***Systems-Thinking and Systems-Doing Parts 1 & 2 Test Bank***

***for post-test and certificate of completion***

***Systems-Thinking and Systems-Doing Part 1***

1. All of the following are common sources of childhood lead exposure today, except:
2. paint in old homes.
3. air from lead in gasoline.
4. water.
5. lead in soil.

Answer B

1. Which of the following is the most accurate statement about the relationship between lead and nutrition?
2. Lead is not affected by nutrition.
3. Lead absorption is reduced by low levels of iron and calcium in the diet.
4. Lead absorption is increased by low levels of iron and calcium in the diet.
5. Lead toxicity is reduced by low levels of iron and calcium in the diet.

Answer C

1. Which of the following is an accurate statement about lead toxicity and systems thinking?
2. Lead toxicity results from multiple factors or influences.
3. The influences may interact to magnify the impact.
4. The presence of peeling lead paint in a home may be a bottleneck to reducing the impact of elevated lead levels.
5. All of these are accurate statements

Answer D

1. Which of the following is the least accurate statement about the impact of taking a systems-thinking approach to lead exposure?
2. Eliminating lead in gasoline was a strategy for addressing a bottleneck.
3. Reducing lead exposure during pregnancy, such as avoiding exposure due to home renovation, is a strategy for addressing a leverage point.
4. Systems-thinking can often identify an intervention that serves as a “magic bullet,” such as reducing blood lead to levels that do not produce any harm.
5. Paint in older homes, soil in older communities, and water can be identified as factors that need to be included in a systems-thinking approach to lead exposure.

Answer C

1. Which of the following is the least accurate description of a role that reductionist thinking plays in systems-thinking?
2. Reductionist thinking helps to identify risk factors or influences.
3. Reductionist thinking helps to estimate the strength of the risk factor or influences.
4. Reductionist thinking is able to identify bottlenecks.
5. Systems-thinking builds on reductionist thinking.

Answer C

1. Which of the following is the least accurate statement about systems-thinking?
2. It can be applied to a range of complex health problems, from antibiotic resistance to obesity to the opioid epidemic.
3. It helps identify bottlenecks and leverage points where interventions may have a large return on investment.
4. It can generally be conducted using existing data and making few assumptions.
5. It starts by identifying factors previously investigated using a reductionist approach.

Answer: C

1. Which of the steps in systems-thinking is illustrated in the following example?

The metabolic syndrome, when present, increases the chances of coronary artery disease more than would be expected by adding together the impact of the individual risk factors.

* 1. Identify key factors or influences that impact an outcome
  2. Estimate the relative strength of each of the influences
  3. Examine the interactions between factors
  4. Identify bottlenecks
  5. Identify leverage points

Answer C