



A FATAL DOSE IN 2 MILLIGRAMS: FENTANYL AND NATIONAL SECURITY

By Heidi Munro and Ron Granieri November 3, 2020
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Ron Granieri: Welcome to A Better Peace, the War Room podcast. I'm **Ron Granieri**, Professor of History at the Department of National Security and Strategy at the U.S. Army War College and Podcast Editor of the War Room. It's a pleasure to have you with us. For the past decades, the United States has struggled with an ongoing opioid crisis, initially sparked by the widespread use of prescription opioids, the crisis has deepened through the introduction of synthetic products. What the Centers for Disease Control refers to as the "third wave" of the opioid crisis began in 2013 with significant increases in the overdose deaths involving synthetic drugs, particularly illicitly manufactured fentanyl. The market for illicitly manufactured fentanyl continues to change, and it can be found in combination with heroin, counterfeit pills and cocaine, but in 2018, more than 31,000 deaths involving synthetic opioids occurred in the United States, which is more deaths than from any other type of opioid. Synthetic opioid involved death rates increased by 10% from 2017, 2018 and accounted for 67% of opioid involved deaths in 2018, the last year for which we have full data. Fentanyl's significance in this opioid crisis is due not only to its deadly properties, but also because a great deal of the fentanyl entering the United States comes from China. According to the U.S. International Trade Commission, China was the source of 97% of inbound shipments of high purity fentanyl during 2016 and 2017 and remains a primary source. This has international complications that have reached the highest levels. It is appeared on the agenda of meetings between President Trump and Chinese President Xi Jinping. Xi had promised to ban the Chinese export of fentanyl as of May 1st, 2019, but the problem has not gone away. How should we understand the role of fentanyl in the opioid crisis and its role in the international drug trade in general and U.S.-Chinese relations in particular? Our guest today, **Lieutenant Colonel Heidi Munro**, is deeply familiar with these topics and joins us to discuss them. A graduate of the U.S. Army War College, Class of 2020, Lieutenant Colonel Munro is a member of the Idaho Army National Guard where she has served for nearly 20 years. Currently acting as the state's joint medical planner for COVID-19, she is also the administrative officer for the medical detachment and full-time clinician for the Office of the State Surgeon. In this position, she advises the Assistant to the Adjutant general in all aspects of medical readiness, health care, medical personnel, medical operational and mobilizational issues and medical training pertaining to the state. She works closely with the Air National Guard medical team as well as reservists and active component soldiers assigned in the Great State of Idaho. So, coming to us from Idaho is Lieutenant Colonel Munro. Thank you for joining us today. Welcome to A Better Peace.

Heidi Munro: Thank you, Ron. First of all, thank you for reading my paper and for finding it intriguing enough to talk about on your podcast. I'm really excited to do this. You know, I graduated in June, but I have not stopped thinking about the topic of illicit fentanyl.

RG: Well, this is good because it's a very interesting and important topic and it is another way for us here at A Better Peace to talk about it and to highlight the work of students at the Army War College, all of whom produce what we call a Strategy Research Project, a major research project at the end of their year of study and yours was indeed on fentanyl. So, I want to ask you, how did you come to the study of this problem?

HM: So, it came about kind of accidentally.

RG: As all great academic adventures do.

HM: Yes, I didn't have an idea for a project at the start of last year. Some people go into the program already knowing what they want to research. I did not have that. During one of our classes, the strategic leadership course in early fall, we were talking about complex adaptive problems and different ways to go about solving them. One of the three topics we talked about was the opioid epidemic in America, and I thought, well, I know quite a bit about this already, and I especially have been watching it from the National Guard and Reserve component side of the crisis, so I thought I would write about the opioid epidemic and particularly the increase in overdose deaths. Well then, at the same time in another class in our national security class, we were learning about the nature and character of war, about near peer adversaries, and in particular about something called grey-zone warfare, particularly with China and Russia. So while I was taking both of those classes and starting to research my opioid topic, I learned that nearly all of the opioid overdoses were actually from a drug called illicit fentanyl, and that over 90% of that fentanyl comes from China. So, when I was thinking about complex problems and then at the same time grey-zone warfare, I wondered in my mind if there was a connection between the two. So that led me to research it.

RG: The audience has heard your biography, but just to clarify a couple of things for people who might not be familiar with the National Guard, you are active duty National Guard, so this is your full-time job, correct?

HM: Correct.

RG: So, were you always in the medical field in the Guard?

HM: Yeah.

RG: So, in other words, this public health question, you are familiar with dealing with public health questions even before you came to the War College?

HM: Definitely, and I've been kind of on top of the opioid crisis since I started medicine in the 90s. I was at the initial onset of the drug reps coming around trying to get you to prescribe their oxycodone and hydrocodone. So, this is part of who I am as a provider.

RG: Right, well, and an interesting way that you come to the War College and it allows you to or encourages you to take a familiar problem but to look at it in slightly different ways or to enrich your understanding of it. So, we think about this as a public health issue, but also as a national security issue. I want to look at each of those parts separately first and then pull them together. So, one is generally, how would you characterize the relationship of fentanyl to larger drug problems in this country? We've talked about the numbers of deaths, but how should we understand what makes fentanyl different or special or anything in dealing with our drug problems in the country?

HM: Yeah, so you mentioned it briefly in your introduction, and I mentioned it a little bit about my civilian practice. I started medicine in the 90s when we were just beginning to prescribe opioids such as hydrocodone and oxycodone with the thought that anyone that has pain should have it treated. And so there was this overprescribing of these narcotic medications with the assumption that they were not addictive and so probably 5-10 years in, it became very clear that they were very addictive. And so, the DEA started to crack down, the Board of Medicines started to crack down, they started limiting who could prescribe these medications. And by that time, people had become addicted to the medicine, so it became harder to get prescription medicines so people that were addicted started going to the streets and originally, trying to buy the prescription drugs on the street, and when they couldn't find it, they turned to something called black tar heroin that was introduced probably around the 2000s, 2010 mark. And so the prescription medicine was the 1st wave of the opioid epidemic, and then this black tar heroin became the 2nd wave.

RG: And so where did fentanyl come from? Leaving aside the question of whether it physically comes from China, which we're going to talk about in greater detail, but just how does fentanyl emerge? Are there legitimate uses for fentanyl that brought it onto the market before it began to be used illicitly for addicts of opioids?

HM: Yeah. The 1st wave and the 2nd wave that we've talked about. Then, people started going not only to the street, but they started going online to look for different ways to get this pharmaceutical hydrocodone, oxycodone. And also, in that first wave of prescription medication, hydrocodone, oxycodone, they were for moderate to severe pain after surgery or those kind of things. Well, there's another product called fentanyl that was saved for the most severe pain for cancer patients, hospice patients, childbirth, inpatient surgeries. It was mostly confined to the hospitals until that first wave in the early 90s. They started with a patch that you could use for really high severe pain patients, and the reason they used it on a patch is because it was so potent they didn't want you to take a pill and then you get all the effect at once or have the chance of overdosing on it, so they put it on a slow release patch.

RG: Gotcha.

HM: There was the legitimate fentanyl and then that started going to the street. Well, with the onset of the internet, people started looking for that hydrocodone, oxycodone and then eventually fentanyl on the internet. You could just do a Google search and bring up fentanyl and be able to buy it directly from China. So that's when it originally started coming to America. You could buy it, and have it shipped directly from China through the mail.

RG: Heidi, you mentioned that, in its official form, fentanyl is often given as a patch because you can get too much very quickly. How much fentanyl is in the typical illicit dose and how is this different and more dangerous than the legal doses of fentanyl?

HM: That's a good question, and that literally is the million-dollar question. So, the problem with pharmaceutical fentanyl, it's properly dosed and properly titrated either with a lozenge or a transdermal patch, so that you just get enough medicine overtime. But the illicit fentanyl comes in a powder form, and if you see pictures of it, it looks almost like salt. A one milligram dose is the equivalent of two grains of salt and one milligram is a typical dose, but a two-milligram dose or four grains of salt, that's enough to kill someone. So, the amount of fentanyl added to heroin or pills or whatever it's cut with, is going to differ by batch. The stuff coming out of China has been produced by professional chemists. By the time it gets to the U.S., either the individual that's ordered it through the mail or the drug dealer, they're not chemists, so they don't know how to mix it properly. So at best, they estimate and a typical dose might be fine one day but mis-dosed the next day and it will kill someone. We had another fatality in Idaho just last week where a teenager took one pill that he had bought from someone off the street and overdosed because it ended up being fentanyl. And there's never any rhyme or reason to how much you're going to get. It's so dangerous that people that know that they're buying heroin off the street or pills off the street, they're aware now that fentanyl could be in it, so they actually buy fentanyl test strips to test the drug they typically do to make sure it doesn't have fentanyl.

RG: Wow.

HM: Yeah, it's horrible. In the event that it does have fentanyl, they make sure that they use the drug with another person and that that other person has Narcan or the antidote so that it could save them if they overdose. It's pretty alarming and a lot of it was back in Pennsylvania, so when I was at the War College, I was actually planning to go do some work in Philadelphia with a nonprofit that makes sure that people on the street have access to this antidote or the Narcan and know how to identify people that have overdosed. It's slowly making its way out West. It's pretty much an East Coast drug for now, but very scary.

RG: Indeed, and am I correct that what also makes fentanyl sort of interesting—I'd say to put it mildly—as a drug is that it is completely synthetic, correct? So, it's not based on any natural product, so it can be made in a lab by people who have the sophistication to do that right? There's no natural product connected to opium poppy.

HM: Yeah, so cocaine, marijuana, the poppy for heroin, all of that takes soil and climate and growers and an entire trade to cultivate it and grow it, but Fentanyl and other synthetic opioids, they're completely man-made in laboratories. And the interesting part is you would think, I would think of something like the meth labs that we're used to seeing in the movies or in *Breaking Bad*, you can make this mobile-y in a Winnebago driving down the highway, but it's not like that. Over 90% of the world supply is manufactured in China, and from all the research I've done, it's not in these illicit labs, it's in professional chemistry labs that do this for a living. They make the pharmaceutical grade product, but then there's also this offshoot that's shipping

out illicit fentanyl mostly to the Mexican cartels into America, but it's somewhat getting into Europe as well now.

RG: And yet, it is at least largely made in these large professional laboratories. Do we know why it's not made more in other places in the world? Is this a matter of many things that the Chinese market, Chinese production is so inexpensive that it's not worthwhile for the legitimate fentanyl for it to be made anyplace else other than China?

HM: I don't know specifically on that. I know that India is starting to get into the trade and Mexico is also now that the cartels have taken over the fentanyl trade. They're starting to produce some of it themselves. But all of the precursor chemicals to make the fentanyl in the synthetic drugs, they get that from China. So anyway, you look at it, all the precursors or the complete product comes from China.

RG: Interesting, and in general how does the U.S. military, to bring in your military experience, how does the U.S. military handle or how has the U.S. military handled the opioid crisis and where does fentanyl fit into that policy matrix?

HM: From everything that I've learned at the War College, studying the national security strategy and everything that I've learned and the people I've talked to, the military treats illicit drugs and narcotic trade as a crime, so it's a transnational crime. So, because of that, they don't really have a way to act on it. They can help identify vessels at sea that might be carrying illegal drugs, or they can work with law enforcement to counteract the problem, but they can't do much more about it.

RG: This is true in the “war on drugs” in general, is the U.S. military does not play the active role here, it's other government law enforcement agencies that are primarily responsible for the war on drugs, correct?

HM: Yes, so I talked to several officers from the Navy while I was doing my research and they said they definitely work at sea to help identify what vessels might be carrying illegal drugs, but once they've identified it, then they hand it off to law enforcement.

RG: Gotcha. Okay. So to bring in then this national security question—when you began to study this fentanyl problem as a national security problem, rather than simply a public health problem or a law enforcement problem, what is your sense of how thinking of this as a national security problem can or should change our approach to the problem of fentanyl coming from China?

HM: I'm not sure that I ever actually got to an answer on that.

RG: Well, we can talk about the questions, right? That's the best part of the academic research, right?

HM: Exactly, I think the biggest thing that I wanted to show with this paper is we at least need to identify it as a problem and start thinking about it and start studying it and start talking about it. When I mentioned that I was going to study this as my research paper for the year, I kind of

got an eyeroll from several people, like it's a drug problem, that's a social problem, it's not really a military problem.

RG: And of course, it affects members of the military and families that are connected to the military, so the military should be interested. So, let's then think about this. If it is a national security problem up to now, I mentioned in the intro the discussion between President Xi and President Trump. What has been the nature of sort of official Chinese American discussions about the fentanyl trade?

HM: First of all, the Chinese government has denied any problem. They don't believe that the drug is coming from China and they don't show any proof of it, and so for years it went on that they just denied it. And then I think as President Trump in particular started to put sanctions and put more pressure on stopping the trade, they did decide to control or schedule the drug in China so that fentanyl could not be produced there. And the chemists and the manufacturers there, they follow the rules, so they stopped producing fentanyl as we know it. But you can tweak just a simple molecule of it and make it into a different drug altogether, so they started producing these analogs, and so America has already caught on to that, and we've kind of controlled and scheduled all analogues of fentanyl. But they had only done the one up until about two years ago and they started scheduling more of them and the last we heard, and I think you mentioned it in your intro, by May of 2019, they decided to schedule all analogs of fentanyl as well, but we still continue to get the product and it still continues to come from China. So, it's hard to say if they can't control it or if they're simply not putting enough effort into it. I know from the research I've seen, we have sent American officials there to help with the export of the drugs and they typically have problems getting visas or have difficulties once they get there of getting involved at all.

RG: Gotcha. I'm sitting here through this conversation and all of the reading that I've done and that we've talked about before this, there are drugs that come into the United States from other countries, right? Cocaine from Colombia, from Bolivia. Meth gets made in Mexico, fentanyl, it's produced in China. What is different about a major problematic illicit drug coming from China rather than coming from someplace else as a national security problem?

HM: Well, I think one of the biggest things right now is that China is trying to become a world power. They're trying to become economically superior and they have different initiatives. We talk about some of their tactics—they're building artificial islands in the South China Sea, the Belt and Road initiative—they have different ways of going about gaining their superiority, and I think when America talks about China and grey-zone activities, we almost always concentrate on several things: artificial island building in the South China Sea, the Belt and Road initiative, what they're doing with 5G technology, and they all have economic implications. So, I think that worries our policymakers, but none of them even approach the subject of drugs or fentanyl, or things that are actually killing tens of thousands of Americans. Where it seems like we're worried about the economic implications, but somehow overlook the things that are killing our own people.

RG: Well, and I guess this is what I'm thinking about too. There's a defensive aspect here. This is an argument that the United States as a society needs to do a better job of helping people to

meet and overcome drug addiction no matter where the drugs are coming from. And then certainly we would also want to interdict the flow of those drugs into this country, but as long as there is a market in the United States for these drugs, that raises that difficult question of, what are we trying to tell the Chinese, and how should we deal with the fact the Chinese produce it? If we weren't buying it, the Chinese would just be having lots and lots of fentanyl in China someplace which would be their problem. It's our problem because we're using it. How do you see the interplay between sort of dealing with it as a national security problem and a U.S.-Chinese relations problem versus viewing it as a domestic public health and law enforcement problem?

HM: Yeah, and so that is the big question because the demand will likely always be there. The problem with this synthetic drug is that we... Americans had a drug problem for as long as America's been America, but in the past, people, I believe, chose their drug of choice, once they know it and understand it and are accustomed to it, that's the life they choose. I'm not advocating for it, but let's say a guy that's been using heroin since the 70s knows how much he normally takes. His life has adjusted to it. It doesn't even matter if he's homeless on the street, if he's been doing this and this is his drug of choice for a while, that's one thing. But now all of a sudden, this fentanyl is introduced to the supply. The drug users don't know about it, and they're dying from it, so someone might choose to use cocaine, or they might choose to use ecstasy or smoke marijuana or any of these things, but they are not choosing on their own to use fentanyl. So to say it's demand-driven, I think yes, it's demand-driven by the drug dealers that are cutting it into our products, but there's not necessarily a demand for fentanyl.

RG: Gotcha. What do you think going forward, what kind of policy suggestions, assuming that you know we're not in a position to make hard and fast new policy, but what kind of suggestions would you have assuming that what you have here about the role of China—and China's at best ambiguous role in producing fentanyl and making sure it gets to the United States—what should the United States military, and more broadly, the United States government, what should we be thinking of doing in order to respond to this ongoing challenge?

HM: I think the first thing we need to do is talk about it, educate people about it and make sure that everyone understands the issue and then get the military talking with law enforcement. And I think we are doing that. The National Guard has a counter drug program that works closely with local law enforcement. I know the Navy is doing quite a bit. Special forces do quite a bit but mostly being educated. I think the next thing, maybe not the military so much as other national security partners, would be to figure some way of working internationally to have similar products that check freight before it gets loaded onto ships or monitors mail or looks for the drugs in different shipments and that kind of thing. I think if we shared information more, that would help identify where the drug is coming from, and maybe would allow us to be stricter about it coming from China.

RG: Right.

HM: I think it can't just be, America has an opioid problem, so this is a problem with America and China. It has to be a global problem and we're going to need help from others with it.

RG: So, we need to find ways to think about it, to study it, and to engage in open conversations like we've tried to do today.

HM: It's not there yet, but I think one of the other ways the military is going to get involved is that fentanyl really can be looked at as a weapon of mass destruction. So already in our civil support teams, or we call them the CSTs and the counter drug world, they are looking at fentanyl as a weapon of mass destruction, and once we label it as that and start calling it that, then when you get a shipment with, 50,000 tons of fentanyl on it, there's no other reason than destruction. So, I think looking at it differently, not thinking of it as only a social problem, thinking of it more as a deliberate destruction problem that might help.

RG: Great. Well, thank you, Lieutenant Colonel Heidi Munro for joining us to talk about this. It's a tough subject, but I'm delighted that you were able to join us to talk about it and congratulations on the SRP as we call it here at the War College. Congratulations on your graduation and I hope that you'll keep us posted as you continue to study this problem and as you continue your work with the Idaho Guard, but we really do appreciate you joining us today on A Better Peace.

HM: Thank you, thank you for having me.

RG: You bet, and thanks to all of you for listening in. Please send us your comments on this program and all the programs and send us your suggestions. We're always interested in hearing from you. And please subscribe to A Better Peace and after you have subscribed to A Better Peace on the podcatcher of your choice, we hope that you will also rate and review this program to tell other people about it because that's how they can hear about it and then they can join us for these discussions as well. We look forward to having you all join us again soon, and until next time, from the War Room, I'm Ron Granieri.