
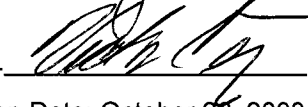


Foot Sampling – Socks
Chapter 8: MATRIX SAMPLES
AHETF-8.1.2.

Effective Date : January 1, 2006

<p>APPROVAL <u></u></p> <p>APPROVAL <u></u></p> <p>Last Revision Date: October 20, 2003</p>	<p>DATE <u>01/05/06</u></p> <p>DATE <u>05 JAN 06</u></p> <p>Previous Version Number: 8.1.1.</p>
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1.0 PURPOSE AND SCOPE

- 1.1 This Standard Operating Procedure (SOP) provides a description of procedures for collecting pesticide residues from agricultural workers' feet by use of cotton socks worn by workers (test subjects) during the Agricultural Handlers Exposure Task Force (AHETF) exposure studies.
- 1.2 The cotton sock dosimeter will be used as a collection medium and will be analyzed. The socks will be worn under the test subject's own socks and shoes.
- 1.3 This SOP was revised to clarify section 3.0.

2.0 MATERIALS REQUIRED

- 2.1 The following materials are required for using and collecting sock dosimeter samples from each worker/replicate:
 - a. 100% cotton, lightweight socks, ankle high
 - b. Disposable gloves (*i.e.*, latex)
 - c. Scissors
 - d. Cleaning solutions (*i.e.*, methanol, isopropanol, alcohol/water mixture, acetone, *etc.*)

- e. Sealable bags or other suitable containers
- f. Aluminum foil wrap
- g. Disposable paper or plastic mat
- h. Cooler with dry ice, or freezer

3.0 USE OF SOCK DOSIMETER

- 3.1 If specified in the study protocol that sock/foot dosimetry will be worn and collected, the test subject(s) will be given a new pair of socks prior to initiation of each study replicate. These socks will be worn on bare feet under the workers normal work socks and shoes/boots. The test subject and the field personnel, to minimize contamination, should wear disposable gloves whenever handling the dosimeters.

4.0 COLLECTION PROCEDURE

- 4.1 The test subject will be taken to a designated clean “privacy area” for removal of exposed clothing.
- 4.2 Disposable paper, plastic mat, or aluminum foil will be placed on the chairs and floor of the changing area to reduce cross-contamination. The materials will be changed after the processing of each worker.
- 4.3 The field personnel collecting samples will always wear disposable gloves when handling any work clothing, dosimeters, and PPE. Gloves will be changed between handling PPE, work clothing, and dosimeter collection. Remove garments in a manner to avoid cross-contamination.
- 4.4 The test subject will remove their work shoes/boots before entering the “privacy” area. The worker’s socks will remain on the worker, over the sock dosimeters, until he/she removes them.

- 4.5 After removal of the worker's outer clothing (first shirt, then pants, then work socks), and before the hand wash and face/neck wipe samples have been collected, the research personnel will collect the sock dosimeters.
- 4.7 Both left and right socks will be placed on a piece of aluminum foil (sufficient size to completely wrap the socks). Do not allow samples to contact any surface before placement onto the foil. Ensure that the edges of the foil wrap are folded together to prevent loss of test material. Place a label either on the aluminum foil or sample container that identifies the sample and place the sample into a labeled, sealable container. Seal all containers.

5.0 SAMPLING INTERVALS

- 5.1 Sock dosimeters will be collected at the end of each monitoring replicate, unless otherwise instructed by the protocol.

6.0 FIELD STORAGE

- 6.1 Place samples collected during the study in the field in a cooler with dry ice or portable freezer until processed and placed into frozen storage for shipping at the end of the monitoring day (or as soon as practical). If dry ice is not available, the Study Director must be notified before sample collection and other suitable storage conditions must be noted in the raw data.