



Data Collection Worksheet

Please Note: The Data Collection Worksheet (DCW) is a tool to aid integration of a PhenX protocol into a study. The PhenX DCW is not designed to be a data collection instrument. Investigators will need to decide the best way to collect data for the PhenX protocol in their study. Variables captured in the DCW, along with variable names and unique PhenX variable identifiers, are included in the PhenX Data Dictionary (DD) files.

Ask the respondent about current and previous residences in which he or she has lived for 3 months or longer. Begin with the current residence, and complete one row for each residence. Geocoordinates are obtained after the interview is completed by entering the complete address into a web-based geocoding tool such as the one developed by the University of Southern California's GIS Research Laboratory and maintained at Texas A&M University at <http://geoservices.tamu.edu/Services/Geocode/>. Utilize this or a similar tool or other reliable geocoding databases to determine the geocoordinates for each residence. A guide to geocoding services and practical applications is provided at <http://geoservices.tamu.edu/Services/Geocode/OtherGeocoders/>, and geocoding details are discussed in Goldberg, D. W., & Cockburn, M. G. (2010). Improving geocode accuracy with candidate selection criteria. *Transactions in GIS*, 14(S1), 129-146. <http://onlinelibrary.wiley.com/doi/10.1111/j.1467-9671.2010.01211.x/abstract>

The accuracy of geocoordinates may also be improved by using a geocode correction tool (Goldberg, D., Wilson, J., Knoblock, C., Ritz, B., & Cockburn M. [2008]. An effective and efficient approach for manually improving geocodes. *International Journal of Health Geographics*, 7, 60-79).

Dates Lived	Address: Street/Crosstreets City, State, ZIP code (5-digit, or 9-digit, if available), Country (if not U.S.) or landmark	Was this on a farm?	What was your water supply?	Near fields or orchards?	Did you live close to the center or margin of town?
1a. From: To:	1b.	1c. [] on farm	1d. [] city [] private	1e. [] yes	1f. [] center

		no <input type="checkbox"/>	well <input type="checkbox"/> filtered water <input type="checkbox"/> bottled water <input type="checkbox"/> other: _____	<input type="checkbox"/> no	<input type="checkbox"/> margin
2a. From: To:	2b.	2c. <input type="checkbox"/> on farm <input type="checkbox"/> no	2d. <input type="checkbox"/> city <input type="checkbox"/> private well <input type="checkbox"/> filtered water <input type="checkbox"/> bottled water <input type="checkbox"/> other: _____	2e. yes <input type="checkbox"/> <input type="checkbox"/> no	2f. <input type="checkbox"/> center <input type="checkbox"/> margin
3a. From: To:	3b.	3c. <input type="checkbox"/> on farm <input type="checkbox"/> no	3d. <input type="checkbox"/> city <input type="checkbox"/> private well <input type="checkbox"/> filtered water <input type="checkbox"/> bottled water <input type="checkbox"/> other: _____	3e. yes <input type="checkbox"/> <input type="checkbox"/> no	3f. <input type="checkbox"/> center <input type="checkbox"/> margin

After the interview has been completed, enter the

Were the geocoordinates

geocoordinates for the residence.	verified?
<p>1g.</p> <p>latitude _____</p> <p>longitude _____</p> <p><input type="checkbox"/> not available, incomplete address</p>	<p>1h.</p> <p>1 <input type="checkbox"/> yes-if yes, how? _____</p> <p>2 <input type="checkbox"/> no</p>
<p>2g.</p> <p>latitude _____</p> <p>longitude _____</p> <p><input type="checkbox"/> not available, incomplete address</p>	<p>2h.</p> <p>1 <input type="checkbox"/> yes-if yes, how? _____</p> <p>2 <input type="checkbox"/> no</p>
<p>3g.</p> <p>latitude _____</p> <p>longitude _____</p> <p><input type="checkbox"/> not available, incomplete address</p>	<p>3h.</p> <p>1 <input type="checkbox"/> yes-if yes, how? _____</p> <p>2 <input type="checkbox"/> no</p>

Protocol source: <https://www.phenxtoolkit.org/protocols/view/60301>