These materials are based on a multidisciplinary workshop developed for *The CDC Experience Applied Epidemiology Fellowship*, a one-year training program for medical students offered during 2004-2014. They have been adapted, with new content for broader use, by:

**Denise Koo, MD, MPH**, Fellowship Program Director and former Director of CDC’s Division of Scientific Education and Professional Development

**Virginia Watson, MA**, Fellowship Program Coordinator and Instructional Systems Designer

Health and Well-Being for All website:  
www.cdcfoundation.org/health-in-a-box
This is a small group learning discussion that will explore many of the factors that can impact health. This module uses gang violence as an example, but you could use the systematic process presented here to develop a variety of population-based approaches for improving other health outcomes.

Together we will discuss:

- Definitions and descriptions of social determinants of health
- The impact of personal, social, economic and environmental factors on gang violence
- How you can play a role in improving health by addressing social determinants with a population-based approach

Take turns reading this guide. Don’t forget to include the headings and subheadings, as they help chart the path we’re following. When you see a red dot (●), this indicates a stop – to talk, discuss or complete an activity. Feel free to skip questions if your group has already addressed them during your discussions.

Take a moment to make a round of introductions, and share anything about yourself that is relevant to your interest in today’s learning experience.

Before we begin, let’s take a look at the visual. Have everyone stand up to observe the visual. Go around the table and have everyone describe what they see. ●

Discuss things that affect health you can’t see in this picture (e.g., mental health, health literacy, etc.) ●

As we learn about addressing social determinants of health as a means of impacting health outcomes, we’ll focus on gang violence.
1. Let’s begin by discussing different ways to describe and define social determinants of health. Have five people choose one each of the Definitions and Descriptions of Social Determinants of Health cards from the card deck. Each person should read the card aloud.

2. What definition or description resonated the most with you? Did the same definition or description resonate for everyone? Why or why not?

3. Can you think of an example of a personal, social, economic or environmental factor that has impacted a patient/client or family member of yours recently? Go around the table and have everyone share an example.

4. Take turns reading the Gang Violence Story on the next two pages. Keep this story in mind, as we’ll reference it throughout the experience today as an example of a health outcome impacted by social determinants.
Janet Wilson, a surgical resident, was called to the county hospital’s ER to admit a patient for surgery. On her way there, she had to pass through a very loud and chaotic parking area. She fell in step with a nearby paramedic and asked him for details of the incident that was causing all the uproar. He recounted the details of the particularly violent gang incident that occurred nearby over the past several hours, which had left several young men dead and many others critically wounded. As they walked toward the front entrance, Janet scanned the parking lot. She saw several members of the health department’s crisis response team trying to console people and diffuse tension. A priest was trying to calm several young men, whose angry voices escalated over the din.

As Janet passed through the hospital’s sliding glass doors, she was greeted with a similar frenzy. Police officers were talking with hospital staff and members of the community. There were clusters of people crying and shouting; they appeared to be family and friends of the victims. Janet was surprised to recognize Ms. Ella, the grandmother of a boy she had treated about a year before. “Oh, no,” she thought, with a feeling of dread. “Please don’t let it be Michael.” Ms. Ella saw her and made her way through the crowd.


“Tell me what happened,” Janet said, hoping she sounded more in control than she felt.

“He’s been shot!” Ms. Ella sobbed. “Please help him!”

“We’ll do everything we can,” Janet replied. “Let me go see what I can find out.”

Janet’s fears were confirmed when she entered the trauma bay and saw that “Trauma Zulu” was actually Michael Simpson, and he had six gunshot wounds: one to the skull, two lodged in his back, one that had gone through the pelvic area and shattered the bone, and two in the right leg that were relatively minor. He was slipping in and out of consciousness.

“Alright, let’s get this patient up to surgery!” shouted the attending surgeon, and Janet followed anxiously. As they hurried down the hall to the elevator, she looked into Michael’s young face, obscured by the oxygen mask – is he about 16 now, she wondered? – and thought of the last time she had treated him. That time, he’d been shot in the leg, and arterial involvement had made it necessary for him to stay in the hospital for several days of recovery.

“So, how did you get shot in the leg?” she had asked him that first day.

“Just at the wrong place at the wrong time, I guess,” he had mumbled, avoiding eye contact.

She wasn’t surprised that he hadn’t admitted to gang involvement. She had been told by seasoned ER staff that gang members feared their rivals would hunt them down while they were vulnerable in the hospital. This was the reason their real names weren’t posted on the boards. Gang members also were clearly apprehensive about being labeled as such, because of their distrust of systems like law enforcement, juvenile justice, and social services, preferring to fly under the radar.
Over those next few days, however, Janet spent more time with him. In addition to rounds each day, she found herself going back to his bedside several times a day; she learned a lot about Michael and his life, which had been so very different from her own. She met Ms. Ella, the woman who raised him when her daughter, Michael’s mother, could not care for him due to her own drug addiction. Michael never knew his father. Janet also met Michael’s aunt, whose son had arrived at the hospital brain dead after a gang-related incident the day after Michael’s admission. Janet went with them to the chapel and then answered their questions about organ donation. What most surprised her, though, and what stuck with her the longest, was that Michael assumed his only path in life was to join a gang; there simply was no other option. He said matter-of-factly that he fully expected to die a violent death by age 25.

And now, here he was, his life hanging in the balance, along with four other young men who were being operated on by her colleagues. The futility of it all struck Janet hard. Why patch them up if they just keep coming back, she wondered?

She couldn’t shake the issue from her mind over the next few days. Michael had stabilized but would be hospitalized for weeks. Finally she expressed her anxieties to her attending.

“Isn’t there something we can do to prevent these gang-related trauma cases?” Janet implored. “Why aren’t we treating these cases like we do cardiac patients? What about their modifiable risk factors and rehabilitation after surgery? Not only are we not going upstream, we’re drowning at the bottom of the waterfall.”

“This is just the way it is, Janet,” he said, shaking his head not unsympathetically. “These things are beyond our control as doctors. We just treat ‘em and street ‘em. That’s our job.”

Janet’s anxieties turned to anger. She decided then and there that she was going to find a way to break the cycle of gang-related traumatic injuries.
5. Reflect on the story you just heard. In your opinion, whose problem is gang violence?

6. Why do you think it’s important for healthcare professionals to care about this?

7. Now, locate the gang members near the liquor store on the visual. As a group, discuss the examples of social determinants of health that may be impacting gang violence based on what you see.

8. Let’s take a look at some interesting data on gangs about which you may not be aware. Get the Gang Dynamics cards from your facilitator. Have someone in your group read these cards aloud.

9. Why is it important to be aware of this information?

10. If unaddressed, how does gang violence impact society?

Change Process

Now we’ll learn more about the six steps of the change process represented on the visual. It’s important to consider your role in leading a change effort as we learn about each step. All of us need to be able to take a leadership role to drive change if we want to make an impact.
Step 1: Seeing the Bigger Picture (5-10 minutes)

Begin to see the interrelationships among parts of a whole.

11. Think again about the gang facts presented on the Gang Dynamics cards. As a group, describe in your opinion what it may have been like for Michael growing up. Discuss issues he might have experienced regarding:
   - Personal factors
   - Social factors
   - Economic factors
   - Environmental factors

12. Now pick one or two factors discussed within the group. In your opinion, why is this factor prevalent in this community or region?

13. How does it or could it impact the whole community?

14. Is the outcome of this factor preventable? Why or why not?
Determine and communicate the magnitude of the problem.

15. Recall the comment made by Janet’s attending physician: “We just treat ‘em and street ‘em. That’s our job.” What’s the impact of this approach by health and medical professionals on the community?

16. Now get the **Know What Affects Health card** from your facilitator. Have someone in your group read the categories of modifiable* risk factors listed on the right. Then guess the impact of each of these categories on health by matching them with a given percentage (10%, 20%, 30% or 40%). You’ll see the correct answers on the reverse of the card.

17. Are you surprised by this information? Why or why not?

18. How do each of the modifiable* factors that affect health impact your ability to improve the health of your patients?

19. You have decided that you would like to DO something about the larger problem of gang violence. In this phase of your path toward change, you need to describe the problem in your community. Think again about the types of data provided on the **Gang Dynamics cards**. Then take a look at the **City Facts card**.

20. What are some important pieces of information/data you should consider?

21. Where might Janet find this information/data?

22. Now that you’ve got the data, you’re ready to motivate others to help you. As a group, discuss why it’s important to have a community/region-wide agreement that the issue needs to be addressed and changes made.

*Recall that risk factors are conditions that increase your risk of developing a disease. They are either modifiable, meaning measures can be taken to change them (e.g., diet, job, home), or non-modifiable, meaning they cannot be changed (e.g., genetics).
Harness the power of champions and recognize impacted groups, organizations and settings.

23. As you consider Michael’s story and Janet’s desire to break the cycle of gang-related traumatic injuries, discuss who else would be invested enough to make a difference. Brainstorm a list of possible stakeholders.

24. Have someone choose the Collaborate with Others card from the card deck and describe it to the group. Are there any stakeholders listed here that you didn’t consider in your brainstorm, but are relevant to include?

25. Is it possible that there will be some reluctant participants? If so, how might you use the data you identified in Step 2 to transition them from reluctant to supportive or willing participants?

Brainstorm Stakeholders List

________________________________________________________________________________________

________________________________________________________________________________________

________________________________________________________________________________________

________________________________________________________________________________________

________________________________________________________________________________________

________________________________________________________________________________________
Empower a coalition of the willing.

26. This exercise is intended to immerse you in a role-play experience. The role-play is a simulation of a first meeting of the “others who care” about gang violence in a given city. Please plan to spend about an hour on this step. Now look at the Meeting Agenda on the next page to see the list of character roles. The facilitator has a card titled Others Who Care that provides an overview of all the characters for quick reference. Have volunteers select a role so that all roles are covered. Then, each person should get their Character Sketch card from the facilitator.

- Become familiar with your role and perspective. Take enough time to quietly read and understand your role.
- As you introduce yourself at the beginning of the meeting, do not share everything about yourself right away. The intention of the role-play is to understand each member’s needs. As you immerse yourself in your character, consider whether you have a “hidden agenda.”
- Role-play can end when the group feels that everyone’s goals have been clearly stated, and participants can see that they have similar interests with at least a few others where passions and frustrations are aligned.

27. What valuable insights were shared by your group when they played the roles of key stakeholders? What points of agreement did you find?

28. Now get the The 3 C’s card from the card deck and have someone read it aloud. As a group, discuss why the 3 C’s will be critical for the alignment of the stakeholders represented in the stakeholder analysis.

Facilitator Instructions:
- Do you have more people than roles?
  - Someone can play the role of a journalist. This person will help clarify issues by asking for details.
  - Someone can play the role of a parent of a gang member or second police officer. This person will provide skepticism about the conversation to ensure that the group doesn’t come to consensus too early.
  - Invent a new, relevant role.
- Do you have more roles than people?
  - Make sure to have the Clinician, Former Gang Member, City Council Representative, Public Health Representative and Police Officer roles represented.
Meeting Agenda

Addressing Community Violence: First Stakeholder Meeting

Meeting called by: Casey Chang, MPH, Director of the County Department of Public Health

Other Attendees:
- Janet Wilson, MD: CLINICIAN
- Darrell Robinson: FORMER GANG MEMBER
- Mel Hicks: CITY COUNCIL MEMBER
- Chris Hayes: POLICE OFFICER
- Lonny Rodrigues, MEd, MSW: SCHOOL COUNSELOR
- Adrian Banks, MBA: HOSPITAL ADMINISTRATOR

Welcome: Casey Chang

The purpose of this meeting is to provide the opportunity for community members to discuss actions that can be taken to address the problem of gang violence.

Round of Introductions: All participants

State your name, give a brief summary of why you are attending this meeting, and what you hope to achieve.

Kickoff: Dr. Janet Wilson

Dr. Wilson’s story of a young patient (shared previously) prompted a great deal of research on gang violence. Since then, she’s been busy conducting research, collecting data, and forming alliances. She’ll give a brief summary.

Discussion: All participants

Meeting participants will share their thoughts and experiences. We will be sharing individual perspectives and seeking points of agreement.

Wrap-up: Casey Chang

Summarize possible action items for a follow-up meeting.

Thank you all for attending!
Step 5: Acting on What’s Important (<20 minutes)

Develop and document a future vision that’s desired and then implement your plan.

29. Given the points of agreement among the stakeholders from Step 4, choose an action this group would like to pursue together. If you need ideas, get the Wraparound Project Strategies card from your facilitator. Here you’ll learn about initiatives to reduce gang-related injury recidivism rates, based on experiences of the real Janet (Dr. Rochelle Dicker at San Francisco General Hospital) with the real Michael. ● (Later, be sure to check out the video of the Wraparound team on the Health and Well-Being for All website. You’ll also find resources outlining other community interventions for violence.)

30. Now let’s look at the Model for Improvement card as we think about our vision and plan for addressing gang violence. While remaining in your role from Step 4, discuss as a group the answers to the three questions at the top of the card. ●

31. Discontinue the role-play and reference the Plan, Do, Study, Act portion of the card at the bottom. The Plan, Do, Study, Act (PDSA) Cycle is shorthand for testing a change in the real-world setting by planning it, trying it, observing the results, and acting on what is learned.

32. Let’s consider an example: Assume the stakeholders from Step 4 decided to form a community coalition. They want to facilitate employment for people with history of gang-related behavior. Have someone select the PDSA Cycle Example card from the card deck and read it aloud.

33. Now come up with your own intervention idea based on your stakeholder role-play. Or, if your group prefers and/or you are short on time, choose instead to come up with the second iteration of the PDSA Cycle about facilitating employment. ●
Step 6: Communicating Your Vision and Mission (<10 min)

Sell it, sell it, sell it.

34. Now we have a sense for how to create a sustainable plan and continuously improve the process. To ensure the success of the initiative, we’ll need to win people over and get the word out about the vision in multiple ways. Get the next four Tactics for Communicating cards from the card deck and read them aloud.

35. Considering the needs of your particular audience, choose one of the ideas listed on the Tactics for Communicating cards and apply it to the vision and mission related to the gang-violence example we’ve been discussing.

36. Why is it important to tailor your communication style, data and information for the particular person or group you’re addressing?

37. Now get the Barriers card from the card deck and read it aloud. Discuss how effectively communicating your vision and mission could help you overcome barriers and set your group on course for sustainable change.

38. Discuss some ways to overcome these barriers.
39. Reference the group of people at the top right of the visual and read the statement aloud. What does this statement mean to the gang-violence effort on which we’ve been focused?

40. Are your thoughts about “sustainable change” related to gang violence any different as a result of today’s group discussion? If so, how?

41. Reflect on the six steps listed along the path of the visual. Take turns talking about the key take-aways you’ve learned as a result of this experience.

42. Now that we’ve provided a process for exploring population-based approaches for improving health outcomes, get the My Commitment card from your facilitator. Capture the changes you can make in your work that will demonstrate your commitment to contributing and impacting your community. Post this in your work area for daily reference.

43. Is anyone willing to share what you wrote on your My Commitment card?
“Health and Well-Being for All” originated with materials created for The CDC Experience Applied Epidemiology Fellowship for medical students, funded by Pfizer External Medical Affairs, Inc. through a grant to the CDC Foundation. The Meeting-in-a-Box was developed by ContXt Corp.