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### Recent Epidemiology of Neonatal Abstinence Syndrome.

Rachel Basiura Clemson University

Elaine A. Donoghue MD

Lehigh Valley Health Network, elaine\_a.donoghue@lvhn.org

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# Recent Epidemiology of Neonatal Abstinence Syndrome

# Rachel Basiura, Elaine Donoghue, MD

Lehigh Valley Health Network, Allentown, Pennsylvania

#### BACKGROUND

- Neonatal Abstinence Syndrome (NAS) refers to opioid withdrawal symptoms in prenatally exposed newborns<sup>1</sup>
  - Potential short-term outcomes: high-pitched cry, fever, loose or watery stools, tremors, extended hospital stay<sup>2</sup>
  - Potential long-term outcomes: hyperactivity, short attention span, memory and perceptual problems<sup>3</sup>
- LVHN experienced a doubling of NAS cases between 2014-2016
- A multidisciplinary group of LVHN Pediatric and Obstetrics providers assembled in Fall of 2016 to explore gaps in departmental care, NAS epidemiology, and potential interventions
- An online database was created to provide a central location and tracking tool for maternal, infant, and pediatric information
- Demographics and personal circumstances of opioid-dependent pregnant women can greatly impact the type of treatment they require

Purpose: Populate and tailor a database to inform LVHN's response to opioid use in pregnancy

#### METHODS

January 2014 - April 2017 Microsoft Excel spreadsheet maintained by a neonatal intensive care unit nurse of all LVHN NAS cases

June 2016 -**July 2017** List of LVHN women coded for substance use after giving birth

January 2015 - July 2017 Pediatric files from the LVHN Child Advocacy Center (CAC)

February 2017 – present List of pregnant women screened positive for risk of opioid use during an LVHN prenatal visit

July 2015 – present LVHN cases of substance use in pregnancy

#### METHODS



- Positive urine drug screen, self-report, or a 'yes' to a prenatal screening tool question established substance use in pregnancy
- A literature review and availability of information in EPIC and from the CAC informed database additions and modifications

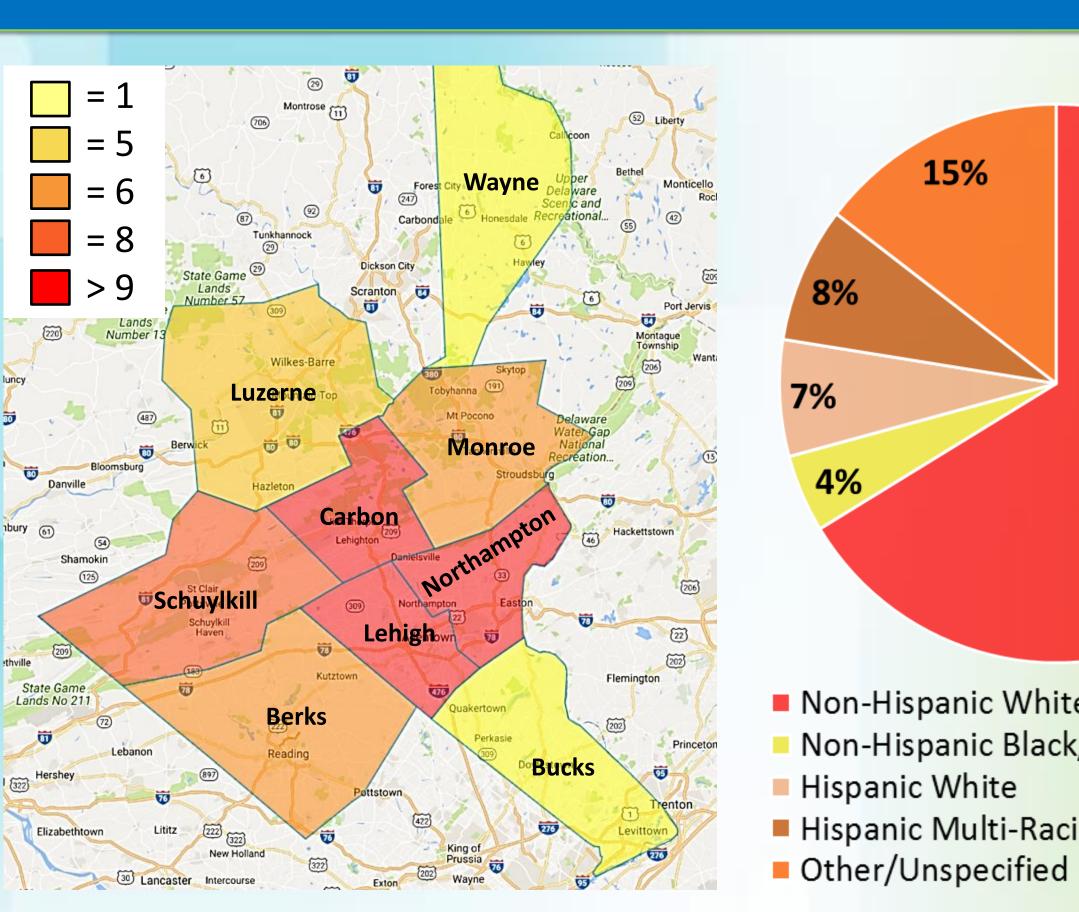
## OUTCOMES



[Digital image]. (n.d.). Retrieved July 24, 2017, from http://maxpixel.freegreatpicture.com

- 90 total records in the REDCap database
- 93 total data fields between maternal, infant, and pediatric instruments
  - 22 data fields were added
  - 8 fields were modified
- Instruments united obstetric and pediatric information in a common database
- Existing records produced preliminary data
- Database entries contributed to a grant proposal intended to fund developing programs designed to meet needs of substance dependent women
- Project coordinator hired to manage database and use as case management tool to track future patient progress

#### RESULTS





**15%** 

counties with substance use in pregnancy. 80% come from Lehigh, Carbon or Northampton county (n = 90)

Figure 3. Ethnic/racial backgrounds of pregnant women with substance use in pregnancy (n = 90)

### RECOMMENDATIONS

- Answer future research questions using the online database
- Promote a mobile program to reach patients beyond Lehigh county
- Communicate across departments to prevent fragmented care
- Enhance awareness of services that already exist and plan for what is still needed

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