2023 PERINATAL SUBSTANCE USE SURVEY

Survey Results February 2023, Updated May 2023

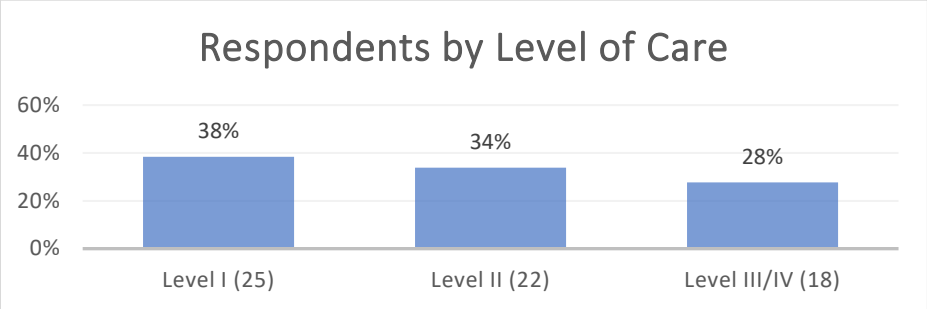
INDIANA PERINATAL QUALITY IMPROVEMENT COLLABORATIVE

In partnership with the Indiana Hospital Association (IHA), the Indiana Perinatal Quality Improvement Collaborative (IPQIC) conducted a survey of the Indiana hospitals with a perinatal program. The purpose of the survey was to identify the variations in program and policy related to the status of pregnant patients who present for delivery and screen positive for substance exposure and the care that their newborn receives. The survey questions (Appendix A) were focused on the algorithm developed for the Perinatal Substance Use (PSU) Practice Bundle used by the hospitals in the PSU Hospital Collaborative (See Appendix B). While not all Indiana delivery hospitals participate in the collaborative, the survey was intended to identify any activity related to substance use. Sixty-five of the 83 hospitals (78.5%) with perinatal services participated in the survey. A list of hospitals that completed the survey can be found in Appendix C.

Survey data was analyzed in aggregate and by Level of Care designation. Levels 3 and 4 responses were combined to maintain anonymity. Not all hospitals responded to every question. The legend in each chart identifies the number of hospitals that responded to each specific question in total and by level of care. The percentages on each chart represent the percent of respondents by each level.

Demographics

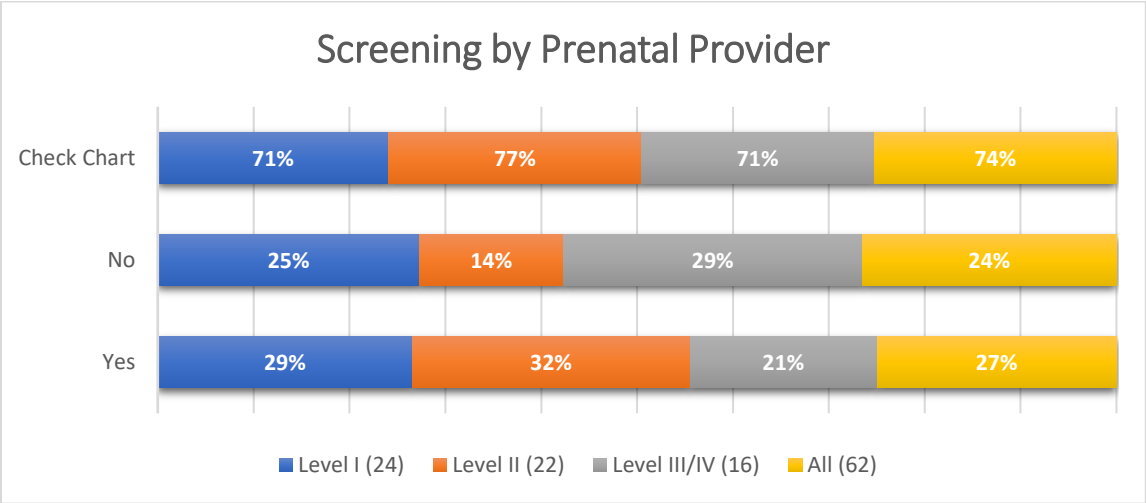
Sixty-five hospitals completed the survey. Twenty-five (38.5%) of the hospitals are designated as Level I. Twenty-two hospitals (33.9%) are designated as Level II hospitals. Eighteen hospitals (27.7%) are designated as Level III/IV hospitals. Of the nine perinatal centers, five centers (56%) completed the survey. Fifty-four (77.2%) of the 70 participants in the PSU Hospital Collaborative responded to the survey.



Prenatal Screening and Testing

Q1. Do you ask each pregnant patient, upon presentation for delivery, if they were screened by their prenatal care provider? Check all that apply.

Sixty-two hospitals responded to this question. Seventeen hospitals (27.42%) responded yes, fifteen hospitals (20%) responded no, and 46 hospitals (74.19%) responded that they check the patient's chart for evidence of prenatal screening.



Q2: If you are tracking data regarding prenatal screening, please estimate the percentage of pregnant persons who report that they were screened prenatally.

Thirty-two hospitals responded to this question. The average percentage of pregnant persons reporting that they were screened prenatally was 67%.

Q3. Does each and every pregnant patient that presents for delivery at your facility receive a verbal screen for substance use?

Sixty-two hospitals responded to this question. Fifty-eight hospitals (93.55%) responded yes, two hospitals (3.23%) responded no, and two hospitals (3.23%) answered other.

Other responses were:

- No tool, just ask if there is a history.
- It is an expectation they do, but currently working on a better workflow to capture it.

Q4. What screening tool are you using?

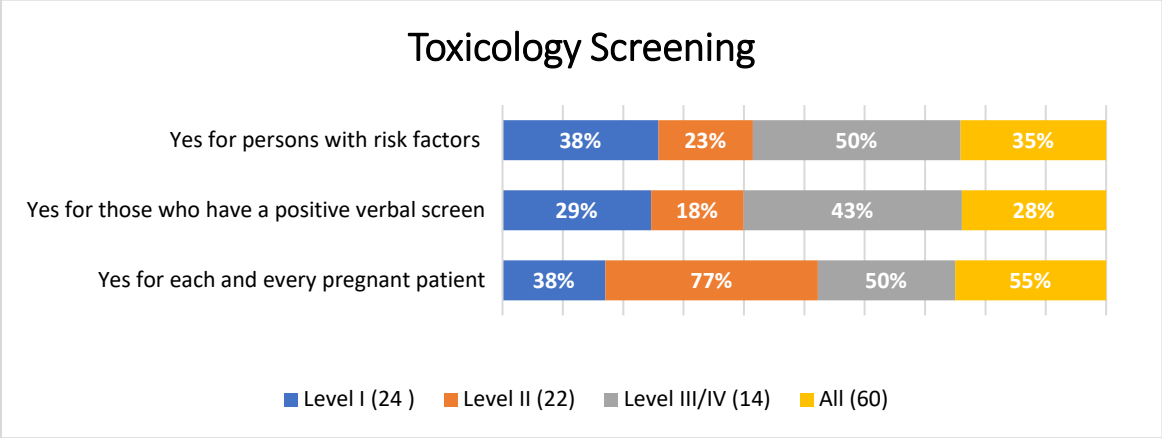
Fifty-nine hospitals responded to this question. Thirty-one hospitals (52.54%) use the 5Ps tool. One hospital uses the 4Ps and twenty-one hospitals (35.59%) use a hospital developed tool. Six hospitals (10.17%) provided other responses:

- Cerner
- Currently using a hospital developed screening, working towards the 5Ps
- Social determinants of health
- Social History question in EMR
- Unsure
- We just verbally ask if they use any drugs or drink alcohol

Q5. In addition to the verbal screen, are you conducting a toxicology screen? Check all that apply.

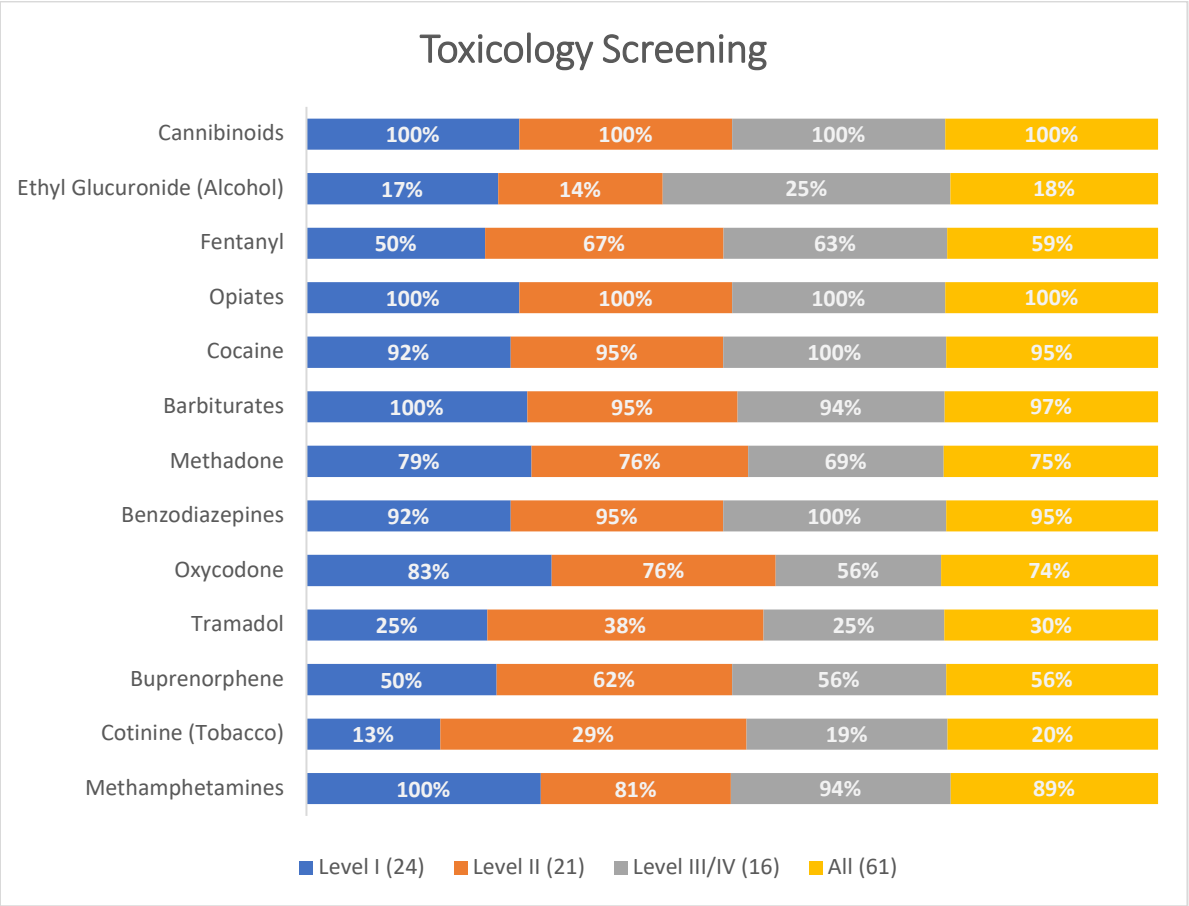
Sixty hospitals responded to this question. Thirty-three hospitals (55.0%) responded that they conduct a toxicology test on each and every pregnant patient. Seventeen hospitals (28.33%) conduct a toxicology test for those who have a positive verbal screen. Twenty-one hospitals (35.0%) conduct a toxicology test for those who have risk factors. Ten hospitals (18.4%) provided the following written responses:

- As per history and MD order
- Currently in a process change for this, to use the positive verbal screen to determine if a tox screen is needed
- Only for those who have previous positive toxicology from their prenatal visits and those who have had a lapse in prenatal care.
- Provider discretion
- Provider runs them in office, if ordered we run one on admission
- The doctors tell us who to screen
- Walk in, no prenatal care
- We conduct a screen if needed for care/treatment



Q6. Which drugs are in the toxicology screening that you are conducting? Check all that apply.

Sixty-one hospitals responded to this question. All sixty-one hospitals are testing for cannabinoids and opiates. Fifty-nine hospitals (96.72%) are testing for barbiturates, and fifty-eight hospitals (95.08%) are testing for cocaine and benzodiazepines. Fifty-four hospitals (88.52%) test for methamphetamines. The chart that follows provides responses from all hospitals across all drugs listed.



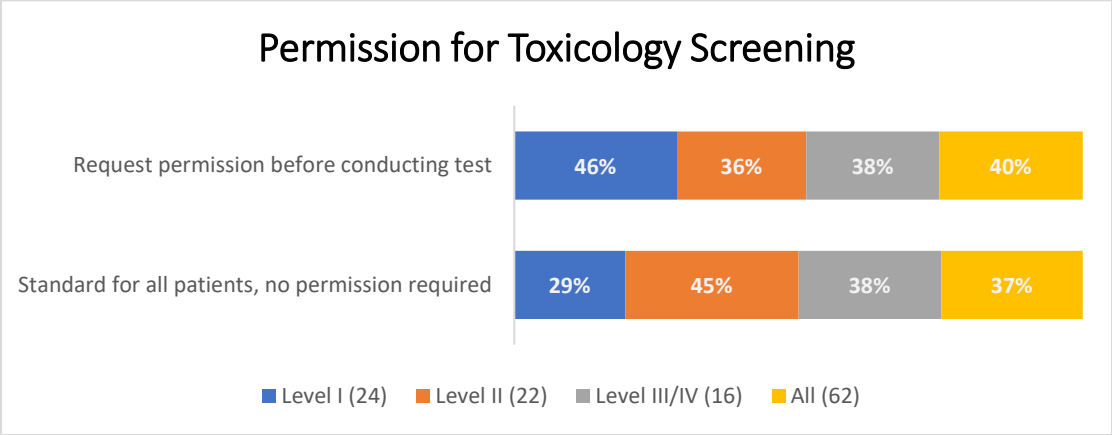
Respondents provided comments on other drugs included in their toxicology screening:

- Amphetamines, PCP
- Amphetamines, PCP, Propoxyphene, Tricyclic Antidepressants
- Amphetamines, Phencyclidine
- Amphetamines, Phencyclidine
- Amphetamines/PCP
- Heroin, MDMA, Suboxone
- Hydrocodone
- PCP
- PCP
- PCP
- PCP
- Phencyclidine, Tricyclics, we will add methadone or buprenorphine if currently in a program
- SSRIs, propoxyphene
- Tox screen run by office and report only generates what is positive. If run on admission to hospital the above checked are what is in the screen
- Tricyclics, Amphetamines

Q7. Is the pregnant patient required to give permission prior to performing the toxicology test?

Sixty-two hospitals responded to this question. Twenty-three hospitals (37.1%) replied that testing is standard for all patients and covered in their admissions documentation. Twenty-five hospitals (40.32%) request permission before conducting the toxicology test and one hospital reported they conduct no toxicology tests. Thirteen hospitals (20.97%) provided additional comments:

- Done in the office
- No permission is necessary, but not standard for all patients.
- Not standard for all patients but covered with admission consents.
- Our policy is written to support testing of patients that meet certain criteria. We inform them of sending their urine and why
- The patient signs a consent for treatment upon admission
- tox testing is standard for patients who meet criteria
- We do not ask for permission
- We get verbal consent; may refuse, but then we will do UDS on infant
- We state their provider has ordered it.

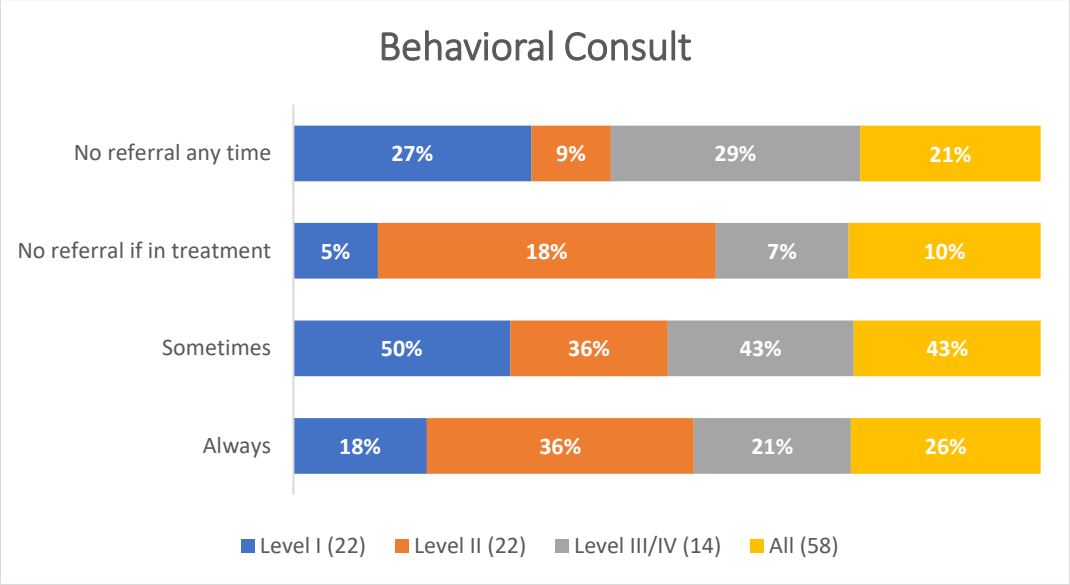


Q8. If a pregnant patient has either a positive verbal or positive toxicology screen, do you refer for a behavioral health consult?

Fifty-eight hospitals responded to this question. Fifteen hospitals (25.86%) indicated they always refer for a consult. Twenty-five hospitals (43.10%) indicated they refer sometimes, twelve hospitals (2o.69%) never make a referral and six hospitals (10.34%) indicated they do not make a referral if the patient is already in treatment. Comments included:

- All are referred to Social Work
- If actively withdrawing would do BH consult - meeting with BH CSW this week to improve our referrals for even those who are not withdrawing but have a need
- Newer process at this time.
- Rarely is a behavioral health consult done, Social Work referrals are done though.
- Refer to Case Management
- refer to social service for a consult

- Social service consult is done, behavioral health consult if appropriate
- Social service consult, no behavior health referral
- Social Services consult is ordered
- social work consult
- social worker vs behavioral health consult
- We consult social worker and she assessed for need of behavioral health consult
- We do not have a behavioral health referral
- We have a substance use program for pregnant woman that they are referred to.
- We have our Care Coordination team discuss and refer if patient would like treatment.

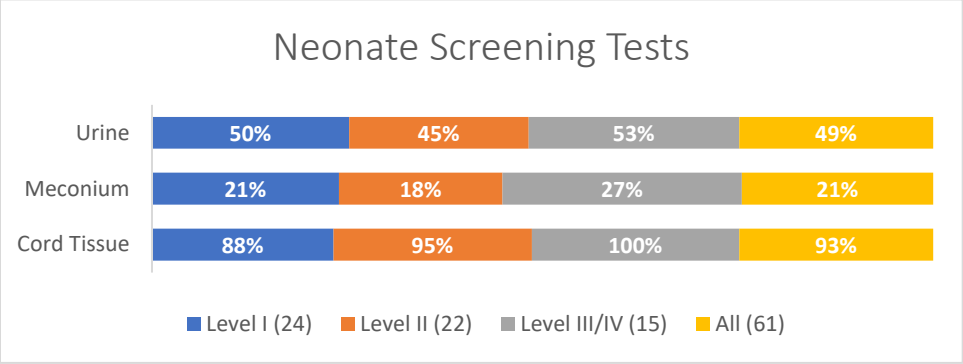


Neonatal Screening and Testing

Q9. What screening tests are conducted for neonates with suspected prenatal substance exposure? Check all that apply.

Sixty-one hospitals responded to this question. Fifty-seven (93.44%) hospitals conduct cord tissue testing. Thirteen hospitals (21.31%) test meconium and thirty hospitals (49.18%) test urine. Additional comments included:

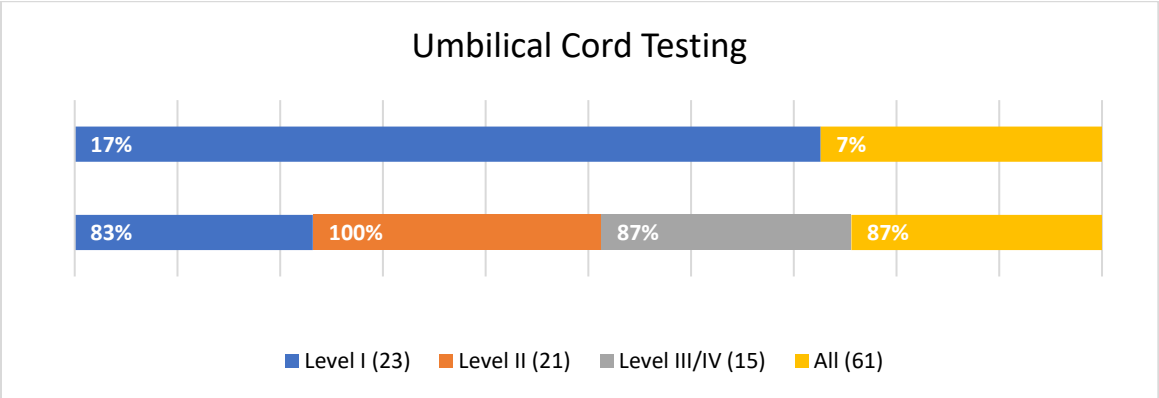
- Meconium if cord is not available.
- Always cord, sometime both
- Meconium if cord is missed.



Q10. If either the verbal or toxicology screen of the patient are positive, is the neonate's umbilical cord sent for testing?

Sixty-one hospitals responded to this question. Fifty-three hospitals (86.89%) responded yes. Four hospitals (6.55%) responded no and four provided comments.

- N/A
- Physician choice - sometimes they will not send if positive screening for marijuana use only.
- We do not yet verbally screen; If urine is tested and is positive, neonatology will request to send the cord tissue out
- Yes, for urine and verbal positive for partner, past, or present--and risk factors.

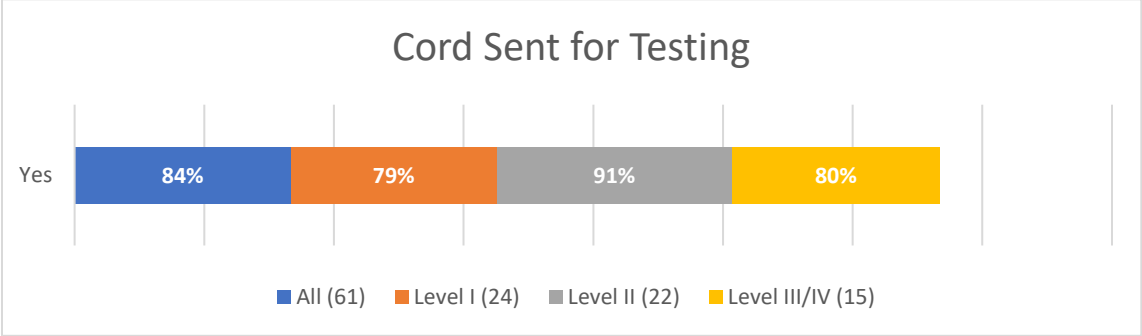


Q11. If the verbal screen of the patient is positive, but permission was denied for toxicology testing, is the neonate's umbilical cord sent for testing?

Sixty-one hospitals responded to this question. Fifty-one hospitals (83.61%) reported that the cord is sent for testing. Two hospitals (3.28%) indicated they did not send the cord for testing and six provided additional comments.

- Have not started a verbal screening yet, and permission is not currently required.
- N/A
- N/A

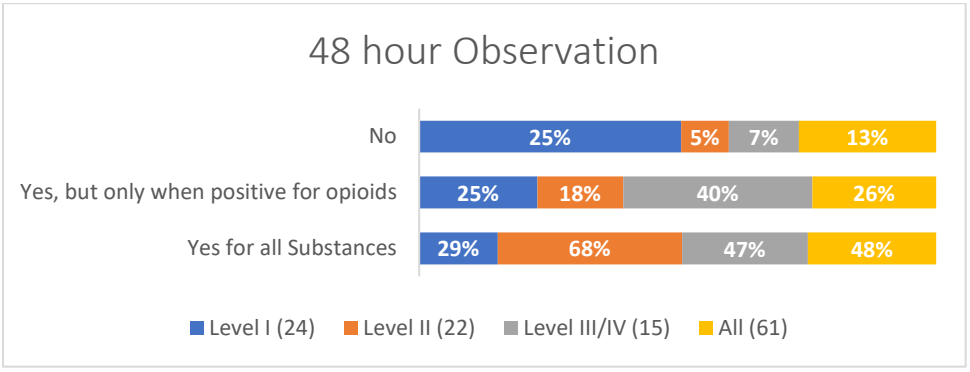
- We call DCS and they get a court order
- We do not yet verbally screen
- We don't currently send cords.



Q12. If either the verbal or toxicology screens of the patient are positive, do you keep the neonate under observation for at least 48 hours for signs of withdrawal?

Sixty-one hospitals responded to this question. Twenty-nine hospitals (47.54%) indicated that they keep the neonate for at least 48 hours for all substances. Sixteen hospitals (26.23%) only keep those neonates positive for opioids. Eight hospitals (13.11%) do not keep neonates and an additional seven provided comments.

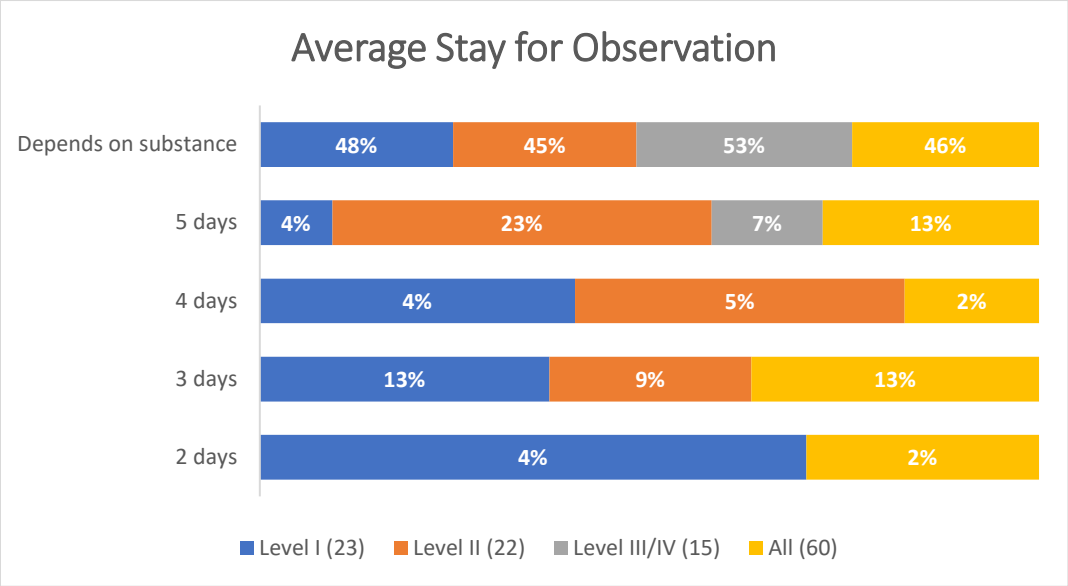
- Yes, for all substances except Marijuana.
- Usually but may vary depending on the substance.
- Provider discretion
- Up to 5 days depending on the substance.
- Pediatrician discretion
- It is up to the Pediatric Hospitalist
- Provider dependent



Q13. If the neonate has tested positive, how long do you keep the neonate under observation?

Sixty hospitals responded to this question. Twenty-nine hospitals (48.33%) indicated that it depends on the substance. Seven hospitals (11.67%) responded the stay was 5 days. Other comments include:

- 5 days for opiates
- 3-5 days
- 4-5 days, depending on substance
- 5 days except for THC
- 5 days minimum for opioid exposure
- 5 days minimum for opioid exposure
- Baby is transferred
- Depends on the provider
- Depends on the providers orders and infant behaviors
- It is a case-by-case instance, but they do remain for observation longer than 48 hours
- Our results for testing do not come back prior to discharge
- Umbilical cord screen typically comes back after discharge. Therefore, follow up is completed.
- Usually, 2-3 days
- We do keep for 3-5 days and If newborn requires medical intervention they are transferred to a higher level of care.

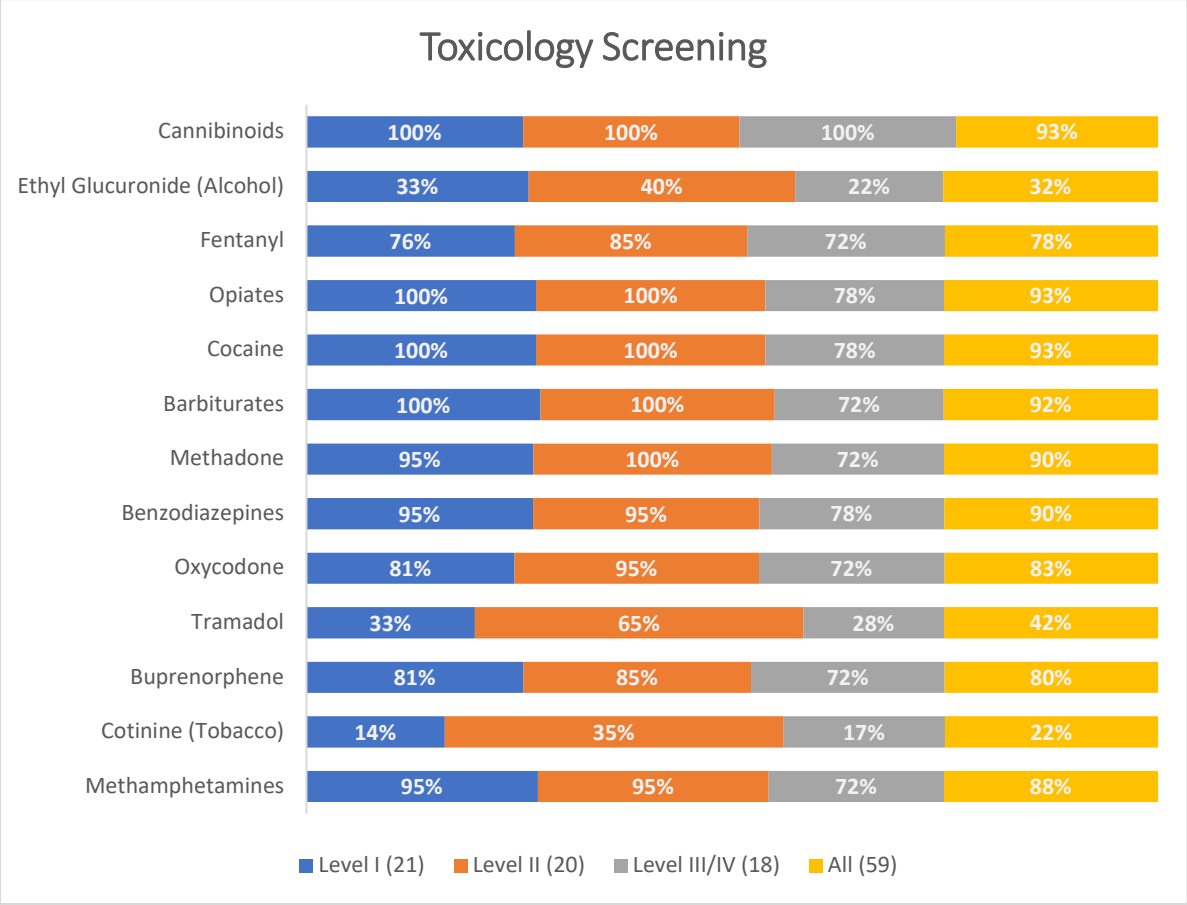


Q14. What lab do you use for cord tissue testing?

Fifty-four hospitals responded to this question. Forty-one hospitals use USDTL, five hospitals use LabCorp and the remaining hospitals identified other sources.

Q15. Which drugs are in the panel that you are using? Check all that apply.

Fifty-one hospitals responded to this question.



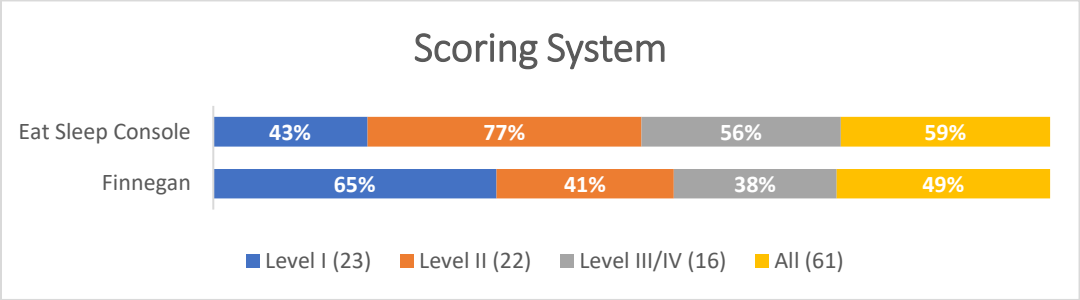
Additional responses included:

- Amphetamines, Meperidine, PCP, Propoxyphene
- Amphetamines, Meperidine, PCP, Propoxyphene
- Amphetamines, Meperidine, PCP, Propoxyphene,
- Amphetamines, Norbuprenorphine
- ARUP tests for 47 metabolites + ethyl glucuronide + cannabinoids; all testing is qualitative
- Hydrocodone
- IN Panel
- IN PLT UC
- only test for alcohol if known history
- PCP
- PCP
- PCP
- PCP, Phenobarbital, MDMA
- We select an order from Cerner, exact substances RNs don't see results

Q16. If a neonate shows any sign of withdrawal, what scoring system do you use? Check all that apply.

Sixty-one hospitals responded to this question. Thirty-six hospitals (59.02%) are using Eat, Sleep, Console. Thirty hospitals (49.18%) are using the Finnegan. Five hospitals provided the following comments:

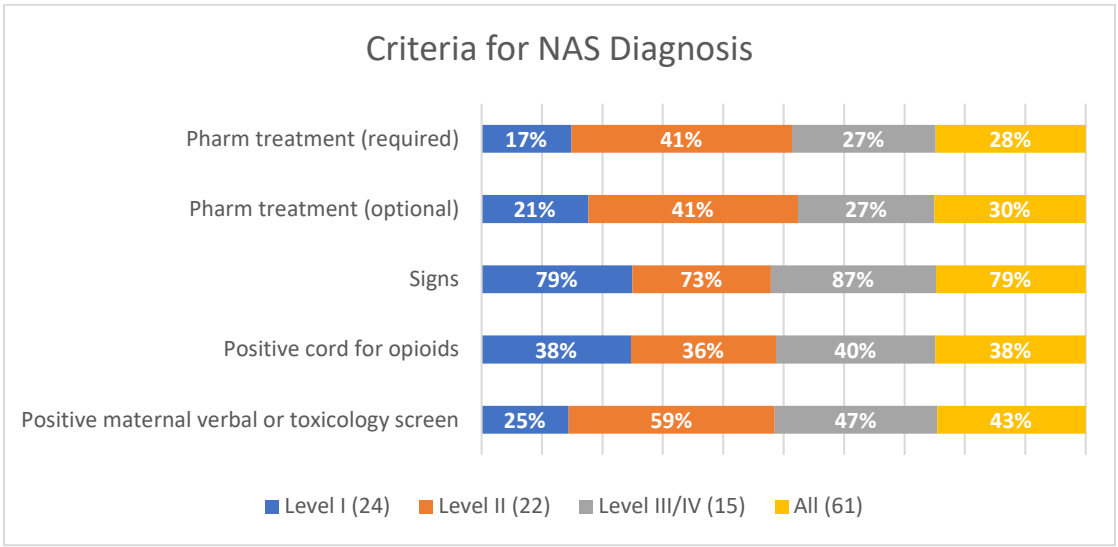
- Modified Finnegan
- NASCEND
- Moving to Eat, Sleep, Console
- Transitioning in 2024 to Eat, Sleep, Console
- Eat, Sleep, Console, pediatrician can order Finnegan if needed.



Q17. What criteria does your facility use to assign a diagnosis of NAS? Check all that apply.

Sixty-one hospitals responded to this question. Forty-eight hospitals (78.69%) identified signs as one of their diagnostic criteria. Twenty-six hospitals (42.62%) use a positive maternal verbal or toxicology screen and twenty-three hospitals (37.7%) use a positive cord.

While pharmacologic treatment is not a criterion for an NAS diagnosis, 18 hospitals (29.51%) make it an optional criterion while seventeen hospitals (27.87%) require pharmacologic treatment for a confirmed diagnosis.



Q18. What percentage of neonates with an NAS/NOWS diagnosis receive pharmacologic care?

Forty-four hospitals responded to this question. The average percentage was reported as 22% with a range of 0% to 100%.

Q19. Does your facility support breastfeeding for the neonate showing signs of NAS?

Sixty hospitals responded to this question. Forty-nine hospitals (81.67%) responded yes, as long as it is not contraindicated by the drug(s) that was used. Other comments included:

- If patient receiving MAT and stable in their treatment program
- It depends on the infant's physician
- Only for those infants whose mother is in a treatment program.
- Yes, unless provider orders otherwise

Discharge Planning

Q20. Is there an order set for discharge planning for the patient affected by substance use embedded in your EMR system?

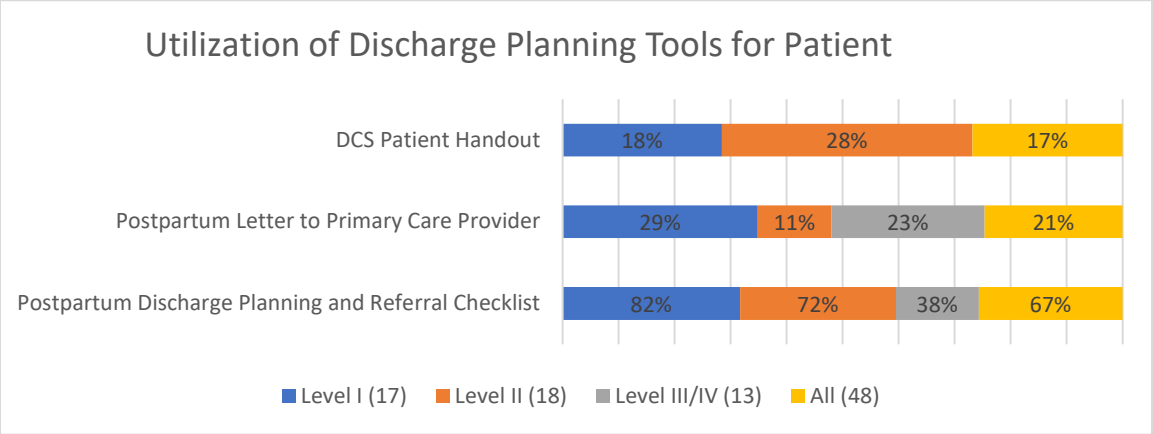
Fifty-six hospitals responded to this question. Forty-five hospitals (80.36%) reported they do not have an order set. Seven hospitals (12.50%) reported an order set is in their EMR system. Two hospitals use a social service consult and two more were unsure.

Q21. Which of the following resources do you use as part of discharge planning for the patient with SUD?

Forty-eight hospitals responded to this question. Thirty-two hospitals (66.67%) reported using the *Postpartum Discharge Planning and Referral Checklist*. Ten hospitals (20.8%) use *the Postpartum Letter to Primary Care Provider* and eight hospitals (16.67%) are using the *DCS Patient Handout*. Fifteen states provided comments including:

- Booklet and verbal teaching
- Case management is involved as well as DCS
- Currently no standardized plan, all individualized based on substance. Will be implementing a discharge checklist in the next year
- DSC information is explained verbally
- If not previously referred, a referral to our substance use program
- Instruction given per physician order
- NA
- None of the above
- Nothing specific
- Physician referral as warranted
- Referral to appropriate treatment resource/ program
- Social workers, DCS, healthy families, we do not have skilled nursing visits in our community
- We do not have any of these

- We have in-house tools created for those with substances found in their system.



Q22. Is there an order set for discharge planning for neonates affected by substance use embedded in your EMR system?

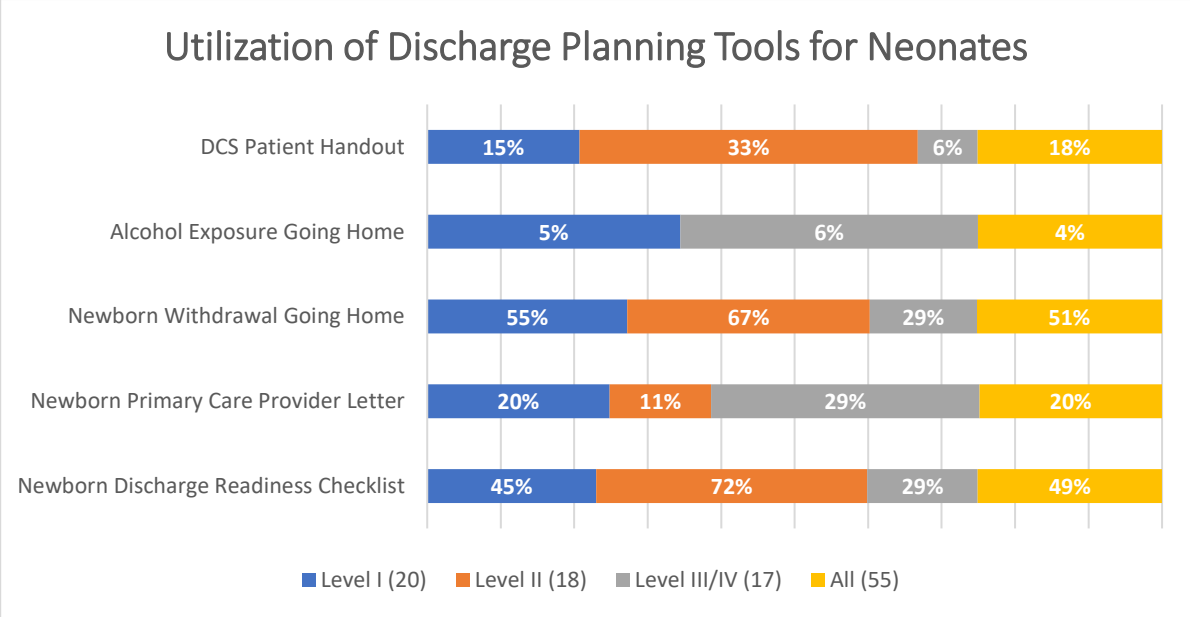
Fifty-five hospitals responded to this question. Thirty-eight hospitals (69.09%) reported they do not have an order set. Twelve hospitals (21,82%) reported there is an order set. Two hospitals indicated that the status of an order set was unknown. One hospital reported it has a discharge criteria checklist but no order set and one hospital has referral to First Steps embedded in their EMR.

Q23. Which of the following resources do you use as part of discharge planning for substance-exposed neonates?

Fifty-five hospitals responded to this question. Twenty-eight hospitals (50.91%) use the *Newborn Withdrawal Going Home* (Spanish and English) document. Twenty-seven hospitals (49.09%) report they use the *Newborn Discharge Readiness Checklist.* Additional comments included:

- Baptist Guide
- Currently no standardized plan, all individualized based on substance. Will be implementing a discharge checklist in the next year.
- DCS is notified for a mother who is positive on admission
- DSC information is explained verbally
- Education as provided in EPIC
- Exit Care, DCS info. if involved, outpatient treatment center if involved
- IU Health flier to reflect NAS - ESC
- NA
- NAS booklet
- None
- None of the above
- Nothing specific

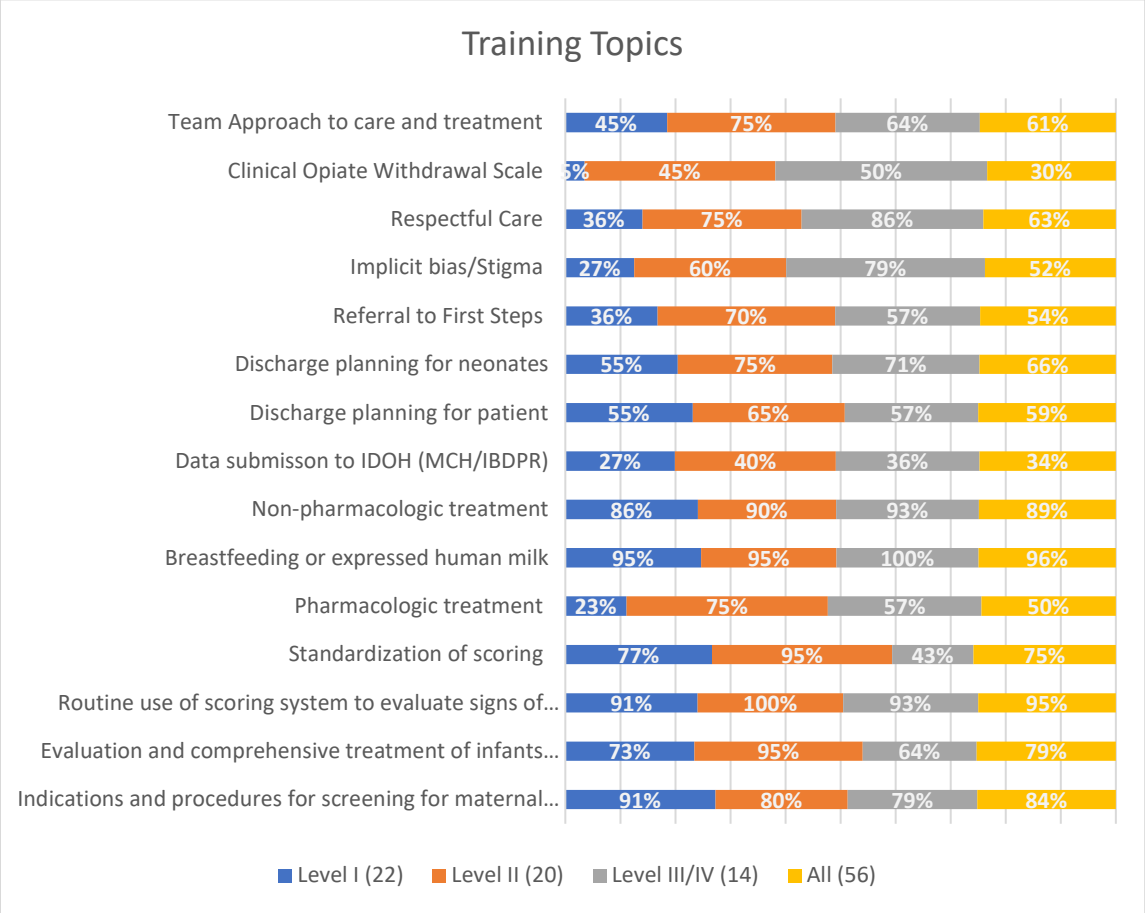
- Referral to First Steps
- Social workers, DCS, healthy families, we do not have skilled nursing visits in our community
- We have in-house tools created for those exposed to substances.
- We have written information to hand out to parents



Training and Policy

Q24. Do you provide training on the following topics? Check all that apply.

Fifty-six hospitals responded to this question. Fifty-four hospitals (96.43%) train on breastfeeding or expressed human milk. Fifty-three hospitals (94.64%) reported training on the routine use of scoring to evaluate signs of drug withdrawal. Training for non-pharmacologic treatment was reported by fifty hospitals (89.29%). The following chart documents the responses for other listed topics.



Q25. What other training topics/resources do you access?

Twenty hospitals responded to this question. Their responses are listed below.

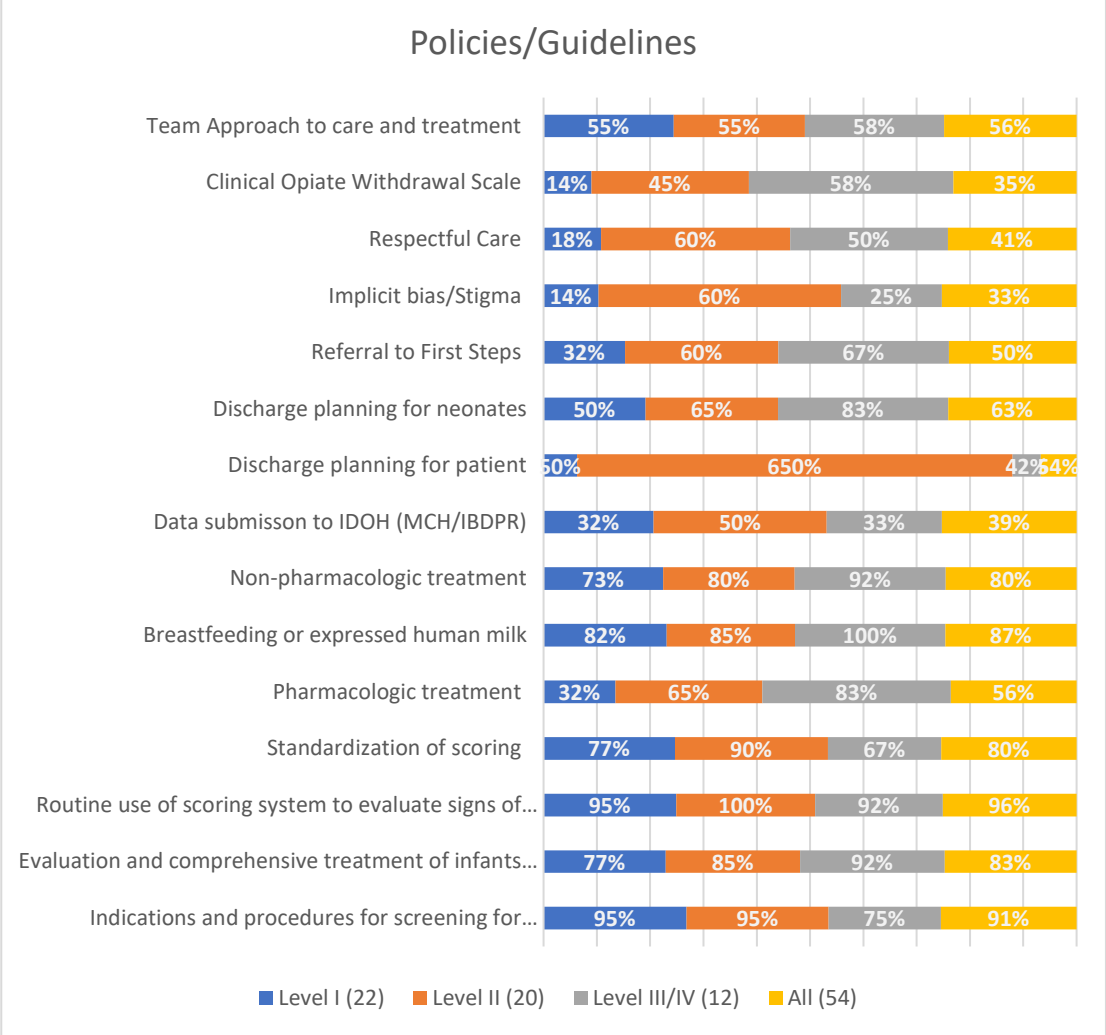
- Behavioral Health- Social Services assist with resources
- Eat, sleep, console
- Family guide on how to console and soothing infants. Expectations beyond the first weeks of life.
- HealthStream
- Healthy Families is offered. Peds providers refer to neonatologist for questions and concerns
- Labor of Love Summit, IU ECHO sessions for NAS and OUD in pregnancy
- NASCEND
- Provider specific
- Trauma informed care
- Vermont Oxford Training for staff on NAS
- VON Network
- VON; 5ps
- We utilized the VON training.

- Working on training for Eat, Sleep and Console

Q26. Do you have policies/guidelines for the following topics? Check all that apply.

Fifty-four hospitals responded to this question. The two most common areas for policies/guidelines were:

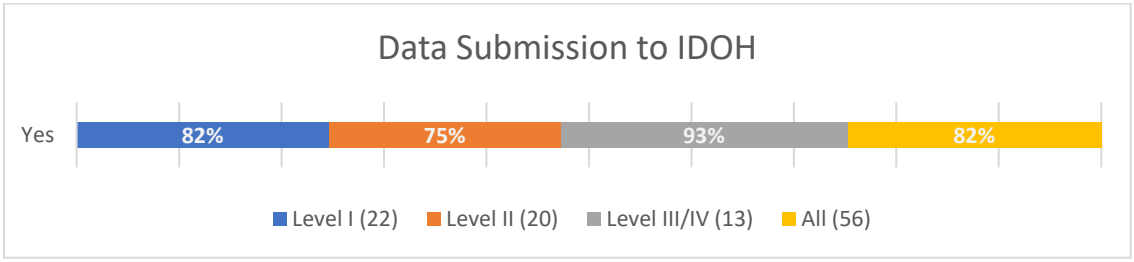
- Routine use of scoring system to evaluate signs of drug withdrawal (96.3%); and
- Indications and procedures for screening for maternal substance use (90.74%).



Data Collection

Q27. Do you currently submit monthly data to the IDOH RedCap data base regarding # births, # cords tested, # positive cords and number of NAS diagnoses?

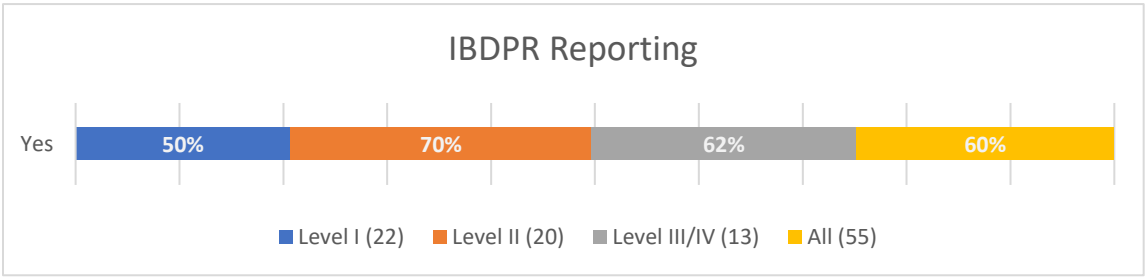
Fifty-six hospitals responded to this question. Forty-six hospitals (82.14%) submit monthly data while ten hospitals (17.86%) do not.



Q28. Does your hospital submit the appropriate ICD 10 codes for every baby that tests positive for substance exposure to the Indiana Birth Defects and Problems Registry (IBDPR)?

Fifty-five hospitals responded to this question. Thirty-three hospitals (60%) reported that they submit the appropriate codes to IBDPR while six hospitals (10.91%) do not. Sixteen hospitals (29.09%) provided the following comments:

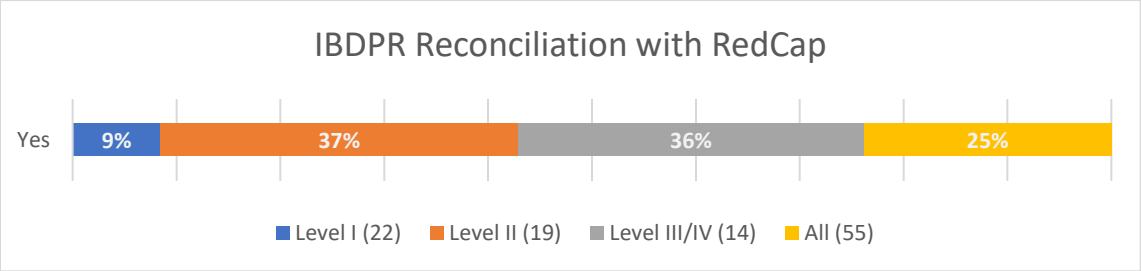
- Don't know
- I am not sure who does this
- I do not know
- I don't know
- Not sure
- Not sure
- Unknown
- Unsure
- Unsure
- Unsure that we are
- Unsure, discussion regarding this happening now
- We do not get the cord segment results back prior to discharge
- We do submit ICD 10 codes to the IBDPR but have recently received feedback that it does match our RedCap data.
- Yes - we believe so. We are assessing this internally currently, as the person who submits IBDPR and who submits NAS dx to RedCap are two different people



Q29. Do you have access to IBDPR data to periodically reconcile with the data that is submitted to RedCap?

Fifty-five hospitals responded to this question. Twenty-eight hospitals (50.91%) indicated they do not have access to the IBDPR data reports. Fourteen hospitals (25.45%) do have access and thirteen hospitals (23.64%) provided the following comments.

- Can email responsible party that does document this information
- Data reported/ monitored by staff in 2 different depts
- I am in communication with the person submitting IBDPR data to compare our data each month.
- I am in communication with the person submitting IBDPR data to compare our data each month.
- I've never checked
- n/a
- Not sure
- Not sure
- Not sure
- Unsure
- Unsure
- Unsure who has this access



Appendix A: Survey Questions

Demographics

1. Hospital

2. Level of Care. Check all that apply.

- [ ] Level I
- [ ] Level II
- [ ] Level III
- [ ] Level IV
- [ ] Perinatal Center

3. Are you a participant in the Perinatal Substance Use (PSU) Hospital Collaborative

- ◯ Yes
- ◯ No

Maternal Screening Procedures

These questions are related to the Universal Maternal Testing Algorithm developed as part of the original PSU bundle.

4. Do you ask each pregnant patient, upon presentation for delivery, if they were screened by their prenatal care provider?

- ◯ Yes
- ◯ No

5. If you are tracking data regarding prenatal screening, please estimate the percentage of pregnant persons who report that they were screened prenatally.

0 100

6. Does each and every pregnant patient that presents for delivery at your facility receive a verbal screen for substance use?

- ◯ Yes
- ◯ No
- ◯ I don't know
- ◯ Other (please specify)

7. What screening tool are you using?

- ◯ 5Ps
- ◯ 4Ps
- ◯ Hospital Developed tool
- ◯ Other (please specify)

8. In addition to the verbal screen, are you conducting a toxicology screen?

- ◯ Yes, for each and every pregnant patient with consent
- ◯ Yes, only for those persons who have a positive verbal screen with consent
- ◯ We do not conduct a toxicology screen for any pregnant patient
- ◯ I don't know
- ◯ Other (please specify)

9. Is the pregnant patient informed that the toxicology test is screening for drug use?

- ◯ Toxicology testing is standard for all patients and is covered in our admissions documentation. No permission is required.
- ◯ We request permission before conducting the toxicology test
- ◯ We do not conduct toxicology tests for possible substance use
- ◯ Other (please specify)

10. If a pregnant patient has either a positive verbal or a positive toxicologic screening, do you refer for a behavioral health consult?

- ◯ Yes, always
- ◯ Yes, sometime
- ◯ No referral if already in treatment
- ◯ No referral any tie

Comment:

Neonate Screening and Testing Procedures

These questions are related to the neonate Screening and Testing algorithm developed as part of the original PSU bundle.

11. What screening tests are conducted for neonates with suspected prenatal drug exposure? Check all that apply

- [ ] Cord tissue
- [ ] Meconium
- [ ] Urine
- [ ] Other (please specify)

12. If either the verbal or toxicology screen of the parent are positive, is the neonate's umbilical cord sent for testing?

- ◯ Yes
- ◯ No
- ◯ Other (please specify)

13. If the verbal screen of the parent is positive but permission was denied for toxicology testing, is the neonate's umbilical cord sent for testing?

- ◯ Yes
- ◯ No
- ◯ Other (please specify)

14. If either the verbal or toxicology screens are positive, do you keep the neonate under observation for at least 48 hours for signs of withdrawal?

- ◯ Yes, for all substances
- ◯ Yes but only when positive for opiates
- ◯ No
- ◯ Other (please specify)

15. If the neonate has tested positive, how long do you keep the infant under observation?

- ◯ 48 hours
- ◯ 72 hours
- ◯ 96 hours
- ◯ Depends on the substance
- ◯ Other (please specify)

16. What lab do you use for cord tissue testing

17. Which drugs are in the panel that you are using? Check all that apply.

- ☐ Cannabinoids
- ☐ Ethyl Glucuronide (Alcohol)
- ☐ Fentanyl
- ☐ Opiates
- ☐ Cocaine
- ☐ Barbiturates
- ☐ Methadone
- ☐ Benzodiazepines
- ☐ Oxycodone
- ☐ Tramadol
- ☐ Buprenorphene
- ☐ Cotinine
- ☐ Other (please specify)

18. If a neonate shows any sign of withdrawal, what scoring system do you use? Check all that apply.

- ☐ Finnegan
- ☐ Eat Sleep Console
- ☐ Other (please specify)

19. What criteria does your facility use to assign a diagnosis of NAS? Check all that apply.

- [ ] Positive maternal verbal or toxicology screen for opiate use
- [ ] Positive cord for opiates
- [ ] Signs
- [ ] Pharmacologic treatment (optional)
- [ ] Pharmacologic treatment (required)
- [ ] Other (please specify)

20. Does your facility support breastfeeding for the neonate showing signs of NAS?

- ( ) Yes
- ( ) Yes, as long as it is not contraindicated by the drug that was used
- ( ) No
- ( ) Other (please specify)

Discharge Planning

These questions are related to the Postpartum and Newborn discharge planning developed as part of the original PSU bundle.

21. Which of the following resources do you use as part of discharge planning for substance-exposed neonates?

- [ ] Infant Discharge Readiness Checklist
- [ ] Infant Primary Care Provider Letter
- [ ] Newborn Withdrawal Going Home (English and Spanish)
- [ ] Alcohol Exposure - Going Home (English and Spanish)
- [ ] DCS Patient Handout
- [ ] Other (please specify)

22. Which of the following resources do you use as part of discharge planning for women with SUD?

- [ ] Postpartum Discharge Planning and Referral Checklist
- [ ] Postpartum Letter to Primary Care Provider
- [ ] DCS Patient Handout
- [ ] Other (please specify)

23. Is there an order set for discharge planning for neonates affected by substance use embedded in your EMR system?

- ◯ Yes
- ◯ No
- ◯ Other (please specify)

Training/Policies/Guidelines

24. Do you provide training on the following topics? Check all that apply.

- [ ] Indications and procedures for screening for maternal substance use
- [ ] Evaluation and comprehensive treatment of infants at risk for or showing signs of withdrawal
- [ ] Routine use of scoring system to evaluate signs of drug withdrawal
- [ ] Standardization of scoring
- [ ] Pharmacologic treatment
- [ ] Breastfeeding or expressed human milk
- [ ] Non-pharmacologic treatment
- [ ] Data Submission to IDOH (MCH/Indiana Birth Defects Problems Registry (IBDPR))
- [ ] Discharge Planning for Mother
- [ ] Discharge Planning for Neonates
- [ ] Referral to First Steps
- [ ] Implicit bias/Stigma
- [ ] Respectful Care
- [ ] Clinical Opiate Withdrawal Scale
- [ ] Team approach to care and treatment

25. Do you have policies/guidelines for the following topics? Check all that apply.

- [ ] Indications and procedures for screening for maternal substance use
- [ ] Evaluation and comprehensive treatment of infants at risk for or showing signs of withdrawal
- [ ] Routine use of scoring system to evaluate signs and symptoms of drug withdrawal
- [ ] Standardization of scoring
- [ ] Pharmacologic treatment
- [ ] Breastfeeding or expressed human milk
- [ ] Non-pharmacologic treatment
- [ ] Data Submission to IDOH (MCH/Indiana Birth Defects Problems Registry (IBDPR))
- [ ] Discharge Planning for Mother
- [ ] Discharge Planning for Neonates
- [ ] Referral to First Steps
- [ ] Implicit bias/Stigma
- [ ] Respectful Care
- [ ] Clinical Opiate Withdrawal Scale
- [ ] Team approach to care and treatment

Data Collection

26. Do you currently submit monthly data to the IDOH RedCap data base regarding #births, # cords tested, # positive cords and number of NAS diagnoses?

- ◯ Yes
- ◯ No

27. Does your hospital submit the appropriate ICD 10 codes for every baby that tests positive for substance exposure to the Indiana Birth Defects Problems Registry (IBDPR)?

- ◯ Yes
- ◯ No
- ◯ Other (please specify)

28. Do you have access to IBDPR data to periodically reconcile the data that is submitted to RedCap?

- ◯ Yes
- ◯ No
- ◯ Other (please specify)

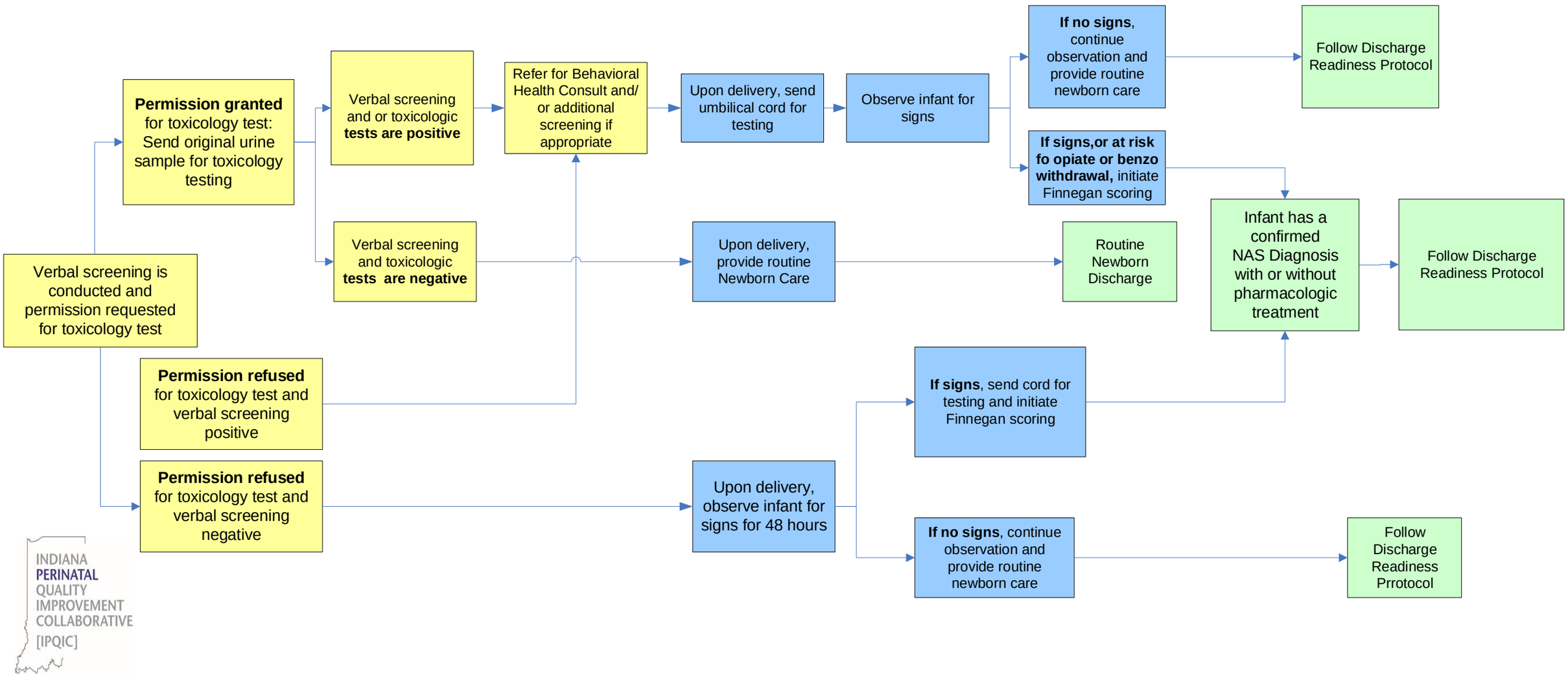
Appendix B: PSU Algorithm

Neonatal Abstinence Syndrome and In-Utero Drug Exposure Algorithm

UNIVERSAL MATERNAL TESTING: verbal screening and toxicology testing for maternal use of illicit drugs, opiates or alcohol at the first prenatal visit and again at presentation for delivery.

INFANT SCREENING AND TESTING: all newborns will have umbilical cord samples saved for two weeks

DISCHARGE



INDIANA PERINATAL QUALITY IMPROVEMENT COLLABORATIVE [IPQIC]

Appendix C: Hospitals Participating in the Survey

Ascension St Vincent Dunn Hospital	IU Health Ball Memorial
Ascension St Vincent Fishers	IU Health Paoli
Ascension St. Vincent Anderson	IU Health West
Ascension St. Vincent Evansville	Johnson Memorial Hospital
Ascension St. Vincent Randolph	Logansport Memorial Hospital
Ascension St. Vincent Women's Hospital	Lutheran Hospital
Baptist Health Floyd	Lutheran Kosciusko Hospital
Bluffton Regional Medical Center	Major Hospital
Cameron Memorial Community Hospital	Margaret Mary Health
Clark Memorial Health	Marion Health Hospital
Columbus Regional Hospital	Memorial Hospital of South Bend
Community Hospital, Munster	Northwest Health - Porter
Community Hospital Anderson	Northwest Health LaPorte
Community Hospital East	Parkview Dekalb Hospital
Community Hospital South	Parkview Huntington Hospital
Decatur County Memorial	Parkview LaGrange Hospital
Decatur County Memorial Hospital	Parkview Noble
Dupont Hospital	Parkview Randallia Hospital
Elkhart General Hospital	Parkview Regional Medical Center
Eskenazi Hospital	Parkview Whitley Hospital
Franciscan Health Crown Point	Perry County Memorial Hospital
Franciscan Health Dyer	Reid Health
Franciscan Health Lafayette East	Riley Maternity Center
Franciscan Health, Michigan City	Riverview Health
Franciscan Mooresville	Schneck Medical Center
Good Samaritan Hospital	St Mary Medical Center
Goshen Health	Sullivan County Community Hospital
Hancock Regional Hospital	Terre Haute Regional
Harrison County Hospital	The Women's Hospital
Hendricks Regional Health	Witham Health Services
Henry Community Health	Anonymous