

# Epidemiology Quiz

(From Association to Causation)

Match the causal criterion with its description. The names of the criteria are:

- strength
- consistency
- specificity
- temporality
- biological gradient
- plausibility
- coherence
- experimentation
- analogy

| Criterion | Description   |
|-----------|---|
|           | This criterion requires that exposure precede the onset of disease by a reasonable amount of time.  |
|           | This criterion suggests evidence from clinical trials, <i>in vitro</i> experiments, animal models, and so on support for the theory.  |
|           | This criterion says increase in the level, intensity, duration, or total level of exposure to the factor leads to progressive increases in risk. This is in keeping with the general dose-response relationship seen with many biologic phenomena.  |
|           | This criterion holds that large associations provide firmer evidence of causality than do small ones, and that the most direct measure of association is found in the form of ratio measures of association such as the risk ratio.   |
|           | This criterion holds that diverse methods of study carried out in different populations under a variety of circumstances by different investigators providing non-contradictory results.  |
|           | The criterion holds that the cause leads to only one disease and that the disease results from this single cause.   |
|           | This criterion suggests that all available evidence concerning the natural history and biology of the disease "sticks together" as a whole. By that, the proposed causal relationship should not conflict or contradict information from experimental, laboratory, epidemiologic, theory, or other knowledge sources. |
|           | This implies a similarity in some respect with an otherwise different phenomenon. It is considered one of the weakest forms of evidence.  |
|           | This criterion suggests that it is helpful for an association to be based on known biological fact. This, of course, is contingent on the state of the biological knowledge of the day.   |