Dramatic increases in opioid overdose deaths due to fentanyl among young people in Washington State

Caleb J. Banta-Green, PhD, MPH, MSW and Jason Williams, PhD

Overdose deaths that involve fentanyl are increasing dramatically in WA State. This trend is particularly concerning among young adults (those under age 30) who appear to be using fentanyl at much higher rates than ever before according to anecdotal reports from health care providers and families. To understand more about the potential impact of fentanyl on overdose death rates among young adults, we examined death certificate data from the Washington State Department of Health.

How we examined the data
We compared drug overdose deaths (poisonings) between decedents under 30 and those aged 30 and older that involved heroin, commonly prescribed opioids (e.g., methadone, oxycodone, codeine, morphine) or fentanyl and other synthetic opioids (e.g., pethidine, tramadol). In this brief, the term “fentanyl” includes the broader category of fentanyl, fentanyl analogues (e.g., carfentanil, acetyl fentanyl) and other synthetic opioids. The fentanyl found in these deaths is most likely to be illicitly manufactured as this is the type almost universally present in statewide police evidence testing and mortality analysis in King County, WA. All deaths are among Washington residents that occurred in the state of Washington between 2010 and 2020. Further details on coding and the data source are available online.

What the data show
The total number of opioid-involved overdose deaths during this period was 8,362. The graph below shows the rate of opioid-involved overdose deaths per 100,000 population for those under age 30 compared to those 30 and older. Some people had more than one opioid type present at the time of death. Each opioid type is shown in a different color. Solid lines represent those under 30 and dashed lines are those 30 or older.

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Change in most common opioid type in deaths among those under 30

Looking at the solid lines (those under 30), we see that from 2010-2011, commonly prescribed opioids (orange solid line) were the most frequent opioid type found in young adult deaths. In 2012, however, heroin (solid green line) surpassed the declining trend in commonly prescribed opioids. From 2013 onwards the rate for heroin among young adults continued at slightly above 2/100,000 while the rate for commonly prescribed opioids was slightly less than 2/100,000. Fentanyl-involved deaths among those under 30 (purple solid line) first increased in 2016. By 2019 fentanyl surpassed the other opioid categories in overdose deaths of those under 30 with a rate of 4/100,000 that then doubled to 8/100,000 in 2020.

Rate of young adult deaths compared to older adults

Looking at the dashed lines (those 30 and over) within opioid type, we see that the rates of death from either heroin or commonly prescribed opioids have typically been much higher for those 30 and older. However, the fentanyl-involved overdose death rates for those under and over 30 have been more similar. This is striking because the mortality rate for most causes of death is substantially higher for older populations.

Polysubstance use

Detailed analyses of drug deaths (available at https://adai.uw.edu/wadata/heroin_versus_fentanyl.htm#deaths) show that the majority of opioid deaths also involve other drugs. Fentanyl-involved deaths, however, were less likely to involve other drugs than heroin-involved deaths. From 2018-2020, about three quarters (76%) of those who died from an overdose involving heroin without fentanyl had another drug present at the time of death, compared to only 59% of deaths involving fentanyl without heroin. Those who died with fentanyl, without heroin, were 35 years of age on average compared to 41 for those who died with heroin, without fentanyl.

Implications of fentanyl for public health

Fentanyl-involved death trends are unlike those seen with either heroin or commonly prescribed opioids in Washington State over the past decade (and the decade prior which saw the rise of commonly prescribed opioids). Fentanyl-involved deaths have increased rapidly and with a very similar rate for those under and over 30. These facts have important implications for public health for several reasons described below.

Availability of fentanyl

“There’s no heroin in the city, only these stupid pills.” Young adult in Seattle, June 2021

At the time of this report, most illicit fentanyl in Washington State is in tablet form, made to look like a legal prescription opioid pill (see photo). Fentanyl is widely available and inexpensive. Starting in 2021 powdered fentanyl has become more common in the local drug supply. Many people who had previously been using heroin (most often those age 30 and over) have switched to fentanyl as their main opioid locally. This switch began several years earlier on the East Coast.

Smoking versus injecting

Fentanyl pills can be swallowed, yet to get a stronger effect more rapidly, many move quickly from taking fentanyl orally to snorting or smoking. Based on reports by people who use fentanyl, service providers who work with people who use fentanyl, and death scene investigators, smoking appears to be the predominant way people are using fentanyl. Injecting fentanyl, in either pill or powder form, may be more common among those who previously injected heroin. Because smoking is a fast, efficient way to use fentanyl and drug injection is
highly stigmatized, young people newer to opioid/fentanyl use may not have a motivation to try or progress to injecting. **Syringe service programs are well-positioned to engage this younger population but will need additional resources, supplies, and strategies to extend their reach beyond people who primarily inject opioids.** Harm reduction services oriented towards people who do not inject drugs may need to be expanded to compliment syringe service programs and provide more access.

**Fentanyl is a high risk for rapid addiction and overdose**
Fentanyl is also strongly associated with **much higher rates of fatal overdose among young adults than other forms of opioids** in the recent past. A pill that looks like a legal prescription opioid may provide a false sense of safety, especially among younger people who are less experienced with drug use and who, in general, tend to underestimate personal risks compared to older adults.

A very small amount of fentanyl produces a very strong effect quickly (often within seconds) that also goes away quickly (within minutes). **The rapid and short effect of fentanyl means that it is has very high addiction potential as well as very high overdose potential.** Because fentanyl causes rapid tolerance, people who use it regularly will quickly need more drug to get equal effect. Younger adults, in particular, may believe they cannot “become addicted” to fentanyl because they are healthy, using a pill that does not look illegal, and they are not injecting it. However, many people are quickly becoming addicted to opioids who have used no opioid other than fentanyl and have never injected it. For those who are using fentanyl regularly and having bad effects (e.g., overdose, loss of control over use, and/or craving) they may well have opioid use disorder. **Fentanyl is on a trajectory to increase opioid addiction and overdose among young adults and replace heroin as the predominant opioid among those 30 and older.**

**What we can do**
Fentanyl use and overdose deaths appear to be occurring primarily among three groups:

- young adults inexperienced with opioids;
- young adults with rapid onset opioid use disorder (addiction); and
- older adults with ongoing opioid use disorder (who are often switching from heroin).

While we do not know the size or proportions of these three different groups of people using fentanyl, there are several important strategies to address the urgent consequences of fentanyl use, especially among youth and younger adults.

**Learn from youth in their own words**
Hear directly from youth and young adults about their fentanyl use and services they use to reduce harms associated with their use from these videos: [https://adai.uw.edu/transforming-our-communities/](https://adai.uw.edu/transforming-our-communities/)

**Reduce harms and overdose**
For those snorting, injecting or smoking fentanyl, it is important that they use safe, clean equipment to lessen physical harms and risk of infectious disease (e.g., hepatitis C, HIV). Harm reduction programs offer a wide array of education, supplies, onsite healthcare and/or referral and linkage to community services: [https://www.doh.wa.gov/YouandYourFamily/DrugUserHealth](https://www.doh.wa.gov/YouandYourFamily/DrugUserHealth).

Anyone who uses fentanyl/opioids, along with their friends and family, should know how to prevent an overdose, recognize the signs of overdose, and know how to respond and use the overdose reversal drug, naloxone. Information about opioid overdose, fentanyl, and how to get naloxone can be found here: [https://stopoverdose.org/section/fentanyl/](https://stopoverdose.org/section/fentanyl/).
Help individuals access treatment for opioid use disorder
There are very effective treatments to help people manage opioid use disorder and gain more control of their lives.

- Opioid use disorder and treatment information https://www.learnabouttreatment.org/.
- Understanding and Supporting Adolescents with an Opioid Use Disorder is an eight-page overview for providers working with adolescents and young adults with opioid use disorder, as well as loved ones of adolescents who use opioids. https://adai.uw.edu/pubs/pdf/2021AdolescentsOUD.pdf.

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ii https://adai.uw.edu/wadata/deaths.htm

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