NAS Case Definition and Coding

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KPQC Centers: At Risk for NAS

At Risk for NAS

- P04.4: 48
- 96.1: 52
- Other: 0
KPQC Centers: Infant treated for NAS

Pharmacological Tx for NAS

- P04.4: 9
- 96.1: 28
- Other: 62
Definition of NAS

• CSTE defines **confirmed, probable or suspect NAS**
• There is a use of “diagnosis of NAS, or chief complaint of NAS, or a clinically compatible presentation of 3 or more signs of withdrawal” in the definition
• It is difficult for clinicians to be consistent with their diagnosis, when the actual diagnosis is used in the definition.
• We propose use of the Florida definition of NAS for Kansas.
• To be the true NAS code 96.1
  • Documented or known exposure to opioid, benzo or barbiturate
  • Signs of NAS requiring some care different than routine observation:
    • Medical treatment or
    • Prolonged hospital stay for comfort cares beyond normal observation period:
      • 72 hours: exposure to short acting opiate
      • 5 days: exposure to long acting opiate
    • Excessive need for comfort cares during hospitalization (i.e. 24/7 holding)
• Always start with the known exposure code
Exposure Codes

• These ICD-10-CM codes were new in October 2018 to designate in utero exposure:
  • P04.14 Newborn affected by maternal use of opiates
  • P04.17 Newborn affected by maternal use of sedative-hypnotics
  • P04.1A Newborn affected by maternal use of anxiolytics
  • P04.11 Newborn affected by maternal antineoplastic chemotherapy
  • P04.12 Newborn affected by maternal cytotoxic drugs
  • P04.13 Newborn affected by maternal use of anticonvulsants
  • P04.14 Newborn affected by maternal use of opiates
  • P04.15 Newborn affected by maternal use of antidepressants
  • P04.16 Newborn affected by maternal use of amphetamines
  • P04.17 Newborn affected by maternal use of sedative-hypnotics
  • P04.1A Newborn affected by maternal use of anxiolytics
  • P04.18 Newborn affected by other maternal medication
  • P04.19 Newborn affected by maternal use of unspecified medication
  • P04.41 Newborn affected by maternal use of cocaine
  • P04.3 Newborn affected by maternal use of Alcohol
  • P04.2 Newborn affected by maternal use of tobacco
  • P04.42 Newborn affected by maternal use of hallucinogens
  • P04.49 Newborn with exposure to methadone, at risk for methadone withdrawal
  • P04.9 Intrauterine drug exposure ------ write in drug if not one of the above
Which Codes to Use?

- **P04.xx Codes to be used when:**
  - There is a known exposure (history or drug screen)
  - No clinical signs of withdrawal
  - Classified as “suspect” (exposure) by CSTE

- **P04.xx Codes to be used when:**
  - There is a known exposure (history or drug screen)
  - Clinical signs of withdrawal
  - No exposure to narcotics, benzos or barbiturates
  - Classified as “suspect” (exposure) by CSTE

- **P04.xx and 96.1 Codes to be used when:**
  - There is a known exposure (history or drug screen)
  - Clinical signs of withdrawal
  - Yes exposure to narcotics, benzos or barbiturates
  - Classified as “possible or confirmed NAS” by CSTE
Which Exposures Could be 96.1 and P04.xx

- Could possibly be coded as 96.1:
  - P04.14 Newborn affected by maternal use of opiates
  - P04.17 Newborn affected by maternal use of sedative-hypnotics
  - P04.1A Newborn affected by maternal use of anxiolytics
  - P04.13 Newborn affected by maternal use of anticonvulsants

- Cannot be coded as 96.1:
  - P04.11 Newborn affected by maternal antineoplastic chemotherapy
  - P04.12 Newborn affected by maternal cytotoxic drugs
  - P04.15 Newborn affected by maternal use of antidepressants
  - P04.16 Newborn affected by maternal use of amphetamines
  - P04.18 Newborn affected by other maternal medication
  - P04.19 Newborn affected by maternal use of unspecified medication
  - Any others
CSTE Definitions

• Confirmed NAS; code 96.1
  • + infant drug screen for opioids, benzos or barbiturates
  • Symptoms requiring increased care (as defined slide 1)

• Probable NAS; code 96.1
  • History of exposure to above or + maternal drug screen for opiates, benzo or barbiturates
  • Negative infant drug screen
  • Symptoms requiring increased care (as defined slide 1)

• Suspected NAS; coded by exposure code P04.xx
  • All other drug exposures with or without symptoms
  • Exposure to opioids, benzo or barbiturates without significant symptoms

• See slides for many more details!
Neonatal abstinence syndrome (NAS) is withdrawal in neonates following chronic in utero exposure to medications or illicit drugs, most commonly opioids, benzodiazepines and barbiturates.

- Withdrawal signs:
  - central nervous system (high pitched cry, hypertonia, tremors, seizures, hyperactive Moro reflex, poor sleep, seizures, poor feeding)
  - autonomic nervous system (sneezing, nasal congestion, frequent yawning, fever, mottling)
  - gastrointestinal (regurgitation, vomiting, loose stools)
  - respiratory dysregulation (tachypnea, respiratory distress)
PROPOSED CASE DEFINITIONS
Tier 1 NAS Case Definitions: CONFIRMED CASE (96.1)

- Hospitalized neonate <28 days of age
- Presentation / clinical signs not explained by another etiology*

<table>
<thead>
<tr>
<th>In utero exposure**</th>
<th>Diagnosis, Chief Complaint or Clinically Compatible Presentation</th>
<th>Neonatal Confirmatory Laboratory Evidence</th>
</tr>
</thead>
<tbody>
<tr>
<td>opioids, barbiturates, benzodiazepines</td>
<td>Diagnosis of NAS</td>
<td>Positive</td>
</tr>
<tr>
<td>opioids, barbiturates, benzodiazepines</td>
<td>Chief complaint of NAS</td>
<td>Positive</td>
</tr>
<tr>
<td>opioids, barbiturates, benzodiazepines</td>
<td>Clinically compatible presentation of 3 or more signs of withdrawal***</td>
<td>Positive</td>
</tr>
</tbody>
</table>

*Dx, CC or signs: Signs of NAS requiring some care different than routine observation
- Medical treatment
- Prolonged hospital stay for comfort cares
- Excessive need for comfort cares during hospitalization

*e.g., sepsis, intracranial hemorrhage, hypocalcemia
**opioids (any level) including natural (e.g., morphine, codeine), semi-synthetic (e.g., heroin), and synthetic (e.g., fentanyl, or fentanyl analogs), or opioid metabolites (e.g., 6-monoacetylmorphine), benzodiazepines (e.g., diazepam, alprazolam), or barbiturates (e.g., phenobarbital)

***Withdrawal signs:
- Central nervous system (high pitched cry, hypertonia, tremors, seizures, hyperactive Moro reflex, poor sleep, seizures, poor feeding)
- Autonomic nervous system (sneezing, nasal congestion, frequent yawning, fever, mottling)
- Gastrointestinal (regurgitation, vomiting, loose stools)
- Respiratory dysregulation (tachypnea, respiratory distress)
### Tier 1 NAS Case Definitions: PROBABLE CASE – Types 1 & 2 (96.1)

- **Hospitalized neonate <28 days of age**
- **Presentation / clinical signs not explained by another etiology**

<table>
<thead>
<tr>
<th>Type</th>
<th>Maternal History of Chronic Substance** Use in the 4 Weeks Prior to Delivery</th>
<th>Diagnosis, Chief Complaint or Clinically Compatible Presentation</th>
<th>Maternal Confirmatory Laboratory Evidence</th>
<th>Neonatal Confirmatory Laboratory Evidence</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>#</td>
<td>Diagnosis of NAS</td>
<td>No/unknown</td>
<td>No/unknown</td>
</tr>
<tr>
<td>1</td>
<td>#</td>
<td>Chief complaint of NAS</td>
<td>No/unknown</td>
<td>No/unknown</td>
</tr>
<tr>
<td>1</td>
<td>#</td>
<td>Clinically compatible presentation of 3 or more signs of withdrawal***</td>
<td>No/unknown</td>
<td>No/unknown</td>
</tr>
<tr>
<td>2</td>
<td></td>
<td>Diagnosis of NAS</td>
<td>Positive##</td>
<td>No/unknown</td>
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<tr>
<td>2</td>
<td></td>
<td>Chief complaint of NAS</td>
<td>Positive##</td>
<td>No/unknown</td>
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<tr>
<td>2</td>
<td></td>
<td>Clinically compatible presentation of 3 or more signs of withdrawal***</td>
<td>Positive##</td>
<td>No/unknown</td>
</tr>
</tbody>
</table>

Dx, CC or signs: Signs of NAS requiring some care different than routine observation
- Medical treatment
- Prolonged hospital stay for comfort cares
- Excessive need for comfort cares during hospitalization

*,**, ***See Tier 1 Confirmed Case Slide

#chronic opioid use (including Medication Assisted Therapy, illicit use, or pain medication), or benzodiazepine, or barbiturate use

##opioid, benzodiazepines or barbiturates
## Tier 1 NAS Case Definitions: SUSPECT CASE – Types 1 – 5 (P04.XX)

### Hospitalized neonate <28 days of age

- Presentation / clinical signs not explained by another etiology*

### Type Maternal History of Chronic Substance Use in the 4 Weeks Prior to Delivery | Diagnosis, Chief Complaint or Clinically Compatible Presentation/Clinical Presentation | Maternal Confirmatory Laboratory Evidence | Neonatal Confirmatory Laboratory Evidence
---|---|---|---
1 | Non-opioid, non-benzodiazepine or non-barbiturate | Diagnosis of NAS | No/unknown | No/unknown
1 | Non-opioid, non-benzodiazepine or non-barbiturate | Chief complaint of NAS | No/unknown | No/unknown
1 | Non-opioid, non-benzodiazepine or non-barbiturate | Clinically compatible presentation of 3 or more signs of withdrawal*** | No/unknown | No/unknown
2 | Unknown type | Diagnosis of NAS | No/unknown | No/unknown
2 | Unknown type | Chief complaint of NAS | No/unknown | No/unknown
2 | Unknown type | Clinically compatible presentation of 3 or more signs of withdrawal*** | No/unknown | No/unknown

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*Dx, CC or signs: Signs of NAS requiring some care different than routine observation
- Medical treatment
- Prolonged hospital stay for comfort cares
- Excessive need for comfort cares during hospitalization

* ***See Tier 1 Confirmed Case Slide
### Tier 1 NAS Case Definitions: SUSPECT CASE – Types 1 – 5, cont. (P04.XX)

- **Hospitalized neonate <28 days of age**
- **Presentation / clinical signs not explained by another etiology***

<table>
<thead>
<tr>
<th>Type</th>
<th>Maternal History of Chronic Substance Use in the 4 Weeks Prior to Delivery</th>
<th>Diagnosis, Chief Complaint or Clinically Compatible Presentation/Clinical Presentation</th>
<th>Maternal Confirmatory Laboratory Evidence</th>
<th>Neonatal Confirmatory Laboratory Evidence</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>Maternal History of Chronic Substance Use in the 4 Weeks Prior to Delivery</td>
<td>Diagnosis of NAS</td>
<td>Positive§</td>
<td>No/unknown</td>
</tr>
<tr>
<td>3</td>
<td>Maternal History of Chronic Substance Use in the 4 Weeks Prior to Delivery</td>
<td>Chief complaint of NAS</td>
<td>Positive§</td>
<td>No/unknown</td>
</tr>
<tr>
<td>3</td>
<td>Maternal History of Chronic Substance Use in the 4 Weeks Prior to Delivery</td>
<td>Clinically compatible presentation of 3 or more signs of withdrawal***</td>
<td>Positive§</td>
<td>No/unknown</td>
</tr>
<tr>
<td>4</td>
<td>Opioid, benzodiazepine or barbiturate</td>
<td>Clinical presentation of 1 or 2 signs of withdrawal***</td>
<td>No/unknown</td>
<td>No/unknown</td>
</tr>
<tr>
<td>5</td>
<td>Opioid, benzodiazepine or barbiturate</td>
<td>Clinical presentation of 1 or 2 signs of withdrawal***</td>
<td>Positive§§</td>
<td>No/unknown</td>
</tr>
</tbody>
</table>

* Non-opioid, non-benzodiazepine or non-barbiturate drug of abuse in the 4 weeks prior to delivery

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Dx, CC or signs: Signs of NAS requiring some care different than routine observation
- **Medical treatment**
- **Prolonged hospital stay for comfort cares**
- **Excessive need for comfort cares during hospitalization**

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* See Tier 1 Confirmed Case Slide

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§§ Chronic opioid, benzodiazepine or barbiturate use in the 4 weeks prior to delivery

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**Council of State and Territorial Epidemiologists**
Proposed Laboratory Criteria

**Confirmatory laboratory evidence -- NEONATE**
Detection of opioids (any level) including natural (e.g., morphine, codeine), semi-synthetic (e.g., heroin), and synthetic (e.g., fentanyl, or fentanyl analogs), or opioid metabolites (e.g., 6-monoacetylmorphine), benzodiazepines (e.g., diazepam, alprazolam), or barbiturates (e.g., phenobarbital) in any clinical specimen from a screening or other laboratory test (See Appendix 3 for exact laboratory criteria). This would include positive immunoassay results as well as confirmatory testing based on liquid or gas chromatography-mass spectrometry.

**Presumptive laboratory evidence – BIRTH MOTHER**
Detection of opioids (any level) including natural (e.g., morphine, codeine), semi-synthetic (e.g., heroin), and synthetic (e.g., fentanyl, or fentanyl analogs), or opioid metabolites (e.g., 6-monoacetylmorphine), benzodiazepines (e.g., diazepam, alprazolam), or barbiturates (e.g., phenobarbital) in blood or urine from a screening or other laboratory test in the four weeks prior to delivery (See Appendix 3 for exact laboratory criteria). This would include positive immunoassay results as well as confirmatory testing based on liquid or gas chromatography-mass spectrometry.

**Supportive laboratory evidence – BIRTH MOTHER**
Detection of a non-opioid, non-benzodiazepine, or non-barbiturate drug of abuse, including cocaine, methamphetamine, amphetamine, or cannabinoid in blood or urine from a screening or other laboratory test in the four weeks prior to delivery (See Appendix 3 for exact laboratory criteria). This would include positive immunoassay results as well as confirmatory testing based on liquid or gas chromatography-mass spectrometry.