**Supplemental Table 1:** Key indicator variables calculated using the Pregnancy Risk Assessment Monitoring System (PRAMS)

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| **Variable Used in Analysis** | **PRAMS Source Variables** |
| Any cigarette use during pregnancy | Birth certificate data on cigarette use by trimester was combined with a core1 PRAMS question on cigarette use during the last 3 months of pregnancy: “In the last 3 months of your pregnancy, how many cigarettes did you smoke on an average day?” This question was dichotomized into a value of “yes” if the respondent reported smoking cigarettes in any amount and “no” if the respondent reported not smoking. |
| Any electronic cigarette (e-cigarette) use during the last 3 months of pregnancy | This variable was based on the following core PRAMS question: “During the last 3 months of your pregnancy, on average, how often did you use e-cigarettes or other electronic nicotine products?” This question was dichotomized into a value of “yes” if the respondent reported using e-cigarettes in any amount and “no” if the respondent reported not using e-cigarettes. |
| Any cigarette or e-cigarette use | Dichotomous values for any cigarette use during pregnancy and any e-cigarette use during the last 3 months of pregnancy were combined into a single variable representing any cigarette or e-cigarette use. This variable was not reported as a standalone estimate in the analysis, but was used to calculate polysubstance use across different types of substances so we would not overestimate polysubstance use among individuals who were smoking either combustible cigarettes or e-cigarettes. |
| Any alcohol use during the last 3 months of pregnancy | This variable was based on the following optional2 PRAMS question: “During the last 3 months of your pregnancy, how many times did you drink 4 alcoholic drinks or more in a 2 hour time span?” This question was dichotomized into a value of “yes” if the respondent reported drinking alcohol in any amount and “no” if the respondent reported not drinking any alcohol. Only 11 of the 25 jurisdictions included in this analysis collected data on alcohol use during the last 3 months of pregnancy. |
| Prescription opioid use during pregnancy | Respondents were asked the following question on the opioid supplement3: “During your most recent pregnancy, did you use any of the following prescription pain relievers?” Options included the following: “Hydrocodone (like Vicodin®, Norco®, or Lortab®); Codeine (like Tylenol #3 or #4, not regular Tylenol); Oxycodone (like Percocet®, Percodan®, or OxyContin®); Tramadol (like Ultram®, or Ultracet®); Hydromorphone or meperidine (like Demorol®, Exalgo®, or Dilaudid®); Oxymorphe (like Opana®); Morphine (like MS Contin®, Avinza®, Kadian ®); Fentanyl (like Duragesic®, Fentora®, Actiq®)” |
| Prescription opioid misuse during pregnancy | Respondents who indicated use of any of the above prescription pain relievers during pregnancy were asked where they received their medications and the reasons for using their prescription medications. Based on responses to these questions, prescription opioid misuse was calculated following the methodology in this reference: Ko, J.Y., D'Angelo, D.V., Haight, S.C., Morrow, B., Cox, S., Salvesen von Essen, B., Strahan, A.E., Harrison, L., Tevendale, H.D., Warner, L., Kroelinger, C.D., Barfield, W.D., 2020b. Vital Signs: Prescription opioid pain reliever use during pregnancy - 34 U.S. jurisdictions, 2019. MMWR Morb Mortal Wkly Rep 69(28), 897-903. DOI: 10.15585/mmwr.mm6928a1 |
| Prescription benzodiazepine use during pregnancy | Respondents were asked the following question on the opioid supplement: “During your most recent pregnancy, did you take or use any of the following drugs for any reason?” Respondents who indicated “yes” to the following were considered to have taken prescription benzodiazepines during pregnancy: “Medication for anxiety, such as Valium®, Xanax®, Ativan®, Klonopin®,Restoril®, or other “benzos” (benzodiazepines)” |
| Prescription stimulant use during pregnancy | Respondents were asked the following question on the opioid supplement: “During your most recent pregnancy, did you take or use any of the following drugs for any reason?” Respondents who indicated “yes” to the following were considered to have taken prescription stimulants during pregnancy: “Adderall®, Ritalin®, or another stimulant” |
| Medications for opioid use disorder [MOUD] during pregnancy | Respondents were asked the following question on the opioid supplement: “During your most recent pregnancy, did you take or use any of the following drugs for any reason?” Respondents who indicated “yes” to the following were considered to have taken MOUD during pregnancy: “Methadone, Subutex®, Suboxone®, or buprenorphine” |
| Cannabis use during pregnancy | Respondents were asked the following question on the opioid supplement: “During your most recent pregnancy, did you take or use any of the following drugs for any reason?” Respondents who indicated “yes” to the following were considered to have used cannabis during pregnancy: “Marijuana or hash” |
| Heroin use during pregnancy | Respondents were asked the following question on the opioid supplement: “During your most recent pregnancy, did you take or use any of the following drugs for any reason?” Respondents who indicated “yes” to the following were considered to have used heroin during pregnancy: “Heroin” |
| Cocaine use during pregnancy | Respondents were asked the following question on the opioid supplement: “During your most recent pregnancy, did you take or use any of the following drugs for any reason?” Respondents who indicated “yes” to the following were considered to have used cocaine during pregnancy: “Cocaine (crack, coke)” |
| Illicit amphetamine use during pregnancy | Respondents were asked the following question on the opioid supplement: “During your most recent pregnancy, did you take or use any of the following drugs for any reason?” Respondents who indicated “yes” to the following were considered to have used illicit amphetamines during pregnancy: “Amphetamines (uppers, speed, crystal meth, crank, ice, agua)” |
| Illicit drug use during pregnancy | This was calculated based on a “yes” response to heroin, cocaine, or illicit amphetamine use during pregnancy. |
| Depression or anti-depressant use during pregnancy | This was calculated based on a “yes” response to a core PRAMS question (“During your most recent pregnancy, did you have any of the following health conditions? ... “Depression”), or a response of “yes” to the following question on the opioid supplement: “During your most recent pregnancy, did you take or use any of the following drugs for any reason? … Medication for depression, such as Prozac®, Zoloft®, Lexapro®, Paxil®, Celexa®” |
| Clinician screening for alcohol use during pregnancy | Respondents were asked the following core PRAMS question: “During any of your prenatal care visits, did a doctor, nurse, or other health care worker ask you any of the things listed below?” Responses of “yes” or “no” were included for the following response option: “If I was drinking alcohol” |
| Clinician screening for cigarette use during pregnancy | Respondents were asked the following core PRAMS question: “During any of your prenatal care visits, did a doctor, nurse, or other health care worker ask you any of the things listed below?” Responses of “yes” or “no” were included for the following response option: “If I was smoking cigarettes” |
| Clinician screening for other substance use during pregnancy | Respondents were asked the following core PRAMS question: “During any of your prenatal care visits, did a doctor, nurse, or other health care worker ask you any of the things listed below?” Responses of “yes” or “no” were included for the following response option: “If I was using drugs such as marijuana, cocaine, crack, or meth” |

1 PRAMS Phase 8 core questions: <https://www.cdc.gov/prams/pdf/questionnaire/Phase-8-Core-Questions-508.pdf>

2 PRAMS Phase 8 standard questions: <https://www.cdc.gov/prams/pdf/questionnaire/Phase-8-Standard-Core-Questions-508.pdf>

3 PRAMS 2019 Opioid Supplement: <https://www.cdc.gov/prams/pdf/questionnaire/Opioid-Supplement_508.pdf>