

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-42.1

Title: Instructions on the Completion of Scannable Forms

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.

Instructions on the Completion of Scannable Forms

1.0 Purpose and Applicability

The purpose of this procedure is to define the appropriate method for the completion of scannable forms generated by *Teleform* for use in the field and laboratory portion of the NHEXAS project, the Border Study, and other Health and Environment projects. The instructions describe methods of form completion and how to indicate a response is not valid.

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 DATA FIELD = An area on a data entry form where datum from a physical form is entered.
- 2.3 FORM, PHYSICAL [DATA] = The paper or "hard copy" version of a data form. This is also referred to as a "physical data form."
- 2.4 GLOBAL CODING = A set of standard codes used in data within the Arizona Prevention Center designating the status of a data field in three cases: (1) datum refused, (2) datum non-applicable, and (3) datum missing. It can also be a standard coding approach that pertains to questions with the same response structure.
- 2.5 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.
- 2.6 HRP Site = The Health Related Professions building, located at 1435 North Fremont Avenue; Tucson, AZ 85719. This is an annex of the Arizona Prevention Center and the primary site of NHEXAS, the Border Study, and other Health and Environment projects.
- 2.7 NHEXAS Arizona: Acronym for National Human EXposure Assessment Survey, a research project conducted in Arizona by the University of Arizona/Battelle/Illinois Institute of Technology consortium.

3.0 References

N/A

4.0 Discussion

Forms for the NHEXAS Arizona Project, the Border Study, and other Health and

Environment projects were designed using *Teleform version 5.0*. This package has the greatest accuracy with bubble fields. Hand writing recognition is excellent for constrained numeric fields and good with constrained alpha fields. Numbers and letters must be written in a recognizable script. They must not exceed the limits of the box.

Whenever possible bubble fields have been provided. Coding for the scannable forms is designed to mimic the global coding strategy of our scanned data entry SOP (#UA-D-31.X) as closely as possible.

Each person completing forms is assigned a Technician Identification Number. This number tells the program which staff member is writing the code. The program "teaches" itself to read the hand writing of each staff member. The more data processed by any individual, the better the hand writing recognition of the program becomes.

5.0 Responsibilities

The Project Data Coordinator is responsible for (1) training all field and laboratory personnel in the appropriate method of completing scannable forms, and (2) testing personnel to demonstrate the errors they commonly commit.

6.0 Materials and Reagents

N/A

7.0 Procedure

7.1 See the attached instruction sheet for preliminary instructions.

7.2 Corrective Actions

The instructions indicate a method of marking through an incorrect response. When the form is scanned, the scanner will stop on this inappropriately filled field and enable the data entry person to correct the error from text written above or beside the field.

8.0 Records

Physical forms will be filed at the HRP site. These are located in Room 128 of Health Related Professions, 1435 North Fremont Avenue, Tucson, AZ 85719.