NAS Surveillance Program

Location: Tennessee
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Category: Cutting Edge Practice

BACKGROUND

Neonatal Abstinence Syndrome (NAS) is a condition where infants exhibit signs of withdrawal from in-utero exposures. Many substances may cause withdrawal in the infant, but the condition is commonly associated with opiate exposure.

In 2012, an NAS Sub-cabinet workgroup was developed to review data and develop plans to address the growing problem of NAS in Tennessee. Based upon the limitations of data available at that time, NAS was made a reportable condition effective January 1, 2013.

PROGRAM OBJECTIVES

To monitor, in real time, the incidence of NAS in Tennessee

TARGET POPULATION SERVED

Pregnant women, infants, children

PROGRAM ACTIVITIES

Effective January 1, 2013, Neonatal Abstinence Syndrome was made a reportable condition in Tennessee, with cases to be reported within 30 days of diagnosis. Cases are submitted from hospitals and providers through an online portal, with information collected on the infant's sex, county of residence, and exposure to substances thought to cause withdrawal in the infant. Data captured from the surveillance system allows for real time estimates of NAS incidence and exposure source at the county, regional and state levels. Weekly, monthly and annual surveillance reports are prepared and distributed to stakeholders. Stakeholders may use this data to develop programs and place them in areas of greatest need and/or evaluate the effects of their programs.

TITLE V/MCH BLOCK GRANT MEASURES ADDRESSED

NOM 11: Neonatal Abstinence Syndrome

PROGRAM OUTCOMES/EVALUATION DATA

Sample weekly surveillance reports can be viewed online: https://www.tn.gov/health/nas/nas-summary-archive.html

PROGRAM COST

Costs are related to staff time, and IT infrastructure to maintain the surveillance portal.

ASSETS & CHALLENGES

Assets
Tennessee currently uses REDCap (https://projectredcap.org) for the NAS reporting platform, a low cost and flexible option when changes to the portal are identified.

Challenges
Turnover in staff designated to report to the surveillance system can result in reporting lapses.

Overcoming Challenges
To address the challenge of reporting lapses, Tennessee Department of Health staff members periodically reach out to reporting facilities to assess reporting challenges and ensure that contact information is accurate.

LESSONS LEARNED

Tennessee has used both a public reporting link and a log-in based web portal. The reporting link makes reporting more accessible but limits control over who can access the system and make reports, which represents a concern for data quality and protection of IT assets. The log-in based portal allows for facilities making reports to see their own data but requires additional staff time for user management (i.e., account creation and password resets).
FUTURE STEPS

Tennessee will continue the surveillance of NAS and remain responsive to stakeholders who may identify data collection fields to add and/or modify.

Projects are planned to compare completeness of surveillance data with administrative databases.

PEER REVIEW & REPLICATION

https://www.tn.gov/health/nas
https://www.cdc.gov/mmwr/preview/mmwrhtml/mm6405a4.htm

Key words:
Neonatal Abstinence Syndrome, NAS, surveillance, opioid

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