



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.

Note: The following protocol was used to measure the pesticide atrazine in the dust sample. Information has been provided at the end of this protocol on other types of environmental contaminants that can be obtained from this sample.

VACUUM DUST COLLECTION INSTRUCTIONS FOR THE STUDY PARTICIPANT

When to Collect

Collect the vacuum dust sample any time within 1 week after you received your sampling kit. Please send us a vacuum cleaner bag that has been in use for a while so that it contains plenty of dust. If a new bag has been installed in your cleaner recently, please vacuum twice before removing the bag.

If your vacuum cleaner does not have a disposable bag, then transfer the dust collected into the resealable plastic bag.

If your vacuum cleaner is the type that uses water, then try to scrape out some dust from the inlet hose and around the seals. Try to collect as much as possible. We do not want the water from the vacuum cleaner.

How to Collect

1. Remove the folded clear plastic trash bag or the resealable plastic bag marked Vacuum Dust from your sampling kit.
2. Following the instructions provided with your vacuum cleaner, remove the disposable bag and place it in the plastic trash bag. Tie the plastic bag with the tie wrap attached to the outside of the trash bag. If you do not have a disposable bag, then empty the contents of the vacuum into the resealable plastic bag marked Vacuum Dust.
3. Record the date and time on the label attached to the trash bag or the resealable plastic bag. Also record how many days the vacuum has been used since changing out the bag or emptying the collection container (in cases of vacuums with no bags). An estimated time will be appropriate if you do not know the exact

number of days.



Vacuum Dust Bag

4. Place the trash bag containing the vacuum cleaner bag or the resealable plastic

bag marked Vacuum Dust in the cardboard box that was used to ship your sampling kit to you. Do not refrigerate or freeze the vacuum dust sample.

5. If applicable, install another bag in your vacuum cleaner before you use it again.

6. Send the plastic bag (with dust sample enclosed) to the laboratory.

For pesticide analysis the dust samples can be shipped to the laboratory at room temperature. For allergen and endotoxin analyses the dust samples need to be shipped on frozen ice packs.

Laboratory

At the laboratory the dust sample needs to be sieved and weighed. Dust samples can be stored at -20° C until analysis. Organochlorine, organophosphates, carbamates, and pyrethroids require a hexane:acetone method and GC/MS analysis, cat and dust mite allergens require analysis via monoclonal-antibody-based, enzyme-linked immunosorbent assays, and endotoxins require a limulus amebocyte lysate (LAL) assay.

Protocol source: <https://www.phenxtoolkit.org/protocols/view/61201>