Substance Exposed Neonates in Wyoming (2016-2021) Wyoming Hospital Discharge Data (WY HDD)

There are a number of ICD10 hospital discharge codes that capture neonates affected by maternal use of substances. These codes are used when the specific drug is known (see table below for codes for known substances) and unknown (ICD10 Code P04.49). Some of these neonates may also have a diagnosis of Neonatal Abstinence Syndrome (NAS). NAS is a group of signs of withdrawal that can occur following in utero exposure to medications or illicit substances, most commonly opioids, but not all exposed infants experience NAS. The presence of NAS is indicated by the ICD10 code P96.1, and more information on NAS in Wyoming can be found in the <u>Wyoming Neonatal Abstinence Syndrome (NAS) report</u> <<u>https://health.wyo.gov/wp-content/uploads/2022/10/NAS-brief-2022-V6-Final-2022.pdf</u>>

Table 1 presents the number of inpatient hospital discharges among neonates in Wyoming during 2016-2021 with the presence of ICD10 codes indicating a neonate diagnosed as being affected by maternal substance use upon inpatient discharge, including discharges which also had an NAS diagnosis.

 Table 1: Number of Hospital Discharges Among Wyoming Neonates by ICD10 Code (WY HDD 2016-2021)

Hospital Discharge Diagnosis (ICD10 Code)	Total # of discharges (2016-2021)	Average per year 2016-2021	% with an NAS Diagnosis (2016-2021)	Rate per 1000 delivery hospitalizations
Newborn affected by maternal use of other drugs of addiction (P04.49)	187	31	10.2%	6.5
Newborn affected by maternal use of opiates (P04.14)	13	2	46.2%	0.5
Newborn affected by maternal use of anxiolytics (P04.1A)	0	0		
Newborn affected by maternal use of sedative-hypnotics (P04.17)	0	0		
Newborn affected by maternal use of antidepressants (P04.15)	15	3	*	0.5
Newborn affected by maternal use of amphetamines (P04.16)	26	4	*	0.9
Newborn affected by maternal use of unspecified drugs of addiction (P04.40)	8	1	0%	0.3
Newborn affected by maternal use of cocaine (P04.41)	≤5		100%	≤0.2
Newborn affected by maternal use of hallucinogen (P04.42)	0	0		

Newborn affected by maternal use of cannabis (P04.81)	80	13	*	2.8
Newborn affected by maternal use of alcohol (P04.3)	10	2	*	0.4
Newborn affected by maternal use of tobacco (P04.2)	231	39	5.2%	8.1

*not calculated because count less than or equal to 5

A neonate can be discharged with more than one ICD10 code indicating the neonate was affected by maternal substance use, indicating the neonate has been affected by maternal use of multiple substances. Therefore, the individual counts of the number of inpatient hospital discharge ICD10 codes among neonates in Wyoming listed in Table 1 above is greater than the total number of inpatient discharges indicating a neonate has been affected by maternal substance use. Table 2 below displays the number of discharges in Wyoming during 2016-2021 with at least one of the ICD10 discharge codes indicating a neonate affected by maternal substance use.

Table 2: Number of Neonatal Discharges with at least one ICD10 Code Indicating they were affected by

 maternal substance use (WY HDD 2016-2021)

	Total # of discharges (2016-2021)	Average per year 2016-2021	% with an NAS Diagnosis (2016-2021)	Rate per 1000 delivery hospitalizations
Neonatal discharges with at least one ICD10 discharge code indicating they were affected by maternal substance use	493	82	7.1%	17.3