NeoQIC Collaborative Webinar #6

Caring for Newborns Impacted by COVID-19: Wrap Up

June 24, 2020, 2p-3p

Please mute yourself!

Chat in your name, organization in chat box (and email address if you are not on our distribution list)

Chat in questions and comments in chat box



Agenda

- Welcome and introduction
- Updates on Massachusetts Data
- Disparities in Perinatal COVID-19
- Lessons Learned and Silver Linings
- Wrap up and next steps



Updates on Massachusetts Data

Munish Gupta, MD, MMSc



National data

- AAP SONPM registry
- Numerous Massachusetts hospitals already participating!
- Weekly updates to data every Friday
- Link on NeoQIC site

https://my.visme.co/view/ojq9qq8e-npc-19-registry



Some Massachusetts data

- Selected data (voluntary sharing)
- Newborns with COVID-19 positive parent or newborns that are COVID-19 positive
- Needed at least 5 to share data



COVID-19+ Parent or Newborn

Hospital	Number
Beverly*	9
Beth Israel*	32
Boston Medical Center*	28
Brigham and Women's*	37
Cambridge Health Alliance*	10
Lowell General*	8
Newton Wellesley*	6
South Shore*	5
Steward System*	21
Winchester	3
Total	173

^{*} Included in subsequent slides



Some demographics

Male	47%
Female	53%
< 32 weeks	5%
32-35 weeks	9%
36+ weeks	86%
C-section delivery	42%
Vaginal delivery	58%

SONPM: 42% c-section



Inclusion Reason

Mother COVID-19 positive at birth	95%
Non-birth parent COVID-19 positive at birth	0%
Either parent COVID-19 positive after birth	5%
Infant COVID-19 positive	0%
Other	
Among mothers positive at birth (N=102, 62% of positive mothers):	
Mother symptomatic	40%
Mother asymptomatic	60%

SONPM: 70% of mothers asymptomatic



Location of Care

Same room as mother for all 50%	
Same room as mother for part	10%
Separate room from mother throughout	40%
Among separated, reason:	
No separation	49%
Hospital policy	20%
Maternal illness	0%
Family preference	9%
Infant status	21%

SONPM: 48% rooming-in



Breastmilk

No mother's milk	25%
Any breastfeeding	52%
Any expressed milk without breastfeeding	23%

SONPM: 34% breastfeeding



Infant COVID-19 testing

Positive	2%
Negative	83%
Not tested	13%
Tested and pending	2%

SONPM: 3.5% of infants positive



Infant Status at Discharge

Home	91%
Other hospital	1%
Expired	1%
Other	2%
Unknown	5%



Useful Resource



COVID-19, Maternal and Child Health, Nutrition

COVID-19, Maternal and Child Health, Nutrition – what does the science tell us?

A Repository

COVID-19, Maternal, and Child Health, Nutrition – what does the science tell us? is compiled by the Johns Hopkins Center for Humanitarian Health and provides an overview of what peer-reviewed journal articles currently state on COVID-19, maternal and child health (including infants), and nutrition. As the pandemic is ongoing more and more research results are published. With this service, we aim to provide the user with a snapshot of what is published with updates every few days. We hope that you will learn and benefit from the articles presented here.

Last update posted: 23 June 2020

Next update expected: 26 June 2020 1 pm USA ET

Currently, there are almost 1000 publications in this repository (Feb: 27; Mar: 75; Apr: 212; May 348; Jun: 263)

Publications from

- lune 2020
- May 2020
- April 2020
- March 2020
- February 2020

http://hopkinshumanitarianhealth.org/empower/advocacy/covid-19/covid-19-children-and-nutrition/



Recent review

- 49 studies, 666 neonates, 665 women
- 4% (28) of infants positive post-natally
 - 2.7% among vaginal, 5.3% among c-section
 - 8 had symptoms potentially related to COVID-19
 - 3 out of 28 formula fed (17 not reported)
 - 7 out of 28 isolated from mother (16 not reported)

Conclusions:

 Neonatal infection uncommon, rarely symptomatic, and not associated with mode of delivery or contact with mother

Walker et. al., Maternal transmission of SARS-COV-2 to the neonate and possible routes for such transmission: A systematic review and critical analysis, BJOG, June 2020.



UK Experience

- 427 COVID-19 positive women, 3/1/20-4/14/20
- 259 births
 - -74% > 37 weeks, 90% > 32 weeks
 - 16% c-section
 - 4% (12) positive for SARS-CoV-2 (6 within 12 hours of birth)

Knight et al, Characteristics and outcomes of pregnant women admitted to hospital with confirmed SARS-CoV-2 infection in UK: national population based cohort study, BMJ, June 2020



Massachusetts Deeper Dive?

- Proposal to use Massachusetts data from SONPM registry for deeper look at statewide practices and outcomes
- Contact Meg or Mandy for more info



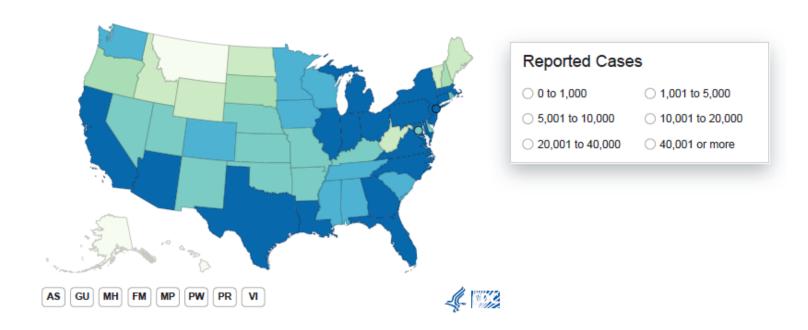
Disparities in Perinatal COVID-19

Meg Parker, MD, MPH



National COVID-19 Statistics

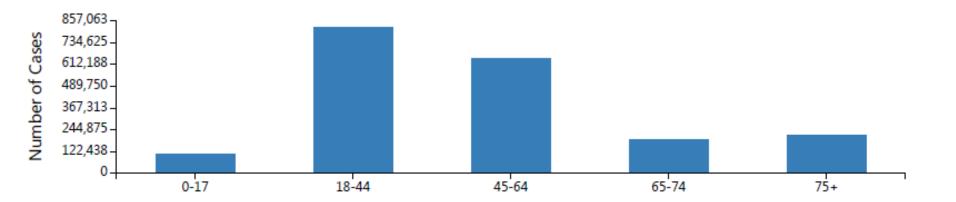
 Massachusetts has 6th highest number of documented COVID-19 cases in the U.S.







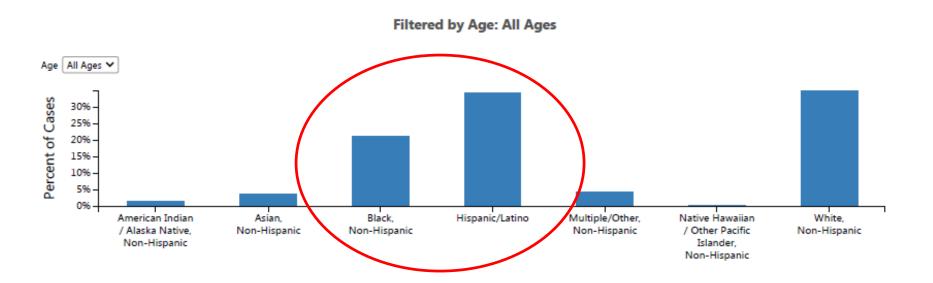
National COVID-19 Cases by Age







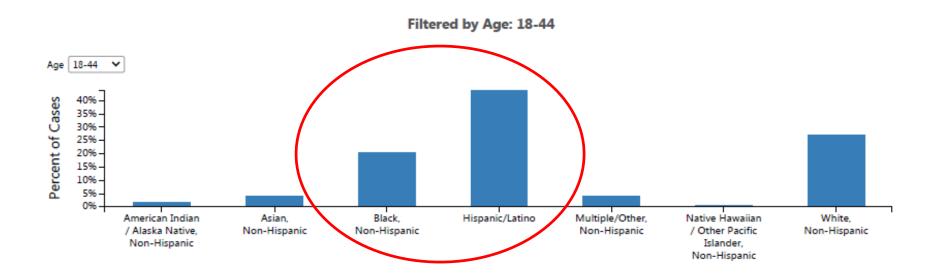
National Cases by Race/Ethnicity- ALL AGES





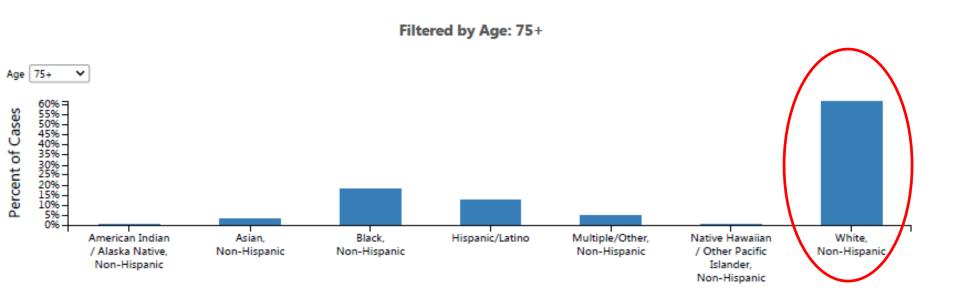


National Cases by Race/Ethnicity-Younger People





National Cases by Race/Ethnicity- Older People



https://www.cdc.gov/coronavirus/2019-ncov/cases-updates/cases-in-us.html



Why are NHB and Hispanics disproportionately getting COVID-19?

- Living conditions
- Work circumstances
- Underlying health conditions and lower access to care



Living Conditions

- Minorities are more likely to live in densely populated areas
 - Due to institutional racism in the form of residential housing segregation
 - (Housing segregation associated with many underlying health conditions that increase chance of severe illness from COVID-19)
 - Harder to practice social distancing
- Multi-generational households more common
 - Hard to practice social distancing
- Minorities over-represented in jails, prisons, and detention centers with congregate living



Work Circumstances

- Minorities are disproportionately essential workers
 - Examples
 - Service industry
 - Agriculture

- Lack of paid sick leaves
 - Prompt continuing to work



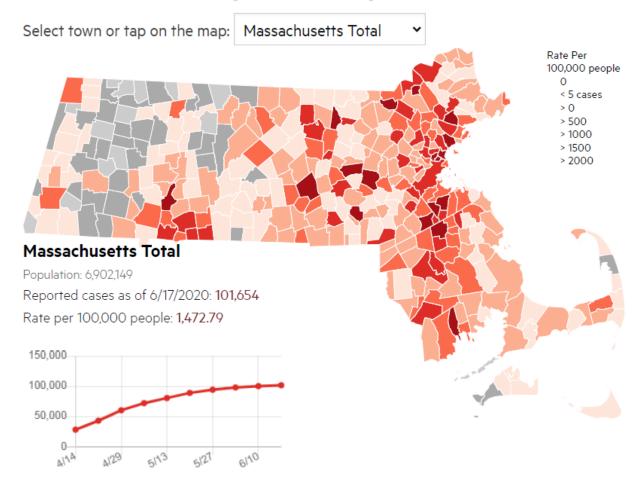
Underlying health conditions and lower access to care

- Minorities present to medical system less often
 - Minorities more often uninsured
 - Long-standing distrust of health care system,
 language barriers, financial implications for missing work
- Minorities are more likely to have chronic conditions
 - Example, DM, hypertension



Massachusetts Disparities in COVID-19

Coronavirus Cases, By Town Or City



Total persons tested as of 6/17/2020: 727,549 (10.5%)

https://www.wbur.org/commonhealth/2020/03/09/coronavirus-cases-massachusetts-map



MA COVID-19 Race/Ethnicity

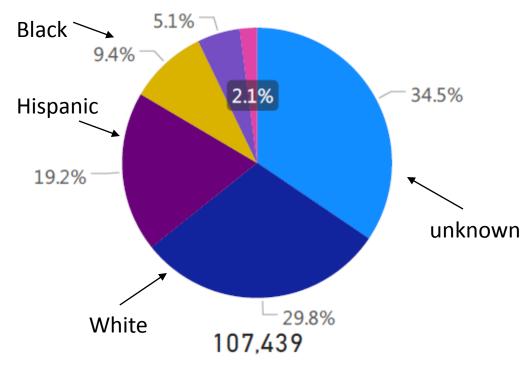
Breakdown

Boston

- -4% Asian
- 37%Black/African-American
- 27%Latinx/Hispanic
- 7% Other
- 25% White

Massachusetts

Total Cases by Race/Ethnicity



Total Case Count

https://www.mass.gov/doc/covid-19-dashboard-june-23-2020/download



National COVID-19 Perinatal Disparities

- June 21: 192 centers, 1106 dyads
- Race/ethnicity of COVID-19 + mothers:
 - 29% Black
 - 45% Hispanic



What can be done among public health professionals?

- Implement standardized protocols in accordance with professional organization guidance and quality improvement initiatives
- Identify and address implicit bias that may hinder patient-provider interactions and communication
- Provide medical interpretation services https://www.cdc.gov/coronavirus/2019-ncov/need-extra-precautions/racial-ethnic-minorities.htm



What can be done among public health professionals?

- Work with community partners to reduce cultural barriers to care
- Connect patients with community resources
- Learn about social and economic conditions that may put some patients at higher risk for getting sick with COVID 19
 - For example, conditions that make it harder for some people to take steps to prevent infection
- Promote a trusting relationship by encouraging patients to call and ask questions
 https://www.cdc.gov/coronavirus/2019-ncov/need-extra-precautions/rac



Thank you



Lessons Learned and Silver Linings

Munish Gupta, MD, MMSc



Next steps

- Hospital resources please continue to share!
- This is the last webinar in the NeoQIC COVID-19 series



Other NeoQIC Projects

 Perinatal Opioid Project- Munish Gupta and Ron Iverson

Respiratory Care Collaborative- Helen Healy

 Disparities and Family Engagement- Meg Parker



Plug for Sharing of AAP Registry Data

 Strong interest to pool MA wide AAP registry data to conduct population-level analysis

Several people have expressed interest

 Looking for investigator willing to take lead in a short time on this project with support from Meg Parker/Mandy Belfort



MA Department of Public Health Updates

 Data collection forms to capture follow-up care of perinatal COVID-19 cases

