

The Impact of Premature Birth on Health Care Costs and The Healthy Babies Healthy Business Program

Presentation to
Ohio Collaborative to Prevent Infant Mortality
Health Care Coordination Subcommittee

By

Lisa Amlung Holloway
March of Dimes Ohio Chapter
State Director of Program Services

What We are All About

Mission:

- **To improve the health of babies by preventing birth defects, premature birth and infant mortality**
- 4 Strategies to Reach our Mission
 - 1: Research
 - 2: Advocacy
 - 3: Community Services
 - 4: Education



March of Dimes Prematurity Campaign

A multiyear, multimillion-dollar campaign to address awareness, education and research to help families have healthier babies



Why Premature Birth?

It's a common, serious, costly medical burden.

Prematurity had risen by nearly 30% during the twenty years preceding the campaign.

It's the #1 killer of newborns.

The leading cause of death in first month of life

A leading cause of death in the first year of life

Premature infants are more than 15 times as likely as other infants to die in the first year of life.

It's a major risk factor for child illness and disability.

The March of Dimes is well suited to tackle the challenge.

A Quick Look at Ohio

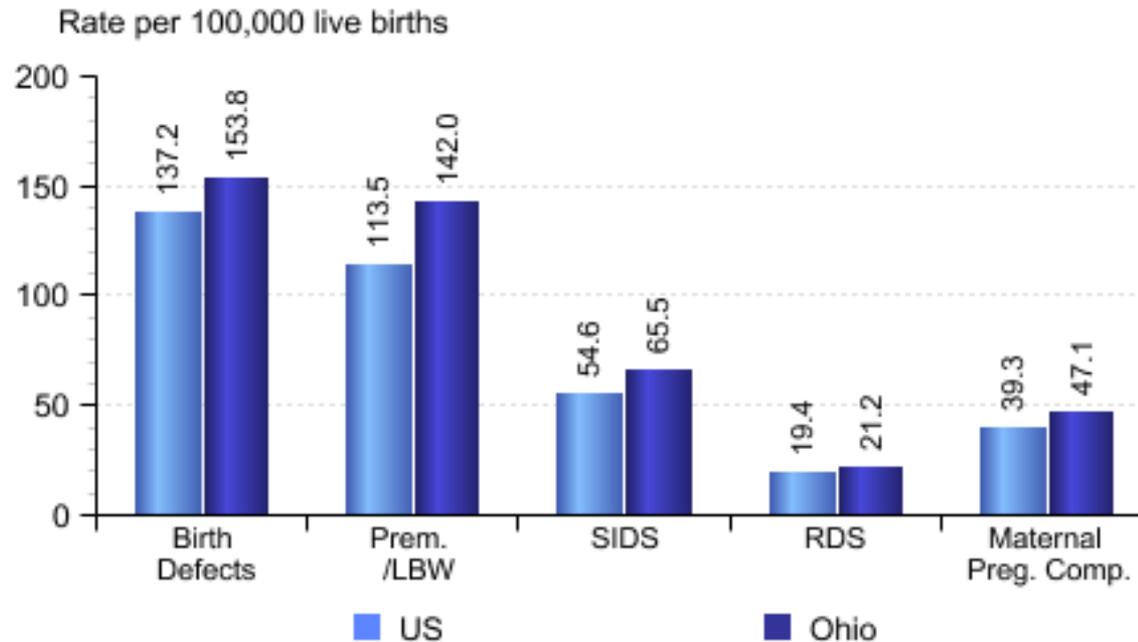
150,879
babies are born

19,842
babies are born preterm (13.2%)

13,188
babies are born low birthweight (8.8%)

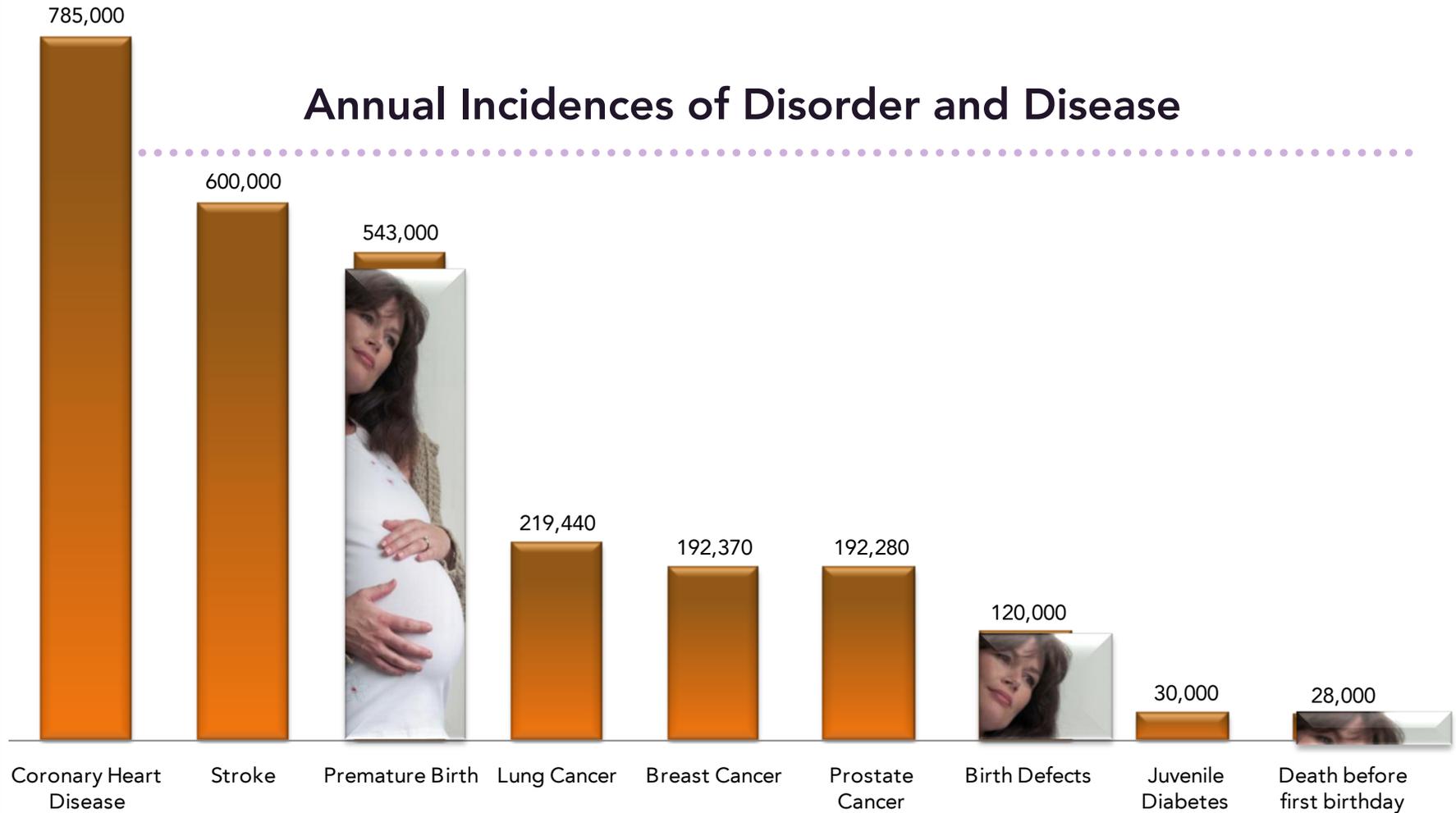
1,168
babies die before reaching their first birthday (7.8)

Causes of infant mortality: U.S. and Ohio, 2006



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Annual Incidences of Disorder and Disease



Coronary and Stroke: Heart Disease and Stroke Statistics, 2009 Update - American Heart Association

Birth Defect, Premature Birth and Infant Mortality: Peristats - March of Dimes

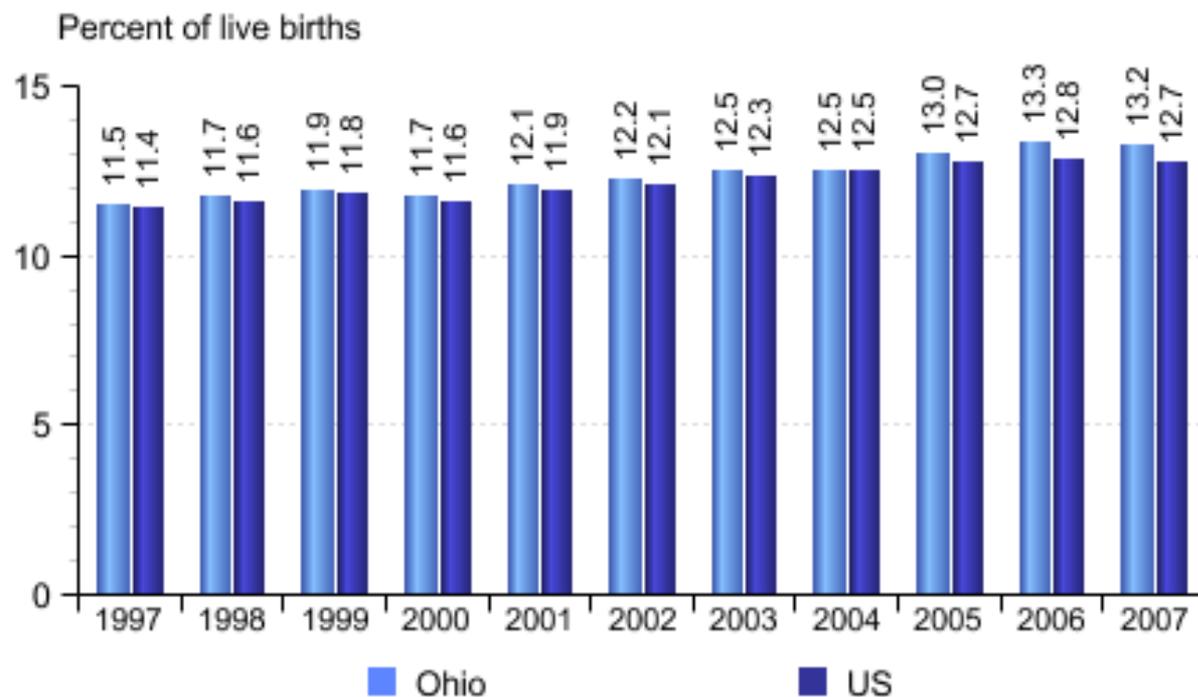
Cancer: Surveillance and Health Policy Research, Cancer Facts and Figures 2009 - American Cancer Society

Juvenile Diabetes: Juvenile Diabetes Research Foundation International



Preterm birth

Ohio and US, 1997-2007



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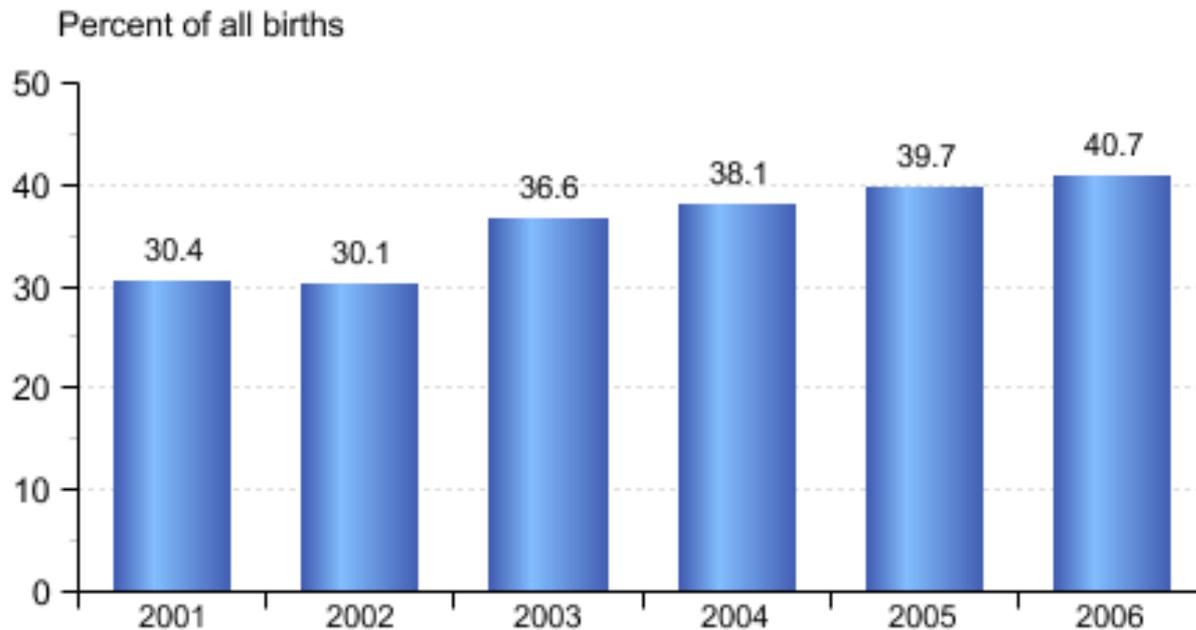
Preterm is less than 37 completed weeks gestation.

Source: National Center for Health Statistics, final natality data. Retrieved January 7, 2011, from www.marchofdimes.com/peristats.



Medicaid coverage of births

Ohio, 2001-2006



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Footnotes available in notes section.

Source: Data collected by the National Governors Association, March 2009 - June 2009. Centers for Medicare and Medicaid Services, MSIS Statistical Report. Data prepared by March of Dimes. Retrieved January 7, 2011, from www.marchofdimes.com/peristats.



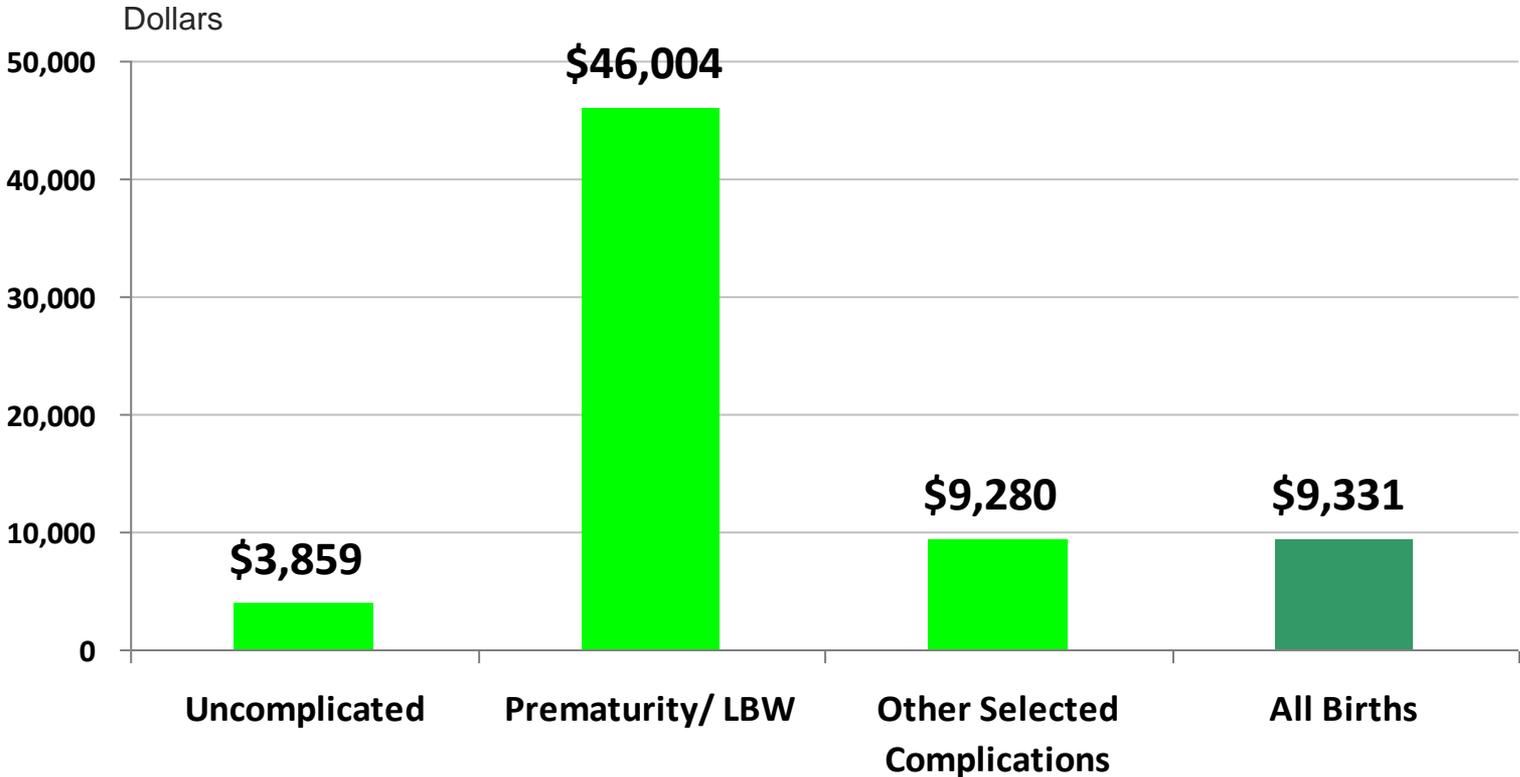
Cost to Business

The IOM estimates the societal economic cost of prematurity to be \$26 billion annually.

Direct health care costs to employers for premature babies during the first year of life average \$46,004, compared to \$3,859 for babies born healthy and full term.

On average, premature babies covered by employer plans spend 14.2 days in the hospital during the 12 months following birth, compared to 2.3 days for full-term babies.

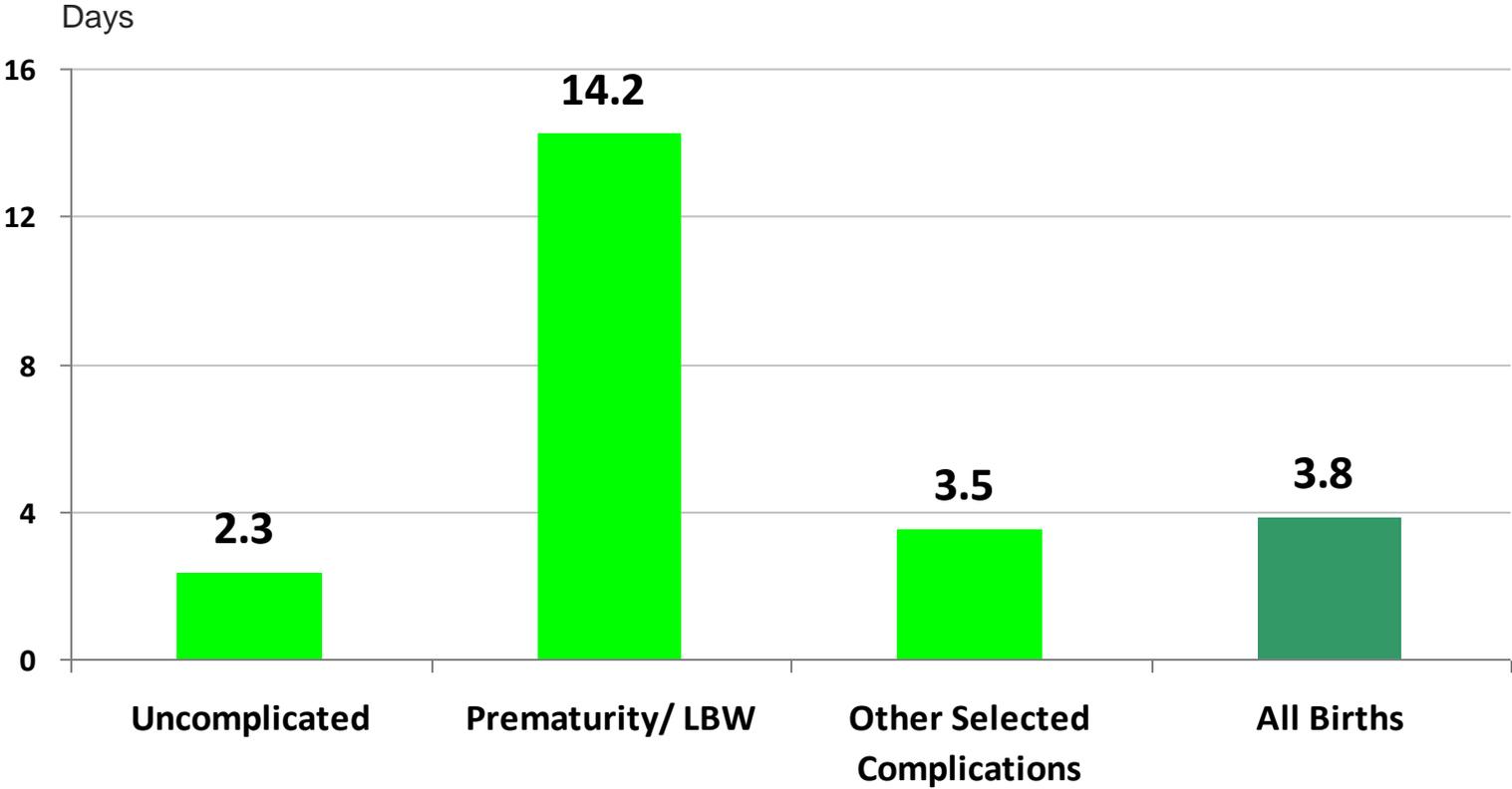
Average Payment by Health Plan for Newborn Care



Source: Thomson Healthcare Babies were chosen from MarketScan Commercial Claims and Encounter database for 2005 and were only included if they had at least twelve months of continuous enrollment after birth.



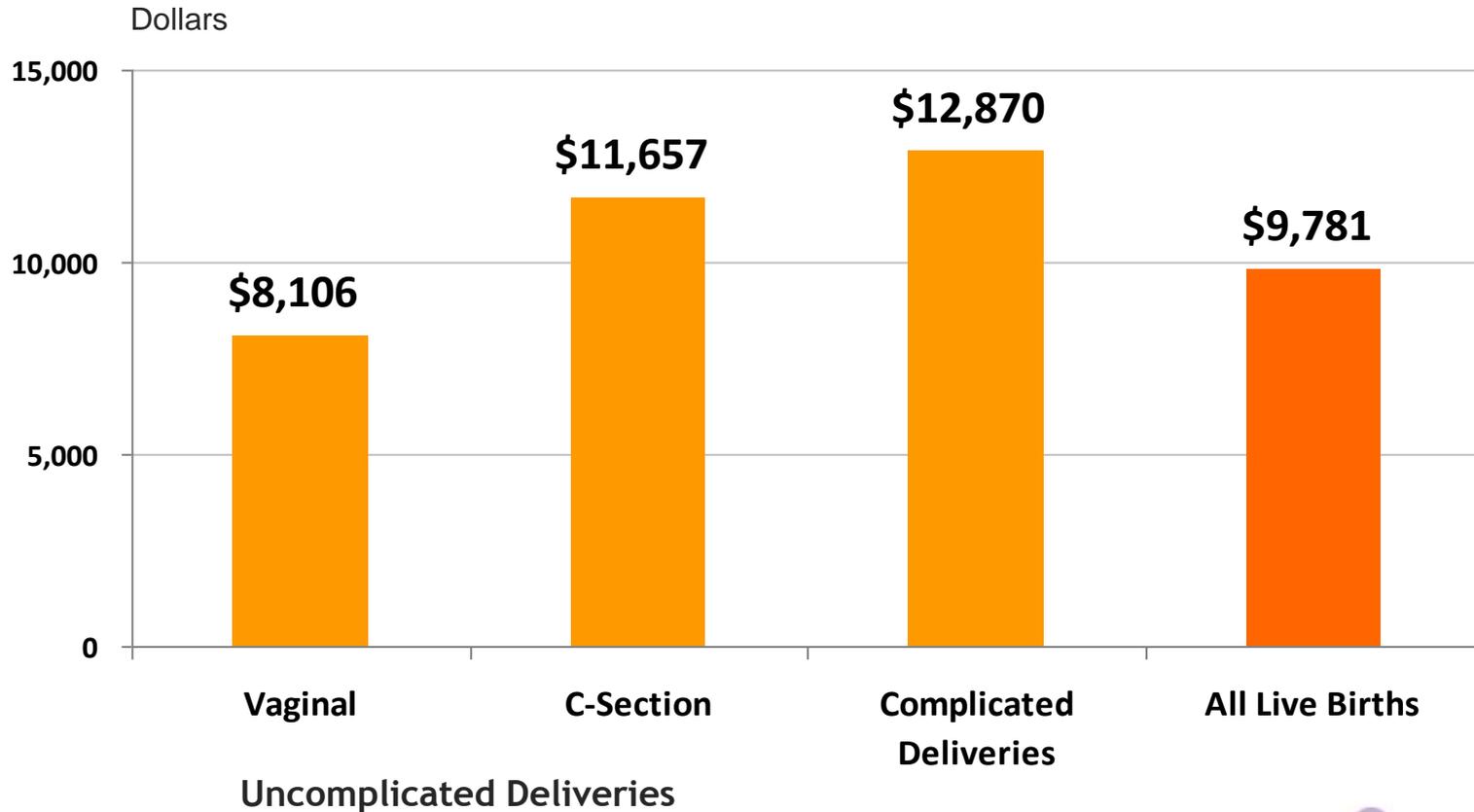
Average Inpatient Hospital Stays for Newborn Care



Source: Thomson Healthcare. Babies were chosen from MarketScan Commercial Claims and Encounter database for 2005 and were only included if they had at least twelve months of continuous enrollment after birth.

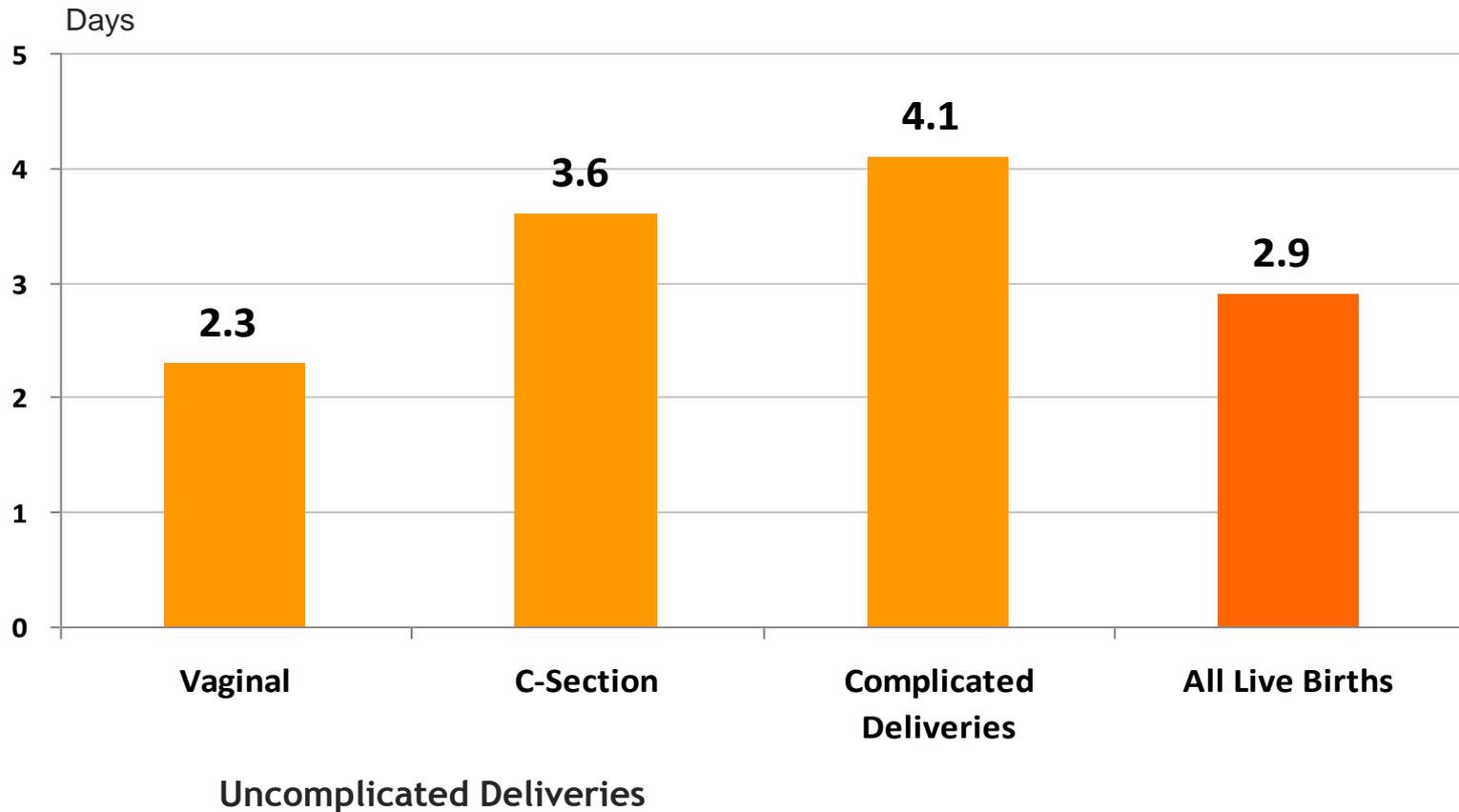


Average Payment by Health Plan for Maternal Care



Source : Thomson Healthcare Mothers were chosen from the MarketScan Commercial Claims and Encounter data base for 2005 and were only included if they had at least nine months of continuous enrollment before birth and three months after birth.

Average Inpatient Hospital Stay for Maternal Care



Source : Thomson Healthcare Mothers were chosen from the MarketScan Commercial Claims and Encounter data base for 2005 and were only included if they had at least nine months of continuous enrollment before birth and three months after birth.

Total Direct Costs by Maternal- Newborn Complication Status

Maternal / Newborn Combination	Provider Charges	Total Payments	Net Payments	% Payments by Plan
Uncomplicated Delivery + Uncomplicated Newborn	\$27,949	\$15,506	\$13,886	89.5%
Complicated Delivery + Complicated Newborn	\$77,805	\$46,009	\$44,367	96.4 %

Source : Thomson Healthcare

Total Direct Costs + Wage and Productivity Costs

	Maternal/Newborn Pair	
Maternal =>	Uncomplicated	Complicated
Newborn=>	Uncomplicated	Complicated
Direct Costs		
Health Plan Payments	\$13,886	\$44,367
Indirect Costs		
Short Term Disability Days	55.8	60.0
Wages	\$8,464	\$9,103
Productivity	\$15,477	\$16,646
Total Costs		
	\$29,363	\$61,013

Risk Factors for Premature Birth.....

Current multifetal pregnancy

History of preterm birth

Some uterine and/or cervical abnormalities

Chronic health problems (high blood pressure, diabetes, obesity)

Medical risks in current pregnancy

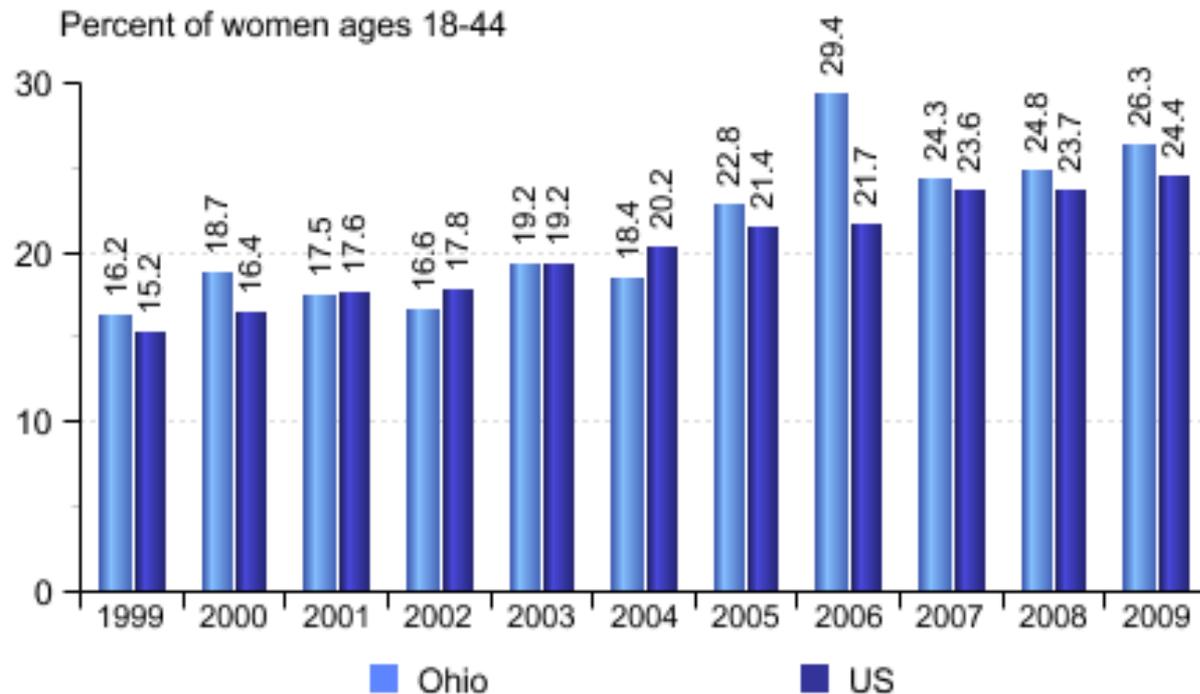
Behavioral and environmental risks (smoking, drinking alcohol,
using drugs)

Demographic risks (African-American, over 35)

Other risks - stress, abuse, etc.

Obesity among women of childbearing age

Ohio and US, 1999-2009



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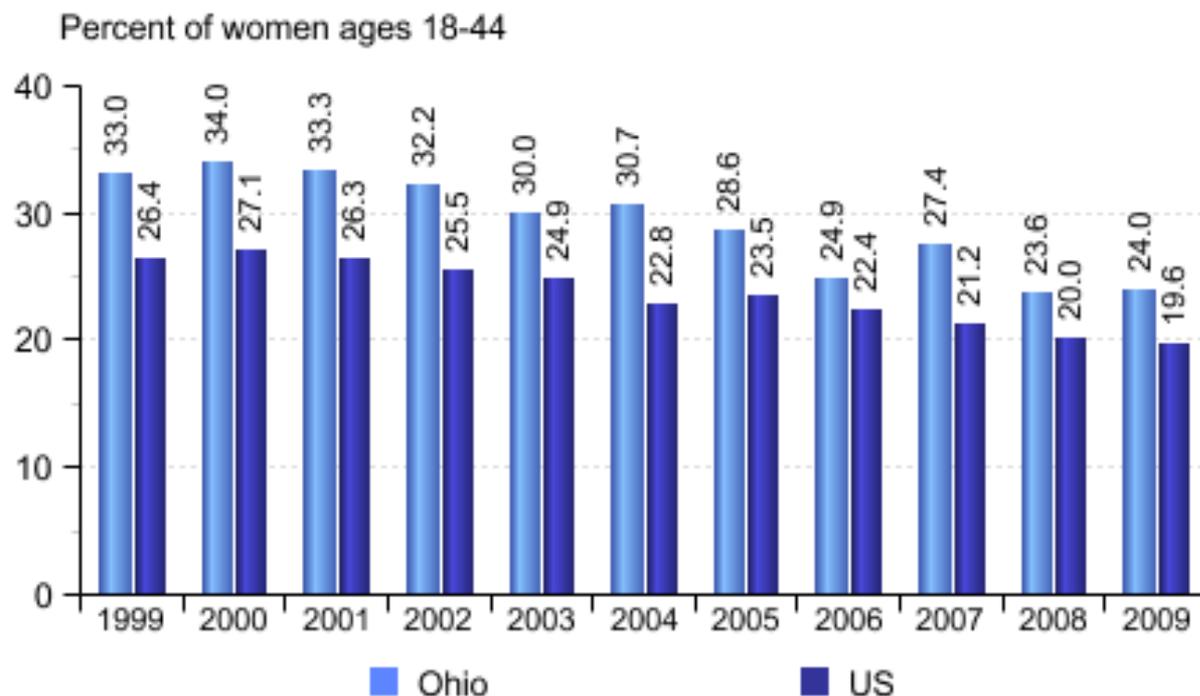


Footnotes available in notes section.

Source: Behavioral Risk Factor Surveillance System, Centers for Disease Control and Prevention. Retrieved January 7, 2011, from www.marchofdimes.com/peristats.

Smoking among women of childbearing age

Ohio and US, 1999-2009



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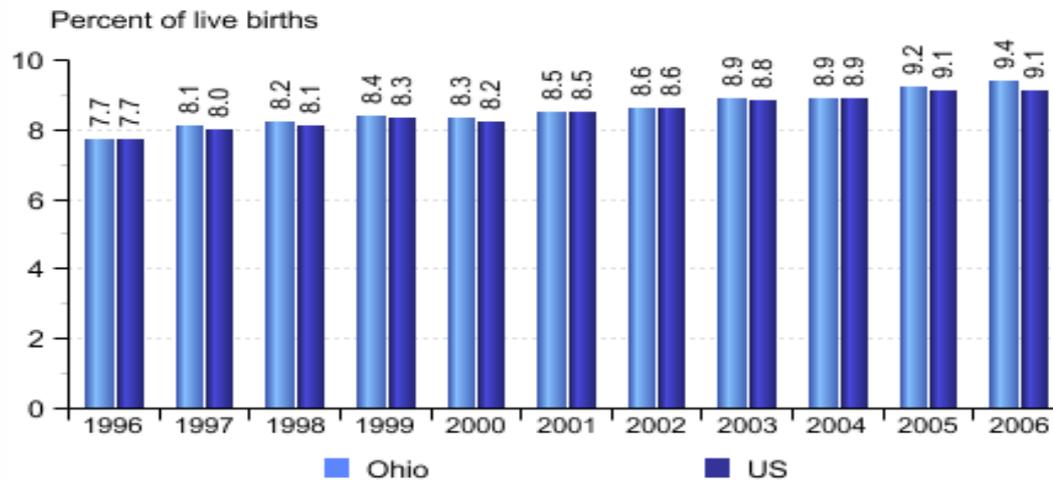
Source: Smoking: Behavioral Risk Factor Surveillance System. Behavioral Surveillance Branch, Centers for Disease Control and Prevention. Retrieved January 7, 2011, from www.marchofdimes.com/peristats.



Late preterm births

Late preterm births

Ohio and US, 1996-2006



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Late preterm is between 34 and 36 weeks gestation.

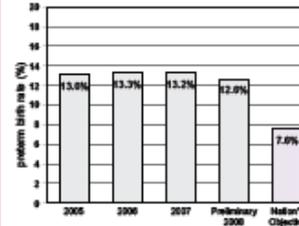
Source: National Center for Health Statistics, final natality data. Retrieved September 12, 2010, from www.marchofdimes.com/peristats.

March of Dimes 2010 Premature Birth Report Card

The March of Dimes graded states by comparing each state's rate of premature birth to the nation's 2010 objective of 7.6 percent. Preterm birth is the leading cause of newborn death in the United States. We don't yet understand all the factors that contribute to premature birth. The nation must continue to make progress on research to identify causes and prevention strategies, and on interventions and quality improvement initiatives to improve outcomes.

Grade for Ohio
Preterm Birth Rate: 12.6%

D



Status of Selected Contributing Factors

Factor	Previous Rate	Latest Rate	Status	Recommendation
Uninsured Women	14.8%	15.9%	✗	Health care before and during pregnancy can help identify and manage conditions that contribute to premature birth. We urge federal and state policy makers to accelerate implementation of health reform by expanding coverage for women of childbearing age, and we urge employers to create workplaces that support maternal and infant health.
Women Smoking	23.6%	24.0%	✗	Smoking cessation programs can reduce the risk of premature birth. We urge federal and state policy makers to immediately implement comprehensive Medicaid coverage of smoking cessation coverage of provisions of health reform.
Late Preterm Birth	9.2%	8.7%	★	The rise in late preterm births (34-36 weeks) has been linked to rising rates of early induction of labor and c-sections. We call on hospitals and health care professionals to establish quality improvement programs that ensure consistency with professional guidelines regarding c-sections and inductions prior to 39 weeks gestation.

★ = moving in the right direction n/c = no change ✗ = moving in the wrong direction

State Actions:

For information on how we are working to reduce premature birth, contact the March of Dimes Ohio Chapter at (513) 769-3588.



2006	2008	%Change	2006	2008	%Change
13.3	12.6	-5.3	9.4	8.7	-7.4

Ohio Perinatal Quality Collaborative

“About 8,256 babies born in Ohio between September 2008 and March 2010, who probably would have been delivered at 36 to 38 weeks in the absence of the initiative, instead were delivered after 38 weeks (at term) according to an internal data analysis by the collaborative”.

“In that same 19-month period, an estimated 250 neonatal intensive care unit admissions were avoided, a cost savings of an estimated \$10 million to \$12 million a year”.

Dr. Edward Donovan

Professor of clinical pediatrics in the Child Policy
Research Center at Cincinnati Children's Hospital Medical
Center and a co-founder of OPQC

The Cleveland Plain Dealer, July 2010





Healthy Babies Healthy Business[®]

A multidimensional worksite wellness
program from the March of Dimes



Solutions are within our grasp



A family-friendly workplace is beneficial to employees and employers. These standards were prepared by the March of Dimes to promote the well-being of your

employees before, during and after their pregnancy. Helping your families have healthy babies makes good business sense.

Fourteen Standards for Workplaces that Support Maternal & Infant Health

1. Provide information to employees on preconception, prenatal, postnatal and infant care through classes, brochures, a library, e-mail or (a) directed Web site(s)
2. Provide a positive working environment that is smoke-, drug- and toxin-free for all employees, including those who are pregnant
3. Encourage healthy activities, such as walking and healthy food choices; include offer of discounts to gyms and fitness resources for all employees
4. Provide information about healthy pregnancy and childbirth, encouraging early and continuing prenatal care and information about preterm birth prevention
5. Provide flexibility in scheduling to allow time off for regular prenatal appointments when possible
6. Provide reasonable physical accommodation for pregnant employees, such as a place where they can rest with their feet up, if needed
7. Provide flexibility in scheduling to allow time off for pediatric appointments during baby's first year when possible
8. Provide a private area where lactating women can pump and store breastmilk
9. Provide health insurance coverage that includes comprehensive preconception, prenatal, childbirth and postnatal care, including immunizations and maternal depression screening, or facilitate through a liaison the application for insurance through state or private agencies
10. Offer an employee assistance program
11. Provide access to flextime when possible
12. Provide access to work from home/telecommuting when possible
13. Provide access to job sharing when possible
14. Provide job protection beyond the federal Family and Medical Leave Act (FMLA) provisions for the birth and care of an employee's child, or for the adoption or foster care placement of a child

One way to adopt the first standard is to register to use our Healthy Babies Healthy Business[®] worksite wellness education package — it's complimentary from the March of Dimes (marchofdimes.com/hbhb)

march of dimes
prematurity awareness month

Employer Programs that Address Risk Factors

Smoking cessation programs

Employee assistance programs (EAPs) that address substance abuse, depression, etc.

Health risk assessments

Fitness club discounts

Childbirth education classes

Flexible spending accounts

Pregnancy and newborn benefits

Background

Labor Force (Women 16-44) - 41.7 million

- Women (16-44) as % of Labor Force - 46%

U.S. Births - 4.1 million

Birth Rate (per 1000) among women 16-44 in labor force - 48

Births among women 16-44 in labor force - 2.0 million

What is HBHB?

A FREE multi-dimensional workplace education program with six resources to help companies improve employee health and the health of their bottom line:

1. My 9 months—high-quality health and wellness information for the company Intranet
2. March of Dimes Web sites in English and Spanish
3. E-mail access to March of Dimes health information specialists
4. Print materials on pregnancy and newborn health in English and Spanish
5. Shareyourstory.org—Online community for families of premature babies
6. Bereavement materials for employees who have lost a baby or child

Who is Using HBHB?

253 organizations using HBHB (Sept. 2010)

WalMart	Nebraska Dept. of Health
Sprint	Farmer's Insurance
Cigna	Cornell University
Hallmark	CVS/Caremark

18 organizations in Ohio (current)

GE Aviation Dayton Chamber of Commerce
Duke Energy Fayette Co. Memorial Hospital
Sherwin Williams
Midmark

[Home Page](#)

[Cost of Saving Babies](#)

[Online Demonstration](#)

[Product Specs](#)

[HR Center](#)

[Get Started Now!](#)

[Log In](#)

[Contact Us](#)

HEALTHY BABIES, HEALTHY BUSINESS[®]

Reduce Your Healthcare Costs
While You Help Save Babies



IT BEGINS WITH AN EDUCATED EMPLOYEE

Premature birth is a serious, common and costly problem. Since 1981, the rate of premature birth has increased approximately 30%, accounting for over 500,000 babies a year. It's the leading cause of newborn death and may result in lifelong disabilities. Nearly 50% of the total charges for infant hospital stays in 2002 were for babies who were born too soon or too small.

March of Dimes has created a free tool to help employees make better health care decisions. **Healthy Babies, Healthy Business** is a multi-dimensional health education program for the workplace. It offers six resources to help companies improve employee health and the health of the company's bottom line.

The 6 Components of the Healthy Babies, Healthy Business Program



1 "My 9 Months"SM

High quality health and wellness information for the company web site or intranet.

[View the online demo.](#)



2 March of Dimes Web sites

in English and Spanish:
www.marchofdimes.com
www.nacersano.org



3 E-mail access

to March of Dimes Health information specialists.



4 Printed health education materials ...

on childbearing topics in English and Spanish.

[View the online catalog.](#)



5 An online community ...

for NICU families. Participate in online discussions, start a blog, make friends.

www.shareyourstory.org



6 Guidance, comfort & information ...

for employees who have lost a baby or child.

[Order bereavement materials.](#)

“My 9 Months”

My9 monthssm
Brought to you by the March of Dimes.



ABOUT THE MARCH OF DIMES

EN ESPAÑOL >

There's a lot you can do both before and during pregnancy to help you have a healthy baby. Developed by March of Dimes experts, this web site gives you the information you need – when you need it.



BEFORE YOU'RE PREGNANT

9 Questions Before Pregnancy

Are You Ready Emotionally for a Baby?

Are You Ready Physically for Pregnancy?

Are You Financially Ready for a Baby?

Ovulation Calculator

Folic Acid

Pregnancy After 35

Choosing a Prenatal Care Provider



DURING YOUR PREGNANCY

Due Date Calculator

Healthy Eating During Pregnancy

Exercise During Pregnancy

Weight Gain During Pregnancy

Prenatal Care

Smoking and Pregnancy

Alcohol

Preterm Labor

Cesarean Birth for Medical Reasons

How Your Baby Grows

Welcome To the World!

Just for Dads: Helping Out During
Pregnancy



MOM AND BABY

Getting Ready for Baby

Newborn Care in the Delivery Room

Newborn Screening Tests

Infant Car Seats

Breastfeeding

Developmental Milestones for Babies

Respiratory Syncytial Virus (RSV)

Immunizations: Your Baby's Shots

Flu and Your Baby

Postpartum Depression

Baby's First Year

My 9 Months

Features

High-quality content provided directly by the March of Dimes
Content is centrally managed by the March of Dimes
Marketing kit and implementation guide for benefits administrators
Seamless integration into your corporate Intranet

Benefits

Preconception and prenatal educational messages delivered to employees whenever and however they need information
Healthier employees and babies
Reduced health care costs
Improved employee productivity and morale
Fast, easy implementation

WHAT ARE YOU WONDERING ABOUT?

Whether you're pregnant, thinking about becoming pregnant, or parenting a newborn - we know you have questions.

[TAP INTO OUR WORLD OF ANSWERS >](#)





MARCH FOR BABIES™ PUT ON YOUR WALKING SHOES
Walk America is now March for Babies, get your shoes on!



MARCH FOR BABIES™ FORM A FAMILY TEAM
Don't walk alone, make it a family affair.

Pregnancy & Newborn

Answers to your questions—before, during and after pregnancy.

- Pre-Pregnancy
- Pregnancy
- Birth Defects
- Newborn Screening
- Complications
- Premature Birth



Prematurity Campaign

Find out what we are doing to give all babies their 9 months.



Every Baby Has a Story

Tell Us Yours! Celebrate all babies, create an interactive scrapbook.

From Our Community ...

FROM OUR NICU COMMUNITY Featured Blog
Though born 10 weeks too soon, Lauren Ruth Batson loves ...



Shop to Help

Browse March of Dimes clothing, wristbands, and much more. Shop

- #### NEWS DESK 1/21/2008
- March of Dimes Delivers A New Look - Online Press Kit
 - New Folic Acid Seal Helps Women Choose Enriched Grain Foods
 - Senate Approves Newborn Screening Saves Lives Act
 - Pregnancy-Friendly Workplace is Key to Retaining Skilled Workers
 - March of Dimes Announces User Generated Video Contest Winner
- [RSS](#) [MORE >](#)

Marchofdimes.com

Nacersano.org

bienvenido a ... **nacersano.org**
Conozca más <




NUEVO BLOG
Particpe y sea parte de nuestra comunidad

[Cuidado con la rubéola](#)
Otra infección que se puede prevenir durante el embarazo es la

[¿Qué es la toxoplasmosis?](#)
Es posible que hayan escuchado acerca de la toxoplasmosis. También es..., 2008-01-14, 5:38:02

[¡Nomine Nuestro Blog!](#)
Entre hoy y el viernes 11 de enero del 2008, se llevará a cabo las..., 2008-01-08, 8:08:54

[Las relaciones íntimas durante el embarazo](#)
De vez en cuando recibo preguntas acerca de la

PARA UN EMBARAZO Y UN BEBÉ SALUDABLE

PRECONCEPCIÓN

Antes del Embarazo
2 preguntas que hacer antes de quedar embarazada para un futuro embarazo sano y feliz.

Acido Fólico
Recuerde tomar su [multivitamina](#) con ácido fólico todos los días.

- [Una vitamina esencial](#)
- [Alimentos y recetas](#)

SU EMBARAZO Y SU BEBÉ

Centro de Enseñanza del Embarazo
Échele un vistazo a todo lo relacionado con el embarazo.

- [Durante](#)
- [Complicaciones](#)
- [El Parto](#)
- [Su Recién Nacido](#)
- [Para Papá](#)

- #### QUIÉNES SOMOS
- [Nuestra misión](#)
 - [Noticias](#)
 - [Manos a la Obra](#)



Cada Bebé Tiene Una Historia
Díganos la suya... Cuéntenos la historia de un bebé especial en su vida.

- #### MÁS INFORMACIÓN:
- [Calculadora de ovulación](#)
 - [Semana por semana](#)
 - [Si ha sufrido una pérdida](#)
 - [Herramientas](#)

E-mail access to March of Dimes health information specialists

askus@marchofdimes.com

preguntas@nacersano.org

March of Dimes Print Materials



march of dimes

Online Community for Families of Premature Babies

The screenshot shows a web browser window displaying the 'Share Your Story' website. The browser's address bar and taskbar are visible at the top. The website has a green header with navigation links: WELCOME, ABOUT, SHARE WITH CARE, and HELP. The main content area features the 'march of dimes' logo on the left and a large image of a baby in a woman's arms on the right. The text reads: 'Share your story. An online community for NICU families. Participate in online discussions, start a blog, or just make friends.' Below this is a blue navigation bar with icons and labels: HOME, COMMUNITY CENTER, SHARE YOUR STORY, PARENT TO PARENT, and GET INVOLVED. On the left side, there is a search box labeled 'FIND A DISCUSSION:' with a 'SEARCH' button and a link to 'Extended Search'. Below the search box is a pink sidebar with a 'WELCOME, GUEST' message dated 'JANUARY 21, 2008', a 'MEMBER LOGIN:' section with a 'REGISTER NOW!' button and a 'LOGIN' button, and a 'RECENTLY UPDATED BLOGS' section listing 'SHILOH THE CHRISTMAS ANGEL', 'ROBBY'S JOURNEY', and 'YANKEE DOODLE DAISY'. The main content area features a quote from Carissa (Braden's Mommy), IA, and a 'What's Hot on Share:' section with a snowman illustration and a link to 'Shining Star!'. At the bottom, there are two purple boxes: 'Community Center' with links to 'Introduce Yourself', 'Community News', 'Need help? Start Here', 'Happy Birthday Wishes', and 'View all Topics'; and 'Share Your Story' with a link to 'Post Your Short Story'.

WELCOME ABOUT SHARE WITH CARE HELP

march of dimes

Share your story.

An online community for NICU families.
Participate in online discussions, start a blog, or just make friends.

HOME COMMUNITY CENTER SHARE YOUR STORY PARENT TO PARENT GET INVOLVED

FIND A DISCUSSION:

Extended Search SEARCH

WELCOME, GUEST
JANUARY 21, 2008

MEMBER LOGIN:
(2289 Total Members)

USER I.D.

PASSWORD

REGISTER NOW! LOGIN

[Lost Password?](#)

RECENTLY UPDATED BLOGS

SHILOH THE CHRISTMAS ANGEL
Shiloh angel

ROBBY'S JOURNEY
sysop

YANKEE DOODLE DAISY
Firecracker Mommy

“ Three years ago when I first logged on, I never imagined I would find such a comforting, welcoming community. But Share Your Story has been my shoulder to cry on, my friend to lean on and the biggest group of cheerleaders a mom could ask for. Share Your Story has been such a blessing in my life.
— Carissa (Braden's Mommy), IA ”

What's Hot on Share:

Want to see the mission in action?
Come meet our [Shining Star!](#)

¡Nueva página! Lo invitamos a que se una a esta comunidad y comparta sus experiencias y sabiduría con otros padres y familias [en español](#).

Community Center

- Introduce Yourself
- Community News
- Need help? Start Here
- Happy Birthday Wishes
- View all Topics

Share Your Story

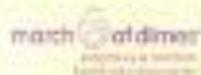
- Post Your Short Story

Bereavement Materials



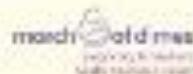
From Hurt to Healing

Dealing with the
Death of Your Baby



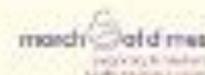
What Can You Do?

Helping Loved Ones Deal with the
Death of Their Baby



When You Want to Try Again

Thinking About Pregnancy



[Home Page](#)

[Cost of Saving Babies](#)

[Online Demonstration](#)

[Product Specs](#)

[HR Center](#)

[Get Started Now!](#)

[Log In](#)

[Contact Us](#)

HEALTHY BABIES, HEALTHY BUSINESS®



GET STARTED NOW!

Thank you for your interest in our **Healthy Babies, Healthy Business™** program. Please fill out the registration form below to get started.

TIP: To create a more seamless integration with your intranet, upload your organization's logo, it will be included in the layout of the website.

* Required Fields

Your Information:

* Your First Name:

* Your Last Name:

* Your E-mail:

* Your Password:

* Verify Your Password:

i We respect your desire for privacy and will not share your e-mail address with third parties.

Your Company's Information:

* Name of Company Headquarters:

Division:

* Number of Employees:



[about the March of Dimes](#)

[EN ESPAÑOL >](#)

There's a lot you can do both before and during pregnancy to help you have a healthy baby. Developed by March of Dimes experts, this web site gives you the information you need – when you need it.



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[Folic Acid](#)

[Pregnancy After 35](#)

[Choosing a Prenatal Care Provider](#)



DURING YOUR PREGNANCY

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[Weight Gain During Pregnancy](#)

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MOM AND BABY

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[Respiratory Syncytial Virus \(RSV\)](#)

[Immunizations: Your Baby's Shots](#)

[Flu and Your Baby](#)

[Postpartum Depression](#)

[Baby's First Year](#)

Contact

Steve Abelman, Director, Worksite Wellness Programs

- 914-997-4226
- sabelman@marchofdimes.com