Background

Canadian and US influence:

– **1976: Perla, Martinelli: Open-spaced technique**

– **1993: McClung, Shaerer: Variations, same issue**

– **1996: Auger, Jamieson: ISSW Banff** ("Avalanche Probing Revisited" 1996)

– **1997: Atkins, further introduction of Auger and Jamiesons article to IKAR**

– **1998: Lunde, Kristensen: Introduced to Norwegian Red Cross; subsequent testing**

– **1999: 3-hole-per-step probing approved as the standard method for coarse probing in the Norwegian Red Cross**

– **2008: Standard method in Norway, for all rescue organisations (National Standard)**

Highway 15, Grasdalen, Norway, 2002

Rationale

- Probing – a life saving measure, not solely body recovery
- Speed vs Accuracy
- "All hands on deck" – No "on-lookers"
- Maximum amount of holes in the snow per unit time
- Repeated probing in the primary search area

Description of Method

- Fingertip to fingertip distance between probers
- 3 holes per step – one front and one to each side
- Probes straight down
- 2 meter depth
- 5-man probe line – guided by left prober
- 50x70 cm grid (per person)
- Marking every 4 steps (approx.)

3-HOLE / STEP PROBING

70 cm   70 cm

←50cm→ ←50cm→ ←— 75 cm —→ ←50cm→ ←50cm→

L   R   30% faster   L   R

166 m^2/ person / 30 min[1] (~95% prob. of hit [2, 3])

CLOSED-SPACED COARSE PROBING

70 cm   70 cm   70 cm

←—75 cm—→ ←—75 cm—→

L   R   L   R   L   R

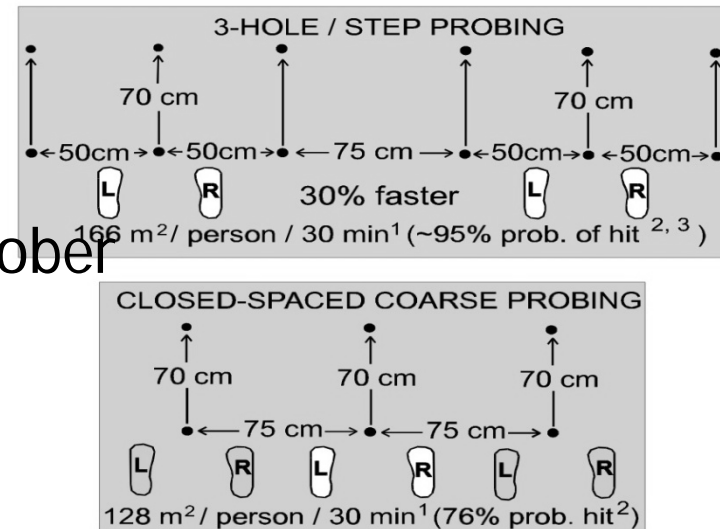128 m^2/ person / 30 min[1] (76% prob. hit[2])

Figure 3 Comparison of 3-hole-per-step probing and open-spaced probing showing position of holes in snow surface relative to prober's feet. Based in trials on compac lev…
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- One hole by step – the "quick method"

- Fine search probing
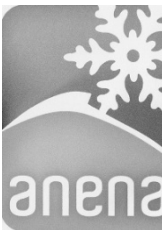
- Two holes by step

**ONE HOLE PROBING
Procedure**

Goal is to find buried subjects <u>alive</u>

Select most probable areas

Max.15 probers + 1 shoveler + 1 leader
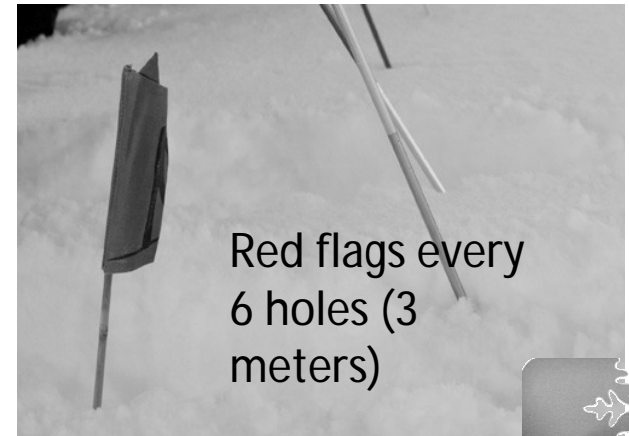
Probes (iron, stainless), red flags

ONE HOLE PROBING
Procedure

- Shoulder against shoulder
- Probe vertical between feet
- Probing 2 meters deep

ONE HOLE PROBING
Procedure

- Probe vertical, 2m deep
- When done, point probe 50 cm ahead on the surface and wait for command
- Team Leader says "move forward"
- Everybody steps forward and probes

Red flags every 6 holes (3 meters)

ONE HOLE PROBING
Procedure

- Someone has a hit : leave the probe in, take a new probe and proceed in the probe line. Shovelers verifying the find.

- In case of a secondary avalanche alarm, leave probes in the snow and run away towards the escape route (green flags)