

**IMPROVISED NUCLEAR DEVICE (IND):  
COMMUNITY RECEPTION CENTER (CRC) QUESTIONNAIRE BANK**

**Health Studies Branch**

**Centers for Disease Control and Prevention**

**Atlanta, GA**



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## Acronyms

CPM:	counts per minute
CPS:	counts per second
REM:	roentgen equivalent, man
Sv	Sievert
$\mu$ REM/hr:	micro rem per hour
mREM/hr:	milli rem per hour
$\mu$ Sv/hr:	micro Sievert per hour
nSV/hr:	Nano Sievert per hour
GM Pancake:	Geiger-Muller Pancake

## Definitions

**REM (roentgen equivalent, man):** a unit of equivalent dose. Not all radiation has the same biological effect, even for the same amount of absorbed dose. REM relates the absorbed dose in human tissue to the effective biological damage of the radiation. It is determined by multiplying the number of rads by the quality factor, a number reflecting the potential damage caused by the particular type of radiation. The rem is the traditional unit of equivalent dose, but it is being replaced by the Sievert (Sv), which is equal to 100 rem. For more information, see “Primer on Radiation Measurement” at the end of this document.

**Sievert (Sv):** a unit used to derive a quantity called dose equivalent. This relates the absorbed dose in human tissue to the effective biological damage of the radiation. Not all radiation has the same biological effect, even for the same amount of absorbed dose. Dose equivalent is often expressed as millionths of a Sievert, or micro-Sieverts ( $\mu$ Sv). One Sievert is equivalent to 100 rem.

## **Introduction**

Following a radiation incident such as an improvised nuclear device (IND) detonation, state and local response authorities will need to establish one or more population monitoring and decontamination facilities to assess people for radioactive exposure, contamination, and the need for decontamination or other medical follow-up. These facilities are known as community reception centers (CRCs). The basic services offered at a CRC include the following: screening people for radioactive contamination, assisting people with washing or decontamination, registering people for subsequent follow-up, and prioritizing people for further care.

Data collected at CRCs will be crucial for many public health response activities and will enable:

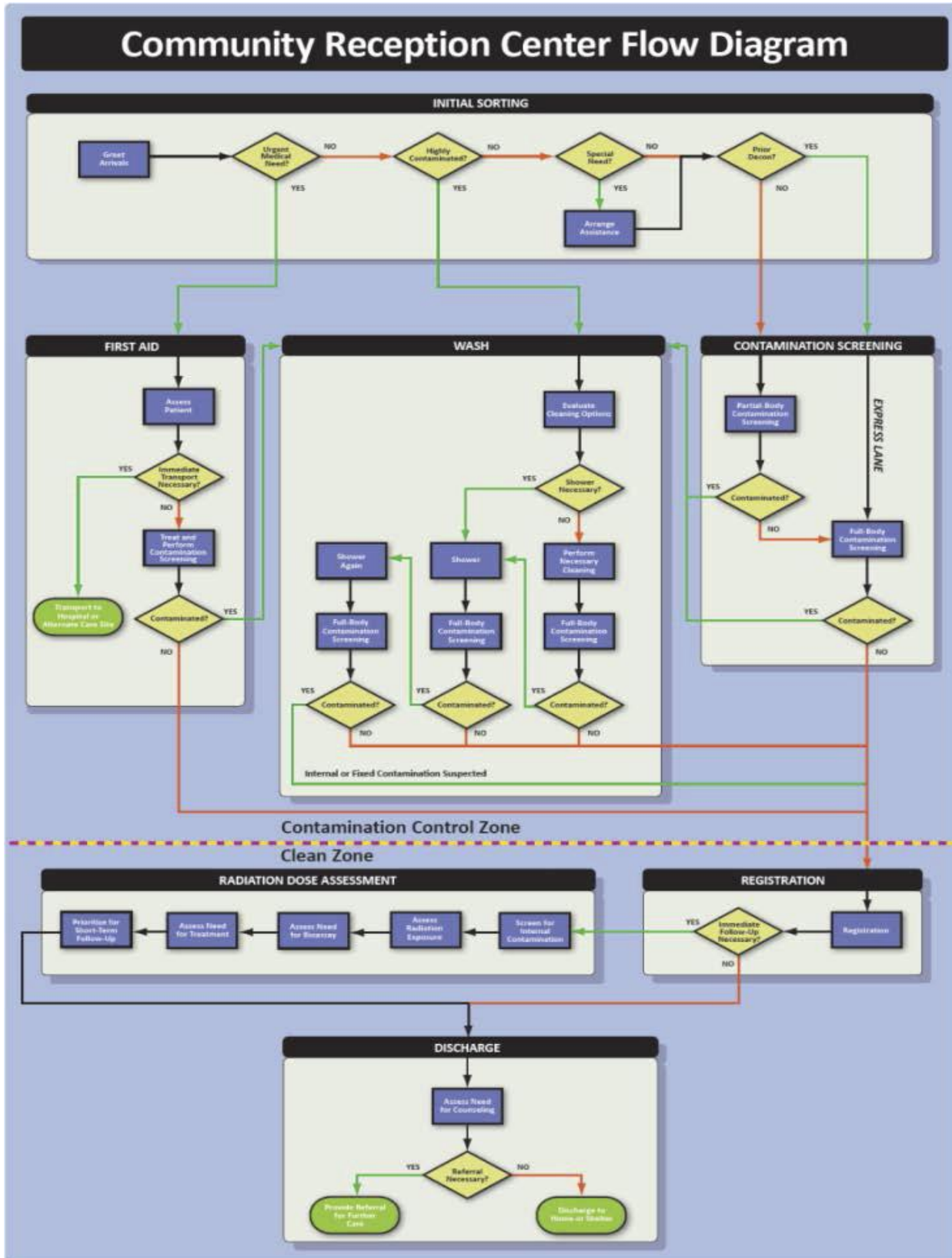
1. Characterization of the affected population including vulnerable/special populations for situational awareness.
2. Provision of accurate epidemiological data that can be integrated into long-term registries for follow up of latent health effects after radiation exposure.
3. Identification of risk factors associated with particular environments or activities (proximity, being outdoors, etc.) for effective public health messaging.
4. Prioritization of limited medical resources such as countermeasures or bioassays to population groups that have a higher risk of exposure or internal contamination based on susceptibility factors.
5. Improvement of the accuracy of dose reconstructions by collecting personal variables needed in dose calculations.

Population monitoring data will be collected in parallel at each station of the CRC (Figure 1) to optimize throughput. Based on the amount and complexity of the data, an ideal platform for data collection is an electronic database tool such as Epi Info 7. An electronic data collection tool such as Epi Info 7 can be implemented using a local area network to include laptops, tablets and cell phones, and paper as an alternative backup option. Additionally, data analysis, visualization, transfer and exchange processes are also much more efficient once the data are collected electronically.

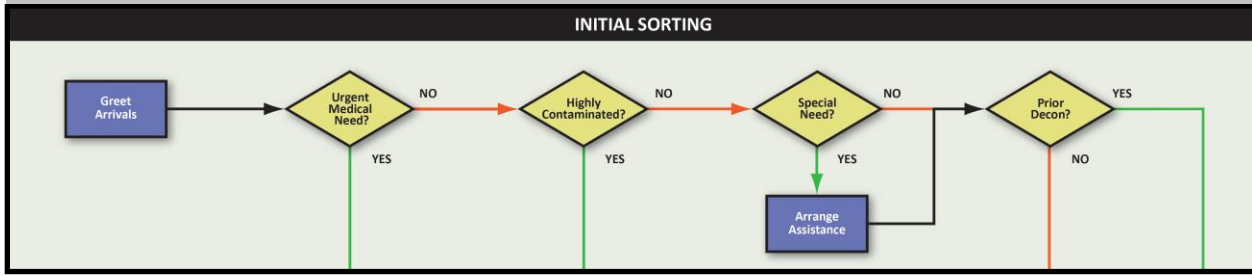
This guide describes the function of each station of a CRC and provides a question bank and other information to guide data collection at each station. A question bank format was chosen to provide the user the ability to tailor the data collection tool to fit a particular incident and/or locality. The CRC data collection tool is designed for CRC staff to fill out the information collected from the individual being assessed. All information collection, as well as procedures performed at the CRC, are voluntary and the individual may accept or refuse any activity. However, some services in the CRC are provided in a “clean zone.” People who refuse contamination screening or decontamination services will not be permitted to continue into the clean zone.

**NOTE: SEE ATTACHEMENT FOR THE EXAMPLE FORM AND CRC FLOW DIAGRAM POSTER**

Figure 1: Community Reception Center Flow Diagram



## Section A. INITIAL SORTING STATION



Staff at this station greet people and direct them where to go next in the CRC. Staff may direct incoming people that have urgent medical needs to the First Aid Station or highly contaminated individuals (several magnitudes above the screening criteria) to the Wash Station. Unaccompanied minors, children and infants and people with disabilities or access and functional needs or pets will be accommodated. Staff will assign ID numbers for tracking and record keeping purposes and begin data collection. The initial sorting station should also be staffed with “runners” who will accompany individuals to the next station, as needed.

### Section-specific instructions:

- Provide a unique barcode or ID number to EVERY individual.
- If recording information for a family, use suffix A, B, C etc. for each family member ID e.g., 1001A, 1001B.
- For infants (less than one year of age), record age in months.
- *All italicized questions will be answered by the individual.*

### Questions:

A1. Date (MM/DD/YYYY): \_\_\_\_\_

A2. Time (Military time): \_\_\_\_\_

A3. Barcode or ID Number: \_\_\_\_\_

A4. *What is your preferred spoken language?* English Spanish Other: \_\_\_\_\_ non-verbal

A5a. *Are you here* alone or with family?

A5b. Check here in case of  Unaccompanied minor.

A6. *If the individual is present with family, total number of family members (including individual):* \_\_\_\_\_

A7a. Last Name: \_\_\_\_\_ A7b. First Name: \_\_\_\_\_ A7c. Middle Initial: \_\_\_\_\_

A8. Age: \_\_\_\_\_ Years Months

A9. *Do you or the family have a pet with you?* Yes No Don't know

A10. *Did you receive radiation contamination screening before arriving at this facility?* Yes No Don't know  
Refuse to answer

A11a. Did radiation contamination detected on the individual today exceed the Initial Sorting criteria\*?  
(\*Initial Sorting criteria set by the CRC manager) Yes No Don't know

A11b. If yes, specify the highest contamination measurement detected: \_\_\_\_\_

A11c. Measurement units: CPM CPS  $\mu$ REM/hr mREM/hr  $\mu$ Sv/hr nSV/hr

**Post-sorting Instructions:** Please ask Runner to accompany individual to the next station according to condition below:

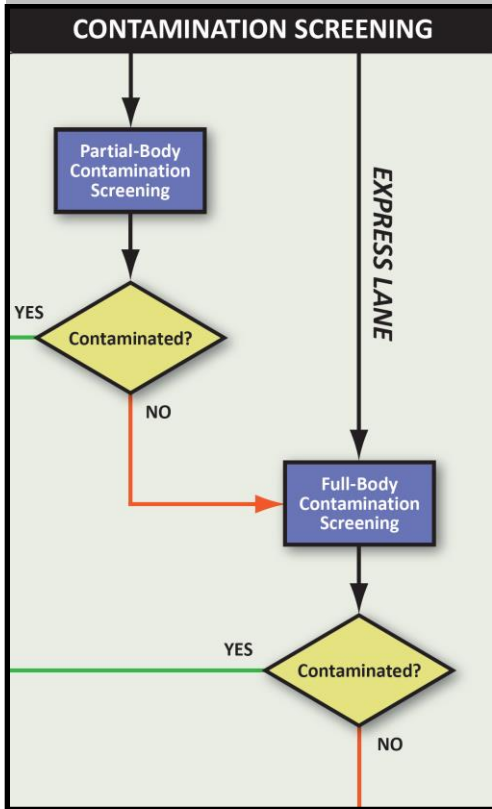
- If they need urgent medical attention, send them to the First Aid Station (Section D).
- If individual is highly contaminated (i.e., answered **YES** to **A11a**), then send them to the Wash Station (Section C).
- If individual does not need first aid, send them to the Radiation Contamination Screening section (Section B).
- If individual decides to leave CRC, send them to the Unregistered Individuals station (Section X) to collect basic information.

A12. Individual was sent next to:

- First Aid Station
- Wash Station
- Radiation contamination Station
- Unregistered Individuals Station as Individual decided to leave CRC



## Section B. RADIATION CONTAMINATION SCREENING STATION



People will undergo screening for radioactive contamination at this station. Instruments used for screening may include a portal monitor or handheld detector. A portal monitor provides an alarm when a measurement exceeds a predetermined threshold (also known as the screening criteria). A handheld detector is used for detailed screening and measurement; it can also detect and localize areas of contamination on the body. Similarly, a radioisotope identifier may also be used which will provide information on the radionuclides involved (i.e. cesium 137). Data collected in this station will include type of detector used for screening, the measurement and identity of any radionuclides, and where in the body the contamination was detected.

### Section-specific instructions:

- If the individual has measurement that is **below** the Screening criteria, complete questions **B1 to B5 ONLY** and send individual to Registration Station (section E) using the Express Lane.
- If individual's contamination measurement result is **above** the Screening criteria, continue answering **ALL** questions in this section.
- *All italicized questions will be answered by the individual.*

### Questions:

B1. Do you accept OR refuse contamination screening?

(In case of minor (under the age of 18), obtain consent from a parent or a guardian)

(If refused, collect name and contact information in **Section X: Contact Information of Unregistered Individuals**. This will end their visit to this CRC.)

B2a. Screening criteria used: \_\_\_\_\_

B2b. Screening criteria units: CPM CPS  $\mu$ REM/hr mREM/hr  $\mu$ Sv/hr nSV/hr

B3a. Detector type: Portal Monitor Handheld

B3b. If handheld, specify type: GM Pancake Other: \_\_\_\_\_

B4a. Specify background count used: \_\_\_\_\_

B4b. Background count units: CPM CPS  $\mu$ REM/hr mREM/hr  $\mu$ Sv/hr nSV/hr

B5. Contamination measurement result:

Below Screening Criteria

Above Screening Criteria/Positive for contamination

*(If Individual is "Below Screening Criteria" then no further screening is needed, do not answer remaining questions (B6a to B9d))*

B6a. Specify highest contamination measurement detected: \_\_\_\_\_

B6b. Measurement units: CPM CPS  $\mu$ REM/hr mREM/hr  $\mu$ Sv/hr nSV/hr

B7. Was contamination detected in the breathing zone (face and/or shoulders)? Yes No

B8a. If contamination was detected in the breathing zone, what was the measurement? \_\_\_\_\_

B8b. Measurement units: CPM CPS  $\mu$ REM/hr mREM/hr  $\mu$ Sv/hr nSV/hr

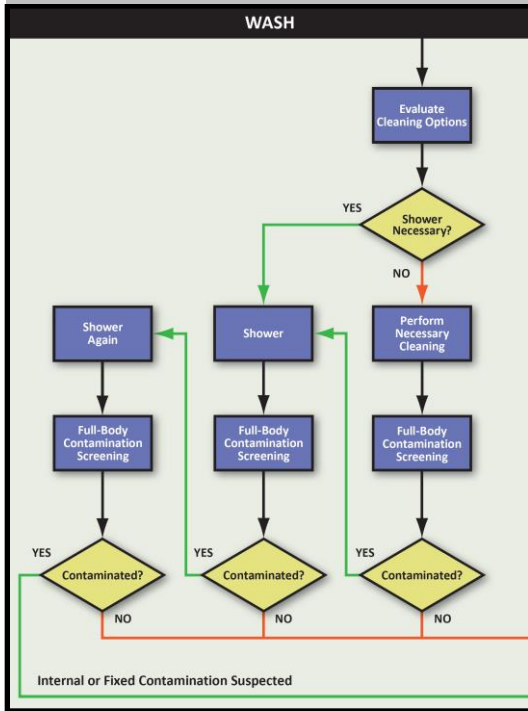
B9a. Was radioisotope identifier used? Yes No

B9b. If yes, specify type and model used: \_\_\_\_\_

B9c. If yes, which radionuclide had the highest activity detected: \_\_\_\_\_

B9d. Which second highest activity radionuclide was detected: \_\_\_\_\_

## SECTION C. WASH STATION



Decontamination procedures will be performed at this station followed by re-screening to make sure that any external contamination has been removed. If a person still screens positive for contamination despite a second decontamination attempt, the contamination may have already been internalized into the body. This is known as internal contamination and it will be important to identify these people for later follow-up. Data collected at this station are related to these activities. The maximum number of washes is 2, at which point, any remaining contamination will be considered to be as low as reasonably achievable or the individual may have internal radiation contamination.

### Section-specific instructions:

- If individual accepts wash (i.e. decontamination), complete **ALL** questions in this section.
- After first wash, rescreen individual and record measurements.
- Individual may receive up to **two washes**. If the individual's contamination level is still above the Screening Criteria, then internal contamination is suspected.
- After all washes are completed, instruct individual to visit the Registration Station (Section E).
- *All italicized questions will be answered by the individual.*

### Questions:

C1. Do you  accept OR  refuse wash?

*(In case of minor (under the age of 18), -obtain consent from a parent or a guardian)*

*(If a contaminated individual refuses wash, collect name and contact information in **Section X: Contact Information of Unregistered Individuals**. This will end their visit to this CRC.)*

### Instructions:

- Complete the following information **AFTER** the first wash.

C2. Is the individual still contaminated?  Yes  No  Refused further screening

*(If individual is not contaminated after first wash, send them to **Registration Station**)*

**Note:** Individual who refused re-screening after first wash **cannot** be sent to the Clean Zone. Collect name and contact information in **Section X: Contact Information of Unregistered Individuals**. This will end their visit to this CRC.

C3a. If yes, contamination measurement: \_\_\_\_\_

C3b. Measurement units: CPM CPS  $\mu$ REM/hr mREM/hr  $\mu$ Sv/hr nSV/hr

C4. Specify the type of handheld detector used for measurement: GM Pancake Other: \_\_\_\_\_

C5a. Specify background measurement used: \_\_\_\_\_

C5b. C5b. Background measurement units: CPM CPS  $\mu$ REM/hr mREM/hr  $\mu$ Sv/hr nSV/hr

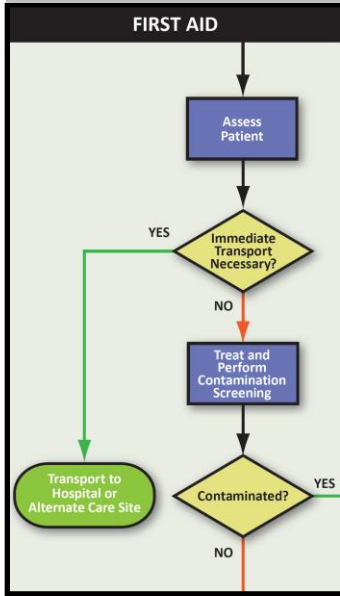
C6. Did individual receive second wash? Yes No Refused second wash

C7. Is the individual still contaminated after the second wash? Yes No Refused further screening

C8a. If yes, contamination measurement: \_\_\_\_\_

C8b. Measurement units: CPM CPS  $\mu$ REM/hr mREM/hr  $\mu$ Sv/hr nSV/hr

## SECTION D. FIRST AID



People with urgent medical needs (related or unrelated to radiation exposure or radioactive contamination) or open wounds, burns, etc. will be taken by Runner to the First Aid Station. At this station, contamination screening and limited decontamination may be performed after urgent medical issues have been dealt with.

### Section-specific instructions:

- Please address **ALL** urgent medical needs first.
- After all urgent medical needs have been addressed; perform necessary whole body contamination screening and decontamination procedures.
- If contamination screening and decontamination were needed and person accepts, complete **ALL** questions in the section below.
- After all procedures are completed, unless transferred to a medical facility, send all individuals to Registration Station (Section E).
- *All italicized questions will be answered by the individual.*

### Questions:

D1. The individual was referred to the First Aid Station for: (*ask Initial Sorting Runner AND check all that apply*)

- Open wound                       number of wounds: \_\_\_\_\_      Specify wound site(s) \_\_\_\_\_
- Burn                                       number of burns: \_\_\_\_\_      Specify burn site(s) \_\_\_\_\_
- Other injury or medical condition                      Specify, other injury or medical condition \_\_\_\_\_

D2. Is individual being treated in the First Aid Section?  Yes  No, a companion is being treated  Transported to a medical facility  Refused treatment

D3. Do you  accept OR  refuse contamination screening?

(*In case of minor (under the age of 18), receive consent from a parent or a guardian*)

(*If refused, collect name and contact information in **Section X: Contact Information of Unregistered Individuals.***)

*This will end their visit to this CRC.*

D4a. Detector type:  Portal Monitor  Handheld

D4b. If handheld, specify type:  GM Pancake Other: \_\_\_\_\_

D5a. Specify background measurement used: \_\_\_\_\_

D5b. Background measurement units:  CPM  CPS   $\mu$ REM/hr  mREM/hr   $\mu$ Sv/hr  nSV/hr

D6. If referred for open wound, was radiation contamination detected in the open wound?

Yes  No  Wound radiation contamination screening was not performed or refused

D7. If referred for burn(s), was radiation contamination detected in the burn?

Yes  No  Burn radiation contamination screening was not performed or refused

**Instructions:**

- If answered **Yes** in **D6** or **D7**, please answer the following questions for body location of open wounds, burns or other reason (injuries).

**D8a. Head/neck:**  Open wound  burn  other, specify: \_\_\_\_\_  none

D8b. What was the measurement? \_\_\_\_\_

D8c. Measurement units:  CPM  CPS   $\mu$ REM/hr  mREM/hr   $\mu$ Sv/hr  nSV/hr

D8d. Was decontamination performed?  Yes  No  Decontamination was not performed or refused

D8e. What was the measurement after decontamination? \_\_\_\_\_

D8f. Measurement units:  CPM  CPS   $\mu$ REM/hr  mREM/hr   $\mu$ Sv/hr  nSV/hr

**D9a. Chest/abdomen:**  Open wound  burn  other, specify: \_\_\_\_\_  none

D9b. What was the measurement? \_\_\_\_\_

D9c. Measurement units:  CPM  CPS   $\mu$ REM/hr  mREM/hr   $\mu$ Sv/hr  nSV/hr

D9d. Was decontamination performed?  Yes  No  Decontamination was not performed or refused

D9e. What was the measurement after decontamination? \_\_\_\_\_

D9f. Measurement units:  CPM  CPS   $\mu$ REM/hr  mREM/hr   $\mu$ Sv/hr  nSV/hr

**D10a. Back:**  Open wound  burn  other, specify: \_\_\_\_\_  none

D10b. What was the measurement? \_\_\_\_\_

D10c. Measurement units:  CPM  CPS   $\mu$ REM/hr  mREM/hr   $\mu$ Sv/hr  nSV/hr

D10d. Was decontamination performed?  Yes  No  Decontamination was not performed or refused

D10e. What was the measurement after decontamination? \_\_\_\_\_

D10f. Measurement units:  CPM  CPS   $\mu$ REM/hr  mREM/hr   $\mu$ Sv/hr  nSV/hr

**D11a. Left upper extremity:**  Open wound  burn  other, specify: \_\_\_\_\_  none

D11b. What was the measurement? \_\_\_\_\_

D11c. Measurement units:  CPM  CPS   $\mu$ REM/hr  mREM/hr   $\mu$ Sv/hr  nSV/hr

D11d. Was decontamination performed?  Yes  No  Decontamination was not performed or refused

D11e. What was the measurement after decontamination? \_\_\_\_\_

D11f. Measurement units:  CPM  CPS   $\mu$ REM/hr  mREM/hr   $\mu$ Sv/hr  nSV/hr

**D12a. Right upper extremity:**  Open wound  burn  other, specify: \_\_\_\_\_  none

D12b. What was the measurement? \_\_\_\_\_

D12c. Measurement units: CPM CPS  $\mu$ REM/hr mREM/hr  $\mu$ Sv/hr nSV/hr

D12d. Was decontamination performed? Yes No Decontamination was not performed or refused

D12e. What was the measurement after decontamination? \_\_\_\_\_

D12f. Measurement units: CPM CPS  $\mu$ REM/hr mREM/hr  $\mu$ Sv/hr nSV/hr

**D13a. Left lower extremity:**  Open wound  burn  other, specify: \_\_\_\_\_  none

D13b. What was the measurement? \_\_\_\_\_

D13c. Measurement units: CPM CPS  $\mu$ REM/hr mREM/hr  $\mu$ Sv/hr nSV/hr

D13d. Was decontamination performed? Yes No Decontamination was not performed or refused

D13e. What was the measurement after decontamination? \_\_\_\_\_

D13f. Measurement units: CPM CPS  $\mu$ REM/hr mREM/hr  $\mu$ Sv/hr nSV/hr

**D14a. Right lower extremity:**  Open wound  burn  other, specify: \_\_\_\_\_  none

D14b. What was the measurement? \_\_\_\_\_

D14c. Measurement units: CPM CPS  $\mu$ REM/hr mREM/hr  $\mu$ Sv/hr nSV/hr

D14d. Was decontamination performed? Yes No Decontamination was not performed or refused

D14e. What was the measurement after decontamination? \_\_\_\_\_

D14f. Measurement units: CPM CPS  $\mu$ REM/hr mREM/hr  $\mu$ Sv/hr nSV/hr

D15. Contamination measurement result:

Below Screening Criteria

Above Screening Criteria/Positive for contamination

*(If Individual is "Below Screening Criteria" then no further screening is needed, do not answer D16a–D18b, go to D20)*

D16a. Specify highest contamination measurement detected: \_\_\_\_\_

D16b. Measurement units: CPM CPS  $\mu$ REM/hr mREM/hr  $\mu$ Sv/hr nSV/hr

D16c. Body location where contamination was detected: \_\_\_\_\_

D17. Was radiation contamination detected in the breathing zone (face and/or shoulders)? Yes No

D18a. If contamination was detected in the breathing zone, what was the measurement? \_\_\_\_\_

D18b. Measurement units: CPM CPS  $\mu$ REM/hr mREM/hr  $\mu$ Sv/hr nSV/hr

D19a. Was radioisotope identifier used? Yes No

D19b. If yes, specify type and model of radioisotope identifier used: \_\_\_\_\_

D19c. If yes, which radionuclide had the highest activity detected: \_\_\_\_\_

D19d. Which second highest activity radionuclide was detected: \_\_\_\_\_

D20. Do you accept **OR** refuse wash?

*(In case of minor (under the age of 18), receive consent from a parent or a guardian)*

(If refused decontamination, then collect name and contact information in **Section X: Contact Information of Unregistered Individuals.**)

**Instructions:**

- Complete the following information **AFTER** the first wash.

D21. Is the individual still contaminated? Yes No Refused further screening

(If individual is not contaminated after first wash, send them to **Registration Station**)

**Note:** Individual who refused re-screening after first wash **cannot** be sent to the Clean Zone. Collect name and contact information in **Section X: Contact Information of Unregistered Individuals.** This will end their visit to this CRC.

D22a. If yes, contamination measurement: \_\_\_\_\_

D22b. Measurement units: CPM CPS  $\mu$ REM/hr mREM/hr  $\mu$ Sv/hr nSV/hr

D23. Specify the type of handheld detector used for measurement: GM Pancake Other: \_\_\_\_\_

D24a. Specify background measurement used: \_\_\_\_\_

D24b. Background measurement units: CPM CPS  $\mu$ REM/hr mREM/hr  $\mu$ Sv/hr nSV/hr

D25. Did individual receive second wash? Yes No Refused second wash

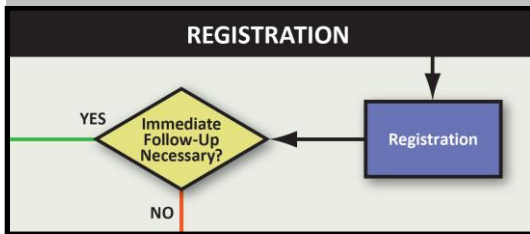
D26. Is the individual still contaminated after the second wash? Yes No Refused further screening

D27a. If yes, contamination measurement: \_\_\_\_\_

D27b. Measurement units: CPM CPS  $\mu$ REM/hr mREM/hr  $\mu$ Sv/hr nSV/hr



## SECTION E. REGISTRATION STATION



This station will collect information on demographics, contact information, and epidemiological information. Due to the large amount of information collected during registration, this station will need additional staffing. This information will be used for integration into a long term registry or if the individual needs additional follow up such as a medical referral or dose assessments. After registration is complete, staff will direct individuals to the Radiation Dose Assessment Station, if necessary.

### Section-specific instructions:

1. *All italicized questions will be answered by the individual.*
2. If individual refuses registration, send them to Discharge Station. If individual accepts registration, it is mandatory to complete questions **E4, E5, E6, E7, E8, E9a, E9b, E9c, E9e, E16, E22 and E23**. These question numbers have been bolded.
3. For infants (less than one year of age), record age in months.
4. For question **E11**, if the individual answers **No, Don't know, or Refuse to answer**, please **SKIP** to question **E15a**. If individual answers **yes**, complete remaining information in the section.
5. For questions **E16–E18**, show individual the map with the location of the explosion and the marked area around this location.
6. For questions **E21a\_1–E21e\_1**, if individual remembers **all** or **some of the locations** they visited from [time and date] before visiting the CRC, please enter location information.

**NOTE:** *Send the individuals to Radiation Dose Assessment Station, if they are in any of these categories:*

1. Individuals who have radiation contamination detected during radiation screening (questions **C2, C7, D6, D7, D17, D21, D26**)  
**OR**
2. Individuals who were in a high dose rate zone (see question **E16**)  
**OR**
3. Individuals who have prodromal signs and symptoms (vomiting more than once) due to possible acute radiation syndrome (see questions **E22–E23**)

**NOTE:** *Incidents involving large numbers of contaminated individuals may overwhelm existing radiation dose assessment resources. In these instances, consider modifying the criteria for referral to Radiation Dose Assessment Station such as indicated in #4.*

4. Individuals who had an initial screening result above screening criteria (see questions **B5, D15**) **AND** answered **Yes** to **ANY** of the following questions:
  - **B7, D17.** Was contamination detected in the breathing zone (face and/or shoulders)?
  - **C2, D15.** Is the individual still contaminated after the wash/decontamination has been completed?
  - **D6.** If referred for open wound(s), did the individual have radiation contamination detected in open wound(s)?
  - **D7.** If referred for burn(s), did the individual have radiation contamination detected in burn(s)?
  - **E6.** Individuals who are <18 years of age
  - **E8a.** Individuals who answer Yes or Don't know for pregnancy
  - **E8b.** Individuals who answer Yes to breastfeeding
  - **E16.** Were you within the high dose rate area (shown on the map) after [time] on [date]?

- **E18.** Were you within the area (shown on the map) after [time] on [date]?
- **E22.** Since the incident, has registrant experienced any of the following symptoms?  Vomiting once  Vomiting more than once  Diarrhea  Fever
- **E23.** Since the incident, has registrant experienced any of the following symptoms?  Vomiting more than once  Diarrhea  Fever

**Questions:**

E1. Due to large number of individuals and limited resources, ONLY basic information (see questions in BOLD) about the individual was collected:  Yes  No

E2. Do you:  accept OR  refuse registration?

(In case of minor (under the age of 18), obtain consent from a parent or a guardian)

(If refused, please send them to Discharge Station)

E3. Who is providing information for this section?  Registrant (Individual)  Family member  Translator  Don't know  Other: \_\_\_\_\_

E4. Name (Last, First, Middle Initial): \_\_\_\_\_

E5. Date of birth (MM/DD/YYYY): \_\_ / \_\_ / \_\_\_\_

E6. Age: \_\_\_\_\_  Years  Months

E7. Sex:  Male  Female  Refuse to answer

E8a. Are you currently pregnant? (For females **ONLY**)  Yes  No  Don't know  Refuse to answer

E8b. Are you currently breastfeeding? (For females **ONLY**)  Yes  No  Don't know  Refuse to answer

What is registrant's?:

E9a. Home phone number: (\_\_\_\_) \_\_\_\_\_ - \_\_\_\_\_  None  Don't know  Refuse to answer

E9b. Work phone number: (\_\_\_\_) \_\_\_\_\_ - \_\_\_\_\_  None  Don't know  Refuse to answer

E9c. Cell/other phone number: (\_\_\_\_) \_\_\_\_\_ - \_\_\_\_\_  None  Don't know  Refuse to answer

E9d. Email address: \_\_\_\_\_  None  Don't know  Refuse to answer

E9e. Mailing address: Street \_\_\_\_\_ City \_\_\_\_\_ State \_\_ Zip \_\_\_\_\_  Don't know  Refuse to answer

E10. How many people live at this address (including yourself)? \_\_  Don't Know  Refuse to Answer

E11. In case of emergency, can you provide the contact information for a person who does not live with you and can always reach you?  Yes  No  Don't know  Refuse to answer

E12. What is that person's?:

E12a. Name (Last, First, Middle Initial): \_\_\_\_\_

E12b. Home phone number: (\_\_\_\_) \_\_\_\_\_ - \_\_\_\_\_  None  Don't know  Refuse to answer

E12c. Work phone number: (\_\_\_\_) \_\_\_\_\_ - \_\_\_\_\_  None  Don't know  Refuse to answer

E12d. Cell/other phone number: (\_\_\_\_) \_\_\_\_\_ - \_\_\_\_\_  None  Don't know  Refuse to answer

E12e. Email address: \_\_\_\_\_  None  Don't know  Refuse to answer

E12f. Mailing address: Street \_\_\_\_\_ City \_\_\_\_\_ State \_\_ Zip \_\_\_\_\_  Don't know  Refuse to answer

E13. Is there a second person who does not live with you and can always reach you?

Yes No Don't know Refuse to answer

E14. *What is that person's?:*

E14a. *Name (Last, First, Middle Initial):* \_\_\_\_\_

E14b. *Home phone number:* (\_\_\_\_) \_\_\_\_\_ - \_\_\_\_\_ None Don't know Refuse to answer

E14c. *Work phone number:* (\_\_\_\_) \_\_\_\_\_ - \_\_\_\_\_ None Don't know Refuse to answer

E14d. *Cell/other phone number:* (\_\_\_\_) \_\_\_\_\_ - \_\_\_\_\_ None Don't know Refuse to answer

E14e. *Email address:* \_\_\_\_\_ None Don't know Refuse to answer

E14f. *Mailing address:* Street \_\_\_\_\_ City \_\_\_\_\_ State \_\_ Zip \_\_\_\_\_ Don't know Refuse to answer

E15a. *Before the incident, did you have any of the following conditions? (Check all that apply)*

Chronic illness Physical disability Other disability None Don't know Refuse to answer

E15b. *Please describe your condition(s):* \_\_\_\_\_ Does not apply

**Instructions:**

- The following questions are related to the incident

E16. *Were you within the area (shown on the map) after [time] on [date]?*

Yes No Don't know Refuse to answer

E17. *At the time [time and date] of the incident, were you:*

Inside a single-story building or structure but not in basement

Inside a multi-story building or structure but not in basement; specify floor location  
(where ground floor= 0): \_\_\_\_\_

Basement or underground facility

Inside a car or other vehicle

Outside

Don't know

Refuse to answer

E18. *Were you present at the time and place of the incident as (Check all that apply):*

Resident

Passerby

Responder or rescue worker

Deployed government official

Clean-up worker

Non-governmental organization/site volunteer

Don't know

Refuse to answer

E19. *Who is your current employer/volunteer organization? (For First Responders, Rescue Worker, Deployed government official, Clean-up worker or Volunteers ONLY) \_\_\_\_\_*

**Instructions:**

- Starting with the time of the incident, please work forward, listing all locations from the incident until now.
- If individual remembers all or some of the locations, please record the following information.
- By default, three locations are provided on the CRC Tool. If more locations are needed, a maximum of 10 locations are provided.

E20. How many locations have you been to since the incident? \_\_\_\_\_

Location 1:

E21a\_1. Do you know your exact location at the time of the incident?

Yes No Don't know the exact location Refuse to answer

E21b\_1. If you do remember, please provide the address: \_\_\_\_\_

E21c\_1. If you do not know the exact location or refuses to answer, please name the nearest building, intersection, or landmark: \_\_\_\_\_  Don't know Refuse to answer

E21d\_1. Did you take shelter in place at this location?

Yes No Don't know Refuse to answer

E21e\_1. How long did you stay at this location?

Start date (MM/DD/YYYY) at this location: \_\_/\_\_/\_\_\_\_

Start time (Military time): \_\_: \_\_

End date (MM/DD/YYYY) at this location: \_\_/\_\_/\_\_\_\_

End time (Military time): \_\_: \_\_

Don't Know

Refuse to Answer

**E22.** Since the incident, have you experienced any of the following symptoms?

Vomiting once

Vomiting more than once

Diarrhea

Fever

None

Don't know

Refuse to answer

**E23.** If you vomited, when did it start after incident [date and time]?

less than 1 hour

1-2 hours

3-6 hours

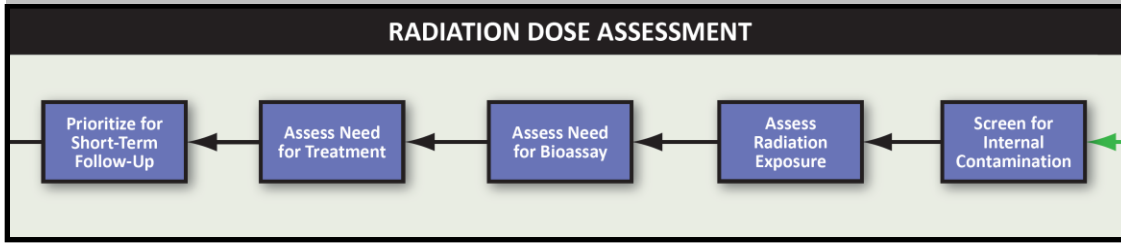
more than 6hrs

Don't know

Refuse to answer

Unknown N/A

## SECTION F. RADIATION DOSE ASSESSMENT



This station is staffed by medical professionals and health physicists to assess the risk and magnitude of radiation exposure and/or internal contamination of persons being screened. Further activities such as collection of blood or urine samples, decisions for urgent referral for medical care or treatment, or internal contamination screening may also take place at this station. Data collected in this section will allow risk stratification based on the person's exposure or intake.

### **Section-specific instructions:**

In this section please make the following assessments:

1. Individual is at risk for possible acute radiation syndrome (ARS), if they meet the following conditions:
  - Individual was in a high dose rate zone (see questions **E16**).

**OR**
2. Individual has potential prodromal signs and symptoms due to acute radiation syndrome (see questions **E22–E23**)
3. Individual is at risk for possible internal contamination if they meet the following conditions:
  - Individuals who had an initial screening result above screening criteria (see question **B5, D15**)

**AND**

  - Answered **Yes** to **ANY** of the following questions:
    - **B7, D17.** Was contamination detected in the breathing zone (face and/or shoulders)?
    - **C2, D15.** Is the individual still contaminated after the wash/decontamination has been completed?
    - **D6.** If referred for open wound(s), did the individual have radiation contamination detected in open wound(s)?
    - **D7.** If referred for burn(s), did the individual have radiation contamination detected in burn(s)?
    - **E6.** Individuals who are <18 years of age
    - **E8a.** Individuals who answer Yes or Don't know for pregnancy
    - **E8b.** Individuals who answer Yes to breastfeeding
    - **E16.** Were you within the high dose rate area (shown on the map) after [time] on [date]?
    - **E22.** Since the incident, has registrant experienced any of the following symptoms?  
 Vomiting once  Vomiting more than once  Diarrhea  Fever
  - Also, consider collection of urine and/or blood sample and/or referral to a medical facility as indicated.
  - If the individual responds with **No** or **Refused to provide a urine and/or blood** sample for question **F3a and/or F4a**, send them to the Discharge Station (Section G).
  - *All italicized questions will be answered by the individual.*

### **Questions:**

F1. *Did you receive nuclear medicine or radiation therapy procedures during the last 30 days?* Examples include cardiac stress test, lung scan, PET scan, bone scan, thyroid uptake or ablation, external radiation beam therapy, and implanted radioactive seeds (brachytherapy).

Yes No Don't know Refuse to answer

F2. Based on previous instructions (see above), is individual at risk for:

- Acute Radiation Syndrome
- Internal contamination
- Both
- Neither
- Risk cannot be determined

F3a. Was urine sample collected? Yes No Refused to provide urine sample

F3b. If yes, date of urine sample (MM/DD/YYYY):\_\_ / \_\_ / \_\_\_\_

F3c. If yes, time of urine sample (Military Time): \_\_ : \_\_

F3d. Record laboratory barcode label for urine sample here: \_\_\_\_\_

F4a. Was blood sample collected? Yes No Refused to provide blood sample

F4b. If yes, date of blood sample (MM/DD/YYYY):\_\_ / \_\_ / \_\_\_\_

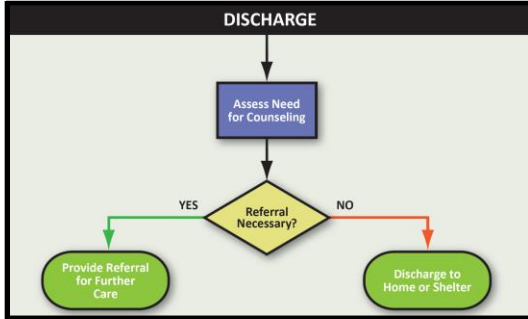
F4c. If yes, time of blood sample (Military Time): \_\_ : \_\_

F4d. Record laboratory barcode label for blood sample here: \_\_\_\_\_

F5. *What is your height?* \_\_\_\_\_ Feet \_\_\_\_\_ Inches Don't know

F6. *What is your weight?* \_\_\_\_\_ (Pounds) Don't know

## SECTION G. DISCHARGE



Staff at discharge station may arrange referrals to medical facilities, shelters or other sites. Mental health counseling may also be provided by professionals. Data collected at this station reflects where people are going after they leave the CRC.

### Section-specific instructions:

- If individual needs counseling information, refer them to mental health professional.
- If individual needs further care, provide referral.
- *All italicized questions will be answered by the individual.*

### Questions:

G1a. *Where will you be going after leaving the CRC?*

Home (as listed in E9e)  Healthcare facility  Shelter  Other

G1b. *If healthcare facility, provide name and address:* \_\_\_\_\_

G1c. *If shelter, provide name and address:* \_\_\_\_\_

G1d. *If other, provide name and address:* \_\_\_\_\_

G2. *Do you need/want mental health counseling?*  Yes  No  Don't know

G3. *Do you need health care facility referral?*  Yes  No  Don't know

G4. *Do you need family reunification desk information?*  Yes  No  Don't know

G5. *Do you have any additional questions?*  Yes  No

G6. *If registrant has additional questions, please specify:* \_\_\_\_\_

**SECTION X. CONTACT INFORMATION OF UNREGISTERED INDIVIDUALS**

Staff will collect contact information of unregistered individuals as necessary throughout the flow of the CRC.

NOTE: This is NOT an official station of a CRC; hence not shown in Figure 1.

**Section-specific instructions:**

- Collect contact information of those who were NOT registered at the Registration Station.
- *All italicized questions will be answered by the individual.*

**Questions:**

X1a. Last Name: \_\_\_\_\_ X1b. First Name: \_\_\_\_\_ X1c. Middle Initial: \_\_\_\_\_

X2. Age: \_\_\_\_\_ Years Months

X3. Home phone number: (\_\_\_\_) \_\_\_\_\_ - \_\_\_\_\_ None Don't know Refuse to answer

X4. Work phone number: (\_\_\_\_) \_\_\_\_\_ - \_\_\_\_\_ None Don't know Refuse to answer

X5. Cell/other phone number: (\_\_\_\_) \_\_\_\_\_ - \_\_\_\_\_ None Don't know Refuse to answer

X6. Email address: \_\_\_\_\_ None Don't know Refuse to answer

X7. Mailing address: Street \_\_\_\_\_ City \_\_\_\_\_ State \_\_\_\_ Zip\_\_\_\_\_ Don't know Refuse to answer