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College of Human Medicine

MSU College of Human Medicine and its Community Campuses



- First accredited community-based medical school (1964)
- 14 hospitals, 83 community sites, 3,700 faculty
- One of the first rural MD education programs
- 2016 AAMC Spencer Foreman Award for Community Service
- Rural education, Flint program discussed today, NIH science in 6 communities including rural settings



The Flint Example

Community Engagement

- 4K surveys, 100 community meetings, 80 organizations
- Flint Research Advisory Council
 - People from Flint and MSU faculty
 - Defining our community-based participatory research effort
 - Focus on reducing disparities through interventions
 - Healthy Behaviors, Behavioral Health, Chronic Disease
 - Interventions that will reduce health disparities
- Participate on search committees for faculty, chair, administrative council





Scientific Safety Net

Providing science when government cannot or will not

- Flint Water Crisis
 - Michigan State University College of Human Medicine
 - Virginia Tech
- Volkswagen Crisis
 - West Virginia University
- COVID
 - Testing, education
- Preparing students and community
 - Our rural students during COVID
- Public intellectual work and citizen scientists



Lee Ann Waters

Photo: Goldman Environmental Prize



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Ideas for Collaborations or Expanded Collaboration

- Nutrition programs from Flint to Traverse City
- Mental Health training and support
- Citizen Scientists (4H and other programs)
- Public Intellectualism
- Maternal Health Disparities





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MATERNAL HEALTH EQUITY LAB

ENGAGED SCHOLARSHIP TO CREATE CHANGE



MIRACLE

Maternal Health Multilevel Intervention for Racial Equity



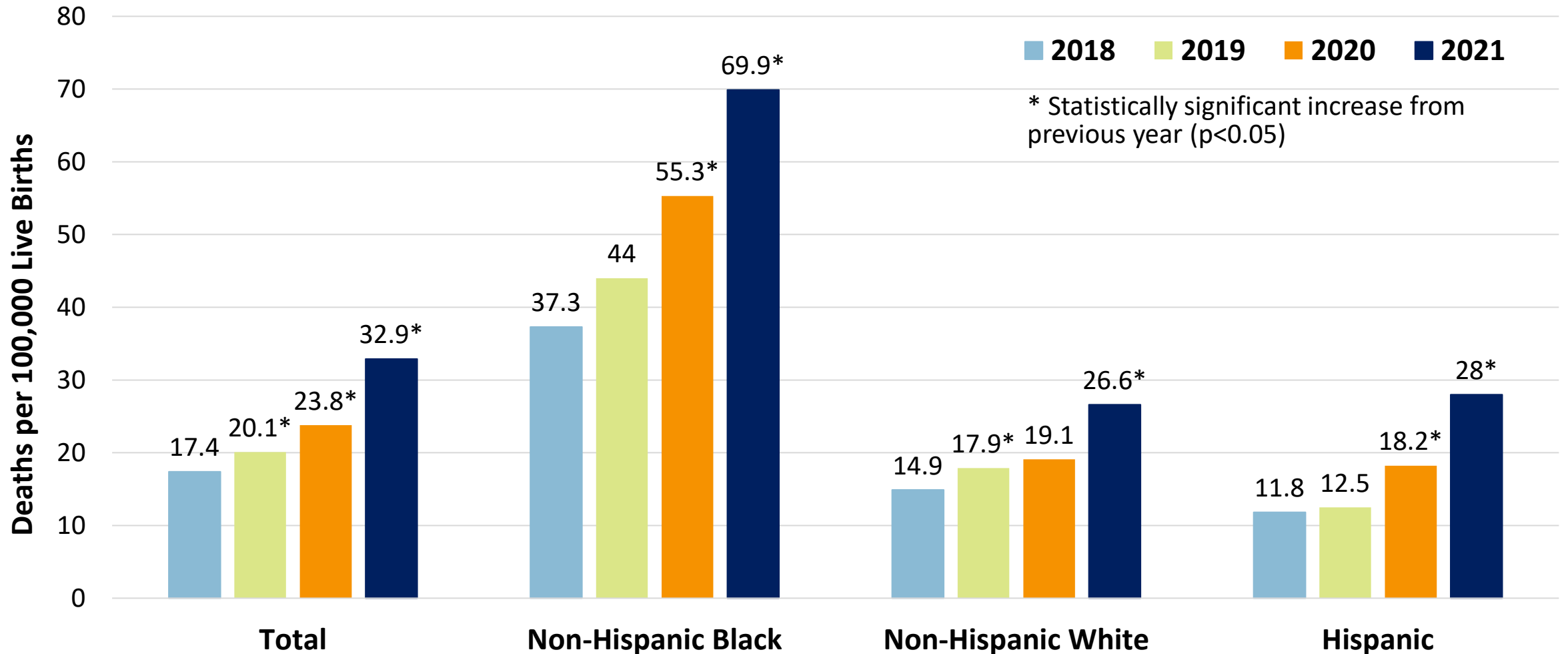
Department of Obstetrics,
Gynecology, and
Reproductive Biology
MICHIGAN STATE UNIVERSITY



Maternal Health Equity: Collaboration for Change

Disparities in US Maternal Mortality

Maternal Mortality by Race and Hispanic Origin: United States 2018-2021



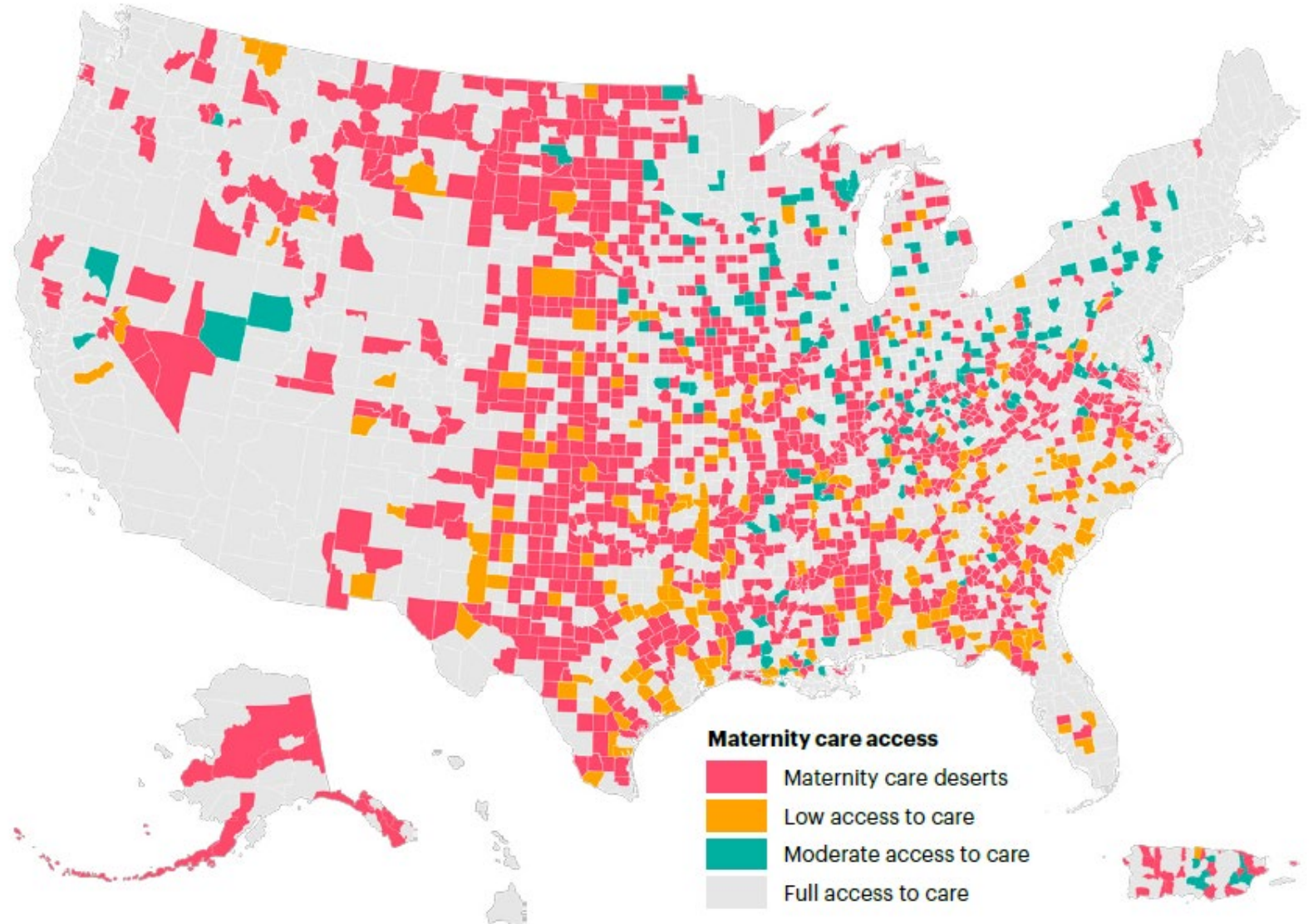
Over 35% of US counties are maternity care deserts

Figure 3. Maternity care access designation by county, US and Puerto Rico



Nowhere to Go: Maternity Care Deserts Across the US

2024 REPORT



Community Health Workers

- CHWs are ***race/ethnicity, language concordant providers***; typically, in home and community settings.
- CHWs are trusted members of the community who serve as a liaison between health/social services and the community ***to address health and social needs and facilitate access to services.***
- CHWs provide intensive peer support and health care to improve the ***quality and cultural competence of service delivery.***



Research

JAMA Pediatrics | [Original Investigation](#)

Community Health Worker Home Visiting, Birth Outcomes, Maternal Care, and Disparities Among Birthing Individuals With Medicaid Insurance

Cristian I. Meghea, PhD; Jennifer E. Raffo, MA; Xiao Yu, PhD; Ran Meng, MS; Zhehui Luo, PhD; Peggy Vander Meulen, MSN; Celeste Sanchez Lloyd, MA; Lee Anne Roman, PhD

[doi:10.1001/jamapediatrics.2023.2310](https://doi.org/10.1001/jamapediatrics.2023.2310)

Very Preterm Birth

- Risk reduced by 40% among all participants
- By 60% among NH Black participants

Preterm Birth

- Risk reduced by 15% among all participants
- By 22% among NH Black participants

Timely Postpartum Care (3-wk)

- Increased from 22% to 43% among all participants
- Increased from 25% to 50% among NH Black participants

Empowering for self-advocacy: A safe pregnancy, birth and postpartum experience



My visit with _____ Date _____

MY STORY

Every visit should include your story and an action plan.

Main reason why you want to see your doctor:

Other things you may want to talk about with your doctor:

How your body is feeling:

Detailed information about your physical symptoms. Know the answers to these questions.

<input type="checkbox"/> When did it start?	<input type="checkbox"/> What does it feel like?
<input type="checkbox"/> How long does it last? Does it come and go?	<input type="checkbox"/> How bad is it?
<input type="checkbox"/> How often does it happen and when?	<input type="checkbox"/> Where is it? Does the pain stay in one spot or move around?
<input type="checkbox"/> What makes it better?	
<input type="checkbox"/> What makes it worse?	

Thoughts and events in your life that you think may be a cause:

How are your symptoms making you feel emotionally/mentally:

MY ACTION PLAN

This is what I understand is the problem:

This is what I don't understand:

My treatment options are:

To help me feel better, we decided I will:

I should expect to feel better in:

I should come back if or when:

One thing I will accomplish after this visit:

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Empowering with Knowledge: Warning Signs Education



Headache that won't go away or gets worse over time



Dizziness or fainting



Changes in your vision



Fever of 100.4 °F or higher



Extreme swelling of your hands or face



Thoughts of harming yourself or your baby



Trouble breathing



Chest pain or fast beating heart



Severe nausea and throwing up



Severe belly pain that doesn't go away



Baby's movement stopping or slowing during pregnancy



Severe swelling, redness or pain of your leg or arm



Vaginal bleeding or fluid leaking during pregnancy



Heavy vaginal bleeding or discharge after pregnancy



Overwhelming tiredness

Empowering with Knowledge and Skills: Hypertension

HIGH BLOOD PRESSURE DURING & AFTER PREGNANCY

WARNING SIGNS

GET MEDICAL CARE RIGHT AWAY IF YOU START HAVING ANY OF THESE WARNING SIGNS:



Severe stomach pain that won't go away



Severe swelling of the hands and face



Severe headache that won't go away



Severe nausea and throwing up (not like morning sickness)



Dizziness or fainting



Chest pain or fast-beating heart



Changes in vision



Trouble breathing

This does not list every warning sign you might have. If something doesn't feel right, contact your health care provider.

HIGH BLOOD PRESSURE:

High blood pressure (also called hypertension) happens when your blood pushes too hard against the walls of your blood vessels. High blood pressure does not usually cause symptoms until a severe or life-threatening stage. It can start before you get pregnant, while you are pregnant, or after your pregnancy.

RISKS FOR HAVING HIGH BLOOD PRESSURE



Not being physically active



Having a close relative with high blood pressure



Smoking



Being pregnant for the first time



Blood pressure issues with a previous pregnancy

Also, being overweight and having diabetes.

RISKS TO YOU AND YOUR BABY

- Preeclampsia
- Stroke
- Heart disease
- Your baby being born too early or being too small

PREECLAMPSIA:

Preeclampsia is high blood pressure with signs of other problems. Some of these signs can be protein in your urine or seizures. Your provider will test your blood and urine to see if you are having these problems.

Preeclampsia can happen after the 20th week of pregnancy. It can also happen after giving birth, even if you did not have high blood pressure during pregnancy.

RISKS FOR HAVING PREECLAMPSIA



Diabetes*



Being pregnant with more than one baby



Chronic high blood pressure



Autoimmune conditions (like lupus)



Being overweight*



Preeclampsia with a previous pregnancy



Kidney disease

**Also a risk for developing high blood pressure.*

RISKS TO YOU AND BABY

- Stroke
- Seizures
- Organ damage
- Death
- Your baby being born too early



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STRONG Beginnings
Strengthening families for a Healthy Start

SELF-MONITORING BLOOD PRESSURE OB PROVIDER VISIT

Bring this sheet to your next visit with your health care provider. Use the guide below to help start the conversation and to write down your provider's answers.

Start the Conversation (example):

"Thank you for seeing me. As you know, I've been diagnosed with high blood pressure. I'm planning to work with my home visiting providers to track my blood pressure at home. Before I start, I wanted to ask you some questions"

ASK YOUR HEALTH CARE PROVIDER AND WRITE DOWN THEIR RESPONSE.

Can you write me a prescription for a blood pressure cuff?

When should I report my readings to you and what is the best way to report them?

What is a healthy blood pressure for me?

If my reading is higher than this, when should I call your office?

When should I go to the emergency room?

What symptoms could mean I am having problems with my blood pressure?

What should I do if I'm having them?

Ask your health care provider any other questions you may have about high blood pressure.



- Can you write me a prescription for a blood pressure cuff?
- When should I report my readings to you and what is the best way to report them?
- What is a healthy blood pressure for me?
- If my reading is higher than this, when should I call your office?
- When should I go to the emergency room?
- What symptoms could mean I am having problems with my blood pressure?
- What should I do if I'm having them?

Empowering for Health and Wellness: CHW Interventions

SELF-CARE DURING AND AFTER PREGNANCY

SELF-CARE

Self-care means taking care of yourself to support your health and wellbeing. And, managing illness when it happens.



Taking care of yourself is not always easy, but you are IMPORTANT.



THERE ARE DIFFERENT TYPES OF SELF-CARE:



Essentials

Having access to resources you need to live.



Physical

Taking care of your body.



Emotional

Handling stress and changes in life.



Social

Building and keeping good relationships with other people.



Spiritual

Thinking about yourself and your place in the world.



Intellectual

Keeping your mind active.



Financial

Managing your money and resources.

YOUR COMMUNITY HEALTH WORKER IS THERE TO:

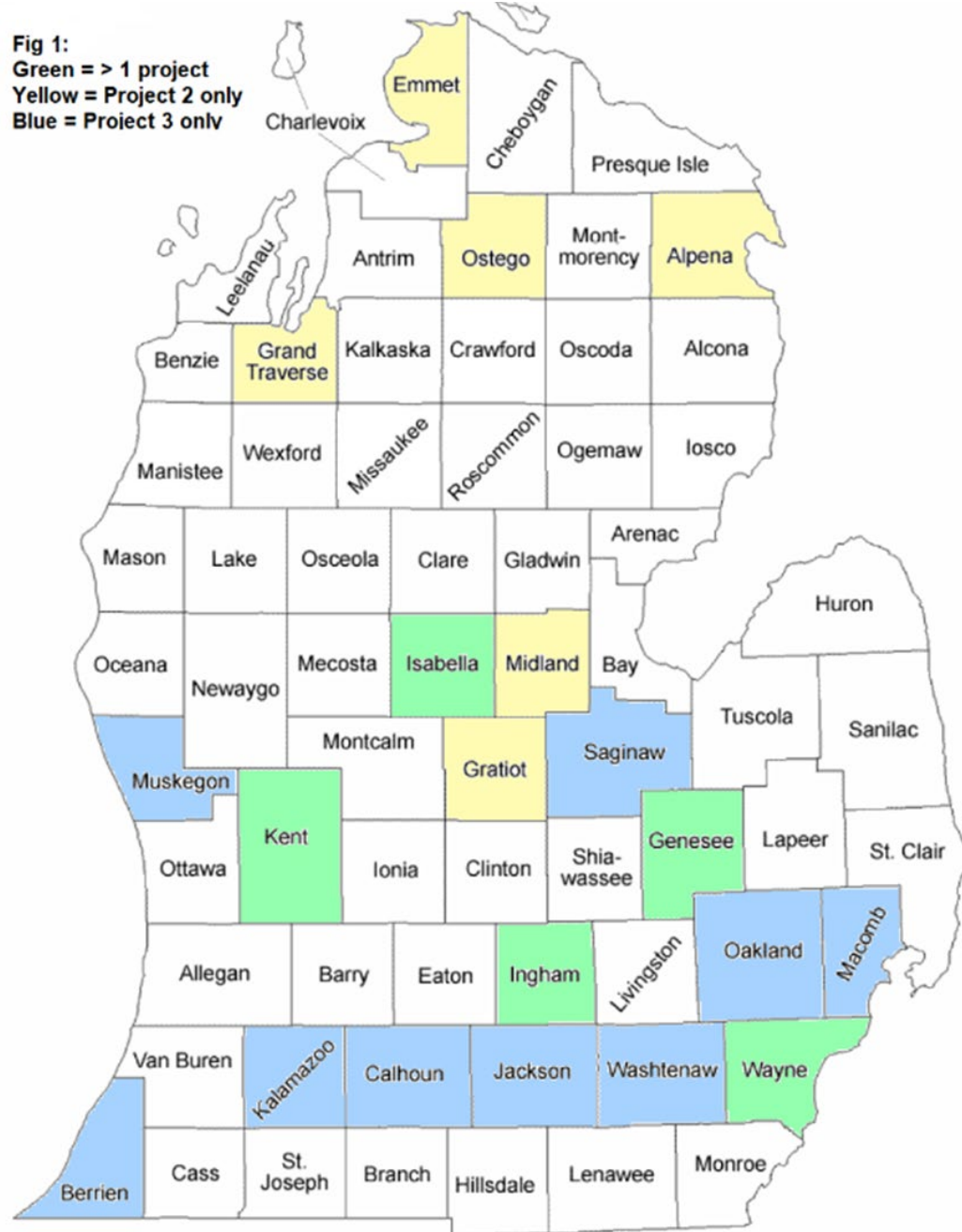
- Listen and help you with what you need.
- Provide support and advocate for you.
- Help connect you with community resources.
- Encourage you with gaining knowledge and self-management skills.
- Help you carry out your self-care plan with goal setting and action planning.
- Help you with problem-solving barriers.
- Coordinate care with your medical provider and other home visitor(s).

INFANT HEALTH AND SAFETY

Practicing self-care can help you keep your infant safe and healthy. Infant health and safety includes a safe environment, breastfeeding, safe sleep, and finding a medical home.



Fig 1:
Green = > 1 project
Yellow = Project 2 only
Blue = Project 3 only

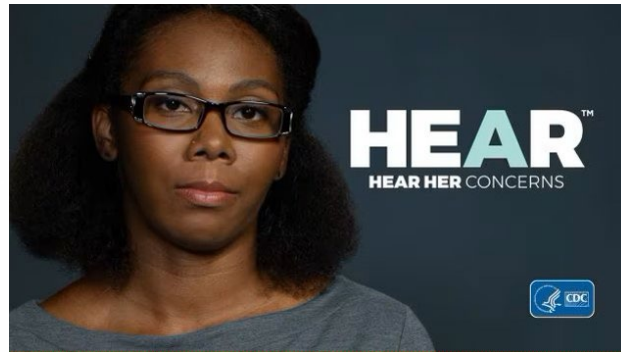


Collaboration for Change



MIRACLE: MICHIGAN NIH MATERNAL HEALTH CENTER OF EXCELLENCE

Educational materials and information



Access Tools:
Scan the QR code or visit
www.obgyn.msu.edu/tools

Access Tools:
Visit
<https://www.cdc.gov/hearher/index.html>

