

MEDICAL SURVEILLANCE

Purpose:

The purpose of this guideline is to provide a guide to perform medical surveillance for hazardous materials response personnel.

Objective:

Medical Surveillance is performed to obtain baseline vital signs and physical assessment and to provide early recognition and treatment of personnel with adverse affects as a result of on-scene activities.

Pre-Entry Medical Surveillance:

Surveillance should be completed on all individuals wearing chemical liquid splash and vapor-protective clothing that may enter the Hot Zone and perform hazardous materials operations.

Components of Medical Surveillance – Pre-Entry:

Vital Signs:

- a. Blood Pressure
- b. Pulse
- c. Respiratory Rate
- d. Temperature

Skin Evaluation

Examine the individuals skin for rashes, open sores and wounds

Mental Status

The individual should be alert and oriented to time and place, have clear speech and normal gait, and respond appropriately to the situation.

Medical History

A recent medical history should be obtained that includes any Medications, including over the counter, taken within the past 72 hours, any alcohol consumption within the past 24 hours, any new medical treatment or diagnosis, and any symptoms of fever, nausea, vomiting, diarrhea or cough within the past 72 hours.

Weight

Normal weight should be recorded

Hydration

Verify the individual has consumed 8 oz. or 16 oz. of water or sport drink.

Components of Medical Surveillance – During Entry

Changes in gait, speech, or behavior require Entry Personnel to undergo immediate decontamination, doffing of protective clothing, and assessment.

Any complaint of chest pain, dizziness, shortness of breath, weakness, nausea, or headache requires immediate assistance from the Go-Team and removal from the Hot Zone.

Post-Entry Surveillance

Post-Entry Surveillance is performed to determine whether an individual has suffered any effects from exposure to a hazardous material or the environment.

Determine the individual's health status for future assignments during this incident.

Components of Medical Surveillance – Post-Entry

History

Any symptom of hazardous materials exposure, environmental exposure or cardiovascular problem.

Vital Signs

- a. Blood Pressure
- b. Pulse
- c. Respiratory Rate
- d. Temperature

Weight

Skin Evaluation

Mental Status

Follow-up

Repeat monitoring of vital signs every 5-10 minutes until they return to 85% of maximum pulse rate. If after 10 minutes vital signs have not returned to baseline seek additional medical advice.

Consider transport to medical facility when:

Blood Pressure – Systolic pressure decreases by 20mm Hg at two minutes in a standing position.

Pulse - Increase by 20 beats per minute or greater than 85% of maximum rate at 10 minutes.

Temperature - Greater than 101°F(38°C) oral

Weight – Body weight loss of greater than 3%

Nausea, altered mental status, or any other symptom(s) requiring medical transport.

Criteria for Possible Entry Exclusion:

This criteria should be used as a guideline to determine medical and/or physical fitness for Entry.

- a. Blood Pressure: Diastolic greater than 105mm Hg
- b. Pulse: Greater than 70% of maximum hart rate
- c. Respiratory Rate: Greater than 24 per minute
- d. Temperature: Greater than 99.5°F Oral / Less than 97.0°F Oral
- e. Skin Evaluation: Open sores, large area rash or significant sunburn
- f. Mental Status: Altered mental status-slurred speech, clumsiness, weakness
- g. Medical History : Presence of nausea, vomiting, diarrhea, fever, upper respiratory infection, heat illness or heavy alcohol consumption within past 72 hours, overall dehydration.

New prescription medications taken within the past two weeks or any over the counter medications taken within the past 72 hours.

Any alcohol within the past 6 hours.

Age-Predicted Heart Rates

Age	70%
20-25	140
25 – 30	136
30 – 35	132
35 – 40	128
40 – 45	125
45 – 50	122

ALLEGHENY COUNTY HAZ-MAT
MEDICAL SAFETY DATA FORM

DATE: _____ PRODUCT: _____

WEATHER: TEMPERATURE: _____ WIND: _____ PRECIPITATION: _____

DECON SOLUTION: _____

TEAM NO.: _____ LEADER: _____ NO. _____ LEVEL OF PROTECTION: A _____ B _____ C _____ D _____

NAME: _____ AGE: _____ M F ASSIGNMENT: _____

MEDICATIONS: _____ ALLERGIES: _____

ENTRY MEDICAL TIME : _____ EXIT MEDICAL TIME : _____

Blood Pressure : _____ : _____

Pulse Rate/ O2 % : _____ : _____

Respirations : _____ : _____

Temperature : _____ : _____

Weight : _____ : _____

EKG: Rhythm/Rate : _____ : _____

Pre-Hydration : Yes _____ No _____ Post-Hydration : Yes _____ No _____

PSI/On Air Time : _____ Exit Time : _____

Entry Time : _____ At Decon Time : _____

At Objective Time : _____ Off Air Time/PSI : _____

REMARKS: _____ APPROVED: _____

TEAM NO.: _____ LEADER: _____ NO. _____ LEVEL OF PROTECTION: A _____ B _____ C _____ D _____

NAME: _____ AGE: _____ M F ASSIGNMENT: _____

MEDICATIONS: _____ ALLERGIES: _____

ENTRY MEDICAL TIME : _____ EXIT MEDICAL TIME : _____

Blood Pressure : _____ : _____

Pulse Rate/ O2 % : _____ : _____

Respirations : _____ : _____

Temperature : _____ : _____

Weight : _____ : _____

EKG: Rhythm/Rate : _____ : _____

Pre-Hydration : Yes _____ No _____ Post-Hydration : Yes _____ No _____

PSI/On Air Time : _____ Exit Time : _____

Entry Time : _____ At Decon Time : _____

At Objective Time : _____ Off Air Time/PSI : _____

REMARKS: _____ APPROVED: _____