G-M DETECTORS JOB AID:

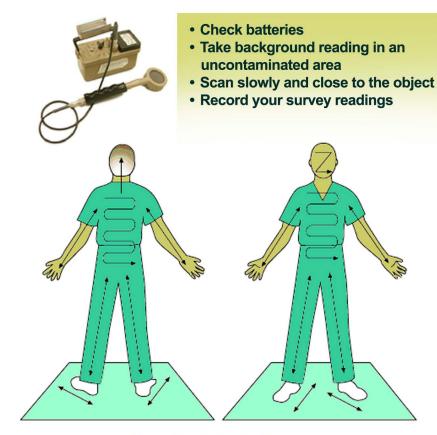


Figure: Conducting the Survey

SAFETY NOTE:

Do not disconnect or connect the connectors for the coaxial cable on the survey meter when the meter is turned on. You could receive an electrical shock.

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Inspect the equipment.

- a. Attach the meter to the probe with the cable.
- b. Inspect the cable that connects the G-M detector to the survey meter. With the meter on, wiggle the cable near the connectors to see if this causes erratic behavior of sound or display; if so, the cable is defective.
- Inspect the meter for obvious signs of damage (e.g., broken detector window; broken glass on meter face).

Perform a battery check.

a. Check the batteries, using the "range" switch or "bat" button; the method depends on the type of instrument. The meter needle should move to an area on scale marked "Bat" indicating the batteries are good. Replace if necessary.

Conduct a source/ operational check.

- a. Place detector close to a check source (e.g., Thorium containing gas lantern mantle in a plastic bag; plastic button "check source").
- Select appropriate range (e.g., x10).
- c. Verify meter response.
- d. If no source is available, assume the meter is working if the response to background is about 30 to 200 counts per minute (cpm).

Conduct a background reading.

a. Expect a reading of 30 to 200 counts per minute.

Conduct the survey (see figure).

- a. Move the probe slowly (1 inch per second).
- b. Do not let the probe touch anything.
- c. Pay particular attention to face, feet, and hands.
- d. Locate the points that produce the most clicks and document the reading. Generally, areas more than twice the pre-determined back ground are considered contaminated.

If large numbers of people require screening, to avoid delays, it may be necessary to perform only a "quick look" spot survey of the head, face, shoulders and hands, the most likely locations for contamination.