

## Chapter 2: Optimizing Population Health

### MULTIPLE CHOICE

1. In 2011, the National Prevention Strategy released a plan to increase the number of Americans who are healthy at every stage of life. The National Prevention Strategy was authorized by the:
  - A. Department of Health and Human Services
  - B. Centers for Disease Control and Prevention
  - C. Affordable Care Act
  - D. American Medical Association

ANS: C

Objective: 1. Describe the National Prevention Strategy.

pp. 27-28

Heading: Introduction

Integrated Processes: N/A

Client Need: Health Promotion and Maintenance

Cognitive Level: Knowledge [Remembering]

Concept: Promoting Health; Legal

Difficulty: Easy

	Feedback
<b>A</b>	The Department of Health and Human Services is the U.S. government's main agency for the protection of health of all Americans, but it did not authorize the National Prevention Strategy.
<b>B</b>	The Centers for Disease Control and Prevention is a research facility that aids the development of better public health, but it is not a legislative body and did not authorize the National Prevention Strategy.
<b>C</b>	The National Prevention Strategy was part authorized by the legislation of the Affordable Care Act.
<b>D</b>	The American Medical Association is the professional association of medical doctors. It does not enact governmental mandates and did not authorize the National Prevention Strategy.

PTS: 1

CON: Promoting Health | Legal

2. A nursing student is studying the National Prevention Council Action Plan. The student correctly identifies which one of the following interventions as not reflecting the strategic directions in this plan?
  - A. Conducting bi-weekly visits to new mothers and newborn babies
  - B. Paying for insurance for low-income families
  - C. Providing nutrition classes which offer weekly fill-in guides for grocery shopping
  - D. Building a health and exercise center in a hospital near the physical and occupational therapy areas

ANS: B

Objective: 1. Describe the National Prevention Strategy.

pp. 27-28

Heading: Introduction

Integrated Processes: Teaching/Learning

Client Need: Health Promotion and Maintenance

Cognitive Level: Application [Applying]

Concept: Promoting Health; Nursing Roles; Legal

Difficulty: Moderate

	Feedback
<b>A</b>	One goal of the National Prevention Council Action Plan is to build healthy and safe community efforts to create a supportive healthy ecology.
<b>B</b>	Providing financial health-care assistance for lower income families is not one of the strategic directions of the National Prevention Council Action Plan.
<b>C</b>	Empowering people to make healthy choices by educating them through health promotion and risk reduction is one of the goals of the National Prevention Council Action Plan.
<b>D</b>	Expanding quality preventive services in both clinical and community settings is one of the goals of the National Prevention Council Action Plan.

PTS: 1                      CON: Promoting Health | Nursing Roles | Legal

3. Based on the ecological model of health, a nurse would evaluate which of the following to understand why a community is having a large incidence of recurring respiratory infections?
- A. Local health-care facilities
  - B. Community health-care programs
  - C. Medical tests results
  - D. Living and employment situations

ANS: D

Objective: 2. Describe public health in terms of current frameworks guiding prevention efforts from a local to a global perspective.

p. 29

Heading: Population Health Promotion, Health Protection, and Risk Reduction > Health Protection and Risk Reduction

Integrated Processes: Nursing Process

Client Need: Health Promotion and Maintenance

Cognitive Level: Application [Applying]

Concept: Assessment; Promoting Health; Evidence-Based Practice

Difficulty: Easy

	Feedback
<b>A</b>	The local health-care facilities would not be a part of the patient's environment so the nurse would not evaluate them based on the ecological model.
<b>B</b>	The community health-care program could assist in health promotion and risk reduction activities, but it is not a place the nurse would evaluate to understand the increasing rate of infection according to the ecological model.
<b>C</b>	Medical tests could diagnose the underlying problems, but they would not illuminate the causes of the problems according to the ecological model.
<b>D</b>	Based on the ecological model, the public health nurse would evaluate how, where, and with whom the patients spent most of their time.

PTS: 1                      CON: Assessment | Promoting Health | Evidence-Based Practice

4. If a nurse is focusing on prevention and establishing a public health intervention for an illness by following the natural history of a disease, he or she is:
- A. Making sure that everyone in a certain area receives treatment
  - B. Studying the biological components of the disease
  - C. Looking at medical trends of clients who have had the disease
  - D. Going to the autopsies of the patients who have died

ANS: C

Objective: 2. Describe public health in terms of current frameworks guiding prevention efforts from a local to a global perspective.

pp. 30-32

Heading: Prevention Frameworks > Natural History of Disease

Integrated Processes: Nursing Process

Client Need: Health Promotion and Maintenance

Cognitive Level: Application [Applying]

Concept: Promoting Health; Health-Care System

Difficulty: Easy

	Feedback
A	Following a disease does not involve treating everyone in an area.
B	Studying the biological components of the disease may help in some aspects, such as prescribing antibiotics, but this is not part of following the natural history of a disease.
C	Following the natural history of a disease allows the nurse to identify who is at the greatest risk by looking at the groups who have had it.
D	Following the natural history of a disease allows the nurse to identify who is at the greatest risk for developing the disease by looking at groups who have had it. This does not include attending autopsies.

PTS: 1

CON: Promoting Health | Health-Care System

5. When a health-care provider offers nutritional health teaching on portions, patterns, and choices, he or she is using which type of approach?
- A. Ecological
  - B. Downstream
  - C. Upstream
  - D. Health promotion

ANS: B

Objective: 2. Describe public health in terms of current frameworks guiding prevention efforts from a local to a global perspective.

pp. 28-29

Heading: Population Health Promotion, Health Protection, and Risk Reduction > Health Promotion

Integrated Processes: Teaching/Learning

Client Need: Health Promotion and Maintenance

Cognitive Level: Application [Applying]

Concept: Nutrition; Promoting Health; Nursing Roles

Difficulty: Moderate

	Feedback
A	This refers to a larger model that includes a more upstream approach. The health promotion strategy in this question is considered a downstream approach.
B	This approach to health promotion is considered downstream since it does include environmental factors such as a lack of supermarkets in its focus.
C	The upstream approach looks more at the environmental factors that prevent or allow healthy choices, such as urban zoning for gardening or a lack of supermarkets in a community.
D	Health promotion is the broad term used to classify all incentives and interventions to encourage healthy lifestyles.

PTS: 1

CON: Nutrition | Promoting Health | Nursing Roles

6. A school cafeteria is planning menus for the school year. They must follow the 2012 national law that calls for school lunch programs to:
- A. Have larger portions of fruits and vegetables, less sodium, and no trans fats
  - B. Have more protein and fewer carbohydrates
  - C. Offer 2% milk and low fat dairy products
  - D. Places a cap on lunch calories at 900, for all grades

ANS: A

Objective: 2. Describe public health in terms of current frameworks guiding prevention efforts from a local to a global perspective.

pp. 28-29

Heading: Population Health Promotion, Health Protection, and Risk Reduction > Health Promotion  
Integrated Processes: Nursing Process

Client Need: Health Promotion and Maintenance

Cognitive Level: Application [Applying]

Concept: Nutrition; Promoting Health; Legal

Difficulty: Easy

	Feedback
<b>A</b>	The new law mandates larger portions of fruits and vegetables, less sodium, and no trans fats.
<b>B</b>	The law does not mention proteins and carbohydrates; it mandates larger portions of fruits and vegetables, less sodium, and no trans fats.
<b>C</b>	The law states that milk can be, at the most, 1% fat, and flavored milk must be fat-free.
<b>D</b>	The calories for each grade group must be 650 for grades K-5, 700 for grades 6-8, and 850 for grades 9-12.

PTS: 1

CON: Nutrition | Promoting Health | Legal

7. A nurse could encourage prevention for a patient with diabetes by
- A. Having the patient try an experimental treatment
  - B. Asking them to share their experiences with other people
  - C. Having them take doses of the prescribed medicine on a PRN, or as needed, basis.
  - D. Helping him or her to slow the progression of the disease and prevent secondary illnesses related to the disease, such as blindness

ANS: D

Objective: 4. Compare and contrast different levels of health promotion, protection, and risk reduction interventions.

p. 29

Heading: Population Health Promotion, Health Protection, and Risk Reduction > Health Protection and Risk Reduction

Integrated Processes: Nursing Process

Client Need: Physiological Integrity: Reduction of Risk Potential

Cognitive Level: Application [Applying]

Concept: Metabolism; Promoting Health

Difficulty: Moderate

	Feedback
<b>A</b>	The experimental medication might or might not work, so prevention might not occur.
<b>B</b>	Sharing experiences with other people might help the patient's morale and guide other people to better health, but it will not prevent the progression of the disease.
<b>C</b>	Taking the prescribed medicine as needed might lessen side effects, but it might not be the most therapeutic and beneficial path for the patient.
<b>D</b>	The most beneficial function the nurse could perform is to help the patient avoid

additional illnesses by encouraging good health care through programs and practices.
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PTS: 1                      CON: Metabolism | Promoting Health

8. In order to assess the predominance of a disease in a population, a public health nurse (PHN) looks at a prevalence pot, which is
- A. A way of estimating the amount of vaccine that needs to be produced
  - B. A way of estimating the past number of cases of a specific disease in a given area
  - C. A way of assessing the total number of cases of a disease that takes into account all of the stages of the disease
  - D. A method of calculating the potential number of various diseases in a given area

ANS: C

Objective: 2. Describe public health in terms of current frameworks guiding prevention efforts from a local to a global perspective.

p. 29

Heading: Population Health Promotion, Health Protection, and Risk Reduction > Health Protection and Risk Reduction

Integrated Processes: Nursing Process

Client Need: Health Promotion and Maintenance

Cognitive Level: Application [Applying]

Concept: Promoting Health

Difficulty: Moderate

	Feedback
<b>A</b>	A prevalence pot is used for more epidemiological use than pharmaceutical use.
<b>B</b>	A prevalence pot estimates current data, not past cases.
<b>C</b>	A prevalence pot is a way of depicting the total number of cases of a disease in a population that takes into account issues related to duration of the disease and the incidence of the disease.
<b>D</b>	A prevalence pot depicts the number of cases of one disease for a given population.

PTS: 1                      CON: Promoting Health

9. A PHN notices the rising incidence of H1N1 (swine flu) in a geographic area. The nurse considers possible interventions, knowing that the preclinical phase of H1N1 lasts:
- A. One to two days
  - B. Two to four days
  - C. Three to four days
  - D. Five to seven days

ANS: A

Objective: 3. Apply public health prevention frameworks to specific diseases.

p. 29

Heading: Population Health Promotion, Health Protection, and Risk Reduction > Health Protection and Risk Reduction

Integrated Processes: Nursing Process

Client Need: Safe and Effective Care Environment: Safety and Infection Control

Cognitive Level: Application [Applying]

Concept: Infection; Clinical Thinking

Difficulty: Difficult

	Feedback
<b>A</b>	The preclinical phase of H1N1 lasts one to two days, and people that are infected can infect others on the first day. Symptoms develop rapidly, and intervention cannot

	prevent progression to the clinical phase.
<b>B</b>	This is past the preclinical phase of H1N1. The preclinical phase lasts only one to two days.
<b>C</b>	This is past the preclinical phase of H1N1. The preclinical phase lasts only one to two days.
<b>D</b>	This is past the preclinical phase of H1N1. The preclinical phase lasts only one to two days.

PTS: 1                      CON: Infection | Clinical Thinking

10. In the traditional public health prevention framework, the level of prevention that includes early detection and initiation of treatment for disease, or screening, is referred to as the:
- A. Clinical level
  - B. Primary level
  - C. Tertiary level
  - D. Secondary level

ANS: D

Objective: 2. Describe public health in terms of current frameworks guiding prevention efforts from a local to a global perspective.

pp. 32-37

Heading: Prevention Frameworks > Public Health Prevention Frameworks

Integrated Processes: N/A

Client Need: Health Promotion and Maintenance

Cognitive Level: Comprehension [Understanding]

Concept: Promoting Health

Difficulty: Easy

	Feedback
<b>A</b>	The clinical level is not a level of prevention in the traditional public health framework.
<b>B</b>	The primary level of prevention includes intervention, not screening.
<b>C</b>	The tertiary level includes prevention of disability and premature death, not screening.
<b>D</b>	The secondary level includes screening.

PTS: 1                      CON: Promoting Health

11. Attributable risk is the proportion of cases or injuries that would be eliminated if a risk factor did not occur, but preventable fraction is:
- A. The number of cases that actually occur
  - B. What could be achieved with a program implemented in a community setting within the at-risk population when community members actually participate in the program?
  - C. The number of cases that require intervention
  - D. What the estimated number of cases with high-risk factors are

ANS: B

Objective: 4. Compare and contrast different levels of health promotion, protection, and risk reduction interventions.

pp. 32-37

Heading: Prevention Frameworks > Public Health Prevention Frameworks

Integrated Processes: N/A

Client Need: Health Promotion and Maintenance

Cognitive Level: Application [Applying]

Concept: Promoting Health

Difficulty: Moderate

	Feedback
A	Preventable fraction is not the number of cases that actually occur.
B	Preventable fraction includes the portion of the population at risk that actually participates in a program and the number of cases prevented.
C	The preventable fraction includes the number of cases that have been prevented from happening, not the cases that now require intervention.
D	The estimated number of cases with high-risk factors is included in attributable risk.

PTS: 1                      CON: Promoting Health

12. Population attributable risk (PAR) is based on the assumption that the risk factor is removed from the entire population being targeted. It also can be used to calculate the cost benefit and the \_\_\_\_ of a prevention program.
- A. Cost effectiveness
  - B. Necessity
  - C. Population ecology
  - D. Percent of repeat participants

ANS: A

Objective: 4. Compare and contrast different levels of health promotion, protection, and risk reduction interventions.

pp. 32-37

Heading: Prevention Frameworks > Public Health Prevention Frameworks

Integrated Processes: N/A

Client Need: Health Promotion and Maintenance

Cognitive Level: Application [Applying]

Concept: Promoting Health; Economics

Difficulty: Moderate

	Feedback
A	PAR can be used as a measurement of the cost benefit and cost effectiveness of a prevention program, which is based on the strength of the risk factor and the prevalence of the risk factor in a population.
B	PAR can be used to estimate the cost effectiveness of a prevention program. The estimation of the cost effectiveness of a program is a separate issue from whether a program is necessary or not.
C	PAR can be used to estimate the cost effectiveness of a prevention program. There is no measurement of the population ecology, only of the strength and prevalence of the risk factor.
D	PAR can be used to estimate the cost effectiveness of a prevention program. The percent of repeat participants is not a measure of the cost effectiveness of the program when the risk factor has been removed from the targeted population.

PTS: 1                      CON: Promoting Health | Economics

13. The nursing student is studying learning theories. He learns that television commercials are an example of which learning theory?
- A. Constructivism
  - B. Cognitivist
  - C. Bandura's theory of social learning
  - D. Behaviorism

ANS: C

Objective: 5. Identify health education strategies and chronic disease self-management within the context of prevention frameworks.

p. 38

Heading: A Primary Prevention Approach: Health Education

Integrated Processes: Teaching/Learning

Client Need: Health Promotion and Maintenance

Cognitive Level: Application [Applying]

Concept: Evidence-Based Practice; Promoting Health; Nursing Roles

Difficulty: Easy

	Feedback
<b>A</b>	Constructivism is a learning theory that includes reflecting on our own experiences and knowledge.
<b>B</b>	Cognitivist focuses on inner mental activity and knowledge that has changed thought patterns through rationally responding to an external stimulus.
<b>C</b>	Bandura's theory of learning specifically connects understanding, behavior, and environment. Whereas the other theories listed are based in behavior and cognitive frameworks, Bandura's theory stresses imitation and reinforcement in learning. In this example, the audience is encouraged to mimic the behavior seen on the commercial.
<b>D</b>	Behaviorism includes the theory of classical conditioning, which emphasizes that change comes with an environmental stimulus resulting in a response.

PTS: 1

CON: Evidence-Based Practice | Promoting Health | Nursing Roles

14. A patient diagnosed with diabetes buys books, reads articles, talks with knowledgeable people, informs himself about what he can do to improve his health, and takes action. The PHN recognizes this method of adult learning as
- A. Pedagogy
  - B. Andragogy
  - C. Constructivism
  - D. Humanism

ANS: D

Objective: 5. Identify health education strategies and chronic disease self-management within the context of prevention frameworks.

pp. 38-40

Heading: A Primary Prevention Approach: Health Education > Theories of Education

Integrated Processes: Nursing Process

Client Need: Health Promotion and Maintenance

Cognitive Level: Application [Applying]

Concept: Evidence-Based Practice; Promoting Health

Difficulty: Easy

	Feedback
<b>A</b>	Pedagogy is the correct use of teaching strategies to provide the best learning.
<b>B</b>	Andragogy is the art and science of helping adults learn.
<b>C</b>	Constructivism is a learning theory that includes reflecting on our own experiences and knowledge.
<b>D</b>	Humanism is defined as self-directed learning through examining personal motivation and goals. It also includes the development of personal actions to fulfill one's personal motivation and goals.

PTS: 1

CON: Evidence-Based Practice | Promoting Health



15. A nursing student is listening to a lecture on poor health outcomes. Based on research by the Institute of Medicine (IOM), the instructor says that less knowledge of chronic disease management, performance of fewer health promotion activities, low usage of the health-care system, and less use of preventative services are due to:
- A. Low health literacy
  - B. Poor insurance
  - C. Limited access to medical services
  - D. Few prevention programs

ANS: A

Objective: 5. Identify health education strategies and chronic disease self-management within the context of prevention frameworks.

pp. 40-42

Heading: A Primary Prevention Approach: Health Education > Health Literacy

Integrated Processes: Teaching/Learning

Client Need: Health Promotion and Maintenance

Cognitive Level: Application [Applying]

Concept: Promoting Health; Nursing Roles; Evidence-Based Practice

Difficulty: Easy

	Feedback
<b>A</b>	The lack of health-care literacy is the problem, particularly in older Americans with limited education. There is a causal relationship between low health literacy and poor health outcomes due to the lack of understanding of one's health problems.
<b>B</b>	Poor insurance produces problems such as a lack of access to health services and inability to receive proper care. However, this is not the cause cited by the IOM research of the trends mentioned above.
<b>C</b>	Limited access to medical services due to transportation or financial issues means poorer outcomes, but this is not the cause cited by the IOM research.
<b>D</b>	Few prevention programs means more intervention programs are needed, but this is not related to the trends mentioned above.

PTS: 1

CON: Promoting Health | Nursing Roles | Evidence-Based Practice

16. The PHN recognizes that which of these tests is not an indicator of health literacy?
- A. The Test of Functional Health Literacy in Adults (TOFHLA)
  - B. Rapid Estimate of Adult Literacy in Medicine (REALM)
  - C. National Quality Forum (NQF)
  - D. Suitability Assessment of Material (SAM)

ANS: C

Objective: 5. Identify health education strategies and chronic disease self-management within the context of prevention frameworks.

pp. 40-42

Heading: A Primary Prevention Approach: Health Education > Health Literacy

Integrated Processes: Nursing Process

Client Need: Health Promotion and Maintenance

Cognitive Level: Comprehension [Understanding]

Concept: Assessment; Promoting Health; Quality Improvement

Difficulty: Easy

	Feedback
<b>A</b>	The TOFHLA is a 50-item reading comprehension and numerical test available in English and Spanish that tests the ability of the patient to understand health-related materials.

<b>B</b>	REALM is used to assess the reading skills of patients.
<b>C</b>	The NQF is an agency for health-care quality, safety, and infection control, but not a test.
<b>D</b>	SAM assesses health information for content and cultural appropriateness.

PTS: 1

CON: Assessment | Promoting Health | Quality Improvement

## COMPLETION

17. If the total number of cases of a disease is 100, and the total number of persons in a population is 1,000, what would the prevalence be? \_\_\_\_\_

ANS:

0.1

Feedback: The prevalence of a disease is calculated by dividing the total number of disease cases (100) by the total number of persons in a population (1,000) to equal the total number of cases of disease in a population.  $100 \div 1,000 = 0.1$ .

Objective: 2. Describe public health in terms of current frameworks guiding prevention efforts from a local to a global perspective.

pp. 30-32

Heading: Prevention Frameworks > Natural History of Disease

Integrated Processes: Nursing Process

Client Need: Health Promotion and Maintenance

Cognitive Level: Application [Applying]

Concept: Promoting Health

Difficulty: Easy

PTS: 1

18. In a hypertensive study, nurses took the blood pressure readings of 250 participants. In order to determine the accuracy of their readings, they wanted to test the sensitivity of their instruments. If the number of true positives is 40, and the total number of participants with disease (true positives plus false negatives) is 55, the sensitivity of the instrument is \_\_\_\_\_.

ANS:

72.7%

Feedback: The number of true positives (40) is divided by the total number of people with the disease (true positives plus false negatives = 55) and multiplied by 100 to equal the sensitivity of the instrument.  $(40/55) \times 100 \approx 72.7\%$ .

Objective: 2. Describe public health in terms of current frameworks guiding prevention efforts from a local to a global perspective.

pp. 46-50

Heading: Screening and Early Identification > Sensitivity and Specificity

Integrated Processes: Nursing Process

Client Need: Health Promotion and Maintenance

Cognitive Level: Application [Applying]

Concept: Assessment; Perfusion; Promoting Health

Difficulty: Easy

PTS: 1

## MULTIPLE RESPONSE

19. A nursing student is studying preventable causes of death. In 2004, what were the three leading causes of preventable death?

Select all that apply.

- A. Tobacco use
- B. Drowning
- C. Alcohol use
- D. Falls
- E. Improper diet and physical inactivity

ANS: A, C, E

Objective: 2. Describe public health in terms of current frameworks guiding prevention efforts from a local to a global perspective.

pp. 32-37

Heading: Prevention Frameworks > Public Health Prevention Frameworks

Integrated Processes: Teaching/Learning

Client Need: Health Promotion and Maintenance

Cognitive Level: Application [Applying]

Concept: Addiction; Sleep, Rest, and Activity; Nutrition; Promoting Health; Nursing Roles

Difficulty: Easy

	Feedback
1.	The three leading causes of preventable death in 2004 were tobacco use, alcohol use, and improper diet and physical activity.
2.	The three leading causes of preventable death in 2004 were tobacco use, alcohol use, and improper diet and physical activity.
3.	The three leading causes of preventable death in 2004 were tobacco use, alcohol use, and improper diet and physical activity.
4.	The three leading causes of preventable death in 2004 were tobacco use, alcohol use, and improper diet and physical activity.
5.	The three leading causes of preventable death in 2004 were tobacco use, alcohol use, and improper diet and physical activity.

PTS: 1

CON: Addiction | Sleep, Rest, and Activity | Nutrition | Promoting Health | Nursing Roles

20. When screening for, monitoring, and diagnosing disease, a health-care provider always evaluates a measurement tool for which of the following attributes?

Select all that apply.

- A. Reliability
- B. Validity
- C. Functionality
- D. Sensitivity
- E. Specificity

ANS: A, B, D, E

Objective: 6. Describe components of screening from a population and individual perspective.

pp. 46-50

Heading: Screening and Early Identification > Sensitivity and Specificity

Integrated Processes: Nursing Process

Client Need: Health Promotion and Maintenance

Cognitive Level: Application [Applying]

Concept: Assessment; Promoting Health

Difficulty: Easy

	Feedback
1.	Reliability is the ability of the instrument to give consistent results on repeated trials.
2.	Validity is the degree to which the instrument measures what it is supposed to measure.
3.	Functionality is the quality of being suited to serve a purpose well. This not one of the attributes by which a measurement tool is always evaluated.
4.	Sensitivity is the ability of the screening test to a positive finding when the person truly has the disease or is a true positive.
5.	Specificity is the ability of the screening test to give a negative finding when the person does not have the disease or is a true negative

PTS: 1

CON: Assessment | Promoting Health