

**Exercise: Salt Brine**

True or False? The proportion of salt to water is critical to brine effectiveness.

- b. How is salt brine used in anti-icing?
- i. In anti-icing the application is made ahead of or before an event to:
    - a) prevent frost,
    - b) prevent black-ice,
    - c) prevent freeze-bond to pavements and
    - d) buy critical response time.
  - ii. The brine is applied directly to the pavement surface in anticipation of an upcoming event.
    - a) The material is applied with a liquid application unit in streams, at controlled amounts, in an application that leaves the surface merely damp.
    - b) The brine streams are placed about 8” to 12” apart and will dry on the pavement surface.
  - iii. Once frost forms or snow begins to fall, the moisture will activate the dried strips into brine that helps prevent frost from forming on the surface or snow/ice from bonding.
  - iv. Anti-icing applications do not result in the flow of liquid on the pavement so the uniformity of spread must be achieved at the time of application.
    - a) Anti-icing applicators use the typical series of stream nozzles to allow for uniform coverage without excessive mist and fanning of the liquid (early models of applicators used fan nozzles and created problems with premature freezing of the mist).

