greatly worsened the health crisis leaving a hole in the U.K. economy, the rise in long-term sickness claims actually began in 2019, and economists see several possible reasons why the country has been uniquely vulnerable.

Portes suggested that the government’s austerity policies — a decade of sweeping public spending cuts implemented after former Prime Minister David Cameron took office in 2010 and aimed at reining in the national debt — had a significant part to play in leaving the U.K. exposed. “The U.K. was particularly vulnerable because of austerity,” Portes said. “And support for those on incapacity and disability benefits was hollowed out in the early 2010s. More broadly, austerity has led to a sharper gradient in health outcomes by income/class.”

Inequality and surging waiting lists

That’s borne out in the national data: The ONS estimates that between 2018 and 2020, males living in the most deprived areas of England on average live 9.7 years fewer than those in the least deprived areas, with the gap at 7.9 years for females. (...)

In the aftermath of the pandemic, NHS waiting lists grew at the fastest rate since records began in August 2007, a recent House of Commons report highlighted, with more than 7 million patients on the waiting list for consultant-led hospital treatment in England as of September. However, the report noted that this isn’t a recent phenomenon, and the waiting list has been growing rapidly since 2012. “Before the pandemic, in December 2019, the waiting list was over 4.5 million – almost two million higher than it had been in December 2012, a 74% increase,” it said. “In other words, while the rise in waiting lists has been accelerated by the pandemic, it was also taking place for several years before the pandemic.”

Former Bank of England policymaker Michael Saunders, now a senior policy advisor at Oxford Economics, also told CNBC that the U.K. has been particularly badly affected by Covid in terms of severity, and that some of this may have been the result of the country’s higher rates of preexisting health conditions — such as obesity — which may have been exacerbated by Covid. “The U.K. is a relatively unequal country, so that may be part of the reason why even if we’ve had the same Covid wave as other countries, we might get a bigger effect on public health, because if you like you have a greater tail of people who would be worst affected by it,” he added.

Saunders suggested that any growth strategy from the government should include measures to address these health-care challenges, which are now inextricable from the labor participation rate and the wider economy. “It’s not just a health issue, it’s an economic issue”. (732 words)

TEXT 4 - Why is Britain’s health service, a much-loved national treasure, falling apart?

By Christian Edwards, CNN, Mon January 23, 2023 - Extracts

Most winters, headlines warn that Britain’s National Health Service (NHS) is at “breaking point.” The alarms sound over and over and over again. But the current crisis has set warning bells ringing louder than before. “This time feels different,” said Peter Neville, a doctor who has worked in the NHS since 1989. “It’s never been as bad as this.”

Scenes that would until recently have been unthinkable have now become commonplace. Hospitals are running well over capacity. Many patients don’t get treated in wards, but in the back of ambulances or in corridors, waiting rooms and cupboards – or not at all. “It’s like a war zone,” an NHS worker at a hospital in Liverpool told CNN.

These stories are borne out by the data. In December, 54,000 people in England had to wait more than 12 hours for an emergency admission. The figure was virtually zero before the pandemic, according to data from NHS England. The average wait time for an ambulance to attend a “category 2” condition – like a stroke or

heart attack – exceeded 90 minutes. The target is 18 minutes. There were 1,474 (20%) more excess deaths in the week ending December 30 than the 5-year average.

Ambulance staff and nurses have staged a series of strikes over pay and working conditions, with the latest walkout by ambulance workers happening Monday. More are planned for the coming weeks. (...)

While the NHS has suffered crises before, this winter has brought a new reality: In Britain, people can no longer rely on getting healthcare in an emergency.

Founded shortly after World War II, the NHS is treated with an almost religious reverence by many. Britons danced for it during the 2012 London Olympics and clapped for it during the pandemic. “Our NHS” is a source of national pride.

Now, it is coming unstuck. (...)

Some of these strains can be seen elsewhere in Europe. Doctors in both France and Spain have held strikes in recent weeks, as many countries face the same problems of providing care to an increasingly aging population – when inflation is at its highest level in decades. Yet there are fears that the NHS is in worse shape than its international peers, and CNN spoke with experts who said they fear they’re witnessing the “collapse” of the service.

So how did Britain get here?

Covid-19

When Covid-19 hit, the NHS went into full crisis-fighting mode, diverting staff and resources from across the organization to care for patients with the disease. But, for many in the NHS, Covid-19 remains a crisis from which they are yet to emerge.

Explanations for the current crisis “have to start with a consideration of Covid-19,” Ben Zaranko, an economist at the Institute for Fiscal Studies (IFS) whose work focuses on Britain’s health care system, told CNN. “There’s the simple fact that there are beds in hospitals occupied by Covid patients, which means those beds can’t be used for other things.” Covid also created a strain on the amount of work the NHS can do. “If you add up all the time that staff spend doing infection control measures, donning protective equipment and separating out wards into people with and without Covid ... that might impede the overall productivity of the system,” Zaranko said. Rates of NHS staff sickness are also considerably higher than they were pre-pandemic, according to IFS analysis.

But, again, Britain was not alone in battling the pandemic, yet it appears to have suffered a worse hit than comparable nations.

Capital expenditure

Even with the increase in funding since the pandemic, the UK is still playing catchup, after what critics say is more than a decade of underfunding the NHS.

Neville, a consultant in a hospital, judges 2008 the “best” he has seen the NHS in more than 30 years of working in it. By that time, the NHS had enjoyed nearly a decade of hugely increased investment. Waiting lists fell substantially. Some even complained about getting doctor appointments too quickly.

“When the Labour government came in in 1997, they injected considerably more money into the NHS. It enabled us to appoint an adequate number of staff and get on top of our waiting lists,” Neville told CNN.

But this level of investment did not last. In response to the 2007-2008 financial crisis, the Conservatives elected in the coalition government in 2010 embarked on a program of austerity. Budgets were cut and staff salaries frozen. For Neville, the ensuing decade saw a gradual “erosion” of the system: “Slow, subtle, but nonetheless happening.” (...)

During this period, capital expenditure – the amount spent on buildings and equipment – was especially low, according to the Health Foundation analysis. The UK has far fewer MRI and CT scanners per person than the Organisation for Economic Co-operation and Development (OECD) average, meaning staff often have to wait for equipment to become available. Hospital beds are particularly scarce. Over the past 30 years the number of beds in England has more than halved, from around 299,000 in 1987 to 141,000 in 2019. (...)

Social care

The bed shortage has been made even more acute by the fact that many of those in hospital no longer need to be there – there is simply nowhere else for them to go.

The problem is caused by a crisis in another sector: Social care. Patients that could leave the hospital end up staying there because they cannot access more modest care in a home setting and so cannot be safely discharged.

Health and social care are separate sectors in the UK system. Healthcare is provided by the NHS, whereas social care is provided by local councils. Unlike the NHS, social care is not free at the point of use: It is rationed and means-tested. There have long been calls to integrate the two systems, since a crisis in one system feeds through into the other.

“If you allow us to regain the enormous number of beds that are currently occupied by people awaiting social care, then I would be very confident that the immediate snarl-up in A&E and ambulances waiting outside would pretty much disappear overnight,” Neville said.

With an increasingly aging population – the latest census data show nearly 19% of the population of England and Wales is now 65 or older – demand for social care is increasing. But the sector is struggling to provide it in the face of staffing shortages, rising costs and funding pressures.

Care work can be grueling and underpaid. Most supermarkets offer a better hourly wage, analysis from the King’s Fund found. So, it is perhaps unsurprising that the sector reported 165,000 vacancies in August.

Staffing

The NHS is also reporting an alarming number of vacancies, with about 133,000 open positions as of September.

This points to a deeper crisis: Morale.

Jatinder Hayre, a doctor completing the foundation program at a hospital in East London, told CNN that morale is “at an all time low.” Staff are “stressed, fatigued, tired,” he said. “There doesn’t seem to be an end to this.”

A doom loop?

The concern is that these issues get worse the longer they go untreated.

When patients finally get seen, their treatments take more time, forcing those after them to wait even longer as they get sicker. “In terms of the system performance, it feels like we’re past the tipping point,” Zaranko said.

It is unclear how the NHS regains its footing. Some compare this crisis to a period in the 1990s when services were rapidly deteriorating. The NHS was in bad shape, but restored its levels of service after a decade of historically high investment while Labour was in power.

Injections of cash on this scale are unlikely to be replicated. The most recent budget announced by the government in November will see NHS England spending rise by only 2% in real terms on average over the next two years. (1307 words)

PART 3 – The Opioid Crisis – Tackling drug addiction

TEXT 5 - Arresting Michael K Williams’ alleged drug dealers won’t solve the US addiction crisis

Akin Olla, *The Guardian*, Fri 11 Feb 2022 (adapted)

I cried the night Michael K Williams joined the over 100,000 Americans who died of an overdose in 2021. When I heard that Williams, the actor best known for his role as Omar, the queer, gun-toting rogue in *The Wire*, had suffered an accidental overdose in his apartment, I felt a deep sense of dread. The knowledge that another Black man not too dissimilar from myself had passed before his time mingled in my mind with my bitter memory of the moment when I learned that my best friend, Joseph Rodriguez, had overdosed at the age of 19.

I am grateful, I suppose, that by the time Joe had died, in 2009, the public narrative around drug users had begun to evolve. Young suburban white kids had started dying, and the country quickly shifted to protect its most prized possessions. Teens were sent to rehab, and drug dealers, like those who allegedly sold Williams his final dose, were rounded up and blamed for what is clearly a broader societal issue.

Last week four men in Brooklyn were charged with having sold fentanyl-laced heroin to Williams and others. This hollow act is part of the problem. The US has long chosen mass incarceration as the solution to substance abuse. Arresting people didn’t prevent Williams’ overdose, and arresting more now won’t prevent future ones. (...)

There are many solutions that could have helped keep Williams alive. While it is unlikely that the US will rid itself

of many of the underlying drivers of drug addiction – such as violence, systemic racism and the inequalities of capitalism – anytime soon, the country, and the federal government in particular, has long ignored policy reforms that could help address the worst of our current addiction epidemic. The most important reform, decriminalization, has gained steam in some places, like Oregon, but remains far away as a federal reform. (...)

Rather than concentrating power in the police through criminalization, most of these policies involve treating drug users like human beings worthy of love and care. One of the simplest ways to save lives is to make drug testing kits easily available for drug users. Williams was reportedly poisoned by fentanyl, a synthetic opioid mixed into cocaine and heroin as a means for illicit manufacturers to increase profits. Drug testing kits, like fentanyl test strips, let consumers ensure that they know what they're putting into their bodies. While these strips are available for free in some places, such as New York City, they are still illegal in many states. (...)

Another potentially life-saving intervention? Supervised consumption sites. These are locations where people can consume drugs safely, with the support of medical staff that can ensure the purity of what is being used while being on call to intervene in the event of accidental overdoses. These locations can also connect people with treatment services and safer alternative drugs. If this all feels unfamiliar, think of bars as a crude version of these sites: bartenders administer doses to clients and can cut them off if they are too intoxicated. If anyone drinks too much, bartenders can call an ambulance and have them hospitalized. Creating robust supervised consumption sites could save lives, and destigmatizing those sites could save even more.

All of these interventions would be made more effective and possible if the federal government took the important leap to decriminalize the possession of small amounts of all drugs. Total decriminalization may seem extreme, but there is evidence that it could save lives, reduce drug use, and prevent more unnecessary incarceration and harassment of those who use drugs, particularly Black Americans. (...)

Portugal decriminalized all drugs, in small amounts, in 2001. The country has also radically expanded its capacity to treat substance use disorders. According to the US-based Drug Policy Alliance, overdose deaths in Portugal decreased by more than 80% after decriminalization. By contrast, in 2017, “there were more than 72,000 overdose deaths in the US. If the US overdose death rate were on par with Portugal’s, there would have been fewer than 800 overdose deaths that year.” By 2008, three-quarters of those suffering from substance use disorder in Portugal were in treatment.

Without a comprehensive federal plan that includes decriminalization, we may as well brace ourselves for many more deaths like Williams’. (710 words)

More on the example of Portugal here: <https://www.theguardian.com/news/2017/dec/05/portugals-radical-drugs-policy-is-working-why-hasnt-the-world-copied-it>

TEXT 6 - Overdoses are increasing at a troubling rate.

The Morning Newsletter, *The New York Times*, February 13, 2022 By German Lopez

A rising death toll

Drug overdoses now kill more than 100,000 Americans a year — more than vehicle crash and gun deaths combined. Sean Blake was among those who died. He overdosed at age 27 in Vermont, from a mix of alcohol and fentanyl, a synthetic opioid. He had struggled to find effective treatment for his addiction and other potential mental health problems, repeatedly relapsing.

Blake’s struggles reflect the combination of problems that have allowed the overdose crisis to fester. First, the supply of opioids surged. Second, Americans have insufficient access to treatment and other programs that can ease the worst damage of drugs.

Experts have a concise, if crude, way to summarize this: If it’s easier to get high than to get treatment, people who are addicted will get high. The U.S. has effectively made it easy to get high and hard to get help.

No other advanced nation is dealing with a comparable drug crisis. And over the past two years, it has worsened: Annual overdose deaths spiked 50 percent as fentanyl spread in illegal markets, more people turned to drugs during the pandemic, and treatment facilities and other services shut down.

Drug overdose deaths in the U.S.

Annual deaths ending in June of each year below

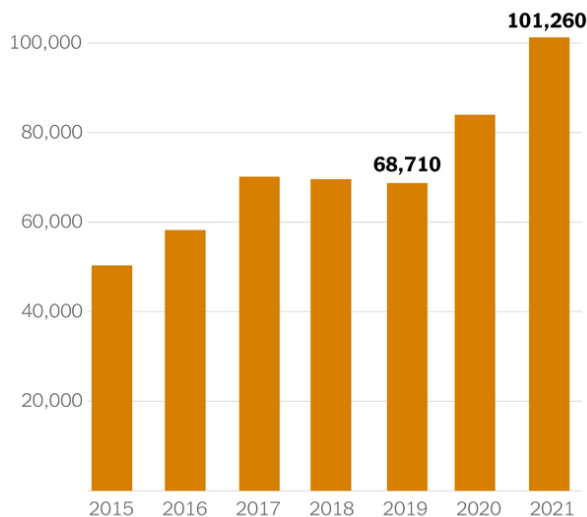


Chart shows provisional figures. | Source: Centers for Disease Control and Prevention

The path to crisis

In the 1990s, drug companies promoted opioid painkillers as a solution to a problem that remains today: a need for better pain treatment. Purdue Pharma led the charge with OxyContin, claiming it was more effective and less addictive than it was.

Doctors bought into the hype, and they started to more loosely prescribe opioids. Some even operated “pill mills,” trading prescriptions for cash.

A growing number of people started to misuse the drugs, crushing or dissolving the pills to inhale or inject them. Many shared, stole and sold opioids more widely.

Policymakers and drug companies were slow to react. It wasn’t until 2010 that Purdue introduced a new formulation that made its pills harder to misuse. The C.D.C. didn’t publish guidelines calling for tighter prescribing practices until two decades after OxyContin hit the market.

In the meantime, the crisis deepened: Opioid users moved on to more potent drugs, namely heroin. Some were seeking a stronger high, while others were cut off from painkillers and looking for a replacement.

Traffickers met that demand by flooding the U.S. with heroin. Then, in the 2010s, they started to transition to fentanyl, mixing it into heroin and other drugs or selling it on its own.

Drug cartels can more discreetly produce fentanyl in a lab than heroin derived from large, open poppy fields. Fentanyl is also more potent than heroin, so traffickers can smuggle less to sell the same high.

Because of its potency, fentanyl is also more likely to cause an overdose. Since it began to proliferate in the U.S., yearly overdose deaths have more than doubled.

No one has a good answer for how to halt the spread of fentanyl. Synthetic drugs in general remain a major, unsolved question not just in the current opioid epidemic but in dealing with future drug crises as well, Keith Humphreys, a Stanford University drug policy expert, told me.

Other drug crises are looming. In recent years, cocaine and meth deaths have also increased. Humphreys said that historically, stimulant epidemics follow opioid crises.

Neglecting solutions

A robust treatment system could have mitigated the damage from increasing supplies of painkillers, heroin and fentanyl. But the U.S. has never had such a system.

Treatment remains inaccessible for many. Sean Blake’s parents, Kim and Tim, drained savings and retirement accounts and college funds to pay for treatment. Like the Blakes, many families spend thousands of dollars to try to get loved ones into care. Health insurers often refuse to pay for treatment; legal requirements for insurance coverage are poorly enforced.

When treatment is available, it’s often of low quality. The Blakes frequently found that providers were ill-equipped and overwhelmed. Some seemed to offer no evidence-based care at all.

Across the country, most facilities don't offer effective medications; instead, they often focus on unproven approaches, like wilderness or equine therapy.

Some are just scams. One, called the "Florida shuffle," has in recent years sent patients from facility to facility without offering real treatment — taking advantage of people desperate for help.

Beyond treatment, the U.S. lags behind other countries in approaches like needle exchanges that focus on keeping people alive, ideally until they're ready to stop using drugs. The country also could do more to prevent drug use and address root causes of addiction, a recent report from Stanford University and The Lancet found.

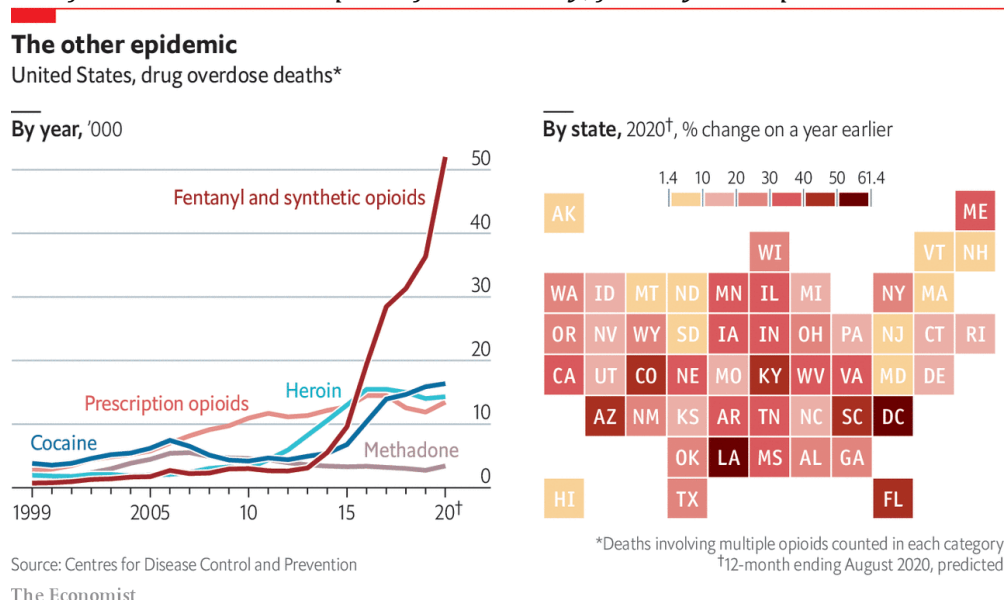
The solutions are costly. A plan that President Biden released on the campaign trail, which experts praised, would total \$125 billion over 10 years. That's far more than Congress has committed to the crisis. Lawmakers haven't taken up Biden's plan, and the White House hasn't pushed for it, so far embracing smaller steps.

But inaction carries a price, too. Overdose deaths cost the economy \$1 trillion a year in health expenses, reduced productivity and other losses, a new government report concluded — equivalent to nearly half of America's economic growth last year.

TEXT 7 - Opioid deaths in America reached new highs in the pandemic

Daily chart, *The Economist*, March 30th 2021

Once a problem confined to the eastern part of the country, fentanyl has spread west



LAST YEAR was a woeful time for people suffering from a drug addiction. Government shutdowns brought job losses and social isolation—conditions that make a transporative high all the more enticing. Those who had previously used drugs with others did so alone; if they overdosed, no one was around to call for help or administer naloxone, a medication that reverses opioid overdoses.

Fatal overdoses were marching upwards before the pandemic. But they leapt in the first part of last year as states locked down, according to provisional data from the Centres for Disease Control and Prevention. Deaths from synthetic opioids—the biggest killer—were up by 52% year-on-year in the 12 months to August, the last month for which data are available. Those drugs killed nearly 52,000 Americans during the period; cocaine and heroin killed about 16,000 and 14,000, respectively (see chart). Once fatalities are fully tallied for 2020, in a few months' time, it is likely to be the deadliest year yet in America's opioid epidemic.

The scourge is worsening in the western part of the country. Deaths from synthetic opioids such as fentanyl rose by 110% year-on-year in the 12 months to August in 16 states west of the Mississippi River. Fentanyl first appeared in Appalachia and New England. It mixes easily with the white-powder heroin consumed there but not with the gummy black tar variety more commonly found in the west. Its westward migration was not inevitable. Markets can vary even across short distances: fentanyl dominates the illicit opioid market in Estonia, for example, but not that in Finland, only a ferry ride away.

The toll from fentanyl shows no sign of slowing. The drug's potency makes it easy to misjudge dosage, especially for new users without a tolerance. Increasingly, counterfeit prescription pills, resembling oxycodone tablets or benzodiazepines such as Xanax, contain fentanyl. Brad Finegood, an adviser to the public-health department for Seattle and King County, says he has seen lots of unsuspecting people casually take a fentanyl-laced pill and die. Deaths from fentanyl in King County, which includes Seattle, rose from three in 2015 to 176 last year. Mr Finegood's office has launched a campaign warning people not to be "faked out" by knock-off pills.

Thanks to the pandemic, addicts have better access to treatment through telemedicine. Some states allowed doctors to prescribe methadone, an artificial opiate used to treat heroin addiction, to be taken at home, saving patients trips to the clinic. Such innovations will probably outlast covid-19. Lawmakers want the Biden administration to ease prescription rules around buprenorphine, another opioid substitute, by waiving a requirement that doctors undergo special training to prescribe it.

Though it commands less attention now because of covid-19, America's opioid epidemic is getting worse. "Picking up the pieces of the crisis is going to be a heavier lift now", says Bryce Pardo, a researcher at the RAND Corporation, a think-tank. The country will have to reckon with a deadlier drug supply in future.

TEXT 8 - Etats-Unis: les grands laboratoires en procès pour la crise des opiacés

La Croix, 21 septembre 2019

Des milliards de dollars sont en jeu: un procès retentissant va s'ouvrir lundi à Cleveland avec plusieurs géants pharmaceutiques sur le banc des prévenus, accusés d'avoir attisé la crise des opiacés et ses dizaines de morts par overdose chaque jour aux Etats-Unis.

Après l'échec vendredi d'une tentative de conciliation de dernière minute entre les grands distributeurs et les plaignants, ce procès pourrait être le plus dramatique et coûteux qu'ait connu le pays depuis celui contre les compagnies de tabac dans les années 1990. A l'époque, il avait été prouvé que les géants du secteur avaient cyniquement dissimulé les dangers de la cigarette pour faire davantage de profits.

De la même manière, la plainte dans ce premier procès fédéral relatif à la crise des opiacés affirme que producteurs et distributeurs étaient tout à fait conscients des dangers que représentaient leurs antidouleurs, notamment le fentanyl, cinquante fois plus puissants que l'héroïne et donc puissamment addictifs, avec lesquels ils ont inondé le marché ces 15 dernières années. Ignorant les signaux d'alarme, ils en ont tiré des profits faramineux.

La procès devant un tribunal fédéral de Cleveland, dans l'Etat de l'Ohio (nord), rassemble 2.300 plaignants, des Etats, des comtés, des municipalités ainsi que des tribus indiennes. En face, quelques-uns des géants mondiaux de la distribution de médicaments: Cardinal Health, Amerisource Bergen et McKesson Corp, le fabricant israélien de médicaments génériques Teva, la chaîne de pharmacies Walgreen Boots Alliance, ainsi qu'un petit distributeur de l'Ohio, Henry Schein.

- Bébés nés accros -

Le laboratoire Johnson & Johnson a de son côté négocié un accord amiable de 20,4 millions de dollars avec deux comtés de l'Ohio qui font partie des 2.300 plaignants. En août, la firme avait déjà reçu l'ordre de

payer 572 millions de dollars à l'Oklahoma pour compenser les dépenses que cet Etat du centre du pays a dû engager pour faire face à la crise des opiacés.

Le juge fédéral Dan Polster a fait pression pendant des mois pour qu'un accord amiable soit trouvé, espérant pouvoir éviter le long et douloureux procès qui s'ouvre lundi. Mais les parties n'ont pas pu parvenir à un accord, sur une base proposée de 48 milliards de dollars, dont 18 milliards en liquide, après une dernière rencontre vendredi entre les représentants des six entreprises accusées et les avocats des plaignants.

Quatre Etats étaient favorables à l'accord de règlement proposé. Mais d'autres, ainsi que de nombreux petits plaignants, n'étaient pas satisfaits du montant total ni de la partie distribuée en cash notamment.

Les quatre Etats voulaient ainsi que l'argent leur soit versé dans leur budget général, qu'il pourraient ensuite utiliser comme bon leur semble. Mais les autres Etats et les municipalités veulent que les fonds leur soient versés pour permettre de traiter directement les conséquences de la crise: pour financer des systèmes de santé et de sécurité sociale surchargés, permettre à des familles endettées en raison de l'addiction de certains de leurs membres de se remettre à flot, de soigner des bébés nés déjà accros aux antidouleurs...

- 400.000 décès -

«Tous les experts ayant étudié ce problème estiment que notre pays sera confronté aux retombées de ce type de drogues pendant des années», a souligné la semaine passée le procureur général de l'Ohio, Dave Yost. «Tout l'argent récupéré doit être utilisé pour régler ce problème et ne doit pas être utilisé à autre chose».

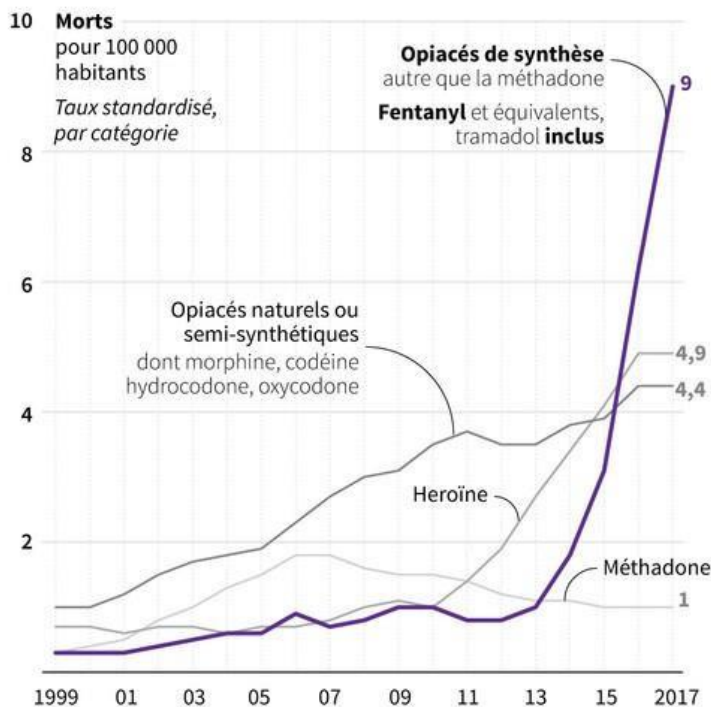
Le montant de l'accord n'aurait représenté qu'une partie du coût réel de cette épidémie des opiacés, qui a provoqué la mort de 400.000 personnes entre 1999 et 2018 et fait encore plus de 130 morts par jour. Une étude publiée la semaine passée a estimé que la crise avait coûté au moins 631 milliards de dollars entre 2015 et 2018. Pour cette année seulement, des

montants de 172 à 214 milliards de dollars sont évoqués.

Cependant, les communautés subissent souvent une intense pression financière et ne veulent pas passer des années à se battre devant les tribunaux: cela donne aux laboratoires et distributeurs un premier élément sur lequel s'appuyer.

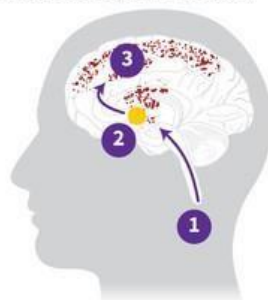
L'addiction mortelle des Américains aux opiacés

68 637 morts par overdose en 2018, selon des estimations provisoires



Les effets des opiacés

Stimulent le système de récompense du cerveau



- 1 Introduits par injection, patchs, pastilles ou poudre inhalée
- 2 Se concentrent près du *noyau accumbens*, s'attachent au *récepteur opioïde* pour libérer la dopamine
- 3 La dopamine active les zones cérébrales de récompense dans le *lobe frontal*.
Elle engourdit la douleur et peut provoquer l'euphorie

Comment les Américains s'en procurent

Légalement

- Produits pharmaceutiques autorisés et obtenus avec une ordonnance
dont l'oxycodone, la morphine, le fentanyl

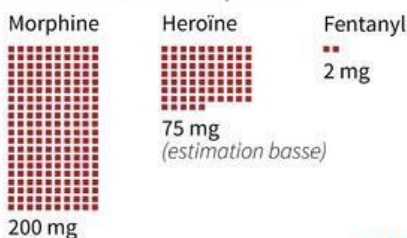
Illégalement

- Vol ou détournement de prescription
- Fentanyl non-pharmaceutique produit dans des laboratoires clandestins
- Narcotiques mélangés à des médicaments obtenus sous ordonnance

Source : CDC National Center for Health Statistics

Le pouvoir des opiacés synthétiques

Comparaison des doses mortelles
En moyenne pour un adulte sans accoutumance au produit



© AFP

The New York Times

The Morning

March 8, 2023 By Emily Bazelon, Staff Writer, NYT Magazine

Since Roe v. Wade ended, the battle over legal abortion has largely shifted to access to pills.

Becoming mainstream

Since the end of Roe v. Wade last June, access to abortion pills has muted some of the effect of the severe restrictions on abortion that 14 states have imposed. Abortion opponents have responded by trying to reduce access to those pills. The resulting struggle has become the main battle to watch in the post-Roe landscape.

Today's newsletter examines the latest developments — including a court ruling expected soon — and explains what's likely to happen next.

How pill access grew

The most effective and safest method of medication abortion requires two drugs. The first, mifepristone, ends the pregnancy. The second, misoprostol, causes cramping and bleeding to empty the uterus, like a miscarriage. In approving this regimen in 2000, the F.D.A. imposed restrictions on mifepristone because of questions then about its safety. Among other rules, patients had to visit a clinic, doctor's office or hospital to receive the medication. In 2021, during the pandemic and after President Biden took office, the F.D.A. lifted the in-person requirement. The shift opened a new avenue for telemedicine abortions. In about 30 states, women could legally end their pregnancies at home, with pills prescribed through an online consultation and mailed to them. If they had questions, they could call a private national hotline to talk to medical professionals.

After the Supreme Court overturned Roe last year, demand surged for abortion pills by mail. An international organization, Aid Access, provided prescriptions for the pills from European doctors, often filled in India, to patients in states with bans. Overseas pharmacies, advertising online, also ship abortion pills without a prescription to every state.

These offshore routes to access, which operate in a legal gray area in states with abortion bans, will probably remain open. But they carry potential legal risks for women and it can take a few weeks for the drugs to arrive from overseas, a delay that can create problems since medication abortion is more effective and less likely to cause complications early in pregnancy.

How opponents are fighting back

Opponents of abortion have a bold counterstrategy. They want to block the use of mifepristone not only in states with abortion bans but also nationwide.

In November, anti-abortion organizations and doctors sued in Texas to challenge the F.D.A.'s approval of medication abortion 23 years ago. They argue that mifepristone is unsafe. In fact, research has clearly established the safety and efficacy of the F.D.A.'s approved regimen. Serious complications are possible but rare. So, on the merits, the suit may seem far-fetched.

But the plaintiffs made sure to file suit (a practice some experts call "judge shopping") in a division of a Federal District Court with one judge, a Trump appointee named Matthew Kacsmaryk who has longstanding views against abortion. If he blocks the F.D.A.'s approval, it would be unprecedented, experts said in an amicus brief.

The drugstore battle

Separate from the Texas case, the national divide over abortion is playing out in pharmacies.

In January, Walgreens, CVS and other companies said they would apply for a newly available certification from the F.D.A. to dispense both drugs in states where abortion remains legal. But 21 Republican attorneys general — including four in states where abortion is still legal — threatened legal action against the pharmacy chains.

Walgreens promised not to provide the pills within those states.

The chains see an opportunity for another new market. Their interest signals that medication abortion is becoming mainstream. In large parts of the country, that's unwelcome.

What's next

Other lawsuits are trying to protect access to abortion pills. One, filed by states where Democrats are in power, asks a judge to affirm the F.D.A.'s approval of mifepristone and remove the remaining restrictions on the medication.

Another, by a U.S. manufacturer of the medication, is challenging state bans on the pill.

For now, mifepristone and misoprostol remain widely and quickly available in states where abortion is legal. And the medications can be obtained through avenues like Aid Access, with a delay, in states where abortion is not legal.

Taken together, the drugs are more than 95 percent effective, research shows. Alternatively, people can take only misoprostol in higher doses, but this method is 88 percent effective, according to a study in the U.S. published last month, and is also more likely to cause side effects like nausea and diarrhea.

A ruling from Judge Kacsmaryk could come any day. If he issues a nationwide injunction to block the provision of mifepristone, his ruling could increase health risks and physical discomfort for women.

A nationwide injunction would be immediately appealed.