



O & M Winter Preparedness and Pedestrian Travel Skills

O&M Department

Massachusetts Commission for the Blind



- **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

Winter of 2014-2015

- “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.....



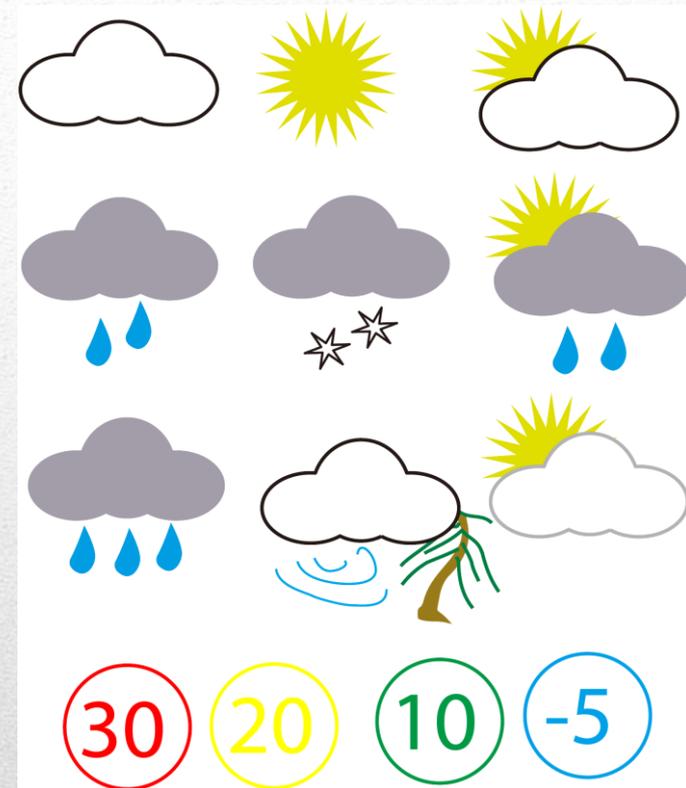
- Set up back up plan for transportation
 - Para Transit options
 - Public transit change of routes during snow event
 - Different back up routes

Be Prepared!

- 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

Traveling in Snow

- Refreezing issues
 - Route ok in morning but icy in afternoon



Understand Weather Forecasts



- Soft/light?
 - Snowdrifts?
- Heavy/Wet?
- Icy?
- Visibility?

Learn Types of Snow

- 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?

**Questions which
should be asked?**

- 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?



- 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

Footwear

- Backpack
- Trekking or ski pole
- Back up long cane

Additional Equipment



- 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 2nd 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





- 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! **(CaCl₂)**
- Clothing
 - Bright/reflective clothing
 - Harness Mitt
- Protection for dog's paws
 - Musher's secret
 - Dog booties

Guide Dog Issues



- Melting and re-freezing
- North side vs South side of Street
- From house to house
- Block to block
- Time of day

**Conditions may
change....**

- 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 through 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
- Muffled traffic sounds
- Traffic may have limited ability to stop

Snow Impacts/Barriers



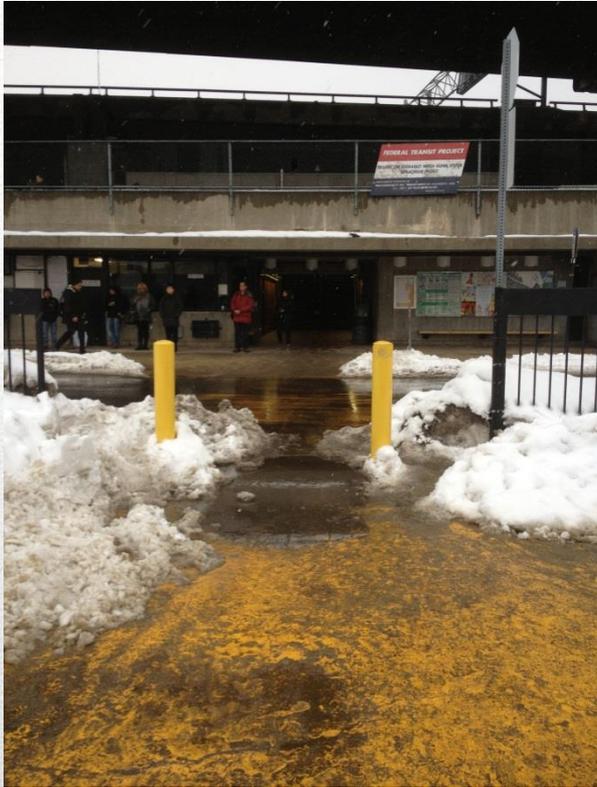
- Where to cross?
 - Understand the footpath route may not lead to correct street crossing
 - Secondary plowing may block curb access.

Orientation





Crossings may be different
on each corner....



- Routes around transit stations may change as well....



- Overhead hazards
- Narrower sidewalks
- No landmarks
- Where is the street crossing?

**Different sizes of
snowbanks...**



**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!

- **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.

WalkBoston: Recommendations
Training & Enforcement needed



- 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



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

Outdoor Winter Activities

- Massachusetts Commission for the Blind O&M Staff
- Grace Cummings COMS
- Cindy Curran COMS
- Cynthia Guise COMS
- Michael Dionne COMS
- Meg Robertson COMS



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