



National Human Exposure Assessment Survey (NHEXAS)

Arizona Study

Quality Systems and Implementation Plan for Human Exposure Assessment

The University of Arizona Tucson, Arizona 85721

Cooperative Agreement CR 821560

Standard Operating Procedure

SOP-UA-D-41.0

Title: Database Tree and Data Sources

Source: The University of Arizona

U.S. Environmental Protection Agency Office of Research and Development Human Exposure & Atmospheric Sciences Division Human Exposure Research Branch

Notice: The U.S. Environmental Protection Agency (EPA), through its Office of Research and Development (ORD), partially funded and collaborated in the research described here. This protocol is part of the Quality Systems Implementation Plan (QSIP) that was reviewed by the EPA and approved for use in this demonstration/scoping study. Mention of trade names or commercial products does not constitute endorsement or recommendation by EPA for use.

Database Tree and Data Sources

1.0 Purpose and Applicability

This SOP describes the database storage organization, as well as describes the sources of data for each database for the NHEXAS Arizona Project, the Border Study, and other Health and Environment projects.

2.0 Definitions

- 2.1 BORDER STUDY = An alias for "Total Human Exposure Arizona: A Comparison of the Border Communities and the State" conducted in Arizona by the University of Arizona/Battelle/Illinois Institute of Technology consortium.
- 2.2 Database Tree: Directory structure which is used to organize databases. Structure consists of a "root" with one or more "branches", or "sub-trees" stemming from it. In this structure, the root is viewed as a primary descriptor, and related topics are grouped in sub-trees, which in turn act as descriptors which are further subdivided.
- 2.3 Data Source: Origin of data; either source of collection of raw data, or of analysis of previously collected data
- 2.4 HEALTH AND ENVIRONMENT PROJECTS (or H&E) = An umbrella title for all projects funded to M.D. Lebowitz and/or M.K. O'Rourke (or their designees) which examine purported or real relationships among environmental factors and any aspect of human health.

3.0 References

UA-D-27.X Master Database Appendage

4.0 Discussion

4.1 Database Tree Structure

See Figure 1 - NHEXAS, the Border Study, and other Health and Environment projects
Master File Area

4 2 Data Sources

Data obtained from the following sources:

1. NHEXAS Project, the Border Study, and other Health and Environment projects

- 2. Census
- 3. Battelle
- 4. CDC
- 5. EPA Cincinnati
- 6. FDA

5.0 Responsibilities

Data Manager: It is the responsibility of the data manager to ensure that each database is stored in its proper location.

6.0 Materials and Equipment

None

7.0 Procedure

- 7.1 Data is collected
- 7.2 Data is cleaned
- 7.3 Data is stored in correct location in tree structure, i.e. appended to appropriate master database (see UA-D-27.X: Master Database Appendage)
- 7.4 If data to be analyzed by outside lab, data transmitted to them. Upon receipt of new analyzed database, data is stored in correct location in tree structure, i.e. appended to appropriate master database (see UA-D-27.X: Master Database Appendage)

8.0 Records

None

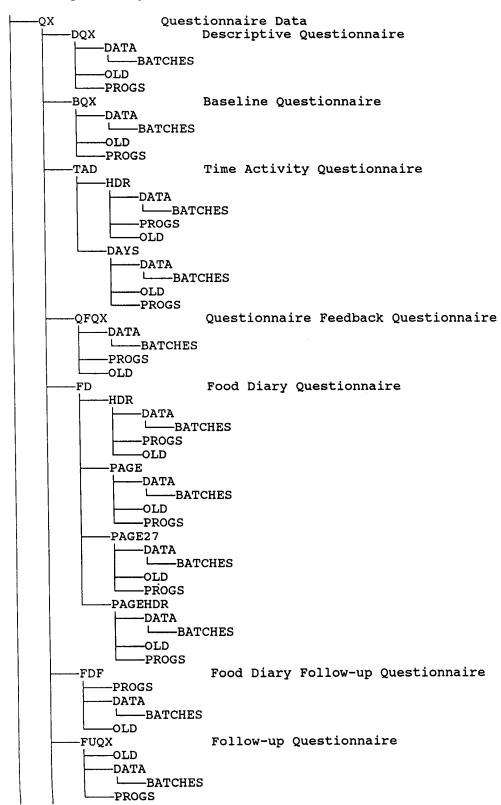
Inclusions:

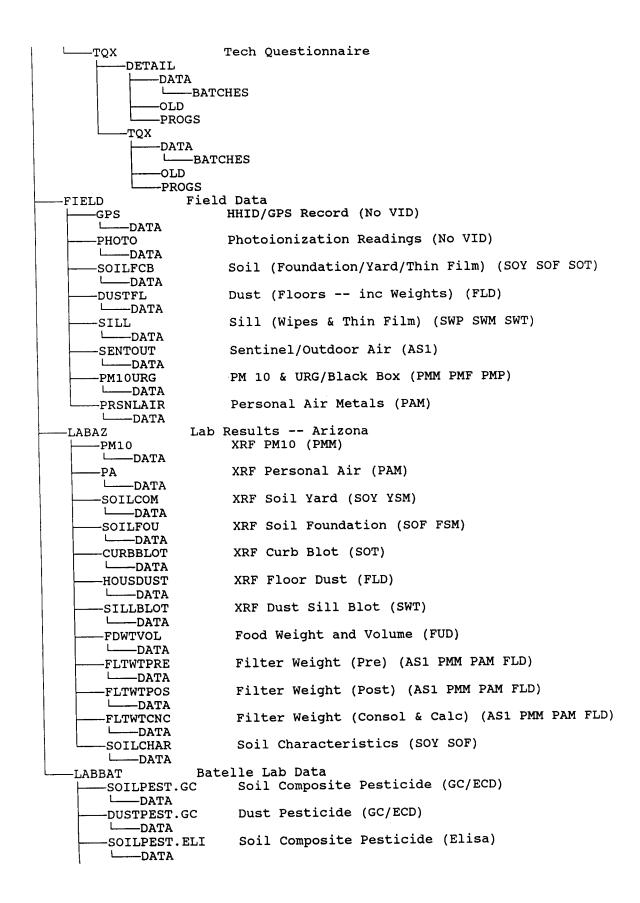
Figure 1 - NHEXAS, the Border Study, and other Health and Environment projects Master File Area (4 pages)

Figure 1 - NHEXAS, the Border Study, and other Health and Environment projects

Master File Area

Directory listing for NHEXAS Master File Area





DUSTPEST.ELI DATA	Dust Pesticide (Elisa)
SOILCMPM.AA	Soil Composite Metals (AA)
PM10IO.ICP	PM 10 Indoor/Outdoor (ICP)
PM10IO.AA	PM 10 Indoor/Outdoor (AA)
PM10PM.ICP	PM 10 Personal Metals (ICP)
PM10PM.AA DATA	PM 10 Personal Metals (AA)
FOODPST DATA	Food Data (3 pest)
SOILCMPM.ICP DATA	Soil Composite Metals (ICP)
SOILFDNM.ICP	Soil Foundation Metals (ICP)
SOILFDNM. AA	Soil Foundation Metals (AA)
DUSTFLRM.ICP DATA	Dust (Floor) Metals (ICP)
DUSTFLRM. AA	Dust (Floor) Metals (AA)
DERMETAL. ICP	Dermal Metal (ICP)
DERMETAL.AA	Dermal Metal (AA)
SURFWPM.ICP	Surface Wipes Metals (ICP)
SURFWPM.AA	Surface Wipes Metals (AA)
URGPSTIO.GC L—DATA	URG Pesticide (GC/MS by EI) Indoor/Outdoor
URGPSTP.GC	URG Pesticide (GC/MS by EI) Personal
DAT'A	• • • • • • • • • • • • • • • • • • • •
URGPSTIO.ELI DATA	URG Pesticide (Elisa) Indoor/Outdoor
URGPSTIO.ELI —DATA —SOILCMPP.GC	
	URG Pesticide (Elisa) Indoor/Outdoor
	URG Pesticide (Elisa) Indoor/Outdoor Soil Composite (GC/MS by EI) Pesticides
URGPSTIO.ELI UDATA SOILCMPP.GC UDATA SOILFDNP.GC UDATA DUSTPEST.MS UDATA DERMWIPP.GC	URG Pesticide (Elisa) Indoor/Outdoor Soil Composite (GC/MS by EI) Pesticides Soil Foundation (GC/MS by EI) Pesticides
	URG Pesticide (Elisa) Indoor/Outdoor Soil Composite (GC/MS by EI) Pesticides Soil Foundation (GC/MS by EI) Pesticides Dust (GC/MS by EI) Pesticides
URGPSTIO.ELI UDATA SOILCMPP.GC UDATA SOILFDNP.GC UDATA DUSTPEST.MS UDATA DERMWIPP.GC UDATA SURFWPP.GC UDATA VOCCARBO.GC	URG Pesticide (Elisa) Indoor/Outdoor Soil Composite (GC/MS by EI) Pesticides Soil Foundation (GC/MS by EI) Pesticides Dust (GC/MS by EI) Pesticides Dermal Wipes (GC/MS by EI) Pesticides
	URG Pesticide (Elisa) Indoor/Outdoor Soil Composite (GC/MS by EI) Pesticides Soil Foundation (GC/MS by EI) Pesticides Dust (GC/MS by EI) Pesticides Dermal Wipes (GC/MS by EI) Pesticides Surface Wipes (GC/MS by EI) Pesticides
URGPSTIO.ELI UDATA SOILCMPP.GC UDATA SOILFDNP.GC UDATA DUSTPEST.MS UDATA DERMWIPP.GC UDATA SURFWPP.GC UDATA VOCCARBO.GC UDATA FRMALDHD UDATA OVMBADGE.GC	URG Pesticide (Elisa) Indoor/Outdoor Soil Composite (GC/MS by EI) Pesticides Soil Foundation (GC/MS by EI) Pesticides Dust (GC/MS by EI) Pesticides Dermal Wipes (GC/MS by EI) Pesticides Surface Wipes (GC/MS by EI) Pesticides VOC Carbo Traps (GC/MSD)
URGPSTIO.ELI UDATA SOILCMPP.GC UDATA SOILFDNP.GC UDATA DUSTPEST.MS UDATA DERMWIPP.GC UDATA SURFWPP.GC UDATA VOCCARBO.GC UDATA FRMALDHD UDATA OVMBADGE.GC UDATA WATERMTL	URG Pesticide (Elisa) Indoor/Outdoor Soil Composite (GC/MS by EI) Pesticides Soil Foundation (GC/MS by EI) Pesticides Dust (GC/MS by EI) Pesticides Dermal Wipes (GC/MS by EI) Pesticides Surface Wipes (GC/MS by EI) Pesticides VOC Carbo Traps (GC/MSD) Formaldehyde
URGPSTIO.ELI UDATA SOILCMPP.GC UDATA SOILFDNP.GC UDATA DUSTPEST.MS UDATA DERMWIPP.GC UDATA SURFWPP.GC UDATA VOCCARBO.GC UDATA FRMALDHD UDATA OVMBADGE.GC UDATA WATERMTL UDATA WATERPST	URG Pesticide (Elisa) Indoor/Outdoor Soil Composite (GC/MS by EI) Pesticides Soil Foundation (GC/MS by EI) Pesticides Dust (GC/MS by EI) Pesticides Dermal Wipes (GC/MS by EI) Pesticides Surface Wipes (GC/MS by EI) Pesticides VOC Carbo Traps (GC/MSD) Formaldehyde OVM Badge (GC/EID)
URGPSTIO.ELI UDATA SOILCMPP.GC UDATA SOILFDNP.GC UDATA DUSTPEST.MS UDATA DERMWIPP.GC UDATA SURFWPP.GC UDATA VOCCARBO.GC UDATA FRMALDHD UDATA OVMBADGE.GC UDATA WATERMTL UDATA WATERPST	URG Pesticide (Elisa) Indoor/Outdoor Soil Composite (GC/MS by EI) Pesticides Soil Foundation (GC/MS by EI) Pesticides Dust (GC/MS by EI) Pesticides Dermal Wipes (GC/MS by EI) Pesticides Surface Wipes (GC/MS by EI) Pesticides VOC Carbo Traps (GC/MSD) Formaldehyde OVM Badge (GC/EID) Water Data (Metals)

WATERVOC DATA	Water Data (VOC)
FOODMTL	Food Data (Metals)
BEVRGMTL	Beverage Data (Metals)
BEVRGPST	Beverage Data (3 Pest)
DATA BLOODMTL	Blood (Metals)
DATA BLOODVOC	Blood (VOC)
L—DATA	• •
URINEMTL DATA	Urine (Metals)
URINEPST DATA	Urine (Pesticide)
	DATA FOODMTL DATA BEVRGMTL DATA BEVRGPST DATA BLOODMTL DATA BLOODVOC DATA URINEMTL URINEPST