

## Addressing Violence as a Health Crisis with Health Methods

August 23, 2016

Every day in our nation, an average of 39 people are killed (1). 117 individuals commit suicide (2). 180 more are shot and wounded (3). 27,400 individuals are hurt by a partner or significant other (4), and 1,900 children are abused or neglected (5).

In the United States, homicide is the third leading cause of death between ages 1 and 45 (6) – resulting in a loss of approximately half a million years of life before age 65 (7). Violence affects all of us, including some groups at even more shocking levels. For example, the homicide rate for black male youth between 10 and 25 years old is nearly 20 times higher than for white male youth (8).

Beyond direct injury, exposure to violence increases the risk of other medical illness, including asthma (9), hypertension (10), heart disease (11)(12), cancer (13), and strokes (14) (15). Violence also contributes to psychiatric illness, including depression and post-traumatic stress disorder (16). Those who are exposed to violence are more likely to sleep poorly (17), to smoke (18), and to become socially isolated (19) – all added risk factors for early death.

Violence between people in the United States is more than a matter of headlines. It is more than dots on a map. It is much more than a subject for the police and criminal justice system.

*The Violence as a Health Crisis Initiative consists of over 125 individuals representing more than 70 organizations across the country dedicated to activating the health and community response to violence. The Initiative, which began in July of 2015, is led by Former Surgeon General Dr. David Satcher, Former Dean of Johns Hopkins School of Public Health Dr. Al Sommer and CEO/Founder of Cure Violence Dr. Gary Slutkin.*

Violence is a health crisis (20)(21)(22).

Like lead poisoning, violence impairs the ability of children to learn (23). Like people exposed to influenza spread influenza (24), violence causes more violence (25), expressing itself as outbreaks of retaliations and clusters of suicide. Like tobacco use, violence spreads through social networks (26), becoming increasingly acceptable and commonplace. Like the Ebola virus, violence generates fear, distrust, and panic (27)-- stigmatizing communities where clusters of cases occur and limiting opportunities for communities to come together.

Doctors, nurses and other health workers try as hard as possible to save the victims of violence. We all recognize the iconic image of a team of doctors and nurses desperately trying to save a patient who has been shot. But another essential role for the health and public health sectors, and other sectors is to help people and communities be safe in the first place (28).

Seeing violence as a health crisis must start with the absolute recognition that violence can and must be prevented (29).

Just as community campaigns in the middle of flu season encourage vaccination and handwashing (30), public health efforts against violence counter distrust, dispel myths, and encourage dispute resolution to interrupt the cycle and transmission of violence. Just as improving the quality of water, air and sanitation stops the spread of infectious disease (31), local approaches to investing in opportunities and new norms builds trust, hope and resilience in young people and reduces the risk for violence (32). Just as health departments develop and coordinate strategies to prevent infant mortality and low birthweight, they use public health strategies to prevent violence -- in fact, these public health and outreach strategies support one another (33). Health strategies also address inequities and racial biases that allow violence to continue (34). The public health approach to violence focuses on addressing the known factors

that increase or decrease the likelihood of violence. Like other health issues, there is a growing science base that informs effective action.

Within the healthcare system, every patient interaction is an opportunity to prevent violence directly and is a window on what can be done community-wide. Providers (including physicians, nurses, and community health workers) can screen patients to identify adults and children experiencing or at risk of intimate partner violence, elder abuse, or child abuse and provide them with access to resources and support (35). Clinicians can partner with local community partners to systematically address behavioral health conditions that may predispose patients to being victims of violence -- or to being perpetrators (36). Health professionals, hospitals, and other healthcare organizations can translate their experience and their data to identify the community conditions and underlying social factors and determinants that can be modified to decrease the likelihood of violence and increase that of safety (37)(38).

Health professionals often have the credibility and the empathy to help provide local leadership, partnering with and supporting existing community efforts to forge local solutions while ensuring equitable treatment of individuals and communities. Community health workers can help young people and families navigate systems, resolve differences, choose alternative paths, and can speak up for the need for more positive resources in communities (39).

The health approach complements other efforts that reduce violence. For example, responsible practices on firearms will have greater impact when paired with public health programs that encourage nonviolent resolution of disputes (40). Similarly, community based policing can be more effective when communities are already engaged in well-designed outreach and other programs that reduce violence and its causes (41).

Rigorous evaluations of health approaches to violence prevention and intervention have

found reductions in injuries, shootings, and deaths – as well as new attitudes and safer norms.

For example:

- A Chicago program using public health methods to interrupt violence, reduce risk and change neighborhood norms reduced homicides and shootings by up to 70% and retaliations by 100% (42). In Baltimore, one historically violent neighborhood went over 22 months without a homicide when implementing the same model (43).
- An Oakland, California hospital-based violence intervention effort that incorporated trauma-informed care and case navigation resulted in 98% of the clients not being reinjured and 70% were not being arrested (44).
- A Richmond, California initiative based on public health analysis that provided supports including mentoring, life skills and subsidized internships to those at highest risk reduced homicides by 75% and gun assaults by 66% (45).
- Youth exposed to an adolescent dating violence prevention intervention in North Carolina showed from 56% to 92% less dating violence victimization compared to controls with the effects sustained for four years (46).
- A health based parenting program delivered in communities of 100,000 children under 8 years of age experienced an average of nearly 700 fewer cases of childhood maltreatment over 2 years (47).
- A nurse-visiting program delivered to children born to high risk unmarried teens saw 80% fewer cases of child abuse and neglect in Elmira, NY and in Memphis, TN yielded 79% fewer hospital days with injuries for children in comparison groups (48).
- Cities across the country are using the public health approach to address violence across all sectors. In Minneapolis, this comprehensive strategy was designed by city agencies, community, civic and business groups and hundreds of young people. Initial

findings suggest that the adoption of the model in 20 neighborhoods with highest rates of violence correlated with a decrease of 57% in individuals under 18 involved as those arrested or suspected in violent crimes while killings of people under 24 fell by 76% (49).

Public health can change norms, environments, and behaviors and reduce violence. And because violence costs the United States hundreds of billions of dollars each year in medical costs and lost productivity alone (50), effective approaches are especially worth the investment. The economic harm of trauma ripples through communities, undermining investment in small businesses, depressing housing values, and diverting resources that could be used for vital support to education and the quality of life (51)(52). Violence also diminishes opportunities for health within our communities when parks aren't safe, kids can't play in them (53). When neighborhoods aren't safe, supermarkets and other businesses won't invest in them (54). The enormous human and financial costs of violence far exceeds the proposed federal spending of \$1 billion annually on effective health approaches (55).

It is long overdue to recognize and treat violence as a health crisis and to mobilize our nation's healthcare and public health systems and methods to work with communities and other sectors to stop this epidemic.

## References

1. Federal Bureau of Investigation, Uniform Crime Reporting Program. (2014). *About Crime in the U.S.* [Data file]. Retrieved from <http://www.ucr.fbi.gov>
2. Centers for Disease Control and Prevention, National Center for Injury Prevention and Control. (2014). *Web-based Injury Statistics Query and Reporting System (WISQARS)* [Online]. Retrieved from: [http://www.cdc.gov/injury/wisqars/fatal\\_injury\\_reports.html](http://www.cdc.gov/injury/wisqars/fatal_injury_reports.html)
3. Centers for Disease Control and Prevention, National Center for Injury Prevention and Control. (2014). *Web-based Injury Statistics Query and Reporting System (WISQARS)* [Online]. Retrieved from: <http://webappa.cdc.gov/sasweb/ncipc/nfirates2001.html>
4. Centers for Disease Control and Prevention, National Center for Injury Prevention and Control. (2011). *The National Intimate Partner and Sexual Violence Survey (NISVS): 2010 Report*. Retrieved from: <http://www.cdc.gov/violenceprevention/nisvs/index.html>
5. U.S. Department of Health and Human Services, Children's Bureau. (2016). *Child Maltreatment 2014: Summary of Key Findings*. Retrieved from <https://www.childwelfare.gov/pubPDFs/canstats.pdf>
6. Centers for Disease Control and Prevention, National Center for Injury Prevention and Control. (2014). *Web-based Injury Statistics Query and Reporting System (WISQARS)* [Online]. Retrieved from: [http://webappa.cdc.gov/sasweb/ncipc/leadcaus10\\_us.html](http://webappa.cdc.gov/sasweb/ncipc/leadcaus10_us.html)
7. Centers for Disease Control and Prevention, National Center for Injury Prevention and Control. (2015). *Years of Potential Life Lost*. [Data file]. Retrieved from <http://www.cdc.gov>
8. Centers for Disease Control and Prevention, National Center for Injury Prevention and Control. (2014). *Web-based Injury Statistics Query and Reporting System (WISQARS)* [Online]. Retrieved from: [http://www.cdc.gov/injury/wisqars/fatal\\_injury\\_reports.html](http://www.cdc.gov/injury/wisqars/fatal_injury_reports.html)
9. Wright, R.J., Mitchell, H., Visness, C.M., Cohen, S., Stout, J., Evans, R., & Gold, D.R. (2004). Community violence and asthma morbidity: the inner-city asthma study. *American Journal of Public Health, 94*(4), 625–32. doi:10.2105/ajph.94.4.635.
10. Wilson, D.K., Kliever, W., & Sica, D.A. (2004). The relationship between exposure to violence and blood pressure mechanisms. *Current Hypertension Reports, 6*(4), 321-326. Retrieved from: <http://www.ncbi.nlm.nih.gov/pubmed/15257868>
11. Felitti, V.J., Anda, R.F., Nordenberg, D., Williamson, D.F., Spitz, A.M., Edwards, V., Koss, M.P., & Marks, J.S. (1998). Relationship of childhood abuse and household dysfunction to many of the leading causes of death in adults: the adverse childhood experiences (ACE) study. *American Journal of Preventive Medicine, 14*(4), 245-258. doi:10.1016/s0749-3797(98)00017-8
12. Cohen, L., Davis, R., Lee, V., & Valdovinos, E. (2010). Addressing the intersection: preventing violence and promoting healthy eating and active living. *Prevention Institute*. Retrieved from: <http://www.preventioninstitute.org/component/jlibrary/article/id-267/127.html>
13. Bellis, M.A., Hughes, K., Leckenby, N., Jones, L., Baban, A., Kachaeva, M., et al. (2014) Adverse childhood experiences and associations with health-harming behaviours in young

adults: surveys in the European Region. *Bulletin of the World Health Organization*. Retrieved: <http://www.who.int/bulletin/volumes/92/9/13-129247/en/>

14. Felitti, V.J., Anda, R.F., Nordenberg, D., Williamson, D.F., Spitz, A.M., Edwards, V., Koss, M.P., & Marks, J.S. (1998). Relationship of childhood abuse and household dysfunction to many of the leading causes of death in adults: the adverse childhood experiences (ACE) study. *American Journal of Preventive Medicine*, 14(4), 245-258. doi:10.1016/s0749-3797(98)00017-8

15. Moffitt, T. E., & the Klaus-Grawe 2012 Think Tank. (2013). Childhood exposure to violence and lifelong health: Clinical intervention science and stress biology research join forces. *Development and Psychopathology*, 25(4pt2), 1619-1634. doi: 10.1017/S0954579413000801

16. Krug, E. G., Mercy, J. A., Dahlberg, L. L., & Zwi, A. B. (2002). The world report on violence and health. *The Lancet*, 360(9339), 1083-1088. doi: [http://dx.doi.org/10.1016/S0140-6736\(02\)11133-0](http://dx.doi.org/10.1016/S0140-6736(02)11133-0)

17. World Health Organization. (2014). *Global status report on violence prevention 2014*. Retrieved from [http://www.who.int/violence\\_injury\\_prevention/violence/status\\_report/2014/en/](http://www.who.int/violence_injury_prevention/violence/status_report/2014/en/).

18. World Health Organization. (2014). *Global status report on violence prevention 2014*. Retrieved from [http://www.who.int/violence\\_injury\\_prevention/violence/status\\_report/2014/en/](http://www.who.int/violence_injury_prevention/violence/status_report/2014/en/).

19. Osofsky, Joy D. (1999). The Impact of Violence on Children. *Future of Children*, 9(3), 33-49. Retrieved from: [http://www.futureofchildren.org/publications/docs/09\\_03\\_2.pdf](http://www.futureofchildren.org/publications/docs/09_03_2.pdf)

20. Slutkin, G. (2012). Violence is a contagious disease. *Contagion of Violence: Workshop Summary*, 94-111. Washington, D.C.: National Academy Press. Retrieved from: <http://www.ncbi.nlm.nih.gov/books/NBK207245/>

21. Graziano, M., & Pulcini, J. (2013). Gun violence and the role of health care: A confusing state of affairs. *The American Journal of Nursing*, 113(9), 23-25. doi:10.1097/01.NAJ.0000434174.40289.af

22. Dahlberg, L.L., & Mercy, J.A. (2009). History of violence as a public health problem. *American Medical Association's Virtual Mentor*, 11(2), 167-172.

23. Office of Juvenile Justice Delinquency Prevention, Office of Justice Programs, U.S. Department of Justice, Attorney General's National Task Force on Children Exposed to Violence. (2012). *Report of the Attorney General's National Task Force on Children Exposed to Violence*. Retrieved from: <https://www.justice.gov/defendingchildhood/cev-rpt-full.pdf>

24. World Health Organization. Global Influenza Programme. (2009). *Pandemic influenza preparedness and response: A WHO guidance document*. Geneva: World Health Organization.

25. Spano, R., Vazsonyi, A.T., & Bolland, J. (2009). Does Parenting Mediate the Effects of Exposure to Violence on Violent Behavior? An Ecological-Transactional Model of Community Violence. *Journal of Adolescence*, 32(5), 1321-1341.

26. Flannery, D.J., Vazsonyi, A.T., & Waldman, I.D. (Eds.). (2007). *The Cambridge handbook of violent behavior and aggression*. New York: Cambridge University Press.

27. Walton, A.G. (2014, October 11). The Problem With Ebola In The Media. *Forbes*. Retrieved from <http://www.forbes.com>
28. Cohen, L. & Chehimi, S. (2013). *Towards a 21st Century Approach: Advancing a Vision for Prevention and Public Health*. Prevention Institute. Retrieved from: <http://www.preventioninstitute.org/component/jlibrary/article/id-342/127.html>
29. State of the States: 2013 Report. (2014). Atlanta (GA): Safe States Alliance. Retrieved from: [https://c.ymcdn.com/sites/safestates.site-ym.com/resource/resmgr/2013\\_SOTS/SOTS\\_final\\_web.pdf](https://c.ymcdn.com/sites/safestates.site-ym.com/resource/resmgr/2013_SOTS/SOTS_final_web.pdf)
30. Luby, S.P., Agboatwalla, M., Feikin, D.R., Painter, J., Billhimer, W., Altaf, A., & Hoekstra, R.M. (2005). Effect of handwashing on child health: a randomised controlled trial. *The Lancet*, 366(9481), 225-233.
31. Prüss-Üstün, A., & Corvalán, C. (2006). *Preventing disease through healthy environments*. Geneva, Switzerland: World Health Organization. Retrieved from: [http://www.who.int/quantifying\\_ehimpacts/publications/preventing-disease/en/](http://www.who.int/quantifying_ehimpacts/publications/preventing-disease/en/)
32. Gewirtz, A.H., & Edleson, J.L. (2007). Young Children's Exposure to Intimate Partner Violence: Towards a Developmental Risk and Resilience Framework for Research and Intervention. *Journal of Family Violence*, 22, 151–163. DOI: 10.1007/s10896-007-9065-3
33. B'more for Healthy Babies. (2015). *Fetal-Infant Mortality Review in Baltimore City FY 2015*. Bureau of Maternal and Child Health, Baltimore City Health Department. Retrieved from: <http://healthybabiesbaltimore.com/our-initiatives/fetalinfant-mortality-review>
34. LaVeist, T., Gaskin, D., & Trujillo, A. (2011). *Separate Spaces, Risky Places: The Effects of Racial Segregation on Health Inequalities*. Washington, D.C.: Joint Center for Political and Economic Studies.
35. Corbin, T.J., Purtle, J., Rich, L.J., Rich, J.A., Adams, E.J., Yee, G., & Bloom, S.L. (2013). The prevalence of trauma and childhood adversity in an urban, hospital-based violence intervention program. *Journal of Health Care for the Poor and Underserved*, 24(3), 1021-1030.
36. Warshaw, C., Sullivan, C.M., & Rivera, E.A. (2013). *A systematic review of trauma-focused interventions for domestic violence survivors*. National Center on Domestic Violence, Trauma and Mental Health. Retrieved from: [http://www.nationalcenterdvtraumamh.org/wp-content/uploads/2013/03/NCDVTMH\\_EBPLitReview2013.pdf](http://www.nationalcenterdvtraumamh.org/wp-content/uploads/2013/03/NCDVTMH_EBPLitReview2013.pdf)
37. Norris, T., & Howard, T. (2015). *Can Hospitals Heal America's Communities?: "All in for Mission" is the Emerging Model for Impact*. Democracy Collaborative. Retrieved from: <http://democracycollaborative.org/sites/clone.community-wealth.org/files/downloads/CanHospitalsHealAmericasCommunities.pdf>
38. Purtle, J., Dicker, R., Cooper, C., Corbin, T., Greene, M., Marks, A., Creaser, D., Topp, D., Moreland, D. (2013). Hospital-based violence intervention programs save lives and money. *Journal of Trauma and Acute Care Surgery*, 75(2), 331-333.
39. Karraker, N., Cunningham, R. M., Becker, M. G., Fein, J. A., & Kn ox, L. M. (2011). *Violence is preventable: A best practices guide for launching & sustaining a hospital-based program to*



*break the cycle of violence*. Washington, D.C.: Office of Victims of Crime, Office of Justice Programs, US Department of Justice. Retrieved from: <http://nnhvip.org/publications-2/>

40. Hemenway, D., & Miller, M. (2013). Public Health Approach to the Prevention of Gun Violence. *The New England Journal of Medicine*, 368(21), 2033-2035.

41. Cohen, L., Chavez, V., & Chehimi, S. (2010). *Prevention is primary: strategies for community well being*. Prevention Institute. Retrieved from: <http://www.preventioninstitute.org/publications.html>

42. Skogan, W.G. (2008). Evaluation of CeaseFire, a Chicago-based Violence Prevention Program, 1991-2007 (ICPSR23880-v1). *Inter-university Consortium for Political and Social Research*. DOI: 10.3886/ICPSR23880.v1

43. Webster, D.W., Whitehill, J.M., Vernick, J.S., & Curriero, F.C. (2013). Effects of Baltimore's Safe Streets Program on gun violence: A replication of Chicago's CeaseFire Program. *Journal of Urban Health*, 90(1), 27-40.

44. Becker, M.G., Hall, J.S., Ursic, C.M., Jain, S., & Calhoun, D. (2004). Caught in the Crossfire: The effects of a peer-based intervention program for violently injured youth. *Journal of Adolescent Health*, 34(3), 177-183.

45. Wolf, A.M., Del Prado Lippman, A., Glesmann, C., & Castro, E. (2015). *Process evaluation for the Office of Neighborhood Safety*. Oakland, CA: National Council on Crime and Delinquency.

46. Foshee, V.A., Bauman, K.E., Ennett, S.T., Linder, G.F., Benefield, T., & Suchindran, C. (2004). Assessing the long-term effects of the Safe Dates program and a booster in preventing and reducing adolescent dating violence victimization and perpetration. *American Journal of Public Health*, 94(4), 619-624.

47. Timmer, S., & Urquiza, A. (2014). Evidence-Based Approaches for the Treatment of Maltreated Children. *Child Maltreatment*, 3.

*\*The Triple P System developed by Sanders and colleagues, uses a public-health approach to parenting to prevent Child maltreatment (CM). 18 medium-sized countries were randomly assigned Triple P Systems Population Trial or the service-as-usual condition. This real-world magnitude reflects the data from a 2-year study of evidence-based parenting programs.*

48. Olds, D., & Ammaniti, M. (2006). The nurse-family partnership: An evidence-based preventive intervention. *Infant Mental Health Journal*, 27(1), 5-25.

49. City of Minneapolis Health Department. (2013). *Minneapolis Blueprint for Action to Prevent Youth Violence*. Minneapolis, MN. Retrieved from: <http://www.minneapolismn.gov/www/groups/public/@health/documents/webcontent/wcms1p-114466.pdf>

50. McCollister, K. E., French, M. T., & Fang, H. (2010). The cost of crime to society: New crime-specific estimates for policy and program evaluation. *Drug and Alcohol Dependence*, 108(1), 98-109.

51. Miller, T.R. (2012). *The cost of firearm violence*. Children's Safety Network, National Injury and Violence Prevention Resource Center. Retrieved:  
<https://www.childrensafetynetwork.org/publications/cost-firearm-violence>
52. Shapiro, R.J., & Hassett, K.A. (2012). The economic benefits of reducing violent crime: a case study of 8 American cities. *Center for American Progress*. Retrieved from:  
[https://www.americanprogress.org/wp-content/uploads/issues/2012/06/pdf/violent\\_crime.pdf](https://www.americanprogress.org/wp-content/uploads/issues/2012/06/pdf/violent_crime.pdf)
53. Carver, A., Timperio, A. & Crawford, D. (2008). Playing it safe: The influence of neighbourhood safety on children's physical activity: A review. *Health and Place*, 14(2), 217-227.
54. Cohen, L., Davis, R., Lee, V, & Valdovinos, E. (2010). *Addressing the Intersection: Preventing Violence and Promoting Healthy Eating and Active Living*. Oakland, CA: Prevention Institute.
55. Waters, H., Hyder, A., Rajkotia, Y., Basu, S., Rehwinkel, J.A., & Butchart, A. (2004). *The economic dimensions of interpersonal violence*. Geneva: Department of Injuries and Violence Prevention, World Health Organization. Retrieved from:  
[http://www.who.int/violence\\_injury\\_prevention/publications/violence/economic\\_dimensions/en/](http://www.who.int/violence_injury_prevention/publications/violence/economic_dimensions/en/)