

4-digit code (same for pre- and post-test): _____

Pre-/Post-test Module 5: Measuring Success: Evaluating Environment and Health Change

Student Copy

Pre/Post-test

NOTE: Post-test contains Self-assessment questionnaire. You may take the post-test as “open book.” You can check your answers against the instructor’s answer key and retake as needed to reach an 70% passing score. Make sure you save a copy of your post-test. Include your last name in the file when you save it.

Self-assessment: Answer this only during the post-test.

In reference to the Measuring Success module, please choose all that apply:

- a. Specifically useful for my work. If so, you can describe how here (optional):

- b. Quick refresher
- c. Offers me knowledge about a topic I am less familiar with
- d. Gives me confidence to increase my skills in and understanding of communicating risk related to land reuse sites
- e. Motivates me to learn more about land reuse sites and ways I can be engaged
- f. Not needed for my work
- g. None of the above

Other (please specify) _____

Test begins on next page.

Minimum Passing Score: 70% (7 out of 10)

Allow multiple retakes? (Y/N) Yes

There are different types of indicators that can help communities understand their overall health status over the course of redevelopment.

- a. True
 - b. False
- 2. As an Environmental or Health Professional, it's important for you to measure the positive (or negative) community changes that occur throughout the lifecycle of the project.**
- a. True
 - b. False
- 3. What data measurement (indicator) themes can be measured over the course of redevelopment?
Select the most correct answer:**
- a. Environment, Redevelopment, and Arts
 - b. Environment, Health, and Economy
 - c. Environment, Redevelopment, and Education
 - d. Environment, Health, and Sustainability
- 4. You are an Environmental Health Specialist working with a community group that is engaged in the cleanup and redevelopment of vacant and contaminated properties along a riverfront. You are using a community assessment and engagement resource, the Action Model, to help the Development Community (citizens, community planners, stakeholders, etc.) identify ways to establish indicators to measure progress in resolving environmental and other issues that can be addressed through revitalization. The issues include river contamination, lack of parks/green space, vacant and contaminated properties, habitat concerns, and high lead exposure in the population. Which environmental indicators would you consider? Select all that apply:**
- a. Number and types of vacant lots, number and use of green parcels, number of parks, number of bike lanes
 - b. Water quality data and fish consumption advisories
 - c. Number of jobs in the hotel industry related to the number of newly developed hotels
 - d. Health data, including chronic diseases and cancer
 - e. Inventory of sites including age of buildings, contaminants and health effects, map of sites
- 5. The Development Community you are working with is interested in tracking changes in physical/mental health outcomes to determine impacts over the course of redevelopment. They have brought up some key health concerns, including lack of access to healthy food, lack of access to healthcare, lack of affordable housing, and high lead exposures in the population. You help them identify indicators that can be measured to show changes in these issues. Select from the list below the indicators you will select:**

- a. Asthma rates in the population
 - b. Number of affordable housing units
 - c. Number of schools with recreational programs
 - d. Number of healthcare clinics and their distance from residential areas
 - e. Number of people addicted to opioids
 - f. Community wide (or children's) blood lead levels
6. **Community assessment and engagement frameworks can be used in land reuse communities to establish a baseline of overall community health status. The Development Community can select from a number of different indicators, but you want to help your community maximize the efficient collection of data. Ultimately, the community selects 50 different indicators. You point out that these might be too many for meaningful data collection. What other factors can you point out to help the community narrow down the number of indicators? Select the best answer:**
- a. It is OK that not all of the indicators have data sets available. These can always be in the "parking lot" to wait for available data.
 - b. It is important to prioritize those indicators that have available data or for which the community can collect the data through community efforts, such as surveys
 - c. It is possible to phase the project into three separate projects over five years to allow time for data collection
 - d. The community can apply for a grant or ask the city government to pay for a consultant to collect data on all 50 indicators
7. **You are an environmental health professional working for a state health department. Your agency learns that people have been skiing, hiking, and snow-shoeing on former asbestos tailing piles at a former asbestos mining area now touted as a recreational area. Previous sampling by a state environmental agency indicated asbestos contamination of the pilings and a waterway, posing a potential for friable asbestos. Your team goes to the site and notes that a creek runs through the site that is milky-white, which you suspect is from asbestos in the waterway. You take some samples of the creek. You also note that a family of four is recreating on the mine tailings. Your state environmental agency partners estimate that 160 people a year access the site. Your agency immediately takes action on the site. Which of the following activities will lead to the best health outcomes? Select the best answer:**
- a. Call the local ski club and let them know that you think people may be exposed to friable asbestos. Suggest that the ski club decide if they want to restrict access to the site and prevent 160 people per year from being exposed to asbestos from the site.
 - b. Plan to take more asbestos samples at the site in three months. Call the local ski club and local and state partners (e.g. regulatory agencies) and let them know you will take more samples in the near future and that it is currently most likely not safe to continue skiing on and using the site. Prevent 160 people per year from being exposed to asbestos from the site.
 - c. Call the state environmental agency and restrict access to the site. Call the local ski club and local and state partners (e.g. regulatory agencies) and let them know that it is likely not safe to continue skiing on and using the site. Take more asbestos samples at the site. Once you have your sampling results, share them with partners. Prevent 160 people per year from being exposed to asbestos from the site.

- d. Do nothing. People have been recreating on the site for over 10 years and nobody has had any adverse outcomes.

8. Outcomes (sometimes also called impacts) are the end product of the redevelopment project are the qualitative or quantitative result of activities related to redevelopment. What are some examples of outcomes? Select all that apply

- a. Recognized that childcare facilities needed to be more aware of environmental hazards.
- b. Monitored those who were exposed by testing 189 urine samples from 72 children and nine adults. Ultimately, the mercury levels in those exposed decreased.
- c. Raised awareness about childcare licensing. Passed legislation requiring an environmental consultant to conduct an Indoor Environmental Health Assessment for childcare centers located on or in specific prior-use sites.
- d. Identified a need to find sample legislation and best practices that could be used as a model for safe siting of childcare centers and schools.

9. Examples of long-term positive outcomes include (select all that apply):

- a. Reduced blood lead levels in a target population of 50 children
- b. Remediation or demolition and cleanup of 4 of 10 contaminated properties, reducing exposure potential by at least 40% for 500 people
- c. Participating in a school health fair attended by 200 parents
- d. Taking a training about environmental health

10. It is important to select indicators that can be tracked over time, for which there are available data, and that can lead to redevelopment health outcomes and quantitative impacts over the course of redevelopment.

- a. True
- b. False