On-screen: People, Prevention, Porta-potties: Understanding Access to Restrooms, Hygiene Resources, and Shelter amid an Increase in Hepatitis A Virus in San Diego Cassandra Schember, PhD, MPH EIS 2022. April 26, 2024 Sarah Luna Memorial Ted-Style Talk Session 2024 Epidemic Intelligence Service Conference. CDC logo on bottom right.

## [APPLAUSE]

**PRESENTER:** Imagine you've been constantly told there's a disease spreading among your community, and it is best prevented by washing your hands. So you go to the same location for lunch every day, and the city has started to add hand-washing stations. So you try to wash your hands before you go to eat, but there's no soap.

So you decide to go to a nearby bathroom. And they only let one person in at a time, and there's already a really long line. After waiting about 20 minutes, you go inside just to find that there's no soap in there either. And somehow there's sewage everywhere. You do your best washing your hands with just water and use your hand sanitizer even though that it doesn't protect as well as soap and water would have.

For people experiencing homelessness in San Diego County during an increase in hepatitis A cases, this was a regular occurrence. During November 2016 through July 2018, a large hepatitis A virus outbreak occurred in San Diego among people experiencing homelessness, which led to 592 confirmed cases.

During that outbreak, the local health department tried several new successful strategies, which included having 2,359 field events, where field teams provided 121,920 vaccinations and 11,993 hygiene kits. They also put out 160 hand-washing stations, and these efforts curbed the outbreak and led to there being one or fewer cases of hepatitis A among people experiencing homelessness annually. However, beginning in January of 2023, hepatitis A again among this population.

So on May 15, 2023, I traveled to San Diego and began working on an anonymous survey to better understand why San Diego was experiencing another cluster of hepatitis A among this population. And there are two settings in which I deployed this survey. First, I went out to encampments to survey more isolated people with the homeless outreach team, and I also attended vaccination events at shelters and safe parking sites during meal times to get not just those who lived at the shelter but also those who had come there for food.

In the one month that I was there, we managed to get responses from 203 people. Our original goal was 100. However, due to all of the work and the education that had occurred during the previous outbreak, people were very knowledgeable about hepatitis and had a lot to say about it. And we learned a lot from our survey results, but some of the most valuable information came from the conversations I had with people after they finished completing the survey.

One of the first people that I talked to and I talked to the most extensively was a woman. We'll call her Martha. And she was skeptical of our survey at first. But when I explained that we were trying to decrease the spread of hepatitis A, she suddenly became very excited and had a lot to say about the subject. She had known someone who in the previous outbreak who had gotten hepatitis A, and she was doing everything she could to prevent it, including she was getting vaccinated. She had made sure all of her friends got vaccinated. But so she thoroughly filled out our survey and then began telling me about her life in the shelter.

She said, with clear sympathy for others staying in the shelter that there are some people experiencing mental health crises that would often make a mess of the bathroom. And beyond the messes created by residents, there is also a lot of plumbing issues that led to sewage dripping from the ceiling into areas that looked like this one, where she and several other women were sleeping.

So she came back to see me several days later after she had completed the survey to show me photos that she had taken on her phone. Photos like this one. It was incredibly hard for me to look at as I imagine it is for you as well.

Many of her photos were much worse than this one. But she had to see this most days, and a lot of the people we work with have to see this. So it's important for us to look at these images as well, no matter how hard they are to look at.

She knew these weren't acceptable living conditions but shared that it was a much safer option than sleeping on the street. So even though she knew it would possibly increase her risk of hepatitis A, she-even though it would increase her risk of hepatitis A, she had to choose a trade-off of personal safety for these unsanitary living conditions.

And another recurring comment we got from several people was that they didn't trust the portable restrooms that had been set out. One man-- we'll call him Chris-- exhibited extreme mistrust of these portable restrooms. He was clearly frustrated and angry that we were even asking about anything other than the portable restrooms.

He felt that the portable restrooms were contributing to the spread, as they were often incredibly dirty and had even become places where people were using drugs. He also complained that there was rarely ever soap in them because people would often steal the soap as soon as they'd been put out. So no matter how many times they replaced the soap, there was just never soap there.

And I saw this first hand at a hand washing station near the lunch line at the shelter. I'd watched several people a day line up, listen to us talk about their risk of hepatitis A and how to prevent it, and be unable to wash their hands. And they'd try and go into the shelter. But due to the sewage issues and the plumbing issues I had mentioned before, sometimes those bathrooms were closed, and they couldn't even go in there.

I was a little-- I felt bad at first when he seemed so angry and frustrated, and I, kind of, took it personally. But then I quickly realized, he thought-- he was hearing his risk every day. And we were explaining the risk, but he felt the things we were doing were actually making things worse. So multiple people like Martha and Chris felt their needs were not being met by the current services being offered.

So along with asking about restrooms, we also asked about international travel in our survey because San Diego sits at one of the busiest land border crossings in the world. And hepatitis A cases are often imported. So we asked about international travel.

And when answering this question, a man we'll call Daniel shared that he regularly traveled to Mexico because everything was cheaper there. So any time he got any money, he would go so he could stay in a hotel, have a roof over his head-- something that he couldn't do in San Diego.

Although this meant leaving a lot of his stuff behind, he said it was worth it because it allowed him to sleep in a bed, in a room alone, and get a few meals for a bit. As I found with many aspects of this investigation, we wanted to learn possible exposures and risks for hepatitis a, but instead we were learning about the many other issues that this population was experiencing and how important shelter really was and the protection the shelter provides was. And this became especially evident during two events that happened during my deployment.

On May 23, while out with the homeless outreach team, we were informed that a block away there was a shooting. We were immediately put on lockdown for over an hour. And then we were escorted to our cars, and I got to drive back to my hotel.

I was extremely scared at first, but that fear was immediately replaced by sadness when I realized I was being paid to come into these areas where people lived. And as soon as it wasn't safe, I was able to leave and go back to the safety of my hotel-- something that these people were not able to do.

And only 10 days later, there was another shooting. It was a block away from the first one. And this time, it led to the death of a man living in a tent nearby, the shelter where we had our vaccination events.

However, this time I was less scared and instead began to feel useless. We can provide vaccinations. We can provide hygiene kits, but we couldn't provide protection from the violence that was occurring. We often think of shelters as a physical place to sleep, but another key component is the safety and protection that they provide.

I truly understood the trade off that Martha had mentioned earlier of choosing the physical safety of a shelter, even if it was the expense of or human dignity that she had to sleep in a room where sewage was dripping from the ceiling. So in addition to the other danger someone who is unsheltered may be facing, in June 2023, San Diego approved an ordinance that established new regulations prohibiting encampments on public property.

By the end of July, these signs were put up around San Diego, and people found camping in areas where these signs were up were at risk of being arrested. Luckily in this case, this ordinance did not lead to an increase in arrests. This is an example of how often laws and ordinances may arise and create issues for our investigations and attempts to connect people to services and relationships building this population that public health workers might not anticipate.

So despite all of these issues, the investigation showed how successful public health was during the previous outbreak in educating about hepatitis A and building trust in community service providers, as seen in how knowledgeable people were and how willing they were to share their views. However, people experiencing homelessness are still facing not only difficulties in protecting themselves from disease, but they also have to worry about their personal safety regarding shootings and fear of arrest.

And as a public health worker, we may face times when we feel we have no idea of how to help these communities. We can offer services, but we don't have control over other dangers they may face. It may feel easier to just accept homelessness as another risk factor that we put in our spreadsheet and call it a day.

However, while I was in San Diego, I was able to see how public health, education and interventions during a previous outbreak was able to empower the population to share their perspective during later interactions with public health. And these communities know what they want and need, which is what we all want and need, a clean and safe place to lay your head at night.

But not only do they know what they want and need, they have ideas of how we can better serve them. We just need to empower them, ask them these questions, and listen. Thank you.

## [APPLAUSE]

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