Neonatal Abstinence Syndrome (NAS) Surveillance System



Coordinator & Data Contact: Tracey Jewell, MPH

Kentucky Department for Public Health Division of Maternal and Child Health

(502) 564-4830 ext. 4393 tracey.jewell@ky.gov

State Web Site: https://chfs.ky.gov/agencies/dph/dmch/Pages/

default.aspx

National Web Site: https://www.marchofdimes.org/complications/neonatal-

abstinence-syndrome-(nas).aspx

Sources of Information for the Database

Neonatal Abstinence Syndrome (NAS) is the collection of signs babies experience in withdrawing from drugs that they were chronically exposed to in utero. Common symptoms that may be present with NAS include: high-pitched cry, restlessness, hyperactive reflexes, myoclonic jerks, jitteriness, tremors, seizure, poor feeding, vomiting, loose stools, fever, sweating, mottling, nasal flaring, apnea, and tachypnea.

Kentucky Revised Statute 211.676 requires the reporting of NAS cases to the Division of Maternal and Child Health within the Kentucky Department for Public Health. Specifically, it states: "All cases of neonatal abstinence syndrome (NAS) diagnosed among Kentucky resident births shall be reported to the Kentucky Department for Public Health by the facility where NAS is diagnosed. The report shall be made at the time of NAS diagnosis pursuant to guidance issued by the department."

Hospitals began submitting data on NAS cases on July 15, 2014.

Description of the Data Collected

Data collected by the NAS surveillance system include both demographic and medical information on the infant and mother. Variables reported include but are not limited to: infant sex, age at onset of symptoms, maternal county of residence and address, infant and maternal dates of birth, maternal history of substance abuse, substances found on infant and maternal testing, and medications used to treat the infant with date and time of first administered dose.

Strengths of the Data

The NAS surveillance system provides a population data set of diagnosed NAS cases in Kentucky from physician diagnosis at time of onset. Data are collected on a standardized form and include the ICD-9 and/or ICD-10 codes utilized at diagnosis. Surveillance performance standards and data quality are monitored at least monthly and technical assistance to reporting facilities is conducted on an as-needed basis.

Data Limitations

Due to the sensitive nature of the data collected and to ensure the confidentiality and security of the information, data will only be reported in aggregate fashion.

Specific Uses of Information

- Provides population level information about Kentucky's NAS cases reported to the Department for Public Health/Division of Maternal and Child Health.
- Provides data to create and evaluate prevention efforts and service initiatives for NAS.
- Used to identify target populations that are disproportionately affected by NAS.

System Evaluation

NAS data are monitored on a monthly basis for quality and accuracy.

Data Set Availability

Due to security and confidentiality restrictions, the NAS raw data are not available for public use.

Data Release Policy

As mentioned previously, in order to maintain the integrity of the surveillance system and protect the confidentiality of the information collected, data are not available for release to the public. Data may be disseminated in aggregate fashion at the discretion of the Maternal and Child Health Division Director provided appropriate approval procedures have been completed and documented. Aggregate data requests can be filled at the public's request with restrictions at no cost. For all requests, please contact Tracey Jewell at tracey.jewell@ky.gov or (502) 564-4830 ext. 4393.

Data Publications

In addition to mandatory reporting of NAS cases, there is a separate mandate requiring publication of an annual report. KRS 211.678 states that the Kentucky Department for Public Health shall publish on, at least, an annual basis de-identified statistical data on the number of reports made under KRS 211.676 relating to a diagnosis of NAS. The report may segregate the data into reporting blocks no smaller than the regional or county level. This report will be made available on the state website.

Suggested Data Citation

Kentucky Department for Public Health, Division of Maternal and Child Health, Neonatal Abstinence Syndrome Surveillance System data; [data year(s)]

Contributing Authors

Tracey Jewell, MPH, Kentucky Department for Public Health Joyce Robl, EdD, MS, CGC, Kentucky Department for Public Health