

What to do after a **PRETERM BIRTH**

A Guide for Families



UWNQC

Utah Women & Newborns Quality Collaborative

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WHAT IS PRETERM BIRTH?

Preterm birth is a birth that happens too soon - before 37 completed weeks of pregnancy. Your due date is at 40 weeks' gestation, so a preterm birth is 3 or more weeks early.

A **spontaneous preterm birth** happens when a woman goes into labor early (preterm labor) or when her water breaks too early (preterm premature rupture of membranes, or PPRM).

A **medically indicated preterm birth** is a delivery that is recommended by a health care provider in order to reduce the risk to a woman or to her unborn child. Common reasons for medically indicated preterm birth include:

- Pregnancy related problems, such as preeclampsia (high blood pressure during pregnancy)
- Maternal medical problems, such as diabetes
- Fetal problems, such as poor growth

WHY DOES PRETERM BIRTH MATTER?

It's common. About 1 out of every 8 U.S. births is preterm (12%).

It's dangerous. Newborn intensive care units (NICUs) help preterm babies to have the best possible start in life. Despite the best medical care, being born preterm can mean problems that last into adulthood. Preterm babies have a higher rate of complications after delivery. In babies who survive, long-term complications may include cerebral palsy, developmental delay (mental retardation), behavioral issues, chronic lung disease, deafness and blindness.

Babies who are born very early have the highest risks. However, even babies born 'late preterm' (34 weeks to 36 weeks) have a higher rate of serious complications and death. All preterm births are therefore very serious.

It's expensive. Preterm birth affects families and society. It is difficult for families emotionally and affects quality of life. It is also expensive for families and for the healthcare system. The estimated cost of preterm birth in the U.S. is \$26 billion per year – more than \$51,000 per preterm baby.

WHAT IS THE RISK OF HAVING ANOTHER PRETERM BIRTH?

We often don't know why a preterm birth happens. We do know that all women who deliver early are at increased risk for preterm birth in future pregnancies.

A woman's risk of having another preterm birth depends on

- How early the preterm birth(s) happened (earlier births = higher risk)
- The number of preterm births (more preterm births = higher risk)
- How long it has been since the last preterm birth (shorter time = higher risk)

Factors strongly associated with preterm birth include:

- Prior preterm birth. You've delivered early in one or more previous pregnancies.
- Short cervix. Your cervix – the opening of the uterus – shortens in preparation for childbirth. If an ultrasound or exam shows that your cervix has shortened too early in pregnancy, you have an increased risk of delivering early.
- Pregnancy spacing less than 6 months. You've become pregnant within 6 months of your previous pregnancy.
- Multiple gestation. You're carrying more than one baby (twins or triplets).
- Smoking and substance abuse. You use tobacco, prescription pain medications, or street drugs.
- Chronic medical conditions. You have a medical problem, such as diabetes or high blood pressure (hypertension).
- Underweight, overweight or poor nutrition. Being under or overweight increases your risk.
- Little or no prenatal care.

- African-American race.
- Problems with the uterus or cervix. If you have had surgery on your uterus or cervix, you have uterine fibroids, or you have a uterine anomaly (such as bicornuate or septate uterus), you may be at increased risk of delivering preterm.

Keep in mind that while these risk factors increase your risk of preterm birth, they are only part of the story. Most women who deliver preterm have no known risk factors.

See YOUR personal risk assessment on page 10. This should be completed by a Maternal Fetal Medicine (MFM) physician, ideally during your and your baby's hospital stay. If this cannot occur during your hospital stay, a consultation with a MFM should be scheduled as soon as possible after delivery.

HOW DO I REDUCE MY RISK OF HAVING ANOTHER PRETERM BIRTH?

Because preterm birth isn't well understood, there are few reliable ways to predict it or prevent it. However, studies have shown that there are ways to lower your risk of having another preterm baby.

1) Plan Your Pregnancies – and Space Them at Least 18 Months Apart.

Waiting 18 months before you get pregnant again allows time for your body to heal and reduces your risk of having another preterm birth. Pregnancy planning makes sure that you, your family, and your body are prepared for a new addition.

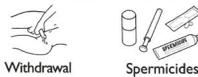
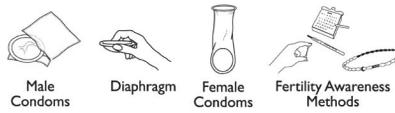
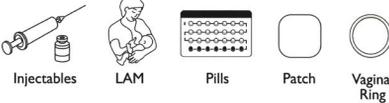
2) Use Highly Effective Contraception as Soon as Possible After You Deliver.

The best way to ensure an 18-month space between pregnancies is to use the most effective methods of contraception, which include the IUD or implant. Talk to your health care provider about what form of contraception is best for you. Some forms of contraception can be safely started before you leave the hospital. See the chart on the next page for a comparison of contraception choices.

Comparing Effectiveness of Family Planning Methods

More effective

Less than 1 pregnancy per 100 women in one year



Less effective

About 30 pregnancies per 100 women in one year



Sources:

Steiner MJ, Trussell J, Mehta N, Condon S, Subramaniam S, Bourne D. Communicating contraceptive effectiveness: a randomized controlled trial to inform a World Health Organization family planning handbook. *Am J Obstet Gynecol* 2006; 195(1):85-91.
 World Health Organization/Department of Reproductive Health and Research (WHO/RHR), Johns Hopkins Bloomberg School of Public Health (JHSPH)/Center for Communication Programs (CCP). *Family Planning: A Global Handbook for Providers*. Baltimore, MD and Geneva: CCP and WHO, 2007.
 Trussell J. Choosing a contraceptive: efficacy, safety, and personal considerations. In: Hatcher RA, Trussell J, Stewart F, Nelson AL, Cates W Jr., Guest F, Kowal D, eds. *Contraceptive Technology, Nineteenth Revised Edition*. New York: Ardent Media, Inc., in press.

2007

How to make your method more effective

Implants, IUD, female sterilization:

After procedure, little or nothing to do or remember

Vasectomy: Use another method for first 3 months

Injectables: Get repeat injections on time

Lactational Amenorrhea Method (for 6 months): Breastfeed often, day and night

Pills: Take a pill each day

Patch, ring: Keep in place, change on time

Condoms, diaphragm: Use correctly every time you have sex

Fertility awareness methods: Abstain or use condoms on fertile days. Newest methods (Standard Days Method and TwoDay Method) may be easier to use.

Withdrawal, spermicides: Use correctly every time you have sex

3) If You Delivered Early Because of Preterm Labor or Because Your Water Broke, Talk to Your Health Care Provider about Taking 17P Shots in Your Next Pregnancy.

Progesterone is a natural body hormone that is important for pregnancy. In women with a history of preterm birth, a special form of progesterone called '17P' can lower the chance of having another preterm baby. In fact, 17P is one of the most effective treatments available for women with a history of preterm birth. Studies show that treatment with 17P lowers the risk of another preterm birth by about one-third (30%).

Who should get progesterone shots?

You may be eligible for progesterone shots in your next pregnancy if you had a preterm birth because of labor or because your water broke.

Are progesterone shots safe?

There is no evidence of risk to mother or baby. Your risk of preterm birth may be reduced if you take the shots. You may have some discomfort at the site of injection. Studies of babies followed through the first four years of life showed no evidence of problems from the progesterone shots.

How do you get progesterone shots?

17P prescribed by your health care provider. It is given as weekly injections between 16 weeks and 36 weeks of pregnancy. There are two forms of the drug.

1. A brand name drug called Makena™ at most retail pharmacies
2. 17P prepared, hydroxyprogesterone caproate, (compounded) at special pharmacies – see page 9.

Your health care provider will talk to you about these options and help you choose which form of the drug is right for you.

4) Maintain or Achieve a Healthy Weight.

Overweight and underweight women have an increased risk of delivering early. Ideally, your body mass index (BMI) should be between 18.5-24.9 when you get pregnant. If you are outside of this target range, talk to your health care provider. Don't get discouraged- even small changes in weight may reduce your risk.

BMI is calculated using your height and weight. Find out your BMI by going to the following website: <http://www.nhlbi.nih.gov/guidelines/obesity/BMI/bmicalc.htm>

5) Don't Smoke and Don't Use Substances That Increase the Risk of Preterm Birth.

Smoking increases your risk of delivering early. The more you

smoke, the higher your risk. Prescription pain medication (opioids) and recreational drugs (such as cocaine and methamphetamine) also increase the risk of preterm birth.

If you smoke or use drugs, talk to your health care provider. Your health care provider can give you support and information to help you quit. Don't give up! Most people try to quit several times before they are successful. There has never been a better time to quit.

- You can get information and support to quit smoking at <http://www.tobaccofreeutah.org/quitline.htm> or by calling the Utah Tobacco Quit Line: 1.800.QUIT.NOW (1-800-784-8669).
- To locate counseling or treatment for substance use, visit Substance Abuse and Mental Health Services Administration at www.findtreatment.samhsa.gov or call 1-800-662-HELP (1-800-662-4357).
- You can get answers to questions about what's safe during pregnancy and breastfeeding by calling MotherToBaby at 1-800-822-2229 or texting 1-855-999-3525.

6) Take Care of Chronic Diseases.

If you have a chronic disease (such as heart disease, diabetes, high blood pressure, autoimmune disease), work with your health care provider to make sure it is well controlled before your next pregnancy. Treating these diseases before you get pregnant will keep you healthy and may reduce the chance of another early delivery.

7) If You've had Treatment for Infertility, Talk to Your Health Care Provider about Ways to Lower the Risk of Multiples (Twins or Triplets).

Fertility treatment may increase your chance of getting pregnant with more than one baby. Unfortunately, twin and triplet pregnancies are at much higher risk of delivering early. Talk to your health care provider about ways to reduce the chance of multiples. You are more likely to have a healthy pregnancy and baby if you carry only one baby at a time.

8) Get a Personal Risk Assessment from a Specialist.

Before your next pregnancy, see a Maternal Fetal Medicine (MFM) physician. MFM physicians specialize in high-risk pregnancies and preterm birth. A consultation (where you talk face-to-face with a specialist about your unique situation) will give you specific information on how to reduce YOUR risk of another preterm birth.

An example of a personalized risk assessment is included on page 10. A list of MFM specialists near you is included on page 12.

9) See Your Health Care Provider Early and Regularly During Your Pregnancy.

When you do get pregnant, see your health care provider early and regularly during pregnancy. Women who receive good prenatal care have a lower chance of delivering early.

10) Take a Multivitamin with Folic Acid (at least 400 mcg).

Make this a habit! Experts recommend that every woman of childbearing age take folic acid, even if she's not planning to become pregnant. Long-term supplementation helps prevent certain birth defects and may lower your chance of delivering early.



YOUR PRETERM BIRTH ASSESSMENT

Your preterm birth happened at _____ weeks' gestation (the due date is at 40 weeks' gestation).

Your preterm birth occurred because of:

- Cervical insufficiency
- Preterm labor
- Preterm premature rupture of membranes (PPROM)
- Your health care provider's decision to deliver you because of a
 - Pregnancy complication
 - Maternal medical complication
 - Fetal concern

Your recurrence risk (the chance of delivering preterm in your next pregnancy) is estimated to be _____%.

In your situation, we recommend:

Waiting 18 months before considering another pregnancy. This allows time for your body to heal and reduces the risk of another preterm birth. Use of highly effective contraception (IUD or implant) is encouraged.

Contraceptive plan: _____

Consultation with a Maternal Fetal Medicine specialist before your next pregnancy and early in your next pregnancy to discuss additional ways to reduce your risk of preterm birth.

Additional recommendations:

- Uterine imaging before your next pregnancy
- 17P beginning by 16 weeks in your next pregnancy
- Cervical cerclage in your next pregnancy
- Cervical length assessment in the mid-trimester of your next pregnancy
- Start a daily baby aspirin (81 mg) before or early in your next pregnancy

17P COMPOUNDING PHARMACIES

BOUNTIFUL

Medicine Shoppe Pharmacy

47 East 500 South
Hours: Friday 9 a.m.–6 p.m.
Saturday 9 a.m.–1 p.m.
Phone: (801) 295–3463
Fax: (801) 298–8223

PROVO

Rock Canyon Pharmacy

3179 North Canyon Road
Hours: Friday 9 a.m.–7 p.m.
Saturday 9 a.m.–5 p.m.
Phone: (801) 377–2002
Fax: (801) 377–2007

RIVERTON

South Valley Pharmacy

12447 South Crossing Drive
Hours: Friday 9 a.m.–6 p.m.
Phone: (801) 676–7880
Fax: (801) 676–7883

SALT LAKE CITY

University Pharmacy

1320 East 200 South
Hours: Friday 9 a.m.–8 p.m.
Saturday 9 a.m.–5 p.m.
Phone: (801) 582–7624
Fax: (801) 582–7633

Intermountain Homecare

Phone: (801) 887–7351
Toll-free: 1–888–887–0015
Fax: (801) 887–6777

The above pharmacies are able to compound 17P using safe and sterile conditions. They will ship prescriptions to your home, if requested.

MATERNAL FETAL MEDICINE SPECIALISTS:

Utah Doctors with Expertise in Preterm Birth

University of Utah, Salt Lake City (801) 581-8425

D. Ware Branch, M.D.	Michael L. Draper, M.D.
Janice L.B. Byrne, M.D.	Robert M. Silver, M.D.
Jeanette R. Carpenter, M.D.	Amy E. Sullivan, M.D.
Erin A. S. Clark, M.D.*	Michael W. Varner, M.D.

University of Utah, South Jordan (801) 581-8425

Jeanette R. Carpenter, M.D.	Michael L. Draper, M.D.
Erin A. S. Clark, M.D.*	

Intermountain Medical Center, Murray (801) 507-7400

D. Ware Branch, M.D.	Calla M. Holmgren, M.D.
Alexandra Grosvenor Eller, M.D.	G. Marc Jackson, M.D.
M. Sean Esplin, M.D.*	T. Flint Porter, M.D.
Cara C. Heuser, M.D.	Nancy C. Rose, M.D.

LDS Hospital, Salt Lake City (801) 408-3446

D. Ware Branch, M.D.	Calla M. Holmgren, M.D.
Alexandra Grosvenor Eller, M.D.	G. Marc Jackson, M.D.
M. Sean Esplin, M.D.*	T. Flint Porter, M.D.
Cara C. Heuser, M.D.	Nancy C. Rose, M.D.

St. Mark's Hospital, Salt Lake City (801) 743-4700

Robert Ball, M.D.	Katherine Gesteland, M.D.
Jeanette R. Carpenter, M.D.	Andrew Spencer, M.D.

McKay Dee Hospital, Ogden (801) 387-4647

Robert L. Andres, M.D.	Heather D. Major, M.D.
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Jordan Valley Medical Center (801) 601-2315

Michael L. Draper, M.D.

Salt Lake Regional Medical Center (801) 350-8293

Michael L. Draper, M.D.

Davis Hospital and Medical Center (801) 807-7539

Robert M. Silver M.D.

Utah Valley Regional Medical Center, Provo (801) 357-7706

Donna S. Dizon-Townson, M.D.

Julie A. Gainer, M.D.

Helen Feltovich, M.D.*

Glenn Schemmer, M.D.

Dixie Regional Medical Center, St. George (435) 688-4770

Kurt A. Hales, M.D.

Maternal fetal medicine physicians also offer consultations at the following locations on a weekly or monthly basis:

- Logan Regional Medical Center (435) 716-6189
- Davis Medical Center (801) 807-7120
- South Valley Women's Health (801) 569-2626
- Salt Lake Regional Medical Center (801) 350-4514
- Timpanogos Regional Hospital.....(801) 743-4700
- Lone Peak Hospital(801) 743-4700
- Mountain West Medical Center(801) 743-7400
- Ogden Regional Medical Center(801) 479-4266

**These physicians have special preterm birth prevention clinics.*



ADDITIONAL RESOURCES

Utah Department of Health - Maternal & Infant Health Program
(801) 273-2871
health.utah.gov/mihp
Educational information for preconception, pregnant, and parenting women.

Utah Department of Health - Baby Your Baby
1-800-826-9662
babyyourbaby.org
Information and resources for pregnant women and new families. Financial help for those who qualify.

Utah Department of Health - Power Your Life
(801) 538-9970
poweryourlife.org
Educational information on pregnancy spacing and women's health.

March of Dimes
(801) 327-9464
marchofdimes.com
Educational information for preconception, pregnant, and parenting women.

IntermountainMoms
facebook.com/intermountainmoms
youtube.com/user/IntermountainMoms
Information about pregnancy and child care, from both medical experts and other moms and families

211
Dial 211
211, a service of the United Way, connects people with community services.

Utah Women and Newborn Quality Collaborative
uwnqc.org
Information and resources for providers, patients and others regarding perinatal health in Utah.



The Utah Women and Newborns Perinatal Quality Collaborative (UWNQC)

is a network of perinatal care providers (healthcare facilities, health care providers, and hospital staff) working together to improve pregnancy outcomes for Utah's women and newborns. Organizational members include the Utah Department of Health and the Utah Chapter of the March of Dimes. UWNQC recognizes care processes that require improvement, identifies the best available methods to effect change, and works to implement change through multi-disciplinary collaborative effort.

UWNQC Mission: To improve maternal and neonatal outcomes through collaborative efforts centered on quality improvement methodology and data sharing.

UWNQC Website: mihp.utah.gov/UWNQC