

# Georgia Board of Public Health

July 11, 2023

# Agenda

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- Call to order
- Roll Call
- Approval/Adoption of Minutes
- New Business
  - Opening Remarks – Kathleen E. Toomey, M.D., M.P.H.
  - Epidemiology Update – Amanda Feldpausch, DVM, M.P.H.
  - Maternal Health – Diane Durrence, APRN, MSN, M.P.H., Women's Health Team
- Board Comments
- Adjournment

# Commissioner's Opening Remarks

DPH Board of Public Health / Kathleen E. Toomey, M.D., M.P.H. / July 11, 2023

# Epidemiology Update

DPH Board of Public Health / Amanda Feldpausch, DVM, MPH / Medical Epidemiologist

# Introduction

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- Infectious diseases can be unpredictable, re-emerge at any time, and know no borders!
- **Surveillance and epidemiologic investigation are** the cornerstones of prevention and control recommendations.
- Illustrated by 2 recent CDC national Health Advisories:
  1. Fungal Meningitis Outbreak Associated with Surgical Procedures in Matamoros, Mexico
  2. Locally-Acquired Malaria Cases in Florida and Texas

# CDC Health Advisories

## This is an official **CDC HEALTH UPDATE**

Distributed via the CDC [Health Alert Network](#)  
June 01, 2023, 5:30 PM ET  
CDCHAN-00492

### **Important Updates on Outbreak of Fungal Meningitis in U.S. Patients Who Underwent Surgical Procedures under Epidural Anesthesia in Matamoros, Mexico**

#### **Summary**

The Centers for Disease Control and Prevention (CDC) is issuing this [Health Alert Network](#) (HAN) Health Update to supplement the CDC HAN Health Advisory issued on [May 17, 2023](#). This Health Update provides updates on the status of the ongoing fungal meningitis outbreak and highlights interim recommendations for diagnosis and treatment.

## This is an official **CDC HEALTH ADVISORY**

Distributed via the CDC [Health Alert Network](#)  
June 26, 2023, 5:00 PM ET  
CDCHAN-00494

### **Locally Acquired Malaria Cases Identified in the United States**

#### **Summary**

The Centers for Disease Control and Prevention (CDC) is issuing this [Health Alert Network](#) (HAN) Health Advisory to share information and notify clinicians, public health authorities, and the public about—

1. Identification of locally acquired malaria cases (*P. vivax*) in two U.S. states ([Florida](#) [4] and [Texas](#) [1]) within the last 2 months,
2. Concern for a potential rise in imported malaria cases associated with increased international travel in summer 2023, and
3. Need to plan for rapid access to IV artesunate, which is the first-line treatment for severe malaria in the United States.

# Severe Fungal Infections: Background

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- Severe fungal infections (causing meningitis or sepsis), once considered rare, are on the rise and can be fatal.
- Because these infections are uncommon, physicians may not consider a fungal etiology early on. Potential for diagnosis/treatment delays and severe clinical outcomes
- Symptoms of fungal meningitis include fever, headache, stiff neck, nausea, vomiting, sensitivity to light, and confusion.
- Fungal infections have very long incubation periods (weeks-months) are not transmitted person-to-person.
- Increased awareness about fungal diseases is critical for early recognition, testing, and treatment (which can save lives).

# Healthcare-Associated Fungal Meningitis Outbreaks

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- Large outbreaks of fungal meningitis have occurred in healthcare settings due to contaminated medical products and poor infection control (these fungi are found in the environment)
- For example, in 2012, 753 patients (in 20 states) who received contaminated steroid injections (made at the New England Compounding Center in Framingham, MA) got fungal meningitis due to ***Exserohilum rostratum*** infection; 64 people died.
- In November 2022, an outbreak of 80 cases of fungal meningitis due to ***Fusarium solani*** occurred in Durango, Mexico. **Half of these cases were fatal.** The outbreak was associated with contaminated anesthesia products (multi-use vials) used at several hospitals.



# Fungal Meningitis Outbreak Matamoros, Mexico, 2023

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- In mid-May 2023, the CDC reported that 5 U.S. citizens who had cosmetic surgery at two different clinics in Matamoros, Mexico had developed fungal meningitis and were hospitalized in Texas (one died).
- One patient had evidence of ***Fusarium solani*** infection.
- Both clinics in Matamoros were closed on May 13.
- Initial investigation revealed that all the surgical procedures were performed under epidural anesthesia and had taken place since January 2023.
- Among the initial case-patients, the time from surgery to hospitalization (incubation period) ranged from 1 to 8 weeks, so anyone who had epidural anesthesia in these clinics from January 1 to May 13, 2023, was considered at risk for fungal meningitis.

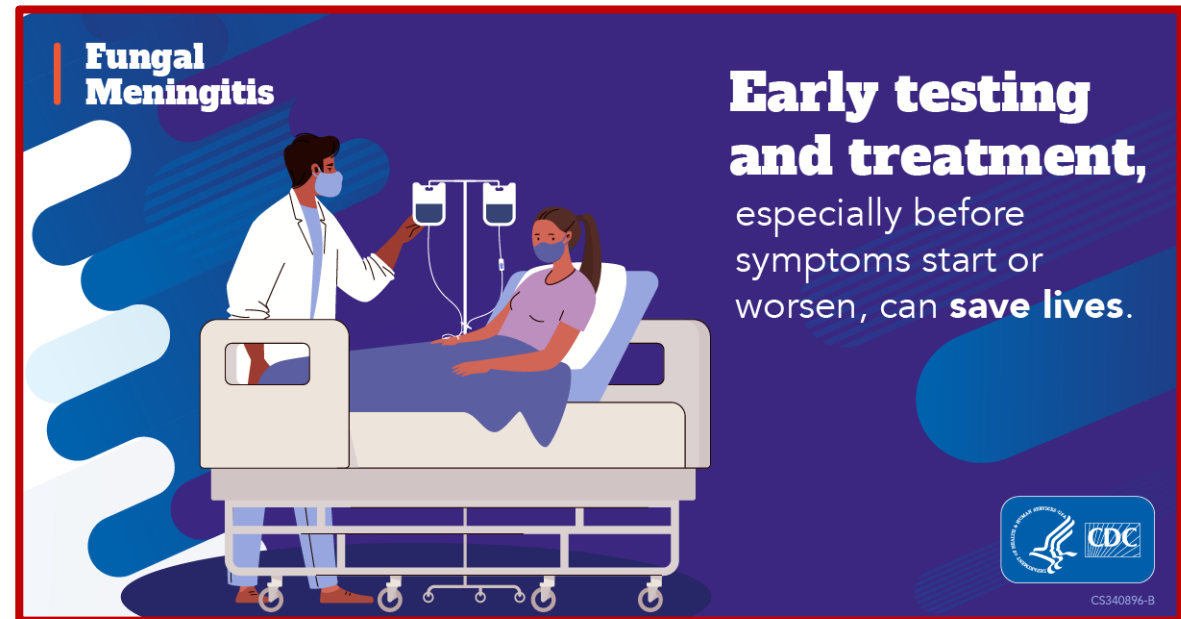
# Fungal Meningitis Outbreak Matamoros, Mexico, 2023

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- It was imperative to contact all persons at risk immediately to determine their clinical status and advise them to be evaluated for fungal meningitis ASAP, even if they do not have symptoms (they could be incubating).
- A total of **212** residents in **25** states had epidural anesthesia at the clinics of interest during that timeframe and were considered at risk (including several in Georgia).
- Contact information for those at risk was provided to state health departments, who then notified them to get tested for fungal infection at the nearest Emergency Department (via lumbar puncture) immediately.
- If the test was positive, starting antifungal treatment right away greatly increases the likelihood of survival (inpatient for 2 weeks, then PO 3-6 months).

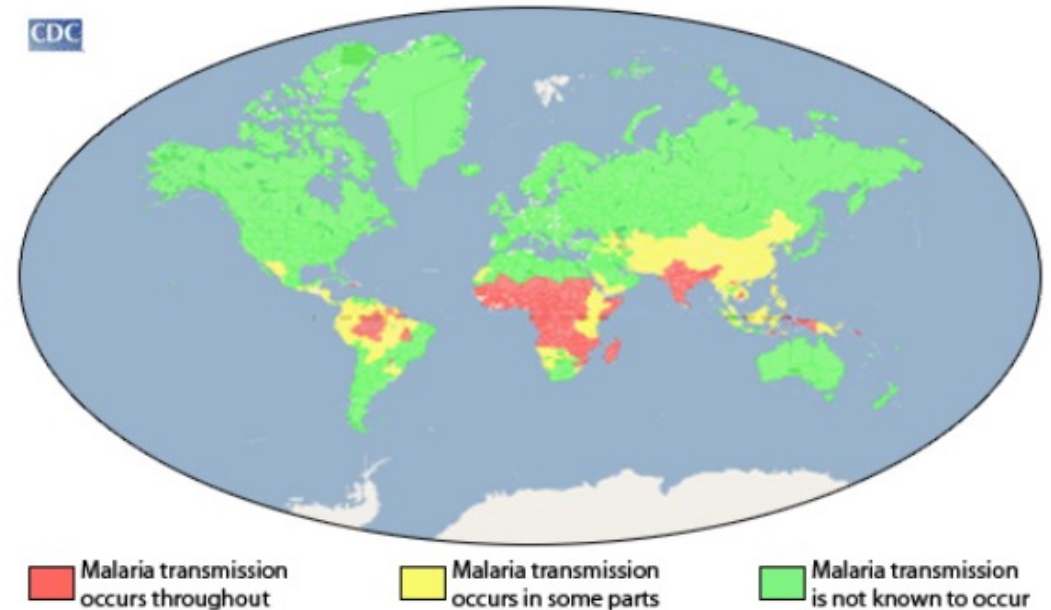
# Fungal Meningitis Outbreak: as of July 7, 2023

- Among the patients considered at risk, 31 cases of fungal meningitis identified
- 8 deaths (none in Georgia)
- Additional cases may still be identified



# Malaria: Background

- Parasitic infection spread through the bite of an infected female **Anopheles** mosquito
- ***Plasmodium falciparum*, *P. vivax*, *P. ovale***, and ***P. malariae***
- Preventable and treatable, if untreated, can be life-threatening
- Symptoms - 10-15 days after exposure, include fever, chills, and flu-like illness, not transmitted person-to-person



- Most frequently in Africa, young children and pregnant women
- Worldwide, 620,000 malaria deaths were recorded in 2021 (95% in Africa).

# Malaria in the United States

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- In the U.S., malaria is primarily an imported disease (from travelers).
- There are about 2,000 travel-associated malaria cases/year in the US (and about 50-60/year in Georgia).
- Rarely, **local** transmission can occur in very warm southern states.
- **Local transmission** means that an ***Anopheles*** mosquito in the U.S. (found in many regions of the country, including Georgia) bites a malaria-infected person (likely a traveler) and then transmits the parasite to other people via bite.
- These are rare and isolated incidents.
- In June 2023, CDC sent a national Health Advisory to warn that 5 locally-acquired (no travel) malaria cases occurred in Florida and Texas within the last 2 months.

# Locally Acquired Malaria Cases in the U.S., 2023

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- Six locally-acquired ***Plasmodium vivax*** malaria cases in Florida, close geographic proximity - Sarasota and Manatee Counties)
  - One locally-acquired ***P. vivax*** malaria case in Texas (Cameron County, near Brownsville)
  - Patients treated and recovering
  - Active surveillance for additional human cases, mosquito surveillance and control measures are ongoing
- Locally-acquired malaria has not occurred in the US since 2003, when eight cases were identified in Palm Beach County, Florida
  - Georgia has not had a locally-acquired malaria case reported since 1999.
  - Despite these cases, the risk of locally acquired malaria remains extremely low in the United States.

# Malaria Recommendations for Clinicians

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- Obtain a travel history and consider malaria in a symptomatic person who traveled to an area with malaria
- Consider the diagnosis of malaria in a person with a fever of unknown origin even if they didn't travel internationally
- Malaria is a medical emergency. Patients suspected of having malaria should be urgently evaluated in a facility that is able to provide rapid diagnosis and treatment **within 24 hours of presentation**
- Report all suspect and confirmed cases of malaria to DPH

# Malaria Recommendations for Individuals

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- **PREVENTION!**
- Take steps to prevent mosquito bites (use EPA-registered insect repellent, cover skin, etc.) and control mosquitoes at home (remove standing water, use screens, etc.)
- If you are traveling internationally to an area where malaria occurs, talk to your healthcare provider about medicines to prevent you from getting malaria
- If you have traveled to an area where malaria occurs and develop fever, chills, headache, body aches, and fatigue, **seek medical care immediately** and tell your healthcare provider where you have traveled



# Closing Comments

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1. Infectious diseases are ever-changing and unpredictable!
2. **AWARENESS, Surveillance and epidemiologic investigation are** the cornerstones of prevention and control recommendations.

# Questions

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For more information, please contact:

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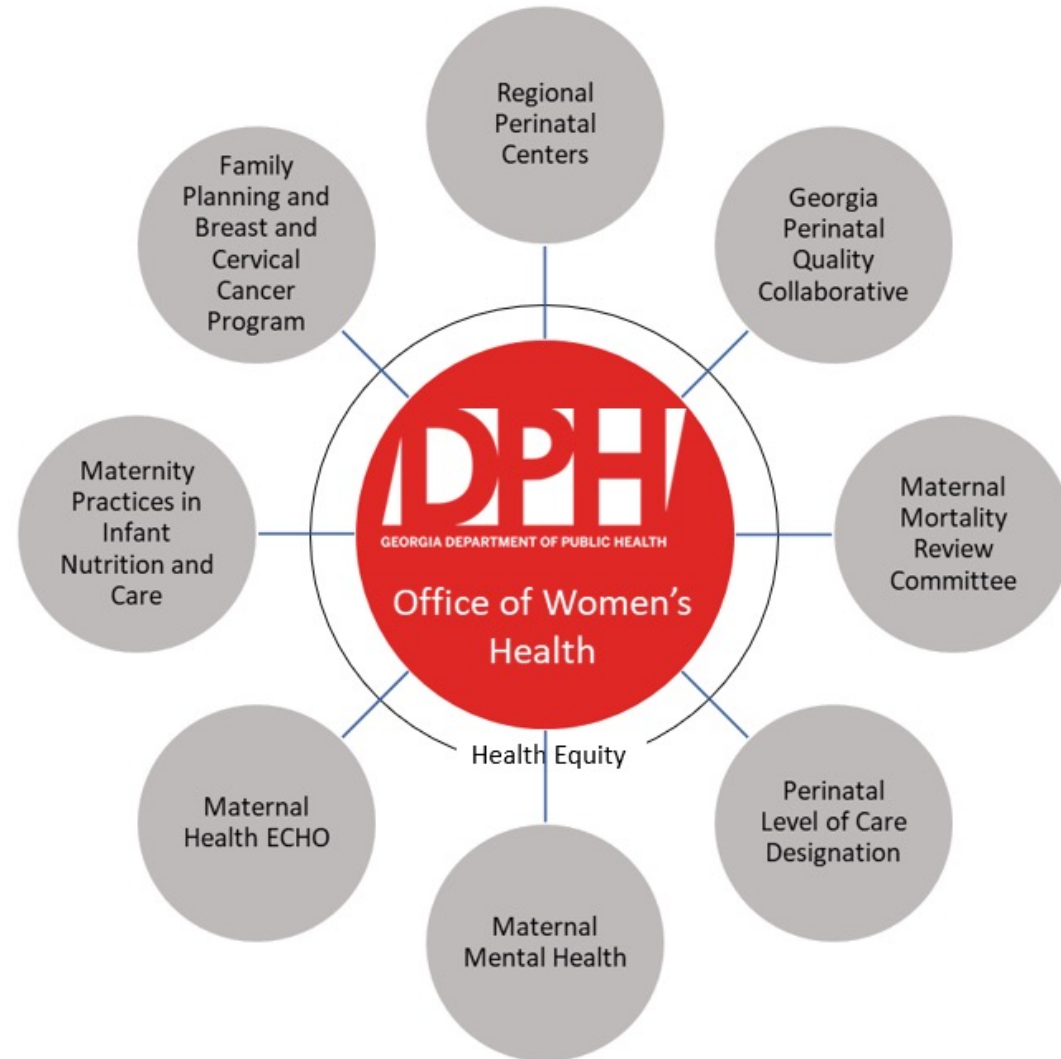
# Maternal Health Report

DPH Board of Public Health / Diane Durrence, APRN, MSN, MPH / July 11, 2023

# Office of Women's Health

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## Programs and Initiatives



# MMRC Process, Data, and Recommendations

DPH Board of Public Health / Katie Kopp, MPH / July 11, 2023

# The Role of the MMRC

	CDC – National Center for Health Statistics (NCHS)	CDC – Pregnancy Mortality Surveillance System (PMSS)	Maternal Mortality Review Committees
Data Source	Death certificates	Death certificates linked to fetal death and birth certificates	Death certificates linked to <b>fetal death and birth certificates, medical records, social service records, autopsy, informant interviews...</b>
Time Frame	During pregnancy – 42 days	During pregnancy – 365 days	During pregnancy – 365 days
Source of Classification	ICD-10 codes	Medical epidemiologists (PMSS-MM)	<b>Multidisciplinary committees</b>
Purpose	Show national trends and provide a basis for international comparison	Analyze clinical factors associated with deaths, publish information that may lead to prevention strategies	<b>Understand medical and non-medical contributors to deaths, prioritize interventions that effectively reduce maternal deaths</b>

Source: St Pierre A, Zaharatos J., Goodman D, Callaghan W.M., Challenges and opportunities in identifying, reviewing, and preventing maternal deaths. Obstetrics & Gynecology, 2018. 131(1): p. 138-142.

# MMRC Overview and Review Process

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# Process Changes

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- Increased staff capacity
  - 3 nurse abstractors, 1 licensed clinical social worker (LCSW)
  - Additional staff capacity to obtain medical records
  - LCSW began to conduct informant interviews in August 2020 to help the MMRC better identify social determinants of health
    - 210 interviews completed to date
- Case review completed on 2012-2020 deaths. 2021 will be completed in September.
- All deaths are being reviewed within two years of date of death.
- Greater diversity of disciplines represented on committee.
- Subcommittee process implemented to increase discussion time.



# Pregnancy-Related Deaths by Year of Death

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The MMRC uses the question, "If she had not been pregnant, would she have died?" to determine whether the death was pregnancy-related.

YEARS	FREQUENCY	LIVE BIRTHS	RATIO*
2012 - 2014	101	389399	25.9
2015 - 2017	98	390431	25.1
2018 - 2020	113	374680	30.2

\*Deaths per 100,000 Live Births

**Due to changes in the review process, years are not comparable.**

# Leading Causes of Pregnancy-Related Deaths by Race, Georgia, 2018-2020

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## Non-Hispanic, Black

Cause of Death	Number (%)
<b>Cardiomyopathy</b>	10 (16%)
<b>Embolism</b>	9 (14%)
<b>Cardiovascular and Coronary Conditions</b>	8 (13%)
<b>Preeclampsia and Eclampsia</b>	8 (13%)
<b>Hemorrhage</b>	7 (11%)

## Non-Hispanic, White

Cause of Death	Number (%)
<b>Mental Health Conditions</b>	10 (27%)
<b>Hemorrhage</b>	8 (22%)
<b>Cardiovascular and Coronary Conditions</b>	4 (11%)
<b>Cardiomyopathy</b>	3 (8%)
<b>Embolism</b>	3 (8%)

# Pregnancy-Related Deaths by Public Health District of Residence, 2018-2020

PUBLIC HEALTH DISTRICT	FREQUENCY	BIRTHS	RATIO
Clayton ( <i>Jonesboro</i> )	*	12719	*
Coastal ( <i>Savannah</i> )	6	24857	24.1
Cobb & Douglas	8	30927	25.9
DeKalb	10	31382	31.9
East Central ( <i>Augusta</i> )	7	18570	37.7
East Metro ( <i>Lawrenceville</i> )	8	40536	19.7
Fulton	10	34536	29.0
LaGrange	8	28657	27.9
North Central ( <i>Macon</i> )	11	18494	59.5
North Georgia ( <i>Dalton</i> )	7	15857	44.1
North ( <i>Gainesville</i> )	*	23053	*
Northeast ( <i>Athens</i> )	5	17066	29.3
Northwest ( <i>Rome</i> )	5	23297	21.5
South ( <i>Valdosta</i> )	*	10112	*
Southeast ( <i>Waycross</i> )	*	13575	*
Southwest ( <i>Albany</i> )	5	12609	39.7
West Central ( <i>Columbus</i> )	9	13697	65.7
South Central ( <i>Dublin</i> )	0	4736	0

# Preventability

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- A death is considered preventable if the committee determines that there was at least some chance of the death being averted by one or more reasonable changes to patient, family, provider, facility, system, and/or community factors.
- Between 2018-2020, 101 (89%) of the 113 pregnancy-related deaths had at least some chance of being prevented.

# Timing of Death

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- Hemorrhage
  - 44% occurred within 24 hours postpartum
  - 69% occurred within the first 7 days postpartum
- Mental Health Conditions
  - 87% occurred in the postpartum period
- Cardiomyopathy
  - 54% occurred 43 to 180 days postpartum
- Cardiovascular and Coronary Conditions
  - 69% occurred in postpartum period

# Hemorrhage

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## Contributing Factors

- Inadequate assessment of risk factors for hemorrhage / Delay in response / Insufficient response
- Lack of knowledge on when to seek care
- Patient not transferred to appropriate level of care
- Emergency Departments did not assess for pregnancy

## Recommendations

- Hospitals should implement the AIM Hemorrhage patient safety bundle
- Communities and care environments should implement the HEAR HER campaign
- Patients should be transferred to the closest, most appropriate level of care
- Emergency Departments should develop a standardized policy for assessing pregnancy

# Mental Health Conditions

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## Contributing Factors

- Case management services not adequately provided
- Inadequate social support during the perinatal period
- Lack of knowledge of safety of psychotropic medications during pregnancy
- Standardized assessment tool for depression and suicide not used

## Recommendations

- Obstetric care system should offer case management during pregnancy and postpartum
- Communities should offer peer support groups / Providers should connect patients with community mental health resources
- Providers should consult with PEACE for Moms to manage mental health conditions
- Providers should use validated screening tools for mental health conditions

# Cardiomyopathy

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## Contributing Factors

- Chronic conditions prior to pregnancy were not managed
- Standard of care not followed
- Policies and procedures not in place to have a follow-up prior to 6 weeks postpartum
- Lack of access to case management services

## Recommendations

- Contraceptive counseling
- Care environments should implement the AIM Cardiac Conditions in Obstetrical Care and Hypertension bundle
- Obstetric care system should offer case management during pregnancy and postpartum



# Cardiovascular and Coronary Conditions

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## Contributing Factors

- Standard of care not followed
- Blood pressure not checked at 72 hours after delivery discharge
- Lack of outreach to community resources

## Recommendations

- Care environments should implement the AIM Cardiac Conditions and Hypertension bundle
- Obstetric care system should offer case management

# Implementation of MMRC Recommendations

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- Georgia Perinatal Quality Collaborative (GaPQC)
- Maternal Health ECHO
- PEACE for Moms
- Maternal Levels of Care Verification
- Regional Perinatal Centers
- Maternal Substance Use Workgroup
- Maternal Health Taskforce
- Healthy Mothers, Healthy Babies Coalition of Georgia
- Department of Community Health
- Department of Human Services
- Department of Behavioral Health and Developmental Disabilities
- AIM Community Care Initiative
- Postpartum Support International, Georgia Chapter
- Community-Based organizations
- Academic institutions

# Legislation and Appropriations

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- The MMRC's recommendation to extend Medicaid coverage up to one year postpartum was passed during the 2021-2022 legislative session.
- \$1,689,000 in the FY24 budget to establish a home visiting pilot.
- \$1,180,000 in the FY23 budget to pilot two maternal quality improvement initiatives to increase resources for cardiac and hypertensive care and follow-up during pregnancy and postpartum.
- \$1,047,540 was allocated in FY19 to establish maternal mental health program.

# Initiatives to Improve Maternal Health

DPH Board of Public Health / Lisa Ehle, MPH / July 11, 2023

Obstetric  
Hemorrhage

Severe  
Hypertension

Cardiac  
Conditions in  
Obstetrical  
Care

Neonatal  
Abstinence  
Syndrome

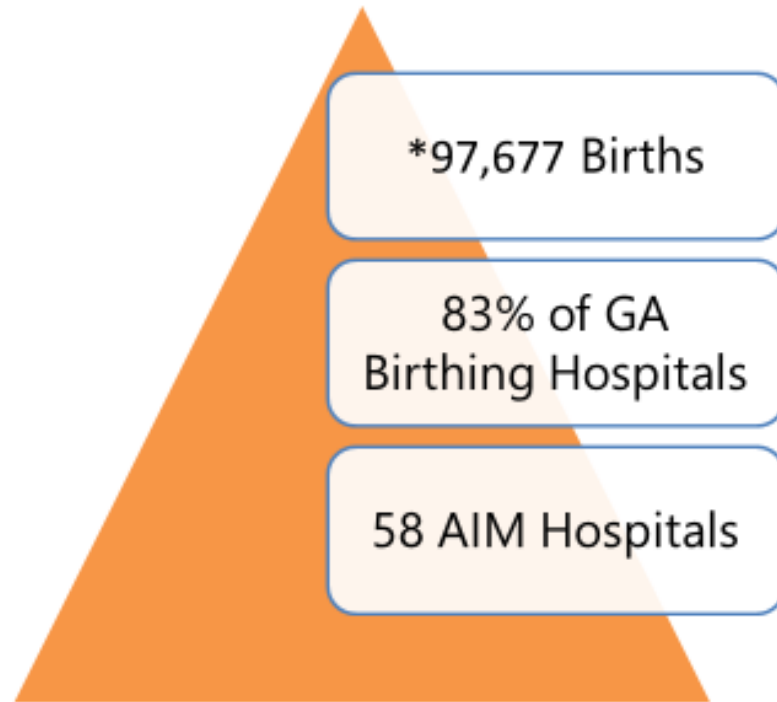
Optimizing  
Newborn  
Nutrition

## Statewide Maternal and Neonatal Initiatives

← Health Equity →



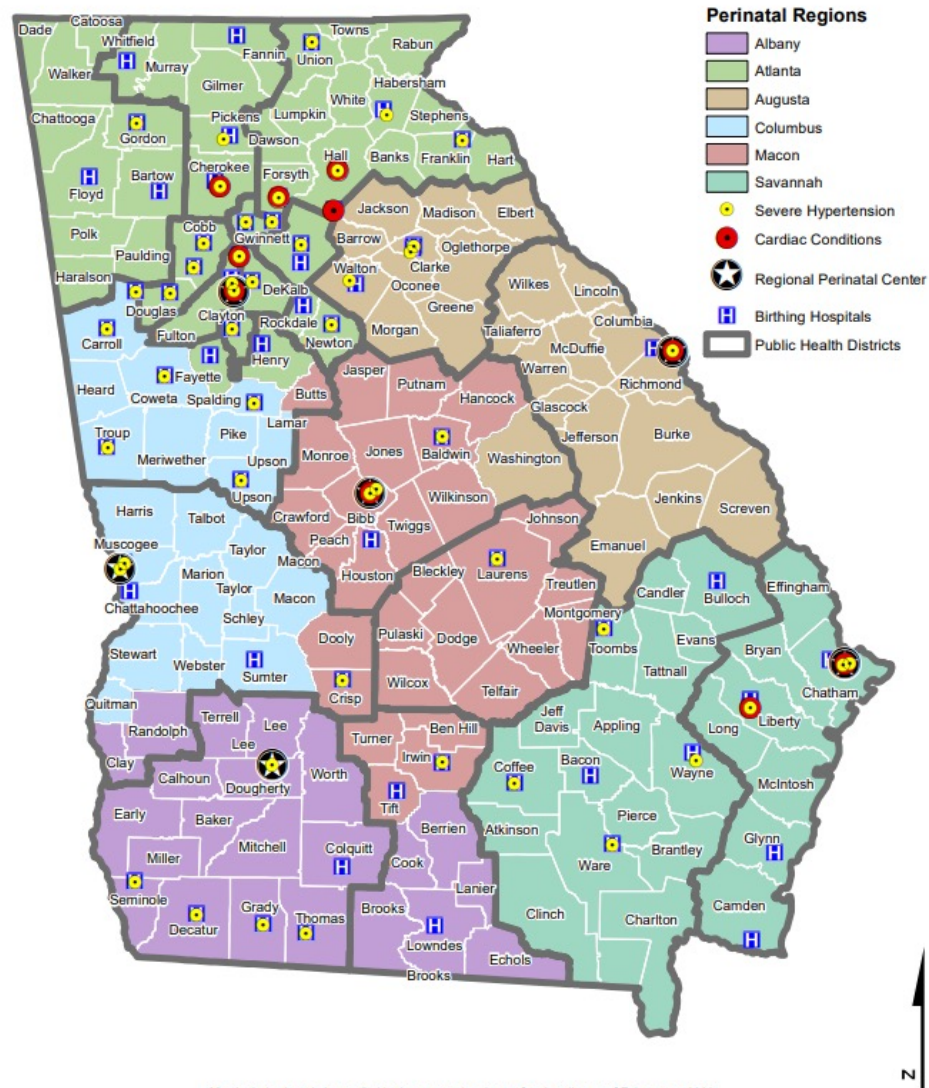
# GaPQC REACH



\*2021 Finalized Birth Data



## Birthing Hospitals Participating in the Georgia Perinatal Quality Collaborative's Maternal Patient Safety Bundles



## Severe Hypertension in Pregnancy

- SMART AIM: By 12/31/2023, to reduce the rate of severe morbidities in women with preeclampsia, eclampsia, or preeclampsia superimposed on pre-existing hypertension by 20%.
- 73% (51 of 70) birthing hospitals are participating in the active hypertension initiative.
- Sustainability Readiness Assessment

## Cardiac Conditions in Obstetrical Care

- Georgia is the first state in the country to implement this bundle.
- SMART AIM: By 02/6/2026, National Wear Red Day, to reduce harm related to existing and pregnancy related cardiac conditions through the 4th trimester by 20%.
- Cardiac Conditions in Obstetrical Care – 17% (12 of 70) hospitals participating in Wave 1 active improvement cohort.

# Rural Hospital Initiative

- 2018 GA General Assembly \$2M for maternal mortality prevention in rural GA – currently funding 8 rural hospitals
- Rural hospital reduction in Severe Maternal Morbidity for GaPQC maternal initiatives (HMG and HTN)
- LARC pilot in rural hospitals to increase access to post-partum contraception/LARCs for deliveries covered by Medicaid

Rural Hospital Severe Maternal Mortality (SMM) Improvement

	Baseline	2019	% Improvement from baseline	2020	% Improvement from baseline	2021	% Improvement from baseline	2022	% Improvement from baseline
<b>Hemorrhage</b>									
SMM w/out transfusion	4.66	3.83	17.81%	4.85	-4.08%	4.44	4.72%	4.93	-5.79%
<b>Hypertension</b>									
SMM w/out transfusion	11.46	11.43	0.26%	6.71	41.45%	8.73	23.82%	5.83	49.13%

Data source: Hospital Discharge Data



# Regional Perinatal Center (RPC) Highlights

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**Mission:** Coordinate access to optimal and appropriate maternal and infant health care.

- Albany, Atlanta, Augusta, Columbus, Macon, Savannah
- Office of Women's Health:
  - Coordination between DCH, RPCs, and National Perinatal Information Center
  - RPC Outreach Educators offer outreach and education to providers and staff of hospitals within the specific region
  - Coordinates the Developmental Progress Clinic workgroup to ensure consistency of developmental monitoring tools and services offered across the state.
- Quarterly Medical Director meetings and annual face to face meeting (August 2023) to discuss system wide issues and trends & to ensure alignment with GaPQC initiatives.

# Maternal and Neonatal Levels of Care

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- Collaboration with the American Academy of Pediatrics (AAP) and the Joint Commission to complete surveys for designation.
- The AAP provides neonatal surveys to levels II, III, and IV.
  - 1 survey has been completed and 8 hospitals are working on the application.
- The Joint Commission provides maternal surveys for all levels.
  - 1 survey has been completed, and 12 hospitals are working on the application.
- July 2022 - rule change was approved allowing DPH to designate Level IV hospitals.

# Maternal Mental Health

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- Perinatal Psychiatry, Education and Community Engagement (PEACE) for Moms
- Provides OB provider training, phone and face-to-face consultations, and treatment support
- 351 prescribing providers are enrolled
- Peer support groups provided through Healthy Mothers Healthy Babies of Georgia



<https://www.peace4momsga.org/>

# Family Planning Program

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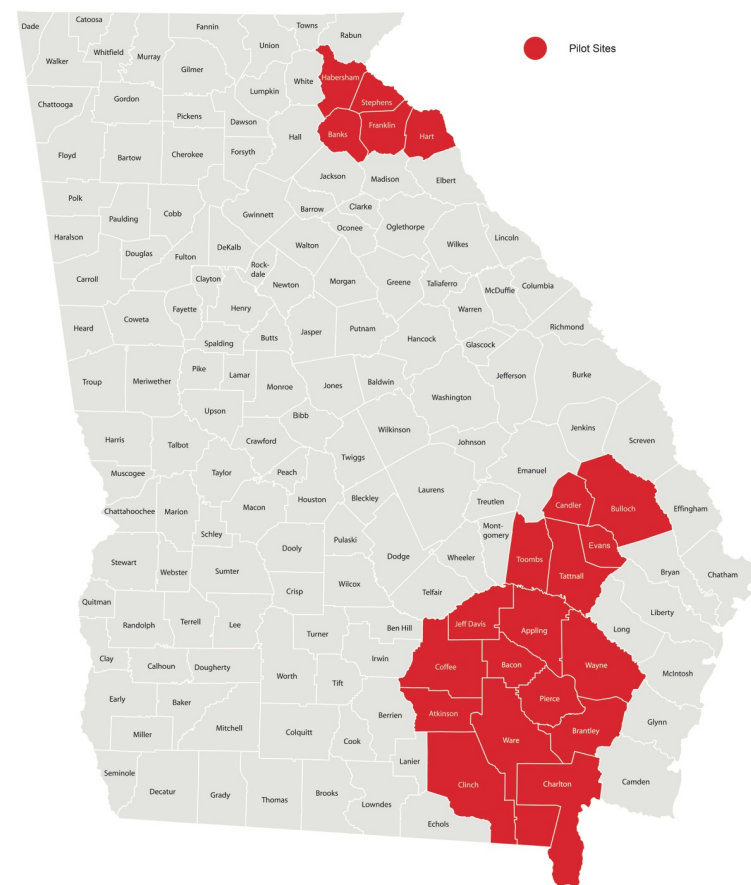
- Family planning program expansion underway to increase access to contraception
- 1st state to train RNs to provide contraceptive implant services
- Statewide FP awareness campaign



# Perinatal Health Partnership – Home Visiting Pilot

- Home visiting during pregnancy and the first year postpartum in two districts – Gainesville (5 counties) and Waycross (16 counties)
- Enrollment during pregnancy or following delivery to provide clinical monitoring, case management, referral and linkage to needed resources
- Priority population will be moms identified with high-risk conditions or indicators for poor outcomes
- Evaluation will include gestation at delivery, infant birth weight, postpartum breastfeeding, postpartum visit completion, infant developmental screening

Home Visiting Pilot Sites



# Questions

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# Closing Comments

# Next Meeting

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The next Board of Public Health Meeting  
will be held August 8, 2023