Melissa Smyser: Where do you see early childhood social and emotional development fitting into the model on the previous slide? (This was your Suicide Prevention Strategies slide on Comprehensive Suicide Prevention and Mental Health Promotion)

Eric Caine: Supporting a safe and vibrant early childhood certainly is a key component to mental health promotion and ultimately an essential feature of suicide prevention, when considered in a model of prevention that looks to build protection many years before potential crises [much like changing lifestyle factors 10-30 years before reaching middle and older age protects against heart attacks]. In both an ecological model and a developmental framework, robust development serves as a protective factor 1) for not being as vulnerable to the emergence of later disorders [i.e., it promotes individual resilience], and 2) for fostering the abilities of youth to form and maintain strong interpersonal bonds. These serve as keys to healthy adulthood — the time when most suicide occurs.

It is important always to remember that suicide is multi-determined. While our clinical approaches emphasize attention to individual-level factors [e.g., a person’s mental state], we know well that environmental/situational factors play important roles in the development of suicidal situations — and in their affirmative resolution. We tend to look at these separately but they are woven together tightly; often a person’s [lack of] interpersonal skills will profoundly influence the degree of support or help that s/he may find from family and friends. Or, one’s ability to ask for help or accept help will be a determining factor. Many of these factors, which we see operating in adolescents, adults, and elders, reflect the foundations that were laid during the first decade of life.

Elly Stout: Eric makes some good points. In terms of the specific model I was referring to, I would say that it fits into the ‘Develop Life Skills’ and possibly ‘Promote Social Networks’, since the early childhood programs tend to improve social interactions and coping skills. However, remember that model is just an example of what a comprehensive approach would look like, so depending on the early childhood work, that may address new bubbles not included in the Air Force model (for instance, the Good Behavior Game reduces later substance abuse, which is a risk factor for suicide — that might be a bubble in a comprehensive approach for a different community).

Alyson Kohl: Do we know what the states with low suicide rates are doing? Are they doing anything different than other states?

Eric Caine: This is an area of substantial discussion — and much speculation and controversy. Some have argued that it relates to the availability of firearms, especially handguns. We know that in Upstate NY, where I live, long guns are very common as it is hunting country. Handguns, however, are less
common, and there is not a generally shared view that carrying one’s own weapon or keeping it at home is necessary for protection. The suicide rate in NYS is very low. Miller, Barber, and colleagues at the Harvard School of Public Health have argued in their work that variations in availability explain state level and regional differences. But, others have challenged the methods in their publications and view the potential influence of other, as-yet-to-be-identified influences.

Suicide is much more common in rural regions, in general, and some would explain the differences related to population density and rurality. The states where there are higher rates tend to be less densely populated overall, and tend to be substantially more rural. But this requires further inquiry. Moreover, there has been little work to define what being “more rural” might mean, in terms of how [What is the mechanism?] this actually affects overall rates. It is not enough to just say, “rural factors”! The real question is, What’s involved? Or, what’s missing? My answer at this time: I don’t know.

Others have suggested that the differences in rates reflect fundamental differences in the availability of mental health services, and more broadly, spending on social safety net services. Research from the European Union showed that greater spending for social safety net services, especially during recessions, offsets some of the powerful associations repeatedly seen between increases in the unemployment rate and increases in the suicide rate. No one has studied this in depth in the US, however, and we must be very, very careful jumping from statistical associations to inferring causal relationships without a clearer understanding of the possible connections.

**Elly Stout:** There has been limited exploration of what might account for differences in suicide rates between different states and regions in the country. Drawing on several of the studies, much of the variance is due to three major factors:

1. Homes that reported owning a firearm
2. Divorce rate in the state
3. People per square mile

So on a population basis, access to lethal means, isolation, and loneliness seem to be key contributing factors that vary state to state. Comparing urban with rural areas, Branas et al (2004) found that rural counties have significantly higher firearm suicide rates, whereas urban areas had higher firearm homicide rates (this difference did not carry over to non-firearm suicide/homicide). Other studies have found that the number of foreign born, percentage male, per capita income, and alcohol consumption may also account for differences between states (Phillips, 2012).

In terms of linking differences between the states to programs and policies they have in place for prevention, this has only been studied selectively. Several studies of gun control laws have compared outcomes between states:

- Miller et al (2006) found that reducing availability to firearms in the home was associated with significant reductions in suicide rates for men, women, and especially children.
- Rodriguez and Hempstead (2011) found in their analysis that permit and licensing requirements for guns have a negative effect on suicide rates among males (e.g. reduced rates).
Webster et al (2004) found that Child Access Prevention laws (requiring safe storage of firearms) modestly reduced teen suicide rates, but that minimum age restrictions didn’t seem to have an effect on youth suicide.

Lang (2011) looked at the impact of mental health insurance laws on state suicide rates, and found that laws requiring insurance coverage to include mental health benefits at parity with physical health benefits were associated by a significant decrease in overall suicide rates.

The sources for the answer to the second question are listed below – I hope this is helpful, and please let me know if any additional questions come up from participants in future webinars that we may be able to help with!

Thanks,
-Elly

References