



## 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.

### Opioid Overdose Risk Behavior Scale, Version 2 (ORBS-2)

**Guide to use, Overview:** The ORBS-2 is designed as a modular series of subscales, with each subscale addressing relatively unique patterns of risky behavior that each independently contribute to overdose risk. To reduce participant burden, a checklist of drugs is provided to all participants, and each participant is asked to indicate which drugs they have used in the past 30 days. Based on that checklist, you can pre-fill certain items at 0. For the remaining items, responses are given values on a 0-30 scale, representing the number of days that the participant has used each of the drugs over the past 30 days.

- Subscale A (Prescription Opioid Misuse), Subscale B (Risky Non-Injection Use) or Subscale C (Injection Drug Use & Speedballing) can be used alone or in combination with any other scale
- Subscales D-F all include increasingly complex combinations of substance use. Each subscale requires administering the subscale before it:
- Subscale D (Opioid & Alcohol Combinations) requires administering subscale C first
- Subscale E (Opioid & Benzodiazepine Combinations) requires administering subscale C AND D first
- Subscale F (Higher Order Polysubstance Combinations) requires administering subscales C, D, AND E first

#### Instructions for Researchers:

- **Selecting Subscales:** Researchers are encouraged to use as many of the subscales as possible; however, if they would like to offer a smaller number of subscales, they may wish to read the original manuscript and refer to Table 3 (which describes the association between various ORBS-2 subscales and various clinical constructs) to balance time, burden, and specific research questions.

- **Scoring and Interpretation:** Subscale scores are represented as an average of all items, with higher scores conferring greater risk.

### **ITEM TEXT AND SCORING FOR RESEARCHERS:**

As tested, the ORBS-2 was an interactive (i.e., online, computer-administered) instrument where items will display based on their relevance to the participant and skip if they are not relevant. This can be recreated in most survey hosting websites through “SKIP” rules for specific blocks of items or questions. The following skip rules will allow you to direct participants to the most relevant questions. This includes skipping the overall ORBS measure if the participant has not used opioids in the last 30 days and/or skipping select subscales (A, B, D, E, F) based on the responses to specific items.

In order to account for potential participant error, there are also validation questions built into the gateway checklist and into Subscale A.

Note that if you are only administering Subscales A or B, you will only need Gateway Questions A-F.

Subscale C will require Gateway Questions G and H

Subscale D will require Gateway Questions G-I (and must be administered with subscale C)

Subscale E will require Gateway Questions G-J (and must be administered with subscales C and D)

Subscale F will require Gateway Questions G-K (and must be administered with subscales C-E)

### **SKIP RULES:**

IF Gateway questions A-F = 0 AND ORBS1X = 0; SKIP all ORBS2 questions and SET ALL ITEMS = 0

IF Gateway Question A = 0; SKIP Subscale A and SET Subscale A items = 0

IF Gateway Question A = 0 AND Gateway Question B = 0; SKIP Subscale B and SET Subscale B items = 0

IF Gateway Question I = 0; SKIP Subscale D

IF Gateway Question J = 0; SKIP Subscale E

IF Gateway Question K = 0; SKIP Subscale F

**Note:** Depending on your willingness to program, you can streamline further by omitting questions within specific subscales based on gateway questions. For example, you can drop any questions that mention amphetamines from all subscales C-F if participants answer BOTH Gateway Question G and Gateway Question H at 0.

### GATEWAY QUESTIONS:

<p>The following questions refer to medicines and other drugs you may have taken in the past 30 days. Please think back on the past 30 days, and answer to the best of your ability.</p> <p>Please look at the list of drugs below and check all that you have used at any point in the last 30 days:</p>		Used in Last 30 Days? (check one)
		YES      NO
1.	Opioid painkiller pills (Oxy, Lortab, Loracet, Percocet, Roxicet, etc.)	1      0
2.	Heroin	1      0
3.	Kratom	1      0
4.	Codeine syrup (aka purple drank or sizurp)	1      0
5.	Methadone	1      0
6.	Buprenorphine (Suboxone, Subutex)	1      0
7.	Cocaine or Crack	1      0
8.	Amphetamine or methamphetamine substances (including ADHD meds like Adderall and Ritalin)	1      0
9.	Alcohol	1      0
10.	Benzo (diazepine) anti-anxiety pills (Valium, Xanax, Klonopin, etc.)	1      0

11. Sleeping pills (Ambien, Restoril, Halcion, Sonata, etc.)	1	0
--	---	---

**NOTE:** Please note that the term "opioid" refers to a category of drug used primarily to manage physical pain. Pills such as Percocet, Oxycontin, Vicodin, Tramadol and Tylenol 3s are all opioids. So are Buprenorphine and Methadone, Opana, and Fentanyl. Codeine cough syrup (aka purple drank, sizurp) and fentanyl patches are opioids. Heroin is an opioid too. All are either based on or derived from the poppy flower which is used to produce opium, from which we get the term "opioid."

**ORBS1-X:**

X. On how many days in the past 30 did you take any opioids at all that were not prescribed to you by a doctor? This could include painkillers, methadone, or buprenorphine you got from a friend or dealer as well as heroin.	0-30 [numeric]
--	-------------------

**VALIDATION NOTES:**

IF Gateway X > 0 AND Gateway a-f = 0, THEN STATE TO PARTICIPANTS:

There seems some confusion. You did not choose any opioid substances from the list on the last question. Please correct your responses before continuing or contact the project staff.

You will need Gateway Questions a-f if administering Subscale A.

IF Gateway Question a = 0, SKIP Subscale A and SET Subscale A items = 0

**SUBSCALE A:**

	YES	NO
Y. Do you have a prescription for an opioid painkiller?	1	0

**VALIDATION NOTES:**

IF Gateway Question Y = 0, SKIP questions 1 and 2 and SET their values to 0.

	# of days
1. On how many days in the past 30 did you use a prescribed opioid painkiller?	0-30
2. On how many days in the past 30 did you use more of your prescribed opioid painkillers than advised?	0-30

You will need Gateway Questions a-f administering Subscale B.

IF Gateway Question a = 0 AND Gateway Question b = 0, SKIP Subscale B and SET Subscale B items = 0.

#### SUBSCALE B:

	# of days
3. On how many days in the past 30 did you use opioid painkillers that you got from someone else who has a prescription or that you know came from a pharmacy?	0-30
4. On how many days in the past 30 did you use opioid painkillers that you got from a dealer or someone else who might not have a doctor's prescription?	0-30
5. On how many days in the past 30 did you crush and snort opioid painkillers?	0-30
6. On how many days in the past 30 did you crush and smoke or vaporize opioid painkillers?	0-30
7. On how many days in the past 30 did you smoke or vaporize (aka chase the	0-30

dragon) heroin?

You will need Gateway Questions g and h if administering Subscale C.

**SUBSCALE C:**

	# of days
8. On how many days in the past 30 did you inject heroin?	0-30
9. On how many days in the past 30 did you inject any opioid other than heroin (crushed pills, methadone, or buprenorphine, for example)?	0-30
10. On how many days in the past 30 did you use any opioids AND use a cocaine or amphetamine type stimulant within the same 6-hour period?	0-30
11. On how many days in the past 30 did you use any opioids AND a cocaine or amphetamine type stimulant at the same time (also known as a speedball)?	0-30

You will need Gateway Questions g-i and Subscale C if administering Subscale D.

IF Gateway Question i = 0 SKIP Subscale D.

**SUBSCALE D:**

	# of days
12. On how many days in the past 30 did you use any opioids AND drink alcohol within the same 6-hour period?	0-30

13. On how many days in the past 30 did you use any opioids and drink 4 or more alcoholic beverages quickly within the same 6-hour period?	0-30
14. On how many days in the past 30 did you use any opioids and use a cocaine or amphetamine type stimulant AND drink alcohol within the same 6-hour period?	0-30

You will need Gateway Questions g-j and Subscale C and Subscale D if administering Subscale E.

IF Gateway Question j = 0, SKIP Subscale E.

#### **SUBSCALE E:**

	# of days
15. On how many days in the past 30 did you use any opioids AND take benzos within the same 6-hour period?	0-30
16. On how many days in the past 30 did you use any opioids and take benzos AND use a cocaine or amphetamine type stimulant within the same 6-hour period?	0-30
17. On how many days in the past 30 did you use any opioids and take benzos AND drink alcohol within the same 6-hour period?	0-30
18. On how many days in the past 30 did you use any opioids and use benzos and use a cocaine or amphetamine type stimulant AND drink alcohol within the same 6-hour period?	0-30

You will need Gateway Questions g-k and Subscales C-E if administering Subscale F.

IF Gateway Question k = 0, SKIP Subscale F.

**SUBSCALE F:**

	# of days
19. On how many days in the past 30 did you use any opioids AND take prescription sleeping pills (within the same 6-hour period?)	0-30
20. On how many days in the past 30 did you use any opioids and take a prescription sleeping pill AND use a cocaine or amphetamine type stimulant within the same 6-hour period?	0-30
21. On how many days in the past 30 did you use any opioids and take a sleeping pill and drink alcohol within the same 6-hour period?	0-30
22. On how many days in the past 30 did you use any opioids and take benzos AND take a prescription sleeping pill within the same 6-hour period?	0-30
23. On how many days in the past 30 did you use any opioids and use benzos and take a prescription sleeping pill and use a cocaine or amphetamine type stimulant within the same 6-hour period?	0-30
24. On how many days in the past 30 did you use any opioids and take a prescription sleeping pill and use a cocaine or amphetamine type stimulant AND drink alcohol within the same 6-hour period?	0-30
25. On how many days in the past 30 did you use any opioids and use benzos and take a prescription sleeping pill AND drink alcohol within the same 6-hour period?	0-30
26. On how many days in the past 30 did you use any opioids and use benzos and take a prescription sleeping pill and use a cocaine or amphetamine type stimulant AND drink alcohol within the same 6-hour period?	0-30