Thank you. It really is a pleasure to be here. It’s very interesting to me that we have three sociologists, two neuroscientists and a geneticist on this panel. It’s an incredible span of disciplines that brings a really valuable perspective to this issue.

I want you to imagine something with me for a second. Imagine that you woke up this morning and in the headlines of the New York Times or on the feature story on CNN, the headline was that scientists discovered a new disease. This was a disease that affected children and about 60 percent of children every year were exposed to this disease. Scientists also reported that those exposed were at greater risk for mental health problems, like depression and anxiety disorder. And they were also at greater risk for physical health problems, even serious health problems such as diabetes, heart disease and cancer. In addition, they were at greater risk for social problems, like crime and drug abuse, during their lives. Scientists also noted that they even could pass this on in the future to their own children in some way. If we had a disease that was in the headlines, framed like that, what do you think we’d do about it? I really believe that despite budget deficits, despite anything, we would do anything we could to eradicate that disease, to stop it. But the truth is, as you’ve already heard, we do have such a disease; it’s called violence against children.

I’m going to be talking about children 0 to 17 years of age and also I’m going to be talking about the full range of types of violence that Dr. Finkelhor referred to earlier.
So unless I specify a specific type, I’m talking about the full range of forms of violence against children.

So, how common is violence against children? If we look at our vital statistics, data in the United States, our data on mortality, we can see that almost 2,000 children died as a result of homicide in 2008. This is probably an underestimate. Nevertheless, even if we use this conservative figure, that means that five children die every day from homicide and 77 classrooms full of children are killed every year. But, I also want you to look at the relative importance of homicide to other health problems. If you look at all children, homicide in the United States is the third leading cause of death among all children. It’s almost in a dead heat with the second leading cause of death, which is cancer. If you look at specific subgroups, like African-American adolescents 10 to 17 years of age, homicide is the leading cause of death. But homicide is just the tip of the iceberg. The data that Dr. Finkelhor presented from the National Survey of Children’s Exposure to Violence illustrates the magnitude of children’s experiences of these victimizations. We have child maltreatment, assault, sexual victimization and witnessing violence. If you take those prevalences and apply them to the 74.4 million children that were present in 2008, in the United States, you find that one of 10, or 7.5 million children were exposed to child maltreatment; nine of 20, or 33 million children were victims of assault; one of 16, or five million children experienced a sexual victimization, and one of four, or 19 million children witnessed violence. Now some children are exposed to multiple forms of these types of violence so you can’t add them up and get a total level of exposure, but these data give you a sense of the sheer magnitude of exposure to violence that we’re talking about in our country.

As we’ve been discussing, there’s now decades of research that speak to the impacts and consequences of these exposures to violence among children throughout their life cycles. Exposure to violence against children can lead—through the mechanisms, such as the effects on the brain architecture—to social, emotional and cognitive impairments, which, in turn, can lead to adoption of health-risk behaviors, which, in turn, can lead to diseases, injuries and disabilities, as well as premature mortality. There are literally hundreds of studies now, and every week I see more studies, establishing and confirming these linkages between exposure to violence and serious
health outcomes. There’s been mention of the Adverse Childhood Exposure Experiences Study at several points during this panel. I think it’s important for you to understand a little more about this study because it’s probably the most prominent example, but not the only example, of research documenting these relationships. This is a study that was done with the CDC, in collaboration with Kaiser Permanente in San Diego, looking at an HMO population. It was a study of 17,000 adults in that HMO population. These adults were asked to give retrospective accounts of their exposure to different childhood adversities, including physical, sexual and emotional maltreatment, witnessing intimate partner abuse in their family, household substance abuse, mental illness, as well as a household member being in prison. What they did in the study was to create something called an ACE score, which is the number of different types of victimization and other adverse exposures that each study participant experienced, sort of a measure of poly-victimization, in that it is a measure of the number of different adverse experiences. So, if they were sexually abused and witnessed their mother being beaten in the household, that would be a score of two, and if they had three of these exposures, three and so forth, they then looked at the association between the health experiences of the adults in this HMO population and their adverse experiences as children.

The first example I have for you are the effects of adverse experiences on mental health—in this case depression. What you find in this case is that those who had experienced five or more of these adverse childhood exposures as a child were at five times greater risk to suffer from adult depression some time in their lifetime. You see a stepwise increase in risk based on the number of adverse experiences that a study participant was exposed to. Depression is a huge problem in this country so identifying a risk factor of this magnitude is critically important. It speaks to the fact that preventing violence is not just an issue of addressing crime; it’s also an issue of improving mental health.

But it wasn’t just mental health that they found a relationship to. They also found a relationship to physical health. In this second example, you see the relationship between having exposure to these adverse childhood exposures and cardiovascular disease. Those who had seven or eight of these exposures were at three times greater risk to suffer from cardiovascular disease some time in their life. This same
type of pattern was found for hypertension, diabetes, cancer and a number of other chronic diseases. But it’s not just chronic disease; these adverse experiences also impact infectious disease. In the third example [showing a slide], we have the relationship between these adverse childhood experiences and risk factors for HIV—you can see that those who had five or more exposures to these adverse exposures were at 10 times greater risk of having ever injected drugs. You can also see [showing a slide] that there was a relationship with sexual promiscuity. A greater number of adverse exposures was associated with having many sexual partners and also to the likelihood of having sexually transmitted diseases. Again we see the same stepwise increase in risk associated with exposure to adversities as a child.

While the Adverse Childhood Exposure Study primarily focused on adversities experienced in the home, we also know from other literature that childhood exposure to violence in the community—both witnessing it and actually being assaulted—also has a number of important negative effects. A review of studies on the effects of exposure to community violence outside the home revealed that there are psychobiological effects in terms of effects on blood pressure and hyperarousal, suggesting there may be impact on the body’s stress regulation system as well. Also mental health issues, including substance abuse, antisocial behavior and aggression are associated with exposure to community violence, as well as other personal psychological factors. We also know that exposure to violence in the context of dating relationships has important consequences. Teen dating violence is associated with physical injury, sexually transmitted diseases, as well as HIV risk behaviors, drug abuse, smoking, unhealthy weight control behaviors, pregnancy and suicide. So, regardless of whether you’re talking about in the home, in the community or in relationships outside the home, we see a broad range of negative health consequences when you’re talking about exposure to violence as a child. Dr. McEwen showed this same type of information, and the research evidence really spans literally hundreds of studies. The evidence linking exposure to violence as a child to a broad range of mental and physical health problems over the life course is consistent and overwhelming.

Now I want to focus on economic cost. I’m going to talk about a study that we recently completed on the cost of child maltreatment in the United States. This is the
most rigorous study of the economic cost of child maltreatment completed to date. This study found that the cost of child maltreatment that occurred in 2008, in the United States, was $124 billion in lifetime costs. So those children that were abused or maltreated in 2008, would cost the U.S., over the course of their lifetimes, about $124 billion. You can see [showing a slide] that about 70 percent of these costs are due to productivity losses, about 20 percent to healthcare costs, and the rest to special education, criminal justice, and child welfare costs. Two caveats about this estimate: One, we are only able to crudely estimate the impact of child maltreatment on healthcare problems that occur later in life, so this is clearly an underestimate of the long-term healthcare costs associated with child maltreatment. Secondly, we developed these costs based on the number of new cases of child maltreatment that were confirmed through child protective service agencies to have occurred in 2008—which in that year was about 600,000 new cases in the United States. If we used the data from Dr. Finkelhor’s study, which found that one out of 10 children was exposed to child maltreatment, these costs go over $500,000 billion a year in 2008. So the $124 billion estimate is clearly a very conservative estimate. Something else I want to show you is that we looked at the reduction in annual earnings as a result of exposure to child maltreatment [showing slide]. We found that, when compared to comparable studies for obesity, teen pregnancy and smoking, the costs of child maltreatment, in reduction of annual earnings, were more than the three of them combined. So, even when you compare to other prominent public health issues that are at the forefront of our attention in this country, the problem of child maltreatment costs a lot of money.

There are certain challenges that we face in addressing the problem of violence against children. I think the broad range of short and long-term health and social consequences of this problem are underappreciated—underappreciated by policy makers and leaders across criminal justice, health, and public health. We haven’t fully internalized the full implications of this problem. Something very important to understand, which neuroscientists tell us, is that brain circuits stabilize over time, so the cost of trying to change things for children that are exposed at a young age will increase as they get older, so it’s better to get it right the first time. We need to invest in primary prevention and, as a society, we have not prioritized primary prevention. I don’t mean to
imply that the response to violence against children through our social welfare and
criminal justice systems isn’t important. Those response systems are critically, absolutely
essential, but it costs us more to wait to deal with the problem than it does to deal with it
up front. Primary prevention is key.

Let me just conclude by saying that this is a strategic problem from a public
health and a policy perspective. First, it’s strategic because viable programmatic and
policy options exist to address it. We haven’t discussed them, but there are many. Dr.
McEwen did show some of the interventions that happen to be effective, and there are
more. We actually know a lot about how to prevent child maltreatment and youth
violence in this country. Second, this problem influences many different health and social
outcomes over the life course. This may be one of the barriers to tackling this problem.
We typically deal with problems within silos. This is a problem that cuts across various
mental health and physical health problems. It’s hard to get people to come together to
address problems such as this as a whole. Third, this problem exacts enormous costs from
society. Fourth, the data and conclusions we have reached about the scope and impact of
this problem are scientifically grounded. Lastly, addressing this problem is politically
feasible.

Let me conclude with a quote from the National Scientific Council on the
Developing Child, that “the healthy development of all children benefits society by
providing a solid foundation for economic productivity, responsible citizenship, strong
communities and a secure nation.” That’s what it’s all about. That’s why we need to
address this. It’s that important.

Thank you very much.