WELCOME!

If you are reading this Handbook, you may be having some difficulty getting pregnant. You are not alone. One in eight couples in the U.S. today need some form of medical help to create their families. The Handbook is designed to give you information you need if getting pregnant is a little more difficult than you had hoped it would be.

If you need more information, Path2Parenthood is here for you. There are additional articles, videos, and fact sheets on family building at our website, www.path2parenthood.org. Don’t forget to sign up for our e-newsletter and updates while you’re visiting. Our Facebook page is another resource you shouldn’t overlook. Just “like” us today so you don’t miss a thing!

Now let’s get you started.
Could It Be Infertility?

It seems that every time you read a newspaper or watch a TV show, infertility is being discussed. That’s because infertility is very common. According to the National Survey of Family Growth, Centers for Disease Control and Prevention, almost 11% of reproductive-age women experience issues with conception. Infertility affects men and women equally and is defined as being unable to conceive a baby after one year of unprotected sex has passed. For women who are over 35, that period of time drops to six months. Those who have already had one or more children and are now having trouble conceiving within those time frames are defined as having secondary infertility. Recurrent miscarriage is also a concern for many, many individuals.

If you have been trying to start or add to your family, the best place for you to begin is with a specialist who understands.
What’s an Infertility Specialist and Do I Need One?

You haven’t gotten pregnant yet and are getting a bit concerned. You may have already had some conversations with your current doctor but feel that you need more help. Did you know that most gynecologists are not infertility specialists? While many are able to give you a basic infertility workup and also some first level treatment, an infertility specialist is typically a gynecologist who has taken their knowledge about infertility to the next level. These doctors are known as board-certified Reproductive Endocrinologists (RE). Unlike many gynecologists, RE’s devote all or most of their professional lives to helping people just like you have a baby when conception, pregnancy and birth are a challenge. Working with an infertility specialist may save you valuable time, and money too. If you decide that working with an RE is the right choice for you, here is a list of questions to ask at your first appointment. Before you go, make sure you gather any past medical records about both you and your partner’s health history that might be relevant.

QUESTIONS TO ASK

• What testing will my partner and I have to go through prior to fertility treatment?
• How long will it take to diagnose our infertility issue?
• How long will it take from when we are diagnosed to when we can begin treatment?
• Is there any sort of waiting list for treatment?
• How long should I expect to undergo treatment?
• What percentage of your patients are in my age group?
• Do you participate in clinical trials? If I am eligible, will I be able to participate?
• What are your live birth success rates?
• What surgical procedures might you recommend for my partner and/or me?
• How many ovulation induction cycles with or without IUI do you recommend before moving to IVF?
• How does your office handle weekend inseminations? Are they done here or at another site? Do you do the weekend inseminations?
• How many IVF attempts will you make?
• What is your IVF success rate per embryo transfer? How many embryos do you generally transfer?
• Do you suggest I consider elective single embryo transfer? How will you help me to not conceive multiples?
• When undergoing IVF, will you perform all egg retrievals and embryo transfers? If either of these are not always performed by you, who will perform them?
• When undergoing IVF, will egg retrieval be performed at your office or through the outpatient clinic at a hospital?
• How will you monitor my treatment and how often?
• Will you always perform treatment monitoring or is it possible that on occasion another physician or a nurse might monitor?
• How is your practice affiliated with the embryology lab? Are the lab procedures done here or off site?
• What are the credentials of your laboratory and your laboratory director?
• What do you think about complementary medicine such as massage, acupuncture, and relaxation?
• What are your office hours and are you available after hours and on weekends?
• How will I communicate with you? Do you return phone calls the same day? Do you call back personally if I request?
• What role does the nursing staff play? Do they return calls or do you?
• If necessary, do you have access to donor egg, embryo, surrogacy and sperm programs?
• How do you handle insurance pre-approvals?
• If my insurance doesn’t cover testing and treatment, can we make arrangements for a payment plan or credit card payment?
• Do you perform PGD (preimplantation genetic diagnosis) and PGS (preimplantation genetic screening) in your office? Do you anticipate that I will require either of these services?
Family Building Options to Discuss with your Doctor

• **Intrauterine Insemination (IUI)** - IUI is a low-tech procedure in which a fine catheter (tube) is inserted through the cervix (the natural opening of the uterus) directly into the uterus in order to deposit a sperm sample. IUIs are typically accompanied by fertility medication such as clomid or gonadotropins.

• **In Vitro Fertilization - IVF** is a form of assisted reproductive technology. In IVF, sperm are combined with an egg or eggs in a Petri dish in an attempt to achieve fertilization. The embryos which result from this process are then either transferred into the uterus in the hopes of beginning a pregnancy or, cryopreserved (frozen) for future use.

• **Intracytoplasmic sperm injection (ICSI)** - ICSI was originally designed to combat severe male factor infertility and is performed as part of an IVF cycle. When ICSI is added to the protocol, a single sperm is injected into an individual egg in the laboratory via micromanipulation, utilizing a tiny pipette. With ICSI either ejaculated or non-ejaculated sperm can be used.

• **Third Party Reproduction** - Third party reproduction refers to the addition of an egg donor, sperm donor or surrogate into your treatment. If you decide that third party reproduction is your most viable option for parenthood, you will most likely work with an assisted reproduction attorney as well as your physician.
Infertility tests will be done on both partners that include medical and family history intake, physical exams, semen and blood tests, hormonal tests, and possibly other tests as well. After your infertility testing is complete, you will most likely have an idea of why you are finding it hard to get pregnant. Often, you will find out there is more than one reason coming into play simultaneously, and sometimes, the cause will remain unknown.

Think about it. So many steps need to take place in order to get pregnant naturally. Sperm and eggs must be healthy enough for fertilization and the fallopian tubes must be open. The fertilized egg must be able to implant in the uterus and be of good quality. Keep in mind that around 40% of the time, male factor infertility will be the sole cause for the problem but in around 30-40% of all cases, both the man and the woman will have some type of issue. It’s complicated! But some common diagnoses of infertility include:

- **Advanced Age** - As women and men age, their reproductive potential declines. This can result in an inability to get pregnant or in an increased rate of miscarriage. For women, fertility takes its first significant dip at around age 34. For men, at around age 45.
• **Endometriosis** - Endometriosis occurs when the endometrial tissue that lines the inside of the uterus finds its way outside and into other organs of the body. The misplaced tissue develops into lesions which respond to the woman’s menstrual cycle. Each month, the tissue builds up and then sheds. Inside the uterus this natural shedding becomes part of the menstrual flow. Outside of the uterus the tissue has nowhere to go and backs up, causing internal bleeding, pain and cramping, inflammation, adhesions and eventually for many, infertility.

• **Fibroids** – Fibroids are benign tumors. Submucous fibroids (those that change the shape of the uterine cavity) and intracavitary fibroids (those inside the uterine cavity) have been known to decrease fertility. Surgical removal of these types of fibroids often restore fertility to its full potential. In addition, submucous and intracavitary (within the uterine cavity) fibroids can sometimes cause miscarriages.

• **Klinefelter’s Syndrome** – Also known as XXY condition, Kleinfelter’s Syndrome is a type of male factor infertility caused by a chromosomal disorder. Men with Kleinfelter’s are born with an extra X chromosome in most of their cells, resulting in a variety of symptoms including infertility.

• **Polycystic Ovarian Syndrome** - PCOS is a hormonal disorder that often affects a woman’s ability to ovulate and conceive. Some young women will receive this diagnosis during their teenage years but many women will not realize they in fact have this disorder until they try to get pregnant, and can’t. PCOS is typically earmarked by any two of the following three characteristics: overproduction of androgens (male hormones); irregular menstrual cycles; and an ultrasound demonstrating polycystic appearing ovaries. While all women have some level of male hormone in their systems, women with PCOS produce an overabundance of them. Some women with this disorder experience a degree of insulin resistance as well.
• **Primary Ovarian Insufficiency (POI)** - Also known as Premature Ovarian Failure, POI refers to a loss of ovarian function in women under the age of 40. Women with POI experience an elevation in follicle stimulating hormone (FSH) and low estrogen. POI is not menopause. Women who have gone through menopause never menstruate again. Women with POI may occasionally get their period, and somewhere around 5-10% conceive naturally.

• **Tubal Factor Infertility** - Tubal factor infertility is defined as either being complete or partial blockage and/or scarring of the fallopian tubes. Tubal factor infertility causes a disruption of egg pick up and transport, fertilization, and also embryo transport from the fallopian tube down into the uterus where the embryo implants. Tubal factor infertility can be caused by a number of factors. These include Pelvic Inflammatory Disease (PID) which typically results from exposure to sexually transmitted infections (STI's), most notably, Gonorrhea and Chlamydia and scar tissue, caused by endometriosis or surgery. Tubal factor infertility is also intentionally caused by having your tubes tied, known as tubal ligation. Tubal ligation can sometimes be reversed surgically, restoring fertility.

• **Unexplained Infertility** - Even with state of the art, current medical advancements, there is still much that is simply unknown about the causes of infertility. Subtle, biochemical or immune factors that can stop conception cold may not even show up through current testing protocols. In addition, multiple, simultaneous issues may be at play that individually, would not necessarily stop you from conceiving but when coupled together, lessen the chances that pregnancy will occur. Sometimes, a single, significant obstacle for which there is no accurate testing may be at fault. Simply put, some possible causes of infertility continue to baffle scientists and doctors alike, and may continue to remain, unexplained. However, unexplained is not the same as untreatable. Unexplained infertility protocols are much the same as infertility that has been diagnosed.

• **Varicocele** - A common type of male factor infertility is called a varicocele. Varicocele refers to enlarged and twisted veins along the cord that holds up a man’s testicles. Varicocele is most common in men 15-25 years of age and sometimes presents itself with no external symptoms. Sometimes however, one testicle will appear to be larger in size than the other. Other symptoms may include a painless testicle lump, scrotal swelling, or bulge within the scrotum. You may also experience an aching pain within the scrotum, a feeling of heaviness, or visibly enlarged veins. Varicocele is caused when the valves found inside the veins of the spermatic cord stop blood from flowing properly, resulting in a blood back up.

Need more information on Male Factor Infertility? Check out the Male Reproductive Health section at www.path2parenthood.org
Recurrent Miscarriage

One of the most heartbreaking things that a person can experience is recurrent pregnancy loss, or miscarriage. Unfortunately, recurrent pregnancy loss is common. As many as twenty five percent of all pregnancies will end in miscarriage, usually during the first trimester. Recurrent miscarriage is defined as having two or more pregnancy losses. While the cause(s) of the miscarriages will not be discovered 50% of the time, it is important to remember that most women who undergo this ordeal will ultimately go on to have a healthy baby.

There are a number of potential causes of recurrent pregnancy loss. These include:

- Genetic or chromosomal variants in one or both parents
- Advanced maternal age
- Hormonal abnormalities
- Medical conditions such as diabetes, obesity, polycystic ovarian syndrome or thyroid disorders
- Uterine cavity distortion caused by fibroids, polyps, scar tissue, or a uterine septum
- Asherman’s syndrome (adhesions within the uterus)
- Celiac disease
- Lupus
- Thrombophilia (tendency towards the formation of blood clots)
- Male factor anomalies (integrity of sperm DNA)
Genetic Screening

Women who have undergone multiple miscarriages may be advised to consider preimplantation genetic diagnosis (PGD) or preimplantation genetic screening (PGS). These are both laboratory procedures done on embryos acquired via IVF. PGD and PGS sleuth out genetic and chromosomal anomalies in embryos, prior to implantation in the womb. PGD is typically used to look at a single gene, if a disorder such as cystic fibrosis or spinal muscular atrophy is suspected. A more broad-based test, PGS analyzes every single gene within the embryo to determine if any chromosomal issues, suspected or otherwise, might be causing miscarriage to occur.

PGD also has applications for individuals or couples who are not experiencing miscarriage or even, undergoing infertility. If it has been determined that either or both partners are carriers of a specific disease which might be inherited by their children with heartbreaking results, PGD can be utilized to test each embryo for that specific gene disorder. PGD enables us to determine if the child would have the disease, be a carrier for the disease, or be completely without a marker for it.
Lifestyle Choices That Help or Hurt.

It’s very important that you take care of both your physical and emotional health during this time. This may include seeking out the support of a therapist or a peer group of people going through the same thing. Taking care of body, mind and spirit will help you to stay in control during this time of your life. Here are some tips to note:

- Have you been tested for sexually transmitted infections (STI’s)? STI’s like Chlamydia, gonorrhea, syphilis and HPV can go undiagnosed for years and adversely harm your fertility. Get tested now, and treated if necessary.

- What’s your BMI (body mass index)? Both you and your partner should try to achieve and maintain a healthy weight while trying to conceive. Being too underweight or overweight can affect fertility in either partner and also cause difficulties for you once pregnant. Eating healthy foods and enjoying a sensible activity level simply makes sense at this time (and at all times).

- Talk to your doctor about exercise and zero in on a plan that makes sense for your fitness level. Exercise not only helps you to maintain optimum health but is also a great stress buster. Make sure you discuss how many hours per day or week you exercise with your doctor, to determine if you are over or under doing it.
• Say yes to vitamins while you are trying to conceive, and fold a high folate supplement into your daily life. Studies show that folate may reduce miscarriage rates for some women.

• Say no to recreational drug use, excessive alcohol or caffeine consumption and smoking. These can all adversely affect both you and your baby.

• Say no to sushi and to raw or undercooked food like meat and eggs, as well as unpasteurized dairy products.

• Learn about the environmental toxins lurking in your environment and do your best to avoid them. There’s mounting evidence that numerous environmental factors have an effect on fertility and on the health of developing fetuses.

• Choose plastics with the recycling code 1, 2 or 5. Recycling codes 3 and 7 are more likely to contain bisphenol A or phthalates and should never be used to re-heat food.

• The chemical bisphenol A (BPA), widely used in products such as food cans, milk container linings, water pipes and even dental sealants, has now been found to be an endocrine disruptor.

• Fish are an important part of any health regime, however, fish that contain high levels of mercury should be avoided. Mercury causes cell mutations which can lead to cancer, miscarriage and possibly even autism. Do not eat shark, swordfish, king mackerel or tilefish which all contain high levels of mercury. Eat only 12 ounces of fish a week in varieties known to have lower levels of this toxin. Some of these are shrimp, canned light tuna, salmon, pollock and catfish. While canned light is OK, you should avoid eating albacore tuna which has higher levels of mercury.

• Benzene—used to make certain rubbers, lubricants, dyes, and detergents and found in some paint, nail polish, and hair dyes is an endocrine disruptor and can cause a woman to stop having periods; men may experience decreased sperm count. Benzene can also cause hyperactivity in some children.

• Avoid phthalates. Read the ingredients. You can identify phthalates in some products by their chemical names, or abbreviations:
  - DBP (di-n-butyl phthalate) and DEP (diethyl phthalate) are often found in personal care products, including nail polishes, deodorants, perfumes and cologne, aftershave lotions, shampoos, hair gels and hand lotions. (BzBP, see below, is also in some personal care products.)
- **DEHP** (di-(2-ethylhexyl) phthalate or Bis (2-ethylhexyl) phthalate) is used in PVC plastics, including some medical devices.

- **BzBP** (benzylbutyl phthalate) is used in some flooring, car products and personal care products.

- **DMP** (dimethyl phthalate) is used in insect repellent and some plastics (as well as rocket propellant).

Be wary of the term “fragrance,” which is used to denote a combination of compounds, possibly including phthalates, which are a subject of recent concern because of studies showing they can mimic certain hormones.

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**Say YES to laughter and fun!**

You are more than just baby-making machines. Keeping a balance between infertility treatment and the other areas of your life, including romance, work and friendships can be a source of strength.
Adoption

You may be at any point in your infertility treatment when you begin thinking about adoption. Some people will opt to pursue both adoption and medical treatment simultaneously and others will terminate infertility treatment before moving on. It is not unusual for one partner to feel more readiness to adopt than the other at first.

There are a number of different adoption routes that you may want to learn about, including domestic, international, and foster care. When you are ready, Path2Parenthood’s website (www.path2parenthood.org) will be a great place to learn more.

Adopting Through a Private Agency: It’s important to know that private adoption agencies must be licensed in their state of operation. Many private agencies are not-for-profit. Agencies typically provide general support and offer counseling for the birthparents and prospective adoptive parents. Agencies set their own guidelines as to eligibility requirements for potential adoptive parents. These often focus on health, age, religion or lifestyle. In order to adopt through an agency you must have a home study, where a social worker determines whether you are prepared to parent a child within a home that is safe. The home study, which is part of the certification process, is required in all types of adoption.
Adopting Independently: When you arrange an adoption through an attorney, this is called an independent adoption. Typically, in an independent adoption, the prospective adoptive parent(s) find a woman wishing to place her child through advertising and word of mouth. The birthmother determines the placement of the baby. The prospective parents, along with the birthparent(s) determine how closed or open the adoption will be.

Adopting Through a Public Agency: Publicly run agencies are overseen by either the state or county government. The agency has legal custody of children currently in foster care and is responsible for placing them in adoptive homes after the birthparents’ rights have been legally terminated. There are currently thousands of children waiting to be adopted out of the foster care system, many of them older. Some states offer fost/adopt programs where you can become a foster parent to a child whom the state or county agency believes will soon become available for adoption.

Adopting Internationally: International or intercountry adoption refers to adoption that places children born in other countries with American parents. Usually the children live in orphanages, but sometimes foster homes as well, before they are placed. Countries “open” and “close” their doors to adoption for many reasons including economic, political and social ones. The Hague Convention on Intercountry Adoption is an international treaty between many countries on how international adoption should be handled. An international adoption agency will be able to work with you on navigating the international adoption option.
Every family has a story to tell. Yours may include a baby born because of in vitro fertilization, a wonderful donor, or a birth mom. It may include a tale of two people in love who decided that all they needed in life were each other. No matter what your story turns out to be, Path2Parenthood is here to support your choices. Visit our website for more information on all types of family building.

We hope your story includes light, love, and the sound of laughter.

www.path2parenthood.org • 888-917-3777

Sources
Adoption101.com
American Society for Reproductive Medicine
Good Start Genetics
Centers for Disease Control and Prevention
Dave Thomas Foundation
Examiner.com
International Federation of Gynecology and Obstetrics
Path2Parenthood Library
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Path2Parenthood (P2P) is an inclusive organization committed to helping people create their families by providing leading-edge outreach programs and timely educational information. The scope of our work encompasses reproductive health, infertility prevention and treatment, and family-building options including adoption and third party solutions. P2P is a national, not-for-profit 501(c)(3) charitable organization headquartered in New York City.

www.path2parenthood.org

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