

Wanda Barfield: Never in my wildest dreams did I think that an experience as a neonatologist in the Army would bring me to this place. 20 years ago, I was sitting in the middle of the Sinai desert as a troop medical clinic doctor, assigned for duties not otherwise specified. I was deployed as a multinational military team supporting the peace between Egypt and Israel. I was a fully trained neonatologist taking care of critically ill and premature infants, but not in the Sinai. I don't think that there was a baby for miles. Now I love the Army, and I love taking care of military families. But I wanted to be someplace where the mission was public health. Some place like the CDC. So I contacted a friend. And she got me in contact with someone from the CDC at former EIS officer, and the rest is history. Now imagine this. I've left the army. I've left the deployments. The missions, the duties not otherwise specified, the backfills and transferred to a new, more relaxed service. The US Public Health Service. Now an EIS officer for the class of 2000 and I'm assigned to the Division of Reproductive Health. And I'm finally going to pursue my dream of population health for moms and babies. I get married and my first son is born in June of 2001, all within my first year of the IRS. Soon after returning from maternity leave. Things change. Soon after September 11th, 2001 begins the largest ever deployment of EIS officers. Both the Class of 2000 and the Class of 2001 deployed to New York City and Ground Zero to investigate and conduct syndromic surveillance in area hospitals in anticipation of another attack, potentially A biological attack. So I packed my bags and I'm ready to go. But wait. Wanda, didn't you just say you had a baby? Well, my son was probably one of the first babies to fly on an airplane after 911. Security was very strict, and his baby nail Clippers were taken by TSA. My parents fortunately lived in nearby Connecticut and they met us at the JFK airport and we're ready to care for him. Now, September 11th was just the beginning of a series of responses by EIS to large scale disasters and health threats. While many of my EIS classmates were working with anthrax at the time, I was with my supervisors in the Division of Reproductive Health, learning the implications of anthrax for pregnant women and infants. And that was really the beginning of my experience and of the importance of emergency preparedness for pregnant women and infants. Now, after EIS, I deployed to several hurricane responses to include the Public Health Service responses, particularly in the southeastern part of the United States. Now what I noticed in the field was that emergency preparedness for pregnant women, postpartum women and infants was an afterthought. Women and children were not first. There were so many struggles in terms of helping to understand and be at the table in the discussion of maternal and infant health in the context of a disaster. It was also important to note that the care of victims who are in a disaster are often done by women of reproductive age, we understand that. This is a really interesting concern because remember, these are also people who may be at risk for the disasters themselves. Remember I had soon had a baby just before 911. So how do we care for responders so that they can adequately also care for others? At the beginning of the H1N1 pandemic, former EIS officer and then CDC director Tom Frieden asked. How many neonatal ventilators are there in the US Strategic National Stockpile? Well, I knew the answer and I found out that answer, but what was more important was. How would that precious resource be allocated in a mass emergency? See, you see, neonatal ventilators could be sized for the most premature of infants weighing 500 grams to large adults. And the question would be who would receive that precious resource, including pregnant women who during the time of H1N1 were particularly vulnerable. The risk of H1N1 and maternal conditions led to many questions and the development of a maternal health desk in the Emergency Operations Center at CDC. This was led by groups including those from the

Division of Reproductive Health, the Division of Birth Defects and Developmental Disabilities, and the Division of Nutrition, Physical Activity and Obesity, and it was a great collaboration, and it became later the Maternal and Infant health desk in the Ebola response. In 2014. At the end of the H1N1 pandemic, I became the director of the Division of Reproductive Health. And right away with leaders within the division, we came together to really think about what we would do in the context of a disaster, because we knew that H1N1 could potentially happen again. We needed to think about preparedness and right then and there we formed an emergency preparedness activity which would uniquely respond to the needs of pregnant women and infants in case of a disaster. And we were able to then respond to the Gulf horizon response in 2010, Ebola in 2014 and Zika in 2016. Now, the CDC response led to the creation of the Pregnancy and Infant Health Task Force, and there were many a new generation of EIS officers included, who served in response. And Zika virus infection with the transmission via mosquitoes led to severe reproductive outcomes to include congenital brain defects. Puerto Rico was the most vulnerable location geographically in the United States, with the largest number of cases of Zika. However, we also knew that in addition to mosquito abatement, what else might we need to do in terms of addressing? This problem that could cause congenital birth defects. Well, the answer actually might be in contraception. It is so important though, to remember who you're serving in an emergency response and what their history is and the context of that history, because we also knew that in Puerto Rico there had been a history of forced sterilization and contraceptive testing. So how could we offer a potentially effective intervention for women who chose not to be pregnant during the Zika epidemic? Fortunately, with good collaboration again with many of you, including our EIS officers, we were successful in terms of the largest scale utilization of contraception during a disaster. By the time COVID-19 appeared, we were ready and prepared to identify the potential needs for pregnant postpartum women and infants. And in that response, once we identified that pregnant women and infants and postpartum women could be potentially at increased risk of the effects of COVID-19, we were prepared to think about how we could equitably provide an opportunity for pregnant women. To receive the COVID vaccine, and this was an important milestone in our work in relating to pregnant women and infants in the context of a disaster. Now CDC is ready more than ever to address the needs of pregnant women and infants. But as we made strides in caring for pregnant women and infants, unfortunately we forgot others. We forgot people who are homeless. We forgot those who need additional assistance, particularly the elderly. We forgot those who may have been discriminated against due to their race. Their ethnicity, their sexual orientation, or the language that they speak. We forgot those who inherently don't trust a system of care that has ignored them. How did we miss this? What do we need to do better? What are the things that the next generation of EIS officers really need to consider? We know that babies are symbolic of a population of people that we need to protect. But I want you to imagine for yourselves, what are the populations that you know that may be most vulnerable and in need of support. Now just simply close your eyes and think about what that vulnerable population is and how you can make sure that you're at the table in supporting their needs in an emergency response. And also think a bit about yourselves too, in terms of the way that you'll be able to help yourselves so that you can better help others. Now we know that EIS. We have our boots on the ground. But with a new generation of EIS officers, I am very confident that you'll have our baby booties on the ground too.