O & M Winter Preparedness and Pedestrian Travel Skills

O&M Department

Massachusetts Commission for the Blind
Winter of 2014-2015

- A six week storm cycle
- Most snowiest in Mass.

- 108.6 inches of snow
  - 30 day snowfall record
  - Snow depth record
  - Fastest six foot snowfall
  - Fastest 90 inch snowfall
  - 4 calendar days of 12 inches or more snow on the ground.
  - 28 consecutive days of lows under 20 degrees
• “If the general principals of orientation are well learned, travelers will be well prepared for dealing with effects of adverse weather.”

“Travel in Adverse Weather Conditions” chapter from “O&M Techniques A Guide for the Practitioner” “Hill/Ponder

Winter O&M Skills......
Be Prepared!

- Set up back up plan for transportation
  - Para Transit options
  - Public transit change of routes during snow event
  - Different back up routes
Traveling in Snow

- Be prepared for the unexpected
  - Use common sense!
- Dress for the weather
- Wear sunglasses
- Carry hand/toe warmers

- Prepare for longer commute
  - Time distance will be different
  - Route might be more difficult
Understand Weather Forecasts

- Refreezing issues
  - Route ok in morning but icy in afternoon
Learn Types of Snow

• Soft/light?
  • Snowdrifts?
• Heavy/Wet?
• Icy?
• Visibility?
Questions which should be asked?

• Do I need to really go out?
  • Windchill factor
    • Waiting for transportation?
    • Waiting in line outside (COVID)

• Can trip wait until later in the day?
  • On line ordering options?

• What are the conditions of the sidewalks or streets?
  • Neighborhood and route?
- Dress in layers
  - Water repellent outer layer
- Ski pants
- Mittens/gloves
- Hat
  - Neck gaiter
  - Cover mouth with scarf to protect lungs
- Bright color coat

Clothing
• On lessons have extra clothing
  • Socks/mittens/gloves
  • Hats
• Schools: lost & found box
  • Dollar store
  • End of winter sales

What about Students who aren't prepared?
Footwear

- Good boots!
  - One pair, for cold/snow, one for wet season
  - Waterproof
  - Warm
  - No or small heel
  - Traction soles
  - Well fitted socks

- Yaktrax
- Ice grips/treads/cleats
Additional Equipment

- Backpack
- Trekking or ski pole
- Back up long cane
Walk Like a Penguin!

- Keep knees loose
- Extend arms to side for balance (adapting when using cane)
- Point feet out slightly (toes out)
- Walk slower!
  - (Canadian Safety Council)
- Climbing over snowbanks
  - Turn sideways and walk up sideways, to maintain balance

Walk Like a Penguin!
• Constant contact
  • For snow over 3 inches deep, a two cane technique may be needed.
  • Use one cane constant contact and 2\textsuperscript{nd} cane as a probe. (should have a pencil tip) or use hiking or ski pole
  • Journal of Vision Impairment and Blindness/JVBI

Long Cane
• Shorter cane
  • Ice grips
• Long Canes
  • Change of tips?
    • Pencil tip
    • Dakota Disc
    • Hiking or ski pole

Canes and Tips
• Sock around cane
• Mitten
• Pickleball mitt
  • Hand/Boot Heating Pads
Guide Dog Issues

- Wind Chill
- Type of snow
- Type of ice melt used
  - Sodium-chloride based/rock salt is not good for dogs/vegetation
  - Calcium chloride is a better choice! ($\text{CaCl}_2$)
- Clothing
  - Bright/reflective clothing
  - Harness Mitt
- Protection for dog’s paws
  - Musher’s secret
    - Dog booties
Conditions may change….

- Melting and re-freezing
- North side vs South side of Street
- From house to house
- Block to block
- Time of day
• Walkways can be better defined.
• Footpaths may now lead to corner.
• Street crossing may be shorter.
• Traffic sounds may be easier to hear.
• Traffic may be slower or less.
• Audio cues on cold crisp days may transmit better.

Benefits of Snow
• Walking though snowdrifts or puddles or on ice.
• Grassline if frozen, harder to detect
• Landmarks are different or hidden
• Pedestrians may be walking in the street

• Snow banks block sound and sight lines
• Muffed traffic sounds
• Traffic may have limited ability to stop

Snow Impacts/Barriers
Orientation

• Where to cross?
  • Understand the footpath route may not lead to correct street crossing
  • Secondary plowing may block curb access.
Crossings may be different on each corner....
• Routes around transit stations may change as well....
Different sizes of snowbanks…

- Overhead hazards
- Narrower sidewalks
- No landmarks
- Where is the street crossing?
Some paths may not be well defined…
Be aware of falling snow and ice!
Must walk in Street
• Roads are plowed more than once.
• Re-sanded and de-iced as needed.
• What about Sidewalks?

Roads and sidewalks are Public Rights of Ways
• Under ADA, State & local governments are required to make their programs accessible.
• Streets, sidewalks and intersections (pedestrian access) are governmental programs
  • DPW, City/Town Officials
    • Identify a municipal point person for snow removal
    • What is the reporting procedure? (311 System)
  • Set priorities for sidewalk snow clearance.
  • Improve monitoring and enforcement.
  • Train municipal and private snow plowing personal

Advocate for Better Sidewalk Snow Removal!
**WalkBoston: Recommendations**

**Training & Enforcement needed**

- **Curbcuts**
  - Municipalities should clear corner curb ramp shortly after or at the same time as street plowing.

- **Driveways: Snow needs to be removed from blocking sidewalks**

- **Sidewalks**
  - Clearing off sidewalks should include ice and snow
  - 48 inches wide or 75% of the width of the sidewalk
  - Sanding and de-icing
  - First-priority sidewalks should be passable within 3-6 hours after a storm between 7am-9pm.
• Even if snow has melted, snowbanks obstacles can remain!

Poor snow removal!
• If you dress for the weather, you can travel in most situations.

• Don’t let the winter season scare you to go outside.

How to enjoy the Winter
Outdoor Winter Activities

- Snowshoeing
- Cross Country Skiing
- Hiking
- Walking
- Balance Activities
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