Pancake Ice - Is a round section of recently formed free-floating ice. It spans
approximately ten feet across and can be up to four inches thick. It is mostly level with
elevated edges due to pieces colliding against one another.

### Ice Strength:

•	3"	Walking
•	4"	Fishing
•	5"	Snowmobile

# • 8-12".....Vehicles

#### Discussion:

When walking on ice, how far apart should rescuers be? How can we better disperse our body weight?

Given that 8-12 inches of ice is theoretically safe to drive on, should NFD vehicles be driven on ice if needed?

# Hypothermic Patients:

We know hypothermia can begin when the core temperature drops below 95 degrees. When a victim is suddenly submerged in cold water hypothermia and hypoxia rapidly occur. Discuss the "Mammalian Diving Reflex". There are many instants when a drowning victim has been successfully revived after submersion in cold water for long periods of time. Why is this? How Would NFD members treat a hypothermic patient. Review the following MFA information on hypothermia.

## **Heat Loss**

Heat loss is due to the transfer of heat (calories) from one body to another, or from one body into the atmosphere. Heat loss occurs several ways.

- a. *Conduction* Direct heat exchange from one body or surface to another by direct contact. Ex., a body immersed in cold water, or wearing wet clothes.
- b. Convection Air currents blowing across the body remove heat and lower the body's temperature.
- c. Radiation Body heat radiates away from the body and warming objects around it. (40% of heat loss from the body radiates away from the head and neck.)
- d. Evaporation Evaporation of perspiration on the surface of the skin is the body's own way of cooling down. Also known as "sweating."
- e. Respiration A person breathes in cool air and exhales warm air. When heat loss is greater than heat production, the body cools down.