Prevention Lesson Package: Understanding and Assessing Risk and Protective Factors

Lesson Objectives

Remember and Understand: What is epidemiology? What are risk and protective factors? What are some examples? Students will learn from the didactic portion of the lesson a general knowledge of epidemiology and how prevention science uses an epidemiological perspective. Students should be able to recognize and give examples of risk and protective factors.

Applying and Synthesizing: How can we use risk and protective factor data to prevent negative outcomes? Students will use the Youth Risk Behavior Surveillance System report to examine and analyze trends to determine what risk and protective factors appear most prominent. Students should be able to differentiate why these factors are of importance and provide evidence to explain why. Students will also use the University of Kansas Community Tool Box to learn how to assess community risk and protective factors. Students will demonstrate a method for assessing communities and defend their methodology.

Terms to Know

Epidemiology, Risk Factor, Protective Factor, Resilience

Suggested Materials

Pre-Assigned Readings (all articles are open-source and available at the below links)

- Ellis, B. J., Bianchi, J., Griskevicius, V., & Frankenhuis, W. E. (2017). Beyond risk and protective factors: An adaptation-based approach to resilience. *Perspectives on Psychological Science*, *12*(4), 561–587. https://doi.org/10.1177/1745691617693054
- Radua, J., Ramella-Cravaro, V., Ioannidis, J., Reichenberg, A., Phiphopthatsanee, N., Amir, T., Yenn Thoo, H., Oliver, D., Davies, C., Morgan, C., McGuire, P., Murray, R. M., & Fusar-Poli, P. (2018). What causes psychosis? An umbrella review of risk and protective factors. *World Psychiatry*, *17*(1), 49-66. https://doi.org/10.1002/wps.20490
- Stone, A. L., Becker, L. G., Huber, A. M., & Catalano, R. F. (2012). Review of risk and protective factors of substance use and problem use in emerging adulthood. *Addictive Behaviors*, 37(7), 747-775. https://doi.org/10.1016/j.addbeh.2012.02.014

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Handouts and Online Resources

- <u>SAMHSA Risk and Protective Factors Handout</u> Details on what risk and protective factors are and features of risk and protective factors. It also provides descriptions of universal, selective, and indicated prevention interventions and how interventions are matched with levels of risk.
- <u>CTC Risk and Protective Factors Online Resource</u> Describes what risk and protective
 factors are and provides a table that gives examples of risk and protective factors across
 different domains. This table provides content that helps students list examples of risk
 and protective factor by ecological system.

Application

Below are application activities for students to pull together what they have learned about epidemiology from the readings, PowerPoint, and supplemental materials. These activities can be modified to be used as an in-class activity or as a post-learning homework assignment.

Activity 1: Youth Risk Behavior Surveillance System (YRBSS)

This activity helps students identify trends in risk and protective factor data, as well as identify which areas are most prominent in a state. This can be done independently or in small groups and may be tailored in many ways. For example, looking at a specific health risk behavior across a region, or examining differences in trends between sex or race. You may also conduct this activity with another data source such as Monitoring the Future or School Health Profiles.

- Explain the <u>Youth Risk Behavior Surveillance System (YRBSS)</u> and have students read the <u>Overview</u>. Access the full report and report supplements <u>here</u>. Please note that some states such as Washington, do not participate in the YRBS. If this is the case for your state, they may have their own version of a healthy youth survey.
- Have students/groups choose a state. How do the state estimates compare to the country as a whole? How would you use this information to inform your prevention efforts?
- At the end of the activity, have students think about how this relates back to their own area of research or their population of interest.
- Alternatives:
 - Instead of choosing states, students may look at the full <u>YRBS report</u> and identify what stands out.
 - Individually, have students choose 2-3 topics and inspect them using <u>YRBS</u> explorer. Students may be asked to respond to questions such as What is the relationship of the topic between states? Nationally? How would you prioritize which risk factors would be addressed? What stands out to you the most about the topic?

Activity 2: Identifying Community Risk & Protective Factors

This activity explores different applications and assessment of community risk and protective factors. Students will use information from the University of Kansas Community Tool Box to demonstrate how they would assess community risk and protective factors. Students will also



gain an understanding of why there is no-one-size-fits-all method in assessing risk and protective factor data.

- The University of Kansas Community Tool Box provides guidance on communitybuilding skills. Explore Chapter 3 on <u>Assessing Community Needs and Resources</u>, as well as the corresponding <u>Toolkit</u>.
- Possible application activities:
 - Assign small groups a community assessment method (e.g., focus groups, surveys, etc.). Give the class a community-based scenario For example... your groups are being brought in as experts in their assigned methodology to determine what risk factors are of most importance to community members. Using your assigned method, how would you employ this method in the community? What would you ask? What answers would you expect to get from asking such questions? What information would you use to support that your method of assessing community risk factors is better than others?
 - At the end of the activity, have students think about how this relates back to their own area of research or their population of interest.
 - o Alternatives -
 - Work backwards and give students a perceived risk factor in the community and have students identify how they would have assessed this and come to this conclusion.
 - Instead of a scenario, have students identify a community of their choice and locate data to investigate what may be risk factors that could be prevented. Data can be found in CDC survey reports, School Health Profiles, State-level reports, Monitoring the Future, etc.

Other Online Resources

Adverse Childhood Experiences (ACEs)

- Adverse Childhood Experiences Information and resources to better understand and prevent ACEs in your community from the CDC.
- The Role of Adverse Childhood Experiences in Substance Misuse and Related Behavioral Health Problems – Describes ACEs and how they relate to substance misuse.

Health Equity

 Module 3: Community Factors & How They Influence Health Equity – this module from the Prevention Institute "explores eighteen community factors and demonstrates their links to health equity. It provides tangible opportunities to address inequities in the community environment."

Risk and Resilience

 InBrief: Resilience Series - Three videos from Harvard University's Center on the Developing Child on resilience and the importance of building resilience in young children.

Substance Use

 Substance Use Disorders Among Adolescents and Young Adults - Webinar from the Institute for Research, Education, & Training in Addictions with Dr. Deanna Wilson. Learn about developmental factors related to adolescents and young



adult substance use disorders. Also, learn skills of how to talk with adolescents and young adults about substance use.

• Violence Prevention

Moving Forward – This video from the Center for Disease Control and Prevention shows "how people can move up or get held back in life, depending on positive or negative impacts. It will ultimately show how increasing what protects people from violence and reducing what puts people at risk for it benefits everyone."

• Prevention Training Module

 Introduction to Prevention Theory and Concepts – Part 1 of a 4-part training developed by Dr. Kimberly Bender, Graduate School of Social Work, University of Denver.

Supplemental resources are also available. The Prevention Science Curriculum Infusion Resource Table (https://pttcnetwork.org/centers/northwest-pttc/product/prevention-science-curriculum-infusion-resources) was developed to provide educators across disciplines with a variety of materials related to three broad content areas where prevention science can inform prevention practice — epidemiology, evidence-based programs, and implementation. These resources can be infused into existing courses to enhance training in prevention science.