

Improving the health status of women & girls Preconception and Interconception Care MIHP Coordinator Meetings March 2015



Bureau of Family, Maternal and Child Health
Division of Family & Community Health



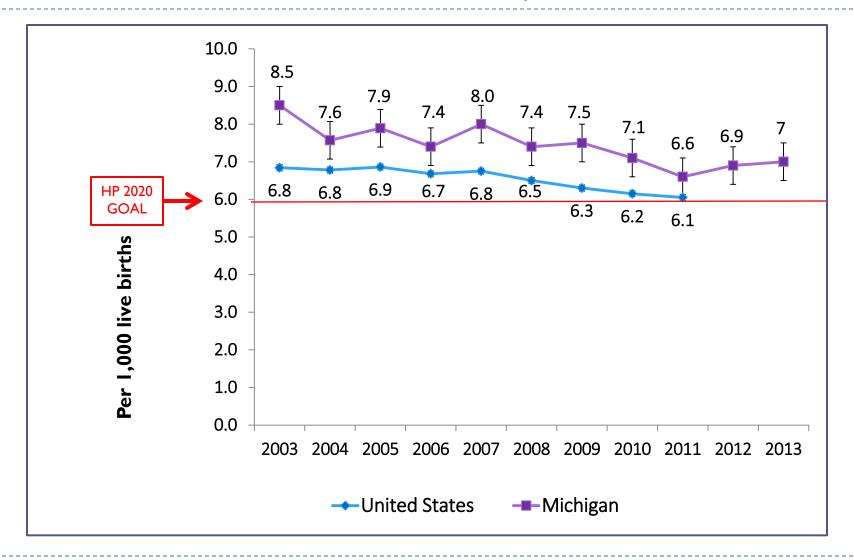
Infant Mortality in Michigan is a Public Health Crisis

- > 743 Michigan babies died in 2013¹
- #1 cause of infant mortality is Low Birth Weight/ Prematurity
- > Improving the health of women of child bearing age before they conceive is essential to improving birth outcomes.

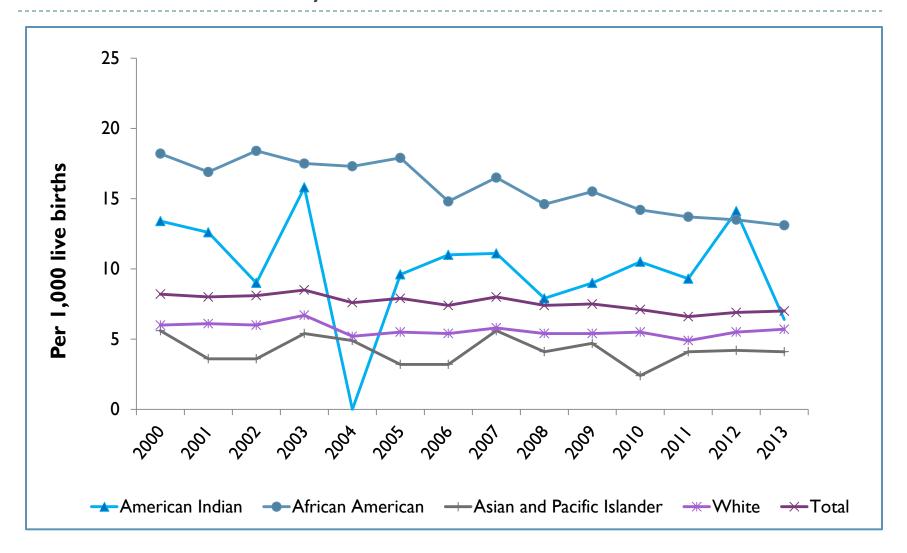


¹ Source: Division for Vital Records and Health Statistics, Michigan Department of Community Health.

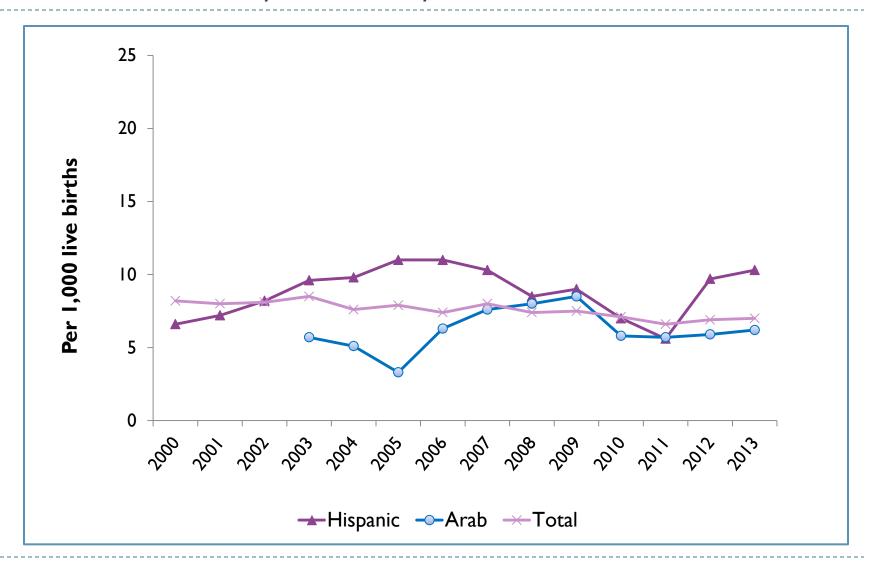
Michigan vs. U.S. Rates of Infant Mortality 2003-2013



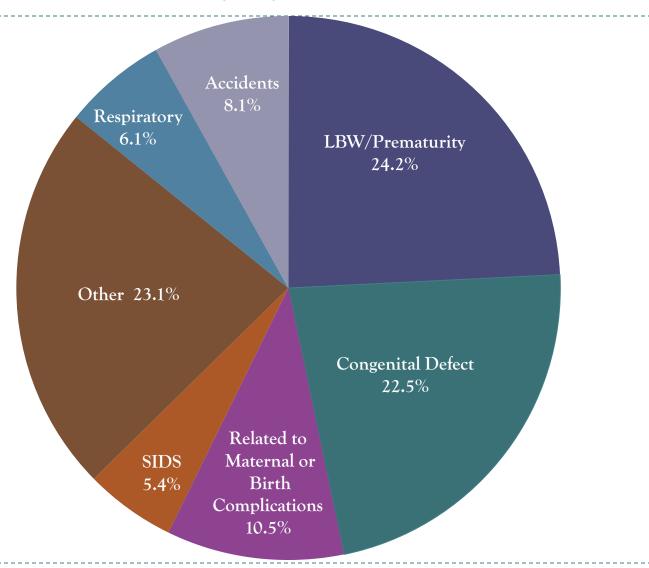
Infant Mortality Race Rates MI 2000-2013

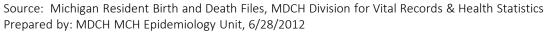


Infant Mortality Ethnicity Rates MI 2000-2013

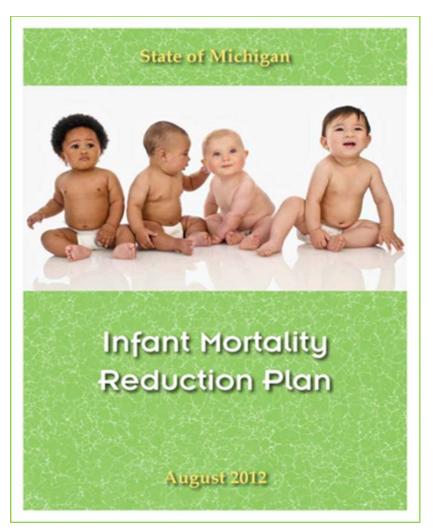


Infant Mortality by Cause, MI 2010





Infant Mortality in Michigan



- Infant mortality is a critical indicator of the overall health and welfare of all Michiganders
- Top health priority for Governor Snyder
- In 2011, the MDCH convened the Infant Mortality Summit attended by key stakeholders to identify priority strategies to reduce infant mortality.
- State Infant Mortality Steering Committee
- ▶ Eight key strategies were identified to address this complex issue while addressing health inequities

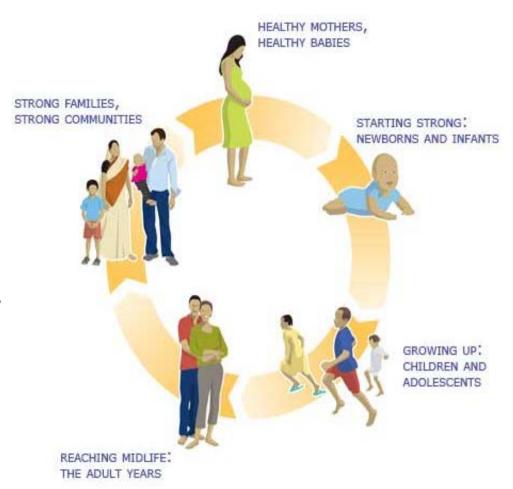
Michigan's Infant Mortality Reduction Plan

- 1. Implement a Regional Perinatal System
- 2. Promote adoption of policies to eliminate medically unnecessary deliveries before 39 weeks gestation
- 3. Promote adoption of progesterone protocol for high risk women
- 4. Promote safer infant sleeping practices to prevent suffocation
- 5. Expand home-visiting programs to support vulnerable women and infant
- 6. Support better health status of women and girls
- 7. Reduce Unintended Pregnancies
- 8. Weave the social determinants of health in all targeted strategies to promote reduction of racial and ethnic disparities in infant mortality

Reducing Infant Mortality...Life Course Perspective

- Attending to a full spectrum of factors that impact well being including the "social determinants of health"; the contributing factors in which people live, work & play
- A "life course approach" fosters a healthy start for mothers and babies & strong thriving families and communities

www.citymatch.org



Strategy 1: Implement statewide perinatal care system

- 2009 Appropriations required convening group to restore regional perinatal system of care
- Created report, Perinatal Regionalization: Implications for Michigan
 - Eighteen recommendations in the report
- Report recommendations resulted in Perinatal Regionalization as an Infant Mortality Reduction Plan strategy
- Perinatal period is defined as the time beginning before conception and continuing through the first year of life (March of Dimes, TIOP II, 1993).
- Perinatal Care System is defined as a sustainable community integrated health care system of people, institutions and local resources for women and infants that promotes healthy birth outcomes and babies who survive and thrive.

Stakeholders include: LHDs, Birth Hospitals, Providers, Health Plans, Community-based organizations, State Depts., Professional Organizations, Universities, Payers, Family Representatives, Advocacy Agencies & MDCH



Strategy 2: Promote adoption of policies to eliminate medically unnecessary deliveries before 39 weeks gestation

- More than \$1.7 million was saved in 2011 by reducing number of non-medically necessary early deliveries. (MI Health & Hospital Association).
- ▶ 84 Medicaid birthing hospitals signed agreements to implement 1 or more policies to eliminate elective, non-medically necessary deliveries before a full-term pregnancy.
- Created provider and community awareness campaign to educate on importance of all babies having their full time to grow and develop before birth (partnership between March of Dimes, MI Health & Hospital Association, and MDCH).





Strategy 3: Promote Adoption of Progesterone Protocol for High-Risk Women

- Collaborate with Medicaid and Medicaid Health Plans to consider improvements in progesterone protocols in prenatal services.
- Develop recommendations for maximizing appropriate, effective, and efficient use of progesterone treatment for women whose birth outcomes benefit from this treatment.
 - In Detroit, make your date campaign launched in May of 2014 as a strategy to reduce infant mortality led by Dr. Hassan Director of the perinatal research branch located in DMC, Hutzel and Henry Ford hospitals. The goal is to enroll every woman in the city to ensure access to prenatal care and universal cervical screening for shortened cervix. Once screened, all women diagnosed as high risk are then treated with progesterone to decrease their risk of delivering early [makeyourdate.org]



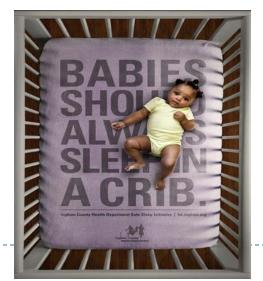




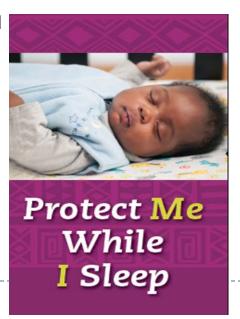


Strategy 4: Promote safer infant sleeping practices

- MDCH collaborated with DHS to develop legislation to raise parental awareness of safe sleep by requiring hospitals to provide safe sleep education after birth and prior to discharge. The Infant Safe Sleep Act was signed into law in May and went into effect in August 2014.
- Created media presentations, PSA's and radio ads for high risk communities to raise awareness of safe sleep.
- Provided infant safe sleep education and resources to community partners serving parents and caregivers before, during, and after pregnancy; included hospitals, LHDs, WIC, DHS, & CDR teams.
- 3,000 "Baby Safe Sleep Kits" distributed to new parents at Hutzel, Henry Ford Main & Spectrum hospitals.
- Enhanced participation in Safe Sleep Advisory Committee with First Lady Sue Snyder, MDCH, and DHS.
- Distributed safe sleep communications toolkit to providers, Safe Sleep Advisory Committee, Children's Trust Fund, LHDs, Early On, local FIMRs, & Infant Mortality Steering Committee members.
- Safe sleep website updated with provider resources and materials.
- New on-line safe sleep training for child care providers developed & launched



www.tomorrowschildmi.org www.michigan.gov/safesleep



Strategy 5: Expand home visiting to support vulnerable women & infants

Maternal, Infant, and Early Childhood Home Visiting (MIECHV) supports *pregnant women and families and helps parents* of children from birth to age 5 tap the resources and develop the skills they needs to raise children who are physically, socially and emotionally healthy and ready to learn [NFP, Healthy Families America, PAT and Early Head Start

- ▶ Secured federal grants totaling over \$29.07 million, to expand and continue evidence-based programs
- ▶ Home visiting models implemented are proven by scientific research to improve the lives of children and families. Serves pregnant women and families with children from birth to age 5
- Focuses on families at risk because social determinates risk factors, such as parents are younger than 21, low income, live in at-risk communities, have a history of child abuse or neglect or have other factors that can put healthy child development at risk

Maternal Infant Health Program (MIHP) is the largest prenatal and early childhood home visiting program in Michigan

- MIHP promotes healthy pregnancies, positive birth outcomes, and healthy infant growth and development as part of Michigan's strategic plan to reduce infant mortality
- Focuses on improving the health and well-being of all Medicaid eligible pregnant women and infants through the age of one using a standard, system-wide process
- Recently published two articles on success of (MIHP) documenting improvements in prenatal and postnatal care, infant care, & reduction in low birth weight (LBW) and preterm births*
- Expanded sites, includes 150 providers with 65 in SE MI
- MIHP meets the criteria for designation an evidence-based home visiting program under PA 291

Strategy 6: Support better health status of women and girls

- Obtained teen health grant \$1.7 million to offer support services for pregnant and parenting teens in high need communities.
- Held first Perinatal Oral Health Conference and developed state level perinatal oral health action plan for preconception, prenatal, and post partum women. Launched "tooth fairy" PSA.
- Offered tobacco quit line and training to providers on evidence-based quit smoking interventions to reduce prenatal smoking.
- Preconception health PSAs launched during September and October statewide on Pandora and MAB radio "A Message From Your Future Baby".
 - Encourages well women's health to reduce infant mortality
 - Well check visit/ preconception and interconception health
- Fetal Alcohol Spectrum Disorders (FASD)
- Alcohol prevention campaign
- Maternal mortality;







House Bill 5882 sponsored by Rep. Darany introduced addressing maternal mortality reporting would require physicians and certain health facilities to report a maternal death to the state health department

Baby

Get on board with an alcohol-free pregnancy.

Healthy Michigan Plan-increased access to women's care



Strategy 7: Reduce Unintended Pregnancies

Planned pregnancies good for maternal and family health and birth outcomes.

- Access to effective family planning services and contraceptives
 - Reproductive life plan
 - Birth spacing
 - Intendedness of conception
 - Health education & counseling
 - Preconception health care
 - health status screening
 - folic acid intake
 - referrals for needed care
 - prevention and cessation messages about alcohol, smoking and drug use
- ▶ 91,588 people served through Family Planning Program (CY 2013).
- Served 7892 youth and 2093 parents via teen pregnancy prevention programming in 21 sites throughout state (FY 2013).
- ▶ Teen birth rate reduced by 19% among 15-19 yr. olds (2007-2011).
- Lowest record of Michigan teen pregnancies 44.4 pregnancies per 1000 teen females (2011).



Taking Pride in Prevention Program (TPIP), MI Abstinence Program (MAP), Teen Pregnancy Prevention & Parenting Program (MI-APPP)

Strategy 8: Weave social determinants of health into all IM strategies

- Practices to Reduce Infant Mortality through Equity (PRIME) Kellogg funded project
 - ▶ Goal: To train staff to develop an equity lens and to create a training and practice model to promote health equity practices
- Completed first Native American Pregnancy Risk Assessment Surveillance to understand needs of high risk population and improve services to meet needs of ethnic and cultural environments
- Launched PRIME website to educate communities on health disparities & health equity practices to reduce infant mortality www.michigan.gov/dchprime
- Released first Michigan Health Equity status report to focus on, maternal & child health and influential social factors that affect reductions in infant mortality
- PRIME Labs Health Equity Learning Labs
- Using the life course approach, focus on:
 - ▶healthy people
 - >prepared, supportive communities
 - ▶effective systems



Supporting the health status of women and girls by promoting preconception and interconception care

Maintaining wellness during the entire life course to __ infant mortality



What Do We Mean by Preconception and Interconception Health Care?

- Preconception health refers to the health of all women and men before conception, however our focus mainly on women
 - Taking steps to protect future health and the health of a future baby
 - Throughout their reproductive years
 - Whether or not they are planning a pregnancy
- Interconception health refers to the health of the mother and supporting optimal birth spacing to protect the health of future babies
- Goal of Preconception and Interconception health care is to combine quality medical care, healthy behaviors, strong social support, and safe environments to improve overall health
 - Reducing physical, emotional, mental and oral health risk factors
 - Focusing on health of the mother as well as infant health
 - Supporting optimal birth spacing (18 months)
 - Care is based on the unique needs of each individual

Why is Preconception Health Important?

- Too many babies in the U.S. are born preterm, of low birth weight or with birth defects
- ▶ Too many pregnancies in the U.S. are unintended pregnancies and face increased risks of poor pregnancy outcomes
 - Approximately ½ of all pregnancies in the U.S. are unintended
 - Unintended pregnancy is associated with increased risk for mother and baby
 - By the time prenatal care starts, it may be too late to prevent unfavorable pregnancy outcomes
- Improving the health of women of childbearing age, before conception is essential to improving birth outcomes
- Too many women lack preventative health and social services that could improve their health and well-being prior to pregnancy
- Too many women face barriers such as violence, poverty and unsafe environments that impede their well-being

Why is Interconception Health Important?

- Many woman who have given birth to preterm or low birth weight babies, or babies with birth defects are at increased risk of having future babies with these pregnancy outcomes
- Too many women lack health care and social and emotional support following an adverse outcome such as infant death, fetal loss, birth defect, low birth weight or preterm birth
- Too many women miss post-partum care appointments and lack contraceptive care following pregnancy and remain at risk of an unintended pregnancy or a too closely spaced pregnancy
- ▶ Too many new mothers face barriers such as violence, poverty and unsafe environments that impede their care and well-being
- Focusing on the health of mothers between pregnancies is essential to improving future birth outcomes

Essential elements of Preconception and Interconception Care Services

Preconception Care

- Assure quality health care and optimal health status for all women and men of reproductive age
- Reproductive Life Plan should be part of every health care visit for every woman
- Family planning services are essential preconception care
 - Deciding if and when to become pregnant
 - Deciding what actions need to be taken to increase the chances of a healthy woman, healthy pregnancy and healthy babies
 - Preventing unintended pregnancy
- Referrals for needed support

Interconception Care

- Quality post partum care and follow up is essential to well woman care
- Support for desired spacing and intendedness of subsequent pregnancies
- Home visiting support can be essential to interconception care
- Referrals for needed support



Impacts on Pregnancy and Infant outcomes

- Obesity increases the risk for maternal complications, including gestational diabetes, hypertension, and preeclampsia. Infants of obese mothers are at increased risk
- <u>Smoking during pregnancy</u> increases the risk for placenta previa, placental abruption and preterm rupture of membranes. Increases the baby's risk for low birth weight, preterm delivery, SIDS, and preterm-related infant death
- Women with <u>Type 1 or Type 2 diabetes</u> have increased risk for preeclampsia, hypertension during pregnancy, cesarean delivery, and adverse birth outcomes including miscarriage, preterm delivery, and fetal or infant death
- <u>Pre-pregnancy Hypertension</u> is associated with increased risk for preeclampsia, placental abruption, and gestational diabetes. Adverse birth outcomes associated with hypertension include: preterm delivery, small for gestational age, and infant death
- Recent research on <u>Stress during pregnancy</u> point to perinatal risks including preterm birth, low birth weight and increased miscarriage risk*

 $\underline{\text{http://www.cdc.gov/reproductive}} \\ \text{health/WomensRH/ChronicDisease} \\ \text{and Reproductive} \\ \text{Health.htm.} \\ \text{http://www.cdc.gov/reproductive} \\ \text{health.htm.} \\ \text{http://www.cdc.gov/reproductive} \\ \text{http://www.cdc.gov/reproductive} \\ \text{health.htm.} \\ \text{http://www.cdc.gov/reproductive} \\ \text{health.htm.} \\ \text{health.htm.htm.} \\ \text{health.htm.} \\ \text{health.htm.} \\ \text{health.htm.} \\ \text{health.htm.} \\ \text{health.$

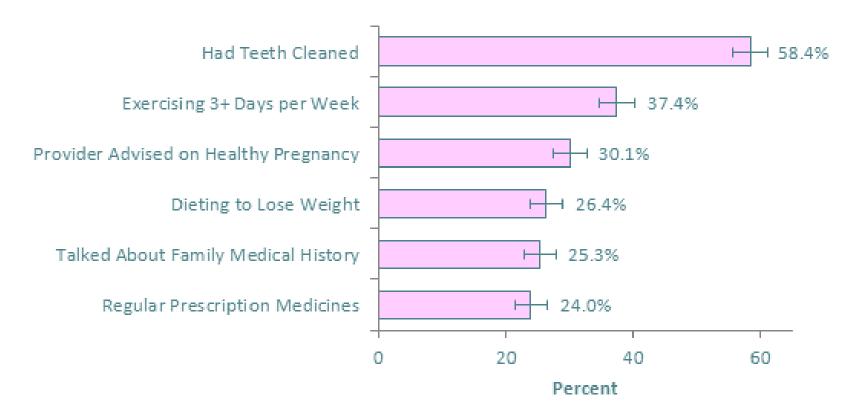
^{*}Witt, W; Cheng, E.; Wisk, L.; Litzelman, K.; Chatterjee, D.; Mandell, K.; Wakeel, F. (2014). Maternal stressful life events prior to conception and the impact on infant birth weight in the United States. *American Journal of Public Health, 104(1),* 81-89.

Examples of how women of reproductive age can benefit from reduced risk for chronic disease

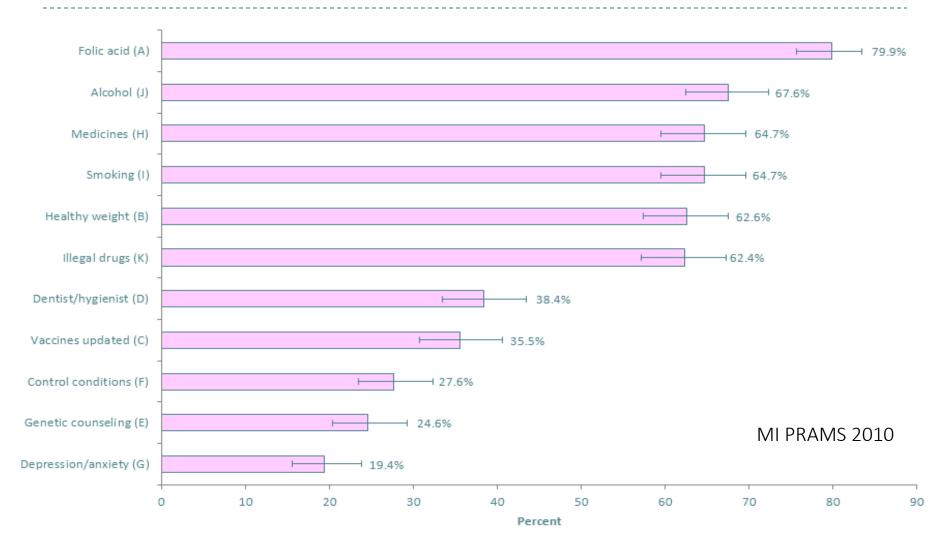
- If overweight and obese women reduced their weight to a normal level before pregnancy, the number of women with gestational diabetes could be reduced by almost 50%.
- If all women were of normal weight, exercised daily, and maintained a healthy diet, the number of women with hypertension could be reduced by approximately 50%.
- ▶ If all pregnant smokers quit smoking, as many as 5%–8% of preterm infants, and 13%–19% of term low birth weight infants could be born a normal weight.
- ▶ If all pregnant smokers quit smoking, as many as 23%—34% of infant deaths from SIDS and 5%—7% of infant deaths from preterm births could be prevented.

How are we doing with Preconception Care in Michigan?

Snapshot of preconception health behaviors during the 12 months before conception, from MI PRAMS 2009



Topics Covered by Health Care Providers Reported by the 30% of women who received Preconception Counseling



Recommendations

▶ The Centers for Disease Control and Prevention (CDC) has developed recommendations based on a review of published research and the opinions of specialists from the CDC/ATSDR Preconception Care Work Group and the Select Panel on Preconception Care

▶ The recommendations are aimed at achieving four goals to:

- Improve the knowledge and attitudes and behaviors of men and women related to preconception health
- Assure that all women of childbearing age in the United States receive preconception care services (e.g., evidence-based risk screening, health promotion, and interventions) that will enable them to enter pregnancy in optimal health
- Reduce risks indicated by a previous adverse pregnancy outcome through interventions during the interconception period, which can prevent or minimize health problems for a mother and her future children
- Reduce the disparities in adverse pregnancy outcomes

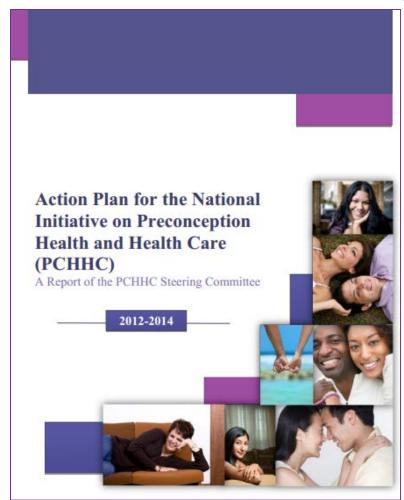
Recommendations

- 1. Individual Responsibility Across the Life Span
 - Each woman, man, and couple should be encouraged to have a reproductive life plan.
- Consumer Awareness
 - Increase public awareness of the importance of preconception health behaviors and preconception care services
- 3. Preventive Visits
 - As a part of primary care visits, provide risk assessment and educational and health promotion counseling
- Interventions for Identified Risks
 - Increase the proportion of women who receive interventions as follow up to preconception risk screening
- 5. Interconception Care
 - Use the interconception period to provide additional intensive interventions to women who have had a previous pregnancy that ended in an adverse outcome (e.g., infant death, fetal loss, birth defects, or preterm birth)
- 6. Pre-Pregnancy Check-Ups
 - Offer, as a component of maternity care, one pre-pregnancy visit for couples and persons planning pregnancy
- 7. Health Insurance Coverage Women with Low Incomes
 Increase public and private health insurance coverage for women with low incomes
- 8. Public Health Programs and Strategies
 Integrate components of preconception health into existing local public health and related programs
- 9. Research
 - Increase the evidence base and promote the use of evidence to improve preconception health
- 10. Monitoring improvements
 - Maximize public health surveillance and related research mechanisms to monitor preconception health
 - Link to full report published on April 21, 2006 by the Division of Reproductive Health, National Center for Chronic Disease Prevention and Health Promotion http://www.cdc.gov/mmwr/preview/mmwrhtml/rr5506a1.htm

Action Plan

http://www.cdc.gov/preconception/documents/ActionPlanNationalInitiativePCHHC2012-2014.pdf



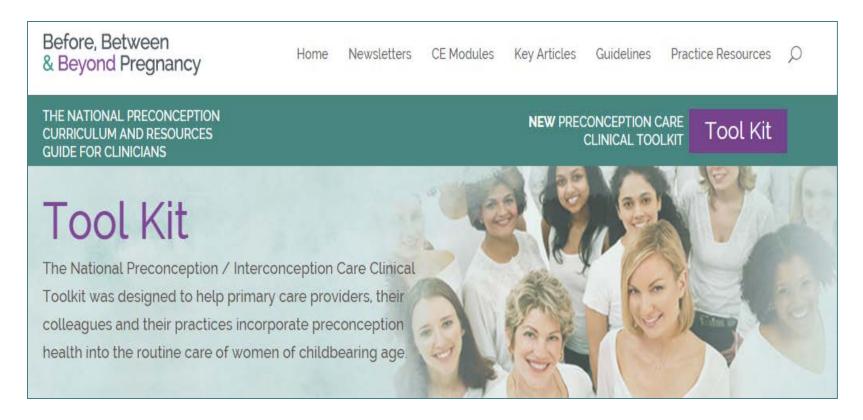




Before, Between and Beyond Pregnancy

Pre/ Interconception Care Information

www.beforeandbeyond.org



Resources for male/ father involvement

Fatherhood.gov

EveryWomanCalifornia.org



The Key Components of Preconception Health

We have prepared special categories of resources that correspond to the key components of preconception health. Click one to begin:

Healthy Body

Healthy Mind

Healthy Environment



For Men

Preconception health is important for men as well. Being healthy is important for your fertility, supporting your partner, and being a good role model.

Browse this part of the site to learn about important factors that influence men's health.

Reproductive Life Plan

Helping clients develop a

Reproductive Life Plan is the

starting point

Preconception Health and Health Care My Reproductive Life Plan

Thinking about your goals for having or not having children and how to achieve those goals is called a reproductive life plan. There are many kinds of reproductive life plans. Your plan will depend on your personal goals and dreams.

First, think about your goals for school, for your job or career, and for other How to Make a Plan important things in your life. Then, think about how having children fits in with

If you do want to have children one day, think about when and under what conditions you want to become pregnant. This can help ensure that you and your partner are healthy and ready when you choose to have a baby. If you do not want those goals. to have children (now or ever), think about how you will prevent pregnancy and what steps you can take to be as healthy as possible.

Try to include as many details as possible in your plan. Some people find it helpful to write their plan down on a piece of paper or in a journal. Be sure to talk with your health care professionals. Doctors and counselors can help you make your plan and achieve your goals.

When making a reproductive life plan, the following questions might be helpful. Questions to Get Started These are probably not all of the questions that you will want to ask yourself, but they will help you to get started.

- If you DO NOT want to have children, you might ask yourself: How do I plan to prevent pregnancy? Am I sure that I or my partner will be
 - able to use the method chosen without any problems? What will I do if I or my partner becomes pregnant by accident?
 - What steps can I take to be as healthy as possible?

Reproductive Life Plan Sample Questions for Providers to ask:

- Do you plan to have any (more) children at any time in your future?
 - ▶ If yes, ask:
 - How many children would you like to have?
 - How long would you like to wait until you or your partner become pregnant?
 - What family planning method do you plan to use until you or your partner are ready to become pregnant?
 - How sure are you that you will be able to use this method without problems?
 - If no, what are you planning to do to prevent becoming pregnant (again)
 - What family planning method will you use to avoid pregnancy?
 - How sure are you that you will be able to use this method without problems?
 - People's plans change. Is it possible you or your partner could ever decide to become pregnant?
 - Is you partner in agreement with you on this?

Adopted from CDC

Project Examples

COIIN

- Began as region V CollN or Collaborative Innovation Improvement Network
 - MI, OH, IN, WI, MN, IL
 - ▶ COIIN participation supports Michigan's IM work by leveraging the collective impact of a regional and national collaborative
 - Project identified two aims related to preconception and interconception care workgroup in June of 2014:
 - ▶ Improve Frequency and Content of Post Partum Visits by 10% by December 2015
 - Improve frequency and content of Adolescent Well Checks by 10% by December 2015

▶ Post-Partum Care (PPC) Learning Series

- Centers for Medicaid & CHIP Services Maternal & Infant Health Initiative
- Participation in the Postpartum Care QI Project supports Michigan's IM work and Region V COIIN aim to improve Frequency and Content of Post Partum visits, with a focus on the Medicaid Health Plans and working towards closing racial/ethnic gaps in care.

Project Examples

Kent County Interconception Care Program

- ▶ The IC Program identifies women with an adverse pregnancy outcome and offers comprehensive interconception care to reduce the risk of another poor pregnancy outcome.
 - Provides services to help high-risk women achieve optimal health before becoming pregnant again
 - Services: Conducts Interconception Care Risk Screening; develops care plans; and provides case management, education, counseling and referrals related to risks
 - Provides client services for up to18 months and tracks outcome data
 - Focus of IC services are on the health of the mother, as opposed to other home visits that focus mostly on the baby
- The goal of the IC Program is to decrease African American infant mortality using an interconception care model designed to achieve:
 - Fewer preterm births
 - Fewer low birth-weight babies
 - More planned pregnancies
 - More pregnancies with 18 month birth spacing

Kent County Interconception Care Program

- Program eligibility: Women are enrolled in the program and considered high-risk if they had a pregnancy outcome that resulted in one of more of the following:
 - Preterm birth (<37 weeks gestation)</p>
 - Low birth-weight baby (<5.5 pounds)
 - Stillbirth or miscarriage after four months of pregnancy
 - Infant death
 - Women can be in the program for up to 18 months

History of the IC program development

- Received MDCH funding that led to implementing an Interconception Care Program
- ▶ Focus is on addressing infant mortality racial disparities between African American and White infants in Kent County
- ▶ KCHD engaged community stakeholders and infant health coalition to continue the program after MDCH funding ended.
- Developed program & training based on evidence-based IC programs and interventions
 - Interconception Health Promotion Initiative in Denver, CO and the Interpregnancy Care Program at Grady Memorial Hospital in Atlanta, GA)
 - Life Course Model and the 12 Point Plan to reduce disparities in maternal, child & adolescent health
- Given initial successes, MDCH is supporting an evaluation of this innovative program

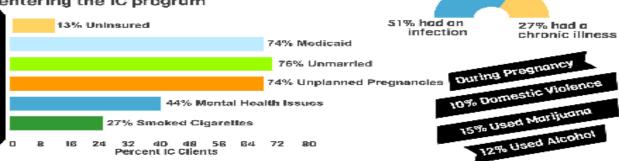
INTERCONCEPTION CARE

Program

Who's in the Interconception Care (IC) Program?







Pregnancies resulted in:

25 IC clients experience infort deaths or stillbirths

8 IC clients had miscorriages after the fourth month of pregnancy 89.5% of Infants born to IC clients were pre-term and/or low birth weight

IC Program Interventions -



In-Home Health Visits

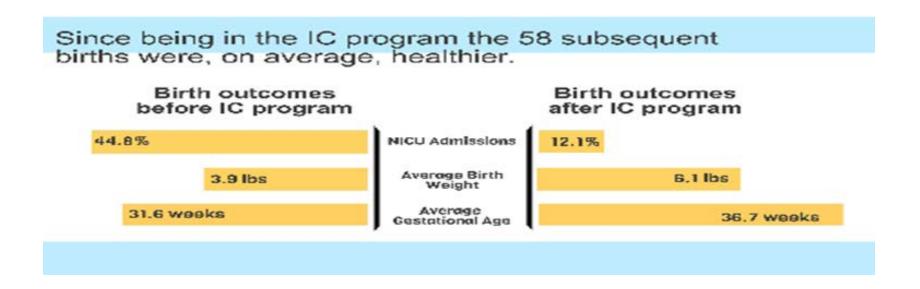




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Kent County Interconception Care Program Outcomes

https://www.accesskent.com/Health/HealthPromo/infant health.htm



Title X Family Planning Program

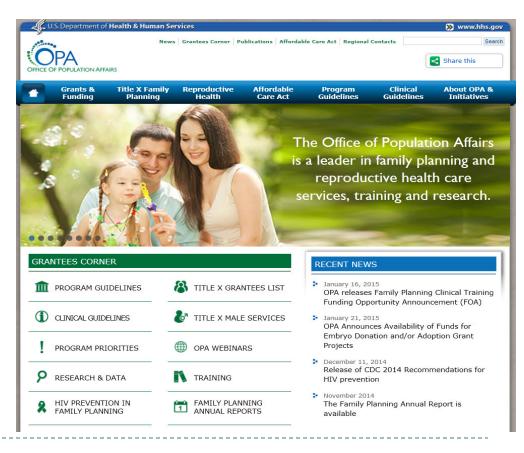
http://www.hhs.gov/opa/

The Title X Family Planning program had provided access to a broad range of family planning and related preventive services to low-income, uninsured individuals for more

than 40 years

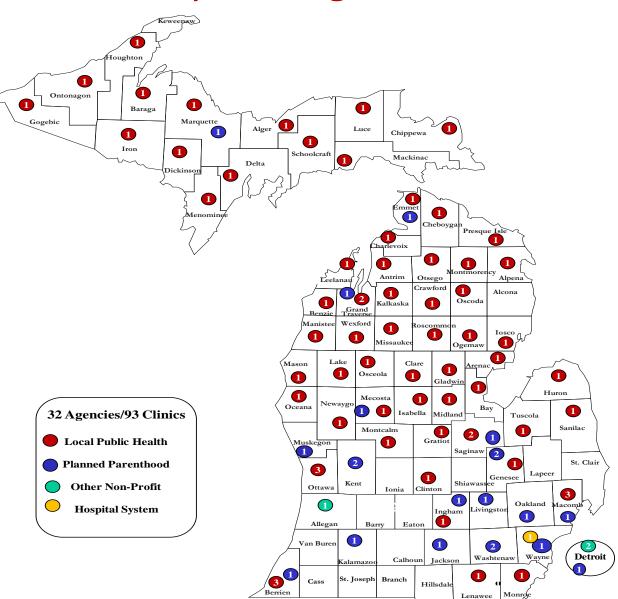
Title X tenants:

- Low-cost services on a sliding fee scale
- Services are provided regardless of ability to pay
- Provide culturally competent services
- Assure dignity and respect to clients
- Assure confidentiality to all clients
- Adolescent services are confidential
- Focus on education and counseling
- Assure client choice



Map of Title X Family Planning Clinics 2015

Michigan's Title X Program
has Provided Family Planning
services throughout the
state for over 40 years
located in health departments
Planned Parenthood clinics,
and other non-profit agencies



Quality Family Planning (QFP) Recommendations

The QFP Recommendations Integrate and Fill Gaps in Other Guidelines for the FP Setting.

http://www.cdc.gov/mmwr/preview/mmwrhtml/rr6304a1.htm?s cid=rr6304a1 w#Fig1



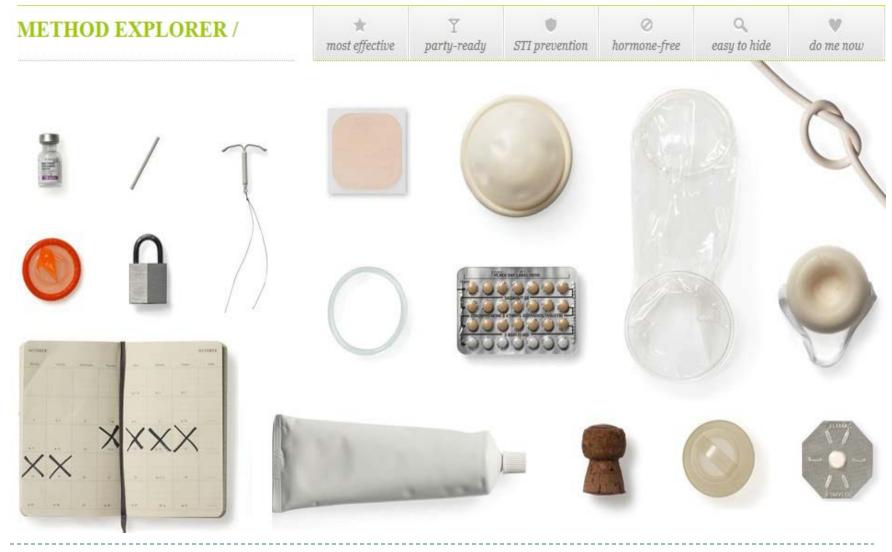
Family planning services

- Contraceptive services
- Pregnancy testing and counseling
- · Achieving pregnancy
- · Basic infertility services
- · Preconception health
- Sexually transmitted disease services

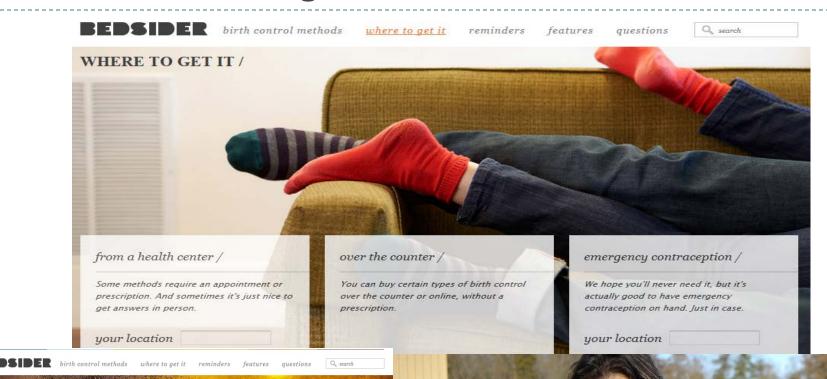
Related preventive health services (e.g., screening for breast and cervical cancer)

Other preventive health services (e.g., screening for lipid disorders)

Contraceptive Methods [www.bedsider.org]



www.bedsider.org

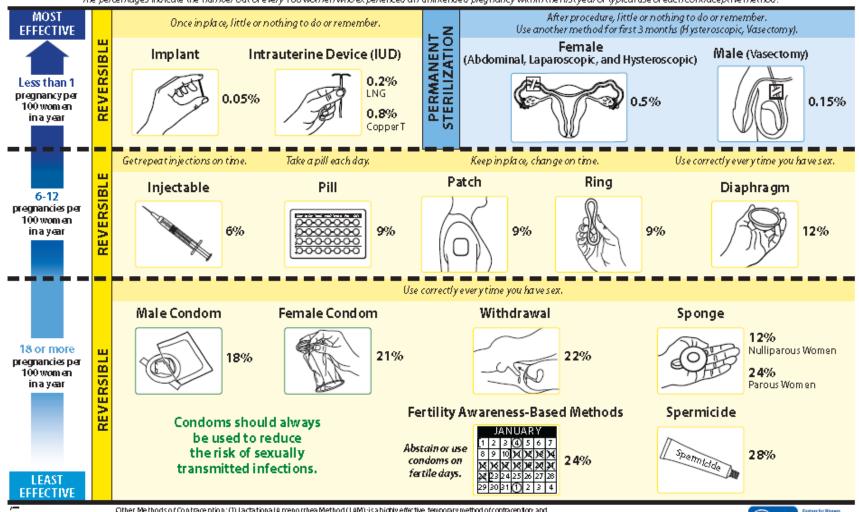






EFFECTIVENESS OF FAMILY PLANNING METHODS*

*The percentages indicate the number out of every 100 women who experienced an unintended pregnancy within the first year of typical use of each contraceptive method.



Other Methods of Contrace ption: (1) Lactational Amenorrhea Method (LAM): is a highly effective, temporary method of contraception; and (2) Emergency Contraception; emergency contraceptive pills or a copper ILD after unprofected intercourse substantially reduces risk or pregnancy.

Adapted from Warld Health Organization (WHO)Department of Peproductive Health and Research, Johnshopkins Bloomberg School of Public Health Carter for Communication Programs (CEP), Knowledge for health project.

Family planning a global handbook for provider (2011 update) Baltimore, MD; Garrier, Switzerland CEP and WHO), 2011; and Trussell J. Contraceptive failure in the United States. Contraceptive 2011; 83:397-4-04.



Additional Resources

Effective Strategies for Promoting Preconception Health—From Research to Practice

http://ajhpcontents.org/doi/full/10.4278/ajhp/27.3.c1

- www.michigan.gov/infantmortality
- www.michigan.gov/familyplanning
- www.michigan.gov/mihp
- www.michigan.gov/teenpregnancy
- www.michigan.gov/dchprime
- www.michigan.gov/fasd
- www.migrc.gov

CDC recommendations to improve preconception health

http://www.cdc.gov/preconception/hcp/recommendations.html



Life Course Model; 12 Point Plan to reduce disparities in maternal, child & adolescent health http://cchealth.org/lifecourse/pdf/12 point plan fact sheet.pdf

Kent County Interconception Care Program

https://www.accesskent.com/Health/HealthPromo/infant health.htm

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