



Deaths of Despair: How Connecting Opioid Data Extends the Possibilities for Suicide Research

Surveillance and Data — Blogs and Stories

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Suicide, drug overdose, and alcohol-related deaths – known together as “deaths of despair” – are increasing across the United States.

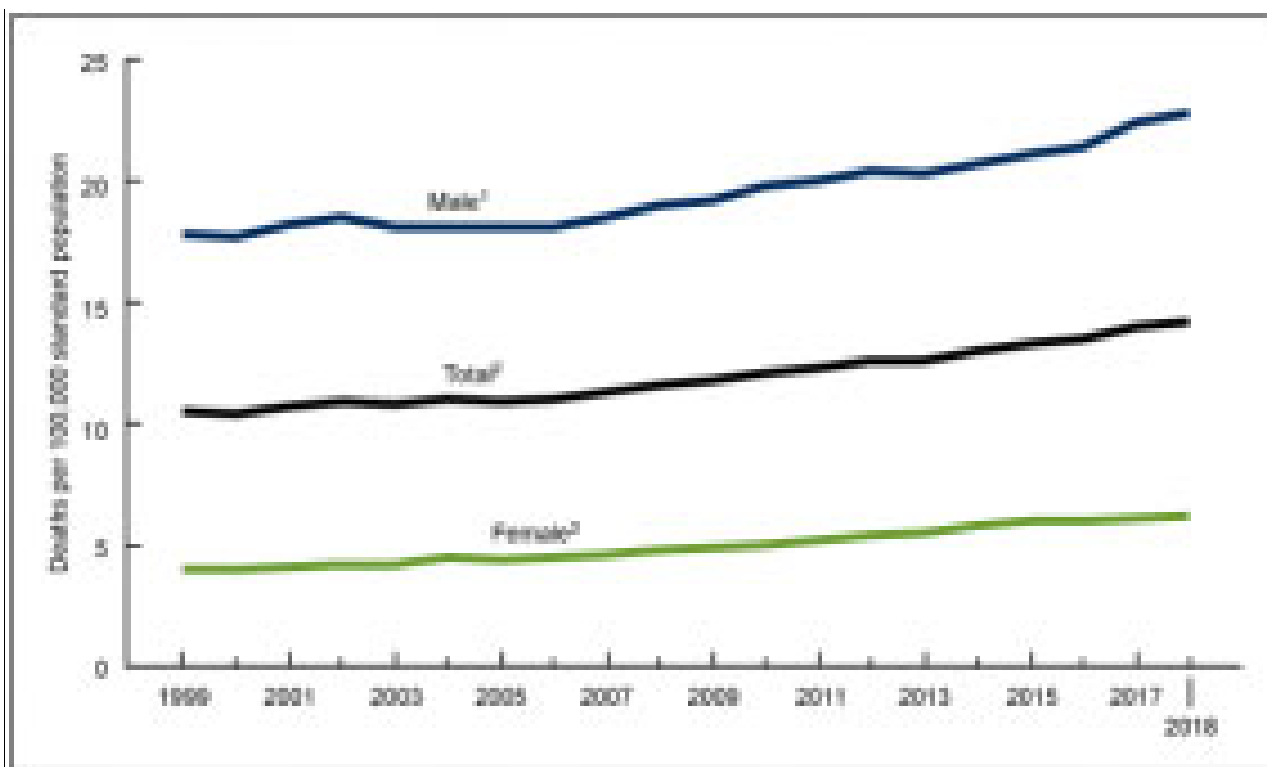
At the National Institute of Mental Health (NIMH), we are using research to help turn the tide. As a research agency, we often uncover clues – and new questions – by examining [mortality data](#) from the National Vital Statistics System. The equation is simple: the more complete death record information we have, and the faster we have it, the better the research we can do to save lives.

NIMH is working to identify the most potent, and modifiable, risk factors for suicide and suicide attempts. Depression can be one, but it’s certainly not the only path to suicide.

NIMH also seeks to understand the long-term impacts of preventive interventions. We want to know more about what happens to people before and after a suicide attempt, as well as how we can best reach people earlier – or even before they’re at higher risk. What if, for instance, we could reduce suicide rates of the future by helping kids develop and sustain healthy coping mechanisms early?

How can work on opioid data help prevent suicides?

Age-adjusted suicide rates by sex United States 1999–2018



Age-adjusted death rates were calculated using the direct method and the 2000 U.S. standard population.

SOURCE: NCHS, National Vital Statistics System, Mortality (NVSS-M).

The ultimate goal for NIMH suicide research is to prevent attempts and death. We need data to pinpoint where interventions are needed and reliable methods to track their effectiveness. We also need [rapid release surveillance](#) capabilities to give us a more immediate view of what's happening.

From a public health perspective, we know that suicides and drug overdose deaths share risk factors. From a data perspective, opioid deaths and suicides face similar challenges. For example, investigations into deaths by suicide, like drug overdose death inquiries, often require more extensive effort to determine exact causes and contributing factors. Toxicology reports and information-gathering can take time, while disconnected or outdated data systems can slow the process down even more.

Given these shared challenges, improvements made around drug overdose mortality data may also be applied to yield better information on suicide.

Boots-on-the-ground problem solving

Several years ago, NIMH was fortunate to work with the National Center for Health Statistics to include suicide as a point of focus for the [Vital Statistics Rapid Release](#) system they were building. It was through this collaboration that we became aware of an [ambitious project](#) to automate and improve the processing and linkage of death record information sources.

While the current work is mainly focused on opioids, it has a lot of potential applications for suicide prevention and intervention development. What's unique about the project is that it brings together a broad "Implementers' Community" of people who touch mortality data at every step – from medical examiners who fill out the death certificates, to state and local registrars, to data scientists and researchers who pull all the information together and analyze it. The Implementers' Community gathers perspectives from everyone to bring challenges to light and share strategies for tackling them.

At Implementers' Community meetings, IT innovators and developers listen to problems and offer hands-on solutions in real time. For example, death record data travels through a lot of different systems and platforms that don't speak a common language. The IT innovators were able to pull information from one platform and link or combine it with data from another platform, bypassing the need for all systems to be exactly the same in order to be interoperable and to communicate with one another. This is a huge step toward making data from a variety of sources move faster and in harmony.

Watching this innovative process unfold brings new possibilities to mind: prospectively linking research data to health records and, ultimately, death records could provide a way for us to observe and quantify the short- and long-term impacts of our suicide prevention and intervention research.

You Can't Prevent What You Can't See

Efforts to modernize drug overdose mortality data will pave the way for us to see more, and therefore, to do more. Indeed, the process the Implementers' Community is perfecting now has the potential to identify related (and perhaps common or modifiable) precursors for a variety of causes of death in the future.

Tremendous progress has already been made toward speeding up the availability of mortality data at the national level. The work of this Implementers' Community will be a powerful contribution to death investigations, to research and – by extension – to advancing our understanding of suicide.

Dr. Lisa Colpe is a scientist on the frontlines of suicide research. She comes from the [National Institute of Mental Health](#), where she is part of a trans-institute suicide research team.

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