U.S. National COVID-19 Newborn Care Practice Survey

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Survey Information

- Survey open 5/26 to 6/8
- Administered to AAP Sections on Breastfeeding, Hospital Medicine, and Neonatal Perinatal Medicine listserves, Neonatal PMG Facebook group, and Twitter
- Instructed to complete survey regarding hospital practices at the hospital they work at "the most" that occurred Sunday, May 17th-Sunday, May 24th

Survey Information, Cont.

- 460 total individual respondents
 - Exclusion criteria:
 - 15 who did not report a hospital name or location
 - 1 freestanding children's hospital w/out regular births
 - 1 that reported ≥1 birth hospital that he/she worked at "the most"
 - 2 from non-U.S. states or territories
 - 2 entries from the same respondent
 - 6 entries from duplicate hospitals that did not return communications
- 433 remaining individual respondents
 - 320 hospitals represented
 - 246 with a single response
 - 74 hospitals with more than response → these "multiple response hospitals" were reconciled
 - 2 hospitals were excluded where we were unable to reach a medical/clinical director to reconcile duplicate answers
- Final analysis: 318 birth hospitals from 46 states
 - Represents 11% of U.S. birth hospitals (>100 births per year)

Provider Type

Check all that apply

Provider Type	Response
Nurse	27 (6%)
Advanced practice provider (PA, NP, APP)	9 (2%)
Neonatologist	225 (52%)
Newborn Hospitalist/ General Pediatrician	155 (36%)
Trainee (fellow, resident)	11 (3%)
Other	9 (2%)

Highest Level of Neonatal Care Provided

Level of Neonatal Care	Response
Level 1	27 (8.5%)
Level 2	62 (19.5%)
Level 3/4	229 (72.0%)

Obstetric and Delivery Practices

Approach to COVID-19 Testing Among Pregnant Women with Anticipated Delivery

Testing Approach for Pregnant Women	Response
Universal testing to all pregnant women regardless of signs and symptoms	235 (73.9%)
Testing based on signs and symptoms	68 (21.4%)
Testing not routinely available for pregnant women	3 (0.9%)
Other	10 (3.1%)

PPE for COVID-19 + Women Delivering Vaginally (check all that apply)

PPE for COVID-19 Positive Vaginal Delivery	Response
Eye protection	310 (97.5%)
Gloves	310 (97.5%)
Gown	305 (95.9%)
N95	305 (95.9%)
Cap	206 (64.8%)
Regular Surgical Mask	17 (5.3%)

Support Persons for Pregnant Women on Labor and Delivery

Support Persons	Response
No support persons	2 (0.6%)
Only 1 support person	311 (97.8%)
2 or more support persons	3 (0.9%)

Testing Asymptomatic Support Persons of COVID + Women in Labor and Delivery

Approach to Testing Support Persons	Responses
Not offered or required	250 (78.6%)
Offer some testing	41 (12.9%)
Required	24 (7.5%)

Newborn Care

Location of Healthy, Newborn Care with COVID-19 + Mother

Newborn Care Location	Responses
Separate rooms	97 (30.5%)
Same room with some precautions to maintain separation (e.g. crib 6 feet away, barrier between mother and infant)	55 (17.3%)
Same room, no precautions	1 (0.3%)
Decisions based on shared decision making on a case-by-case basis	161 (50.6%)
Other	3 (0.9%)

Skin-to-Skin Care in 1st Hour of Life with COVID + Mother

Skin to Skin	Responses
Prohibited or Discouraged	154 (48.4%)
Encouraged with precautions	33 (10.4%)
Encouraged with no precautions	2 (0.6%)
Decisions based on shared decision making on a case-by-case basis	127 (39.9%)

Timed or Delayed Cord Clamping

Delayed or Timed Cord Clamping	COVID + Mother	COVID - Mother
Yes	207 (65.1%)	296 (93.1%)
No	111 (34.9%)	22 (6.9%)

Early Bath (<4 hours)

Early Bath	COVID + Mother	COVID - Mother
Yes	260 (81.8%)	25 (7.9%)
No	58 (18.2%)	293 (92.1%)

Direct Breastfeeding for COVID-19 + Mothers

Approach to Direct Breastfeeding	Responses
Prohibited	15 (4.7%)
Discouraged, but permitted if family strongly desires	101 (31.8%)
Encouraged with precautions	49 (15.4%)
Decisions based on shared decision making on a case-by-case basis	153 (48.1%)

Approach to expressed breast milk (check all that apply)

Approach to Expressed Breast Milk	Responses
May be given by the mother with precautions	189 (59.4%)
May be given by another caregiver	245 (77%)
Discouraged	3 (0.9%)

Approach to testing for an infant delivered by cesarean section with anticipated discharge on day 3 or 4

Approach to Infant Testing	Response
We generally do not test infants	31 (9.7%)
We do 1 test	93 (29.2%)
We do 2 tests	169 (53.1%)
More than 2 tests	3 (0.9%)
Unsure	19 (6.0%)
Other	3 (0.9%)

Time of First Test

Among 262 that responded that they do 1, 2, or >2 tests

Time of First Test	Response
Before 24 hours	12 (4.5%)
Around 24 hours	199 (75.1%)
Between 24-48 hours	42 (15.8%)
Around 48 hours or after 48 hours	9 (3.4%)

Time of Second Test

Among 171 that responded that they do 2 or >2 tests

Time of Second Test	Response
Between 24-48 hours	7 (4.1%)
Around 48 hours	141 (82%)
After 48 hours	23 (13.4%)

Postpartum Visitation of Non-COVID Positive Dyads

Number of Support Persons	Responses
0	13 (4.1%)
1	299 (94.0%)
≥ 2	3 (0.9%)

Discharge Processes

Discharge Processes for Newborns Born to COVID-19 + Mothers

Test	Have not changed our process	Changed process, but occurs during newborn hospitalization	Changed process and deferred until after discharge
Hepatitis B	310 (97.5%)	4 (1.3%)	0 (0%)
Red Reflex	306 (96.2%)	5 (1.6%)	3 (0.9%)
CCHD	301 (94.7%)	13 (4.1%)	0 (0%)
Bilirubin Checks	297 (93.4%)	18 (5.7%)	0 (0%)
Newborn Screens	297 (93.4%)	18 (5.7%)	0 (0%)
Hearing Screening	244 (76.7%)	32 (10.1%)	39 (12.3%)
Circumcisions	209 (65.7%)	53 (16.7%)	49 (15.4%)

Discharge Timing for Non-COVID-19 Positive Dyads

Discharge Timing	Responses
Hasn't really changed	129 (40.6%)
Some dyads discharged early	91 (28.6%)
Many dyads discharged early	73 (23%)
All dyads are being discharged early unless there is a medical contraindication	24 (7.5%)

Take Home Points

- Visitors are restricted
- Substantial variation in location of care, approach to direct breastfeeding, skin-toskin in first hour and timing of infant testing
- Hearing screening deferred until after discharge among 12% of hospitals
- 59% of hospitals discharging non-COVID + dyads early

Regional Differences

All practices compared among 4 U.S. Census Regions (Northeast, Midwest, South, and West) as defined by U.S. Census Bureau

Notable results shown

Testing of Women Anticipated to Deliver

Approach to Testing	Northeast	Midwest	South	West
Universal testing	69 (88.5%)	51 (77.3%)	64 (67.4%)	51 (64.6%)
Testing based on signs/symptoms	7 (9.0%)	10 (15.2%)	27 (28.4%)	24 (30.4%)
Testing not routinely available	1 (1.3%)	1 (1.5%)	0 (0.0%)	1 (1.3%)

- p = 0.043
- Universal testing highest in NE hospitals
- National prevalence of COVID-19 highest in NE at time of survey in late May 2020

Asymptomatic Support Person for a COVID + Mother

Asymptomatic Support Person	Northeast	Midwest	South	West
Not offered or required	52 (66.7%)	58 (87.9%)	77 (81.1%)	63 (79.7%)
Offer some testing	12 (15.4%)	6 (9.0%)	10 (10.5%)	13 (16.5%)
Required	14 (17.9%)	2 (3.0%)	6 (6.3%)	2 (2.5%)

- p = < 0.01
- NE hospitals had greatest availability of testing for asymptomatic support persons

Infant Testing

Infant Testing	Northeast	Midwest	South	West
We generally do not test	6 (7.7%)	8 (11.9%)	6 (6.3%)	11 (13.9%)
infants				
We do 1 test	35 (44.9%)	15 (22.4%)	20 (21.1%)	23 (29.1%)
We do 2 tests	35 (44.9%)	37 (56.1%)	63 (66.3%)	34 (43.0%)
More than 2 tests	0 (0.0%)	1 (1.5%)	1 (1.1%)	1 (1.3%)
Unsure	0 (0.0%)	5 (7.5%)	4 (4.2%)	10 (12.7%)
Other	2 (2.6%)	0 (0.0%)	1 (1.1%)	0 (0.0%)

- p = < 0.01
- 2 infant tests, representing AAP recommendations, highest in Southern hospitals.
- No infant testing highest in Western hospitals.

Location of Newborn Care

Location of Newborn Care	Northeast	Midwest	South	West
Separate rooms	17 (21.8%)	22 (33.3%)	40 (42.1%)	18 (22.8%)
Same room with some precautions to maintain separation	20 (25.6%)	10 (15.2%)	13 (13.7%)	12 (15.2%)
Same room, no precautions	1 (1.3%)	0 (0.0%)	0 (0.0%)	0 (0.0%)
Decisions based on shared decision making on a case-by-case basis	38 (48.7%)	34 (51.5%)	40 (42.1%)	49 (62.0%)
Other	2 (2.6%)	0 (0.0%)	1 (1.1%)	0 (0.0%)

- p= 0.057
- Separation was highest in Southern hospitals
- Shared decision making was highest in Western hospitals

Approach to Direct Breastfeeding

Direct Breastfeeding	Northeast	Midwest	South	West
Prohibited	3 (3.8%)	4 (6.1%)	6 (6.3%)	2 (2.5%)
Discouraged, but permitted if family strongly desires	15 (19.2%)	22 (33.3%)	43 (45.3%)	21 (26.6%)
Encouraged with precautions	15 (19.2%)	8 (12.1%)	11 (11.6%)	15 (19.0%)
Decisions based on shared decision making on a case-by-case basis	45 (57.7%)	32 (48.5%)	35 (36.8%)	41 (51.9%)

- p= 0.028
- Direct breastfeeding was prohibited or discouraged most frequently in Southern hospitals
- Shared decision making was highest in Northeastern hospitals

Timing of Discharge for Non-COVID-19 Dyads

Timing of Discharge	Northeast	Midwest	South	West
Timing hasn't really changed	17 (21.8%)	28 (41.8%)	48 (50.5%)	36 (45.6%)
Some dyads are discharged early	20 (25.6%)	16 (24.2%)	29 (30.5%)	26 (32.9%)
Many dyads are discharged early	29 (37.2%)	20 (30.3%)	16 (16.8%)	8 (10.1%)
All dyads discharge early unless a medical contraindication	12 (15.4%)	2 (3.0%)	2 (2.1%)	8 (10.1%)

- p = < 0.01
- Early discharge was highest among Northeastern hospitals
- National prevalence of COVID-19 highest in NE at time of survey in late May 2020

Differences According to Highest Level of Neonatal Care

All practices compared among hospitals according to their highest level of neonatal care (level 1, 2, 3/4) as defined by 2017 AAP Guidelines for Perinatal Care (provided in survey verbatim)

Notable results shown

Skin to Skin Care in First Hour

Skin to Skin	Level 1	Level 2	Level 3/4
Prohibited	5 (18.5%)	3 (4.8%)	32 (14%)
Discouraged	7 (25.9%)	22 (35.5%)	85 (37.1%)
Encouraged with precautions	5 (18.5%)	7 (11.3%)	21 (9.2%)
Encouraged with no precautions	1 (3.7%)	0 (0.0%)	1 (0.4%)
Decisions based on shared decision making on a case-by-case basis	9 (33.3%)	28 (45.2%)	90 (39.3%)

- p = 0.0241
- Hospitals with level 3/4 NICUs had a higher rate of prohibiting/discouraging skin to skin

Differences by Highest Level of Care

 All other practices did not have any statistical significant differences (p < 0.05) according to highest level of neonatal care

Differences According to Baby Friendly Hospital Status

Breastfeeding support practices compared among hospitals with and without current or past Baby-Friendly Hospital Status, according to Baby-Friendly USA website

No differences found

Take Home Points on Hospital Characteristics

- Universal COVID-19 testing for delivering mothers and availability of testing for asymptomatic support persons was highest in the NE hospitals
- Rate of use of 2 infant tests was highest in the South
- Rate of early discharge of non-COVID-19 dyads was highest in the NE, possibly due to high prevalence of COVID in the NE at the time of survey
- We found no differences in hospital practices according to highest level of neonatal care with the exception of skin-to-skin care (lower skin-to-skin among level 3/4s)
- We found no differences in hospital practices according to Baby-Friendly status

Contact information

- Feel free to distribute to anyone that may find this useful
- These results are located on our website: www.neoqicma.org
- For questions, please contact Meg Parker: <u>margaret.parker@bmc.org</u>