Updates to this report will be posted on the CDC website at the following address:

http://www.cdc.gov/art/reports/

For additional information, send an e-mail to artinfo@cdc.gov

Or write to CDC, ATTN: ART Surveillance and Research Team
4770 Buford Highway, N.E.; Mail Stop F-74; Atlanta, GA 30341-3717.
Acknowledgments

The Centers for Disease Control and Prevention, the Society for Assisted Reproductive Technology, and the American Society for Reproductive Medicine thank RESOLVE: The National Infertility Association and Path2Parenthood (formerly The American Fertility Association) for their commitment to assisted reproductive technology (ART) surveillance. Their assistance in making this report informative and helpful to people considering an ART procedure is greatly appreciated. Appendix D has current contact information for these national consumer organizations.

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For many people who want to start a family, the dream of having a child is not easily realized; about 11% of women of childbearing age in the United States have used an infertility service. Assisted reproductive technology (ART) has been used in the United States since 1981 to help women become pregnant, most commonly through the transfer of fertilized human eggs into a woman’s uterus. However, for many people, deciding whether to undergo this expensive and time-consuming treatment can be difficult.

The goal of this report is to help patients make informed decisions about ART by providing some of the information needed to answer the following questions:

- What are my chances of having a child by using ART?
- Where can I go to get this treatment?

The Society for Assisted Reproductive Technology (SART), an organization of ART providers affiliated with the American Society for Reproductive Medicine (ASRM), has been collecting data and publishing annual reports of pregnancy success rates for fertility clinics in the United States and Canada since 1989. In 1992, the US Congress passed the Fertility Clinic Success Rate and Certification Act. This law requires the Centers for Disease Control and Prevention (CDC) to publish pregnancy success rates for ART in fertility clinics in the United States. (For more details about the law, see http://www.cdc.gov/art/nas/policy.html.) Since 1995, CDC has worked in consultation with SART and ASRM to report ART success rates.

The 2013 report of pregnancy success rates is the nineteenth to be issued under the law. This report is based on the latest available data on the type, number, and outcome of ART cycles performed in US clinics.

The 2013 ART report has three major sections:

- **Commonly Asked Questions About the US ART Clinic Reporting System**

  This section provides background information on infertility and ART and an explanation of the data collection, analysis, and publication processes.

- **Fertility Clinic Tables**

  Many factors contribute to the success of ART, including the training and experience of the ART clinic and laboratory professionals, the quality of services, and the characteristics of the patient population. The Fertility Clinic Tables section displays ART results and success rates for individual US fertility clinics in 2013. The section also includes the 2013 National Summary table, which combines data from all clinics.

- **Appendixes**

  **Appendix A** provides information about 2013 data validation activities.

  **Appendix B** provides definitions for technical and medical terms used throughout the report.

  **Appendix C** includes the current names and addresses of all reporting clinics along with a list of clinics known to be in operation in 2013 that did not report their data to CDC as required by law.

  **Appendix D** includes the names and addresses of national consumer organizations that offer support to people experiencing infertility.
Success rates can be reported in a variety of ways, and the statistical aspects of these rates can be difficult to interpret. This report is intended for the general public, and the emphasis is on presenting the information in an easily understandable form. CDC hopes that this report is informative and helpful to people considering an ART procedure. We welcome any suggestions for improving the report and making it easier to use. (Please contact us at artinfo@cdc.gov.)

In addition to the 2013 Assisted Reproductive Technology Fertility Clinic Success Rates Report, CDC also publishes the 2013 Assisted Reproductive Technology National Summary Report (available in October 2015), which provides an overall national picture that uses 2013 data to answer specific questions related to ART success rates.
1. How many people in the United States have infertility problems?

The latest data on infertility available to the Centers for Disease Control and Prevention (CDC) are from the 2011–2013 National Survey of Family Growth. (For more details about the data, see http://www.cdc.gov/nchs/nsfg/key_statistics/i.htm#infertility.)

- Of the approximately 61 million women aged 15–44 years in 2011–2013, about 6.9 million, or 11%, had received infertility services at some time in their lives. (Infertility services include medical tests to diagnose infertility, medical advice and treatments to help a woman become pregnant, and services other than routine prenatal care to prevent miscarriage.)

- Additionally, about 6% of married women aged 15–44 years are infertile (unable to get pregnant after at least 12 consecutive months of trying to conceive).

2. What is assisted reproductive technology (ART)?

Although various definitions have been used for ART, the definition used in this report is based on the 1992 law that requires CDC to publish this report. According to this definition, ART includes all fertility treatments in which either eggs or embryos are handled. In general, ART procedures involve surgically removing eggs from a woman's ovaries, combining them with sperm in the laboratory, and returning them to the woman's body or donating them to another woman. They do NOT include treatments in which only sperm are handled (i.e., intrauterine insemination) or procedures in which a woman takes drugs only to stimulate egg production without the intention of having eggs surgically retrieved.

The main type of ART is in vitro fertilization (IVF). IVF involves extracting a woman's eggs, fertilizing the eggs in the laboratory, and then transferring the resulting embryos into the woman's uterus through the cervix. For some IVF procedures, fertilization involves a specialized technique known as intracytoplasmic sperm injection (ICSI). In ICSI, a single sperm is injected directly into the woman's egg.

Other types of ART exist, but are rarely performed. Gamete intrafallopian transfer (GIFT) involves using a fiber optic instrument called a laparoscope to guide the transfer of unfertilized eggs and sperm (gametes) into the woman's fallopian tubes through small incisions in her abdomen. Zygote intrafallopian transfer (ZIFT) involves fertilizing a woman's eggs in the laboratory and then using a laparoscope to guide the transfer of the fertilized eggs (zygotes) into her fallopian tubes.

In addition, ART often is categorized according to whether the procedure was started with the intent to freeze all eggs or embryos (banking), whether the procedure used a woman's own eggs (nondonor) or eggs from another woman (donor), whether the eggs were frozen and thawed before use, and whether the embryos used were newly fertilized (fresh) or previously fertilized, frozen, and then thawed (frozen).
3. What is an ART cycle?

Because ART consists of several steps over an interval of approximately 2 weeks, an ART procedure is typically referred to as a cycle of treatment rather than a procedure at a single point in time. The start of an ART cycle is when a woman begins taking drugs to stimulate egg production or starts ovarian monitoring with the intent of having embryos transferred. For the purposes of this report, data on all cycles that were started, even those that were discontinued before all steps were undertaken, are counted in the clinic’s success rates.

4. How do US ART clinics report data to CDC about their success rates?

CDC contracts with a statistical survey research organization, Westat, to obtain the data published in the Fertility Clinic Success Rates Report. Westat maintains a list of all ART clinics known to be in operation, identifies new clinics throughout the year, and tracks clinic reorganizations and closings. This list includes clinics and individual providers that are members of the Society for Assisted Reproductive Technology (SART) as well as clinics and providers that are not SART members. Westat maintains the National ART Surveillance System (NASS), the web-based data collection system that all ART clinics use to submit data to CDC. Clinics either electronically enter or import data into NASS for each ART cycle started in a given reporting year. SART-member clinics can report directly to SART, and SART submits the data to NASS. The data collected include de-identified information on the patient’s medical history (such as infertility diagnoses), clinical information pertaining to the ART procedure, and information on resulting pregnancies and births.

5. Why is the report of 2013 success rates being published in 2015?

Before success rates based on live births can be calculated, every ART pregnancy must be followed up to determine whether a birth occurred. Therefore, the earliest possible date that clinics can report complete annual data is about 9 months past the end of the reporting year, when all the births have occurred. Accordingly, the results of all the cycles initiated in 2013 were not known until October 2014. After ART outcomes are known, the following occurs before the report is published:

- Clinics enter their 2013 data into NASS and verify the data’s accuracy before submitting the data at the end of 2014 to Westat.
- Preliminary data for individual fertility clinic tables are prepared and made available in the spring of 2015 on CDC’s website at http://www.cdc.gov/art/reports/.
- After CDC conducts comprehensive data checks, the full report with all fertility clinic tables and the National Summary table is prepared and published on the CDC website at http://www.cdc.gov/art/reports/.

These steps are essential for ensuring that the report provides the public with correct information regarding each clinic’s success rates.

6. Which clinics are represented in this report?

The data in this report come from 467 fertility clinics that provided and verified information about the outcomes of the ART cycles started in their clinics in 2013.

Although almost all clinics that provided ART services in the United States during 2013 are represented in this report, data from 30 clinics or practitioners are not included because they did not report as required. Clinics and
practitioners known to have been in operation as of January 1, 2013, that did not report and verify their data are listed in this report as nonreporters, as required by law (see Appendix C: 2013 Nonreporting Clinics, by State on pages 575–576). Given the estimated number of ART cycles performed in nonreporting clinics, we estimate that ART surveillance covered 98% of ART cycles performed in the United States in 2013. We will continue to make every effort to include in future reports all clinics and practitioners providing ART services.

7. Why aren’t the clinics ranked by their success rates?

Many factors contribute to the success rate of an ART procedure, and a difference in success rates between two ART clinics may reflect differences in the groups of patients treated, the types of procedures performed, or other factors. More explanations on how to use the success rates and other statistics published in this report are in the Introduction to Fertility Clinic Tables section (see pages 11–20). The report should be used to help people considering an ART procedure find clinics where they can meet personally with ART providers to discuss their specific medical situation and their likelihood of success using ART. Contacting a clinic also may provide additional information that could be helpful in deciding whether or not to use ART. Because ART offers several treatment options for infertility, there are many other factors that may affect the decision. This report may be a helpful starting point for consumers to obtain information and consider their options.

8. Does this report include all ART cycles performed by the reporting clinics?

This report includes 190,773 ART cycles performed in 2013 by the 467 clinics that reported their data as required. Of those 190,773 cycles, 27,564 were cycles started with the intent of cryopreserving (freezing) and storing all resulting eggs or embryos for potential future use. Because these cycles cannot result in pregnancies or births, they are not included in the majority of clinic success rates. Instead, the number of banking cycles are included in the total number of cycles performed, and the number of banking cycles by age group are reported.

Of the 190,773 total cycles, 2,655 were cycles started with the intention of thawing a frozen egg for fertilization and transfer. These cycles are not included in any clinic success rates. Instead, the number of cycles using frozen eggs is shown for each clinic in their table as part of the total number of cycles performed. The 190,773 total cycles performed in 2013 excludes 67 cycles started in which a new treatment procedure was being evaluated. The number of new treatment procedures performed is shown for each clinic in footnote “d” of their table.

9. How are the success rates determined?

This report presents several measures of success for ART, including the percentage of ART cycles that result in a pregnancy. (Please note that not all pregnancies result in live birth; some pregnancies may result in miscarriage, induced abortion, or stillbirth.) All live-birth deliveries were reported to the ART clinic by either the patient or the patient’s obstetric provider. Because this report is geared toward patients, the focus is on the percentage of cycles resulting in live births. Singleton live births, births of a single, live infant, are emphasized as a separate measure of success because they have a much lower risk than multiple-infant births for adverse infant health outcomes, including prematurity, low birth weight, disability, and death. Success rates were calculated at various steps of the ART cycle to provide a complete picture of the chances for success as the cycle progresses.
10. What are my chances of getting pregnant using ART?

Many consumers ask this question because they assume that the pregnancy will lead to a live birth. Unfortunately, not all ART procedures that result in a pregnancy lead to the delivery of a live infant. For example, 93,787 fresh nondonor ART cycles were started in 2013. Of those, 33,425 (36%) led to a pregnancy, but only 27,406 (29%) resulted in a live birth. In other words, 6,019 (almost 1 in 5) of ART pregnancies did not result in a live birth. The percentage of cycles resulting in live births will give a more accurate answer to the question, “If I have an ART procedure, what is my chance that I will have a baby?”

It is important to note that ART success rates vary in the context of patient and treatment characteristics. These characteristics include age, infertility diagnosis, number of embryos transferred, type of ART procedure, use of techniques such as ICSI, and history of previous births, miscarriages, and ART cycles.

11. If a patient has had more than one ART treatment cycle, how is the success rate calculated? Alternatively, how many cycles does a patient usually go through before getting pregnant?

As required by law, this report presents ART success rates in terms of how many cycles were started each year. Because clinics report information based on outcomes for each cycle started, success rates on a “per patient” basis, or the number of cycles that an average patient may undergo before achieving success, are not presented in this report. While it is possible to achieve success with one ART cycle, success rates vary in the context of patient and treatment characteristics. Consumers should consult with their physician to understand their specific medical situation and their chances of pregnancy using ART.

12. What quality control steps are used to ensure data accuracy?

To have their success rates published in this annual report, clinics have to submit their data in time for analysis and the clinics’ medical directors have to verify by signature that the tabulated success rates are accurate. Then, Westat conducts an in-house review and contacts the clinics if corrections are necessary. After the data have been verified, a quality control process called validation begins.

This year, 35 (about 7%) of the 467 reporting clinics were selected after taking into consideration some cycle and clinic characteristics and whether the clinic had been selected before. (See Appendix A: Validation of 2013 ART data on page 523 for a more detailed presentation of sampling strategy.) Members of the Westat Validation Team visit these clinics and review medical record data for a sample of the clinic’s ART cycles. For each cycle, the validation team abstracts information from the patient’s medical record. The abstracted information is then reviewed onsite and compared with the data submitted for the report.

The data validation process does not include any assessment of clinical practice or overall record keeping. Validation primarily helps ensure that clinics submit accurate data. It also serves to identify any systematic problems that could cause data collection to be inconsistent or incomplete. Findings and discrepancy rates from the 2013 validation visits are presented in Appendix A (see pages 523–526).
13. How does CDC use the data collected but not reported in the annual Assisted Reproductive Technology Fertility Clinic Success Rates Report and National Summary Report?

CDC uses the data collected and not reported in the annual ART reports for surveillance of emerging practice patterns, surveillance of success rates by patient and practice characteristics, evaluation of emerging ART research questions, and the monitoring of safety and efficacy issues related to ART treatment for improving maternal and child health outcomes. A list of ART publications is available at http://www.cdc.gov/art/publications/. Other data may not be released in order to protect the ART patient’s confidentiality. However, CDC has established a way that researchers outside of CDC can securely access limited, de-identified NASS data to conduct analyses. CDC’s Research Data Center, housed within the National Center for Health Statistics, allows researchers to analyze restricted data in a secure environment after their proposed research has been reviewed and approved by CDC.

14. How does CDC ensure the confidentiality of the ART data it collects?

CDC has an Assurance of Confidentiality for the ART database. An Assurance of Confidentiality is a formal confidentiality protection authorized under Section 308(d) of the Public Health Service Act (42 U.S.C. 242[m]). An assurance is used for projects conducted by CDC staff or contractors involving the collection or maintenance of sensitive, identifiable, or potentially identifiable information. The assurance allows CDC programs to assure that individuals and institutions involved in research or nonresearch projects protect the confidentiality of the data collected. Under Public Health Service Act Section 308(d), no identifiable information may be used for any purpose other than that for which it was supplied unless such institution or individual has consented to that disclosure. CDC’s current Assurance of Confidentiality for this project is ongoing.

15. Why doesn’t the report contain specific medical information about ART?

This report describes a woman’s average chances of success per ART cycle. Although the report provides some information about factors such as age and infertility diagnosis, consumers face many unique medical situations. This population-based registry of ART procedures cannot capture detailed information about specific medical conditions associated with infertility. Consumers should consult with their physician to understand their specific medical situation and their chances of success using ART.

16. Why are statistics in the Fertility Clinic Tables published by CDC different from statistics reported by SART’s IVF Success Rate Reports?

During 1996–2013, the percentage of ART clinics with a SART membership reporting data to CDC ranged from approximately 82% to 95%. Annual summary statistics of ART treatments performed in each of these clinics are available online at http://www.sart.org. For the same table items that are presented in both the CDC’s Fertility Clinic Tables and SART’s IVF Success Rate Reports, discrepancies in tabulated statistics between the SART and CDC tables may be due to (1) the inclusion in the CDC Fertility Clinic Reports of ART treatments performed at non-SART member clinics; (2) differences in the data submission deadlines between SART and CDC, which may result in ART clinics being excluded from CDC’s annual Fertility Clinic Reports; and (3) differences in data processing procedures and statistical methods used to generate statistics.
17. Does CDC have any information on the women who donate eggs?

CDC only collects information on the age of egg donors, but does not present it in the individual clinic tables for this report. In 2013, the average age of egg donors was approximately 26 years. Success rates for cycles using donor eggs or using embryos derived from donor eggs is related to the age of the woman who produced the eggs. Thus, the percentage of transfers that resulted in live births for cycles using fresh embryos from donor eggs remained consistently high—above 55% among most patients of different ages.

18. Are there any medical guidelines for ART performed in the United States?

ASRM and SART issue guidelines dealing with specific ART practice issues, such as the number of embryos to be transferred in an ART procedure. Further information can be obtained from ASRM or SART (both at telephone 205-978-5000 or at websites http://www.asrm.org and http://www.sart.org).

19. Where can I get additional information on US fertility clinics?

For further information on specific clinics, contact the clinic directly (see Appendix C: ART Clinics on pages 535–576 for current contact information). In addition, SART can provide general information on its member clinics (telephone 205-978-5000, extension 109).

20. What’s new in the 2013 report?

CDC is constantly striving to present the most accurate and relevant ART clinic success rates to help potential patients make decisions. Changes to the clinic table and National Summary table format have been made to provide a more comprehensive and user-friendly presentation of clinic and national success rates data. Highlights of modifications to this report designed to enhance clarity, readability, and improve the presentation of data include the following:

**2013 ART Fertility Clinic Tables Section**

- Modification of the total number of ART cycles performed to include the total number of cycles using frozen eggs for each clinic (indicated in parentheses).
- Removal of outcomes per pregnancy for fresh embryo cycles from nondonor eggs.
- Addition of a measure, percentage of cycles and transfers resulting in term, normal weight, and singleton live births.
- Replacement of the percentage of cycles per transfer resulting in triplet or more live births with the percentage of cycles per transfer resulting in twin live births, and the addition of this measure for donor egg cycles.
- Addition of the number of egg/embryo banking cycles by age of the woman.

**Appendix A**

- Addition of results from validation of 2013 ART data.
INTRODUCTION TO FERTILITY CLINIC TABLES

Presentation of fertility table data begins on page 21 with the 2013 National Summary of combined data from all clinics. Individual clinic tables follow, beginning on page 23, with each clinic’s data presented in a one-page table that includes the types of assisted reproductive technology (ART) used, patient diagnoses, success rates, and individual clinic characteristics. Clinics reporting their data to the Centers for Disease Control and Prevention (CDC) are listed in alphabetical order by state, city, and clinic name. Each known nonreporting clinic is also included in alphabetical order, although no data are presented for these clinics. An explanation of how to read a fertility clinic table begins on page 14.

Many people considering ART will want to use this report to find the “best” clinic. However, comparisons between clinics must be made with caution. Many factors contribute to the success of an ART procedure. Some factors are related to the training and experience of the ART clinic and laboratory professionals and the quality of services they provide. Other factors are related to the patients themselves, such as their age, quality of their eggs and sperm, cause of their infertility, genetic factors, and diagnosis. Some clinics may be more willing than others to accept patients with low chances of success or may specialize in ART treatments that attract particular types of patients.

We encourage consumers considering ART to contact clinics to discuss their specific medical situations and their potential for success using ART. Because clinics did not have the opportunity to provide narratives to explain their data in this report, such conversations could provide additional information to help consumers decide whether to use ART.

Although ART offers important options for the treatment of infertility, the decision to use ART involves many factors in addition to success rates. Therefore, consumers should carefully examine all related financial, psychological, and medical issues before beginning treatment. They also will want to consider the location of the clinic, the counseling and support services available, and the rapport that staff members have with their patients.

Important Factors to Consider When Using These Tables to Assess a Clinic

• ART statistics are from 2013

Data for cycles started in 2013 could not be published until 2015 because the final outcomes of pregnancies conceived in December 2013 were not known until October 2014. Additional time was then required to collect and analyze the data and prepare the report. Many factors that contribute to a clinic’s success rate may have changed in the 2 years since these cycles were performed. Personnel may be different. Equipment and training may or may not have been updated. As a result, success rates for 2013 may not necessarily represent current rates.

• Success rates may vary

A clinic’s success rates may vary from year to year even if all determining factors remain the same. The more cycles that a clinic carries out, the less the rate is likely to vary. Conversely, clinics that perform fewer cycles are likely to have more variability in success rates from year to year. As an extreme example, if a clinic reports only one ART cycle in a given category, as is sometimes the case in the data presented here, the clinic’s success rate in that category would be either 0% or 100%.
• Some clinics see more than the average number of patients with difficult infertility problems

Some clinics are willing to offer ART to most potential patients, even those who have a low probability of success. Others discourage such patients or encourage them to use donor eggs, a practice that results in higher success rates among older women. Clinics that accept a higher percentage of women who previously have had multiple unsuccessful ART cycles will generally have lower success rates. In contrast, clinics that offer ART procedures to women who might have become pregnant with less technologically advanced treatment will generally have higher success rates. CDC does not collect information on clinic-specific practices with regard to patient selection.

• The percentage of cycles that are canceled varies

Percentages of canceled cycles using fresh nondonor eggs or embryos vary among clinics from less than 1% to, in a few cases, more than 25%. A high percentage of cancellations tends to lower the percentage of cycles resulting in live births but may increase the percentage of embryo transfers resulting in live births.

• Percentages of unstimulated (or “natural”) cycles are included with those for stimulated cycles

In an unstimulated cycle, the woman ovulates naturally rather than as the result of the daily injections used in stimulated cycles. Unstimulated cycles are less expensive because they require no daily injections and fewer ultrasounds and blood tests. However, women who use natural or mild stimulation produce only one or two eggs, thus reducing the potential number of embryos for transfer. As a result, clinics that perform a relatively high percentage of unstimulated cycles may have lower success rates. Nationally, about 1% of ART cycles using fresh nondonor eggs or embryos in 2013 were unstimulated.

• Success rates are calculated per cycle rather than per patient

Success rates shown in this report are presented in terms of cycles, as required by law, rather than in terms of patients. As a result, patients who had more than one ART cycle in 2013 are represented in multiple cycles that are not linked. In addition, for patients who undergo both fresh and frozen cycles, success rates are calculated separately by cycle type. Clinics that have a very high percentage of cycles resulting in live births with frozen embryos would have higher ART success rates if these births were included as successes from the original fresh cycle. Consumers should look at both rates (for cycles using fresh embryos and for those using frozen embryos) when assessing a clinic’s success rates.

• The number of embryos transferred varies from clinic to clinic

In 2013, the average number of embryos that nearly all clinics transferred to women younger than age 35 ranged from 1 to 3 for fresh nondonor cycles. The American Society for Reproductive Medicine (ASRM) and the Society for Assisted Reproductive Technology (SART) discourage the transfer of a large number of embryos because of the increased likelihood of multiple-fetus pregnancies. Multiple-fetus pregnancies, in turn, increase the probability of premature births and related health problems.
Comparison of success rates across clinics may not be meaningful. Patient medical characteristics and treatment approaches vary (see pages 11–20).

### 2013 ART CYCLE PROFILE

Data verified by Andrew B. Sample, MD

<table>
<thead>
<tr>
<th>Type of ART and Procedural Factors</th>
<th>Tubal factor</th>
<th>Ovulatory dysfunction</th>
<th>Diminished ovarian reserve</th>
<th>Endometriosis</th>
</tr>
</thead>
<tbody>
<tr>
<td>IVF</td>
<td>99%</td>
<td>13%</td>
<td>6%</td>
<td>6%</td>
</tr>
<tr>
<td>Unstimulated</td>
<td>&lt;1%</td>
<td>6%</td>
<td>9%</td>
<td>6%</td>
</tr>
<tr>
<td>Used gestational carrier</td>
<td>&lt;1%</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Patient Diagnosis</th>
<th>Male factor</th>
<th>Other factor</th>
<th>Unknown factor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Uterine factor</td>
<td>1%</td>
<td>19%</td>
<td>7%</td>
</tr>
<tr>
<td>Tubal factor</td>
<td>13%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ovulatory dysfunction</td>
<td>6%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Diminished ovarian reserve</td>
<td>9%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Endometriosis</td>
<td></td>
<td></td>
<td>10%</td>
</tr>
</tbody>
</table>

Multiple Factors:
- Female factors only: 13%
- Female & male factors: 28%

### 2013 ART SUCCESS RATES

Total number of cycles: 610 (includes 8 cycle[s] using frozen eggs)

#### Fresh Embryos from Nondonor Eggs

- Number of cycles: 115
- Percentage of cancellations: 12.2%
- Average number of embryos transferred: 2.0
- Percentage of embryos transferred resulting in implantation: 28.8%
- Percentage of elective single embryo transfers (eSET): 5.5%

#### Outcomes per Cycle

- Percentage of cycles resulting in term, normal weight & singleton live births: 23.5%
- Percentage of cycles resulting in singleton live births: 28.7%
- Percentage of cycles resulting in twin live births: 7.0%
- Percentage of cycles resulting in live births: 37.4%
- Percentage of cycles resulting in pregnancies: 45.2%

#### Frozen Embryos from Nondonor Eggs

- Number of cycles: 75
- Number of transfers: 62
- Estimated average number of transfers per retrieval: 2.5
- Average number of embryos transferred: 2.1
- Percentage of embryos transferred resulting in implantation: 24.5%
- Percentage of transfers resulting in term, normal weight & singleton live births: 19.4%
- Percentage of transfers resulting in singleton live births: 21.0%
- Percentage of transfers resulting in twin live births: 4.8%
- Percentage of transfers resulting in live births: 27.4%
- Percentage of transfers resulting in pregnancies: 61.3%

#### Outcomes per Transfer

- Percentage of transfers resulting in term, normal weight & singleton live births: 19.4%
- Percentage of transfers resulting in singleton live births: 21.0%
- Percentage of transfers resulting in twin live births: 4.8%
- Percentage of transfers resulting in live births: 27.4%
- Percentage of transfers resulting in pregnancies: 61.3%

#### Number of Egg/Embryo Banking Cycles

- Number of cycles: 12
- Number of transfers: 49
- Average number of embryos transferred: 2.1
- Percentage of transfers resulting in term, normal weight & singleton live births: 38.7%
- Percentage of transfers resulting in singleton live births: 45.0%
- Percentage of transfers resulting in twin live births: 4.1%
- Percentage of transfers resulting in live births: 51.0%
- Percentage of transfers resulting in pregnancies: 71.4%

#### Current Services & Profile

<table>
<thead>
<tr>
<th>Current Name: Sample Clinic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Donor eggs?</td>
</tr>
<tr>
<td>Donor embryos?</td>
</tr>
</tbody>
</table>

---

a Reflects features of fresh nondonor cycles. If IVF is <100%, the remaining cycles are GIFT, ZIFT, or a combination of these procedures with IVF.

b Total patient diagnosis percentages may be greater than 100% because more than one diagnosis can be reported for each ART cycle.

c Fractions are used for rates with denominators less than 20. Multiple-infant births (e.g., twins) with at least one live infant are counted as one live birth.

d Total cycle number includes those using frozen eggs. It excludes 3 cycle[s] evaluating new procedures. Both cycle types are excluded from ART success rates.

e In this report, births are defined as term if at least 37 full weeks gestation and normal birth weight if at least 2,500 grams (approximately 5 pounds, 8 ounces).

f All ages are reported together because previous data show that patient age does not materially affect success with donor eggs.
How to Read a Fertility Clinic Table

This section is provided to help consumers understand the information presented in the fertility clinic tables. The number before each heading refers to the number of the corresponding section in the sample clinic table on page 13. Technical terms are defined in the Glossary of Terms (see Appendix B on pages 529–531).

1. Verification
To have success rates published in the annual report, a clinic’s medical director must verify the accuracy of the data reported to CDC. The name of the medical director who verified the clinic’s data is shown.

2. Type of ART and procedural factors
This section gives the percentage of in vitro fertilization (IVF) cycles using fresh nondonor embryos. It also lists the percentage of ART cycles using fresh nondonor eggs or embryos that were unstimulated, that used a gestational carrier, that involved intracytoplasmic sperm injection (ICSI), and that used preimplantation genetic diagnosis (PGD).

3. Patient diagnosis
This section gives the percentage of ART cycles for which patients had a particular diagnosis out of the total number of cycles performed at the clinic. See Appendix B: Glossary of Terms on pages 529–531 for more information about each diagnosis. Cycles started with the intent of using frozen eggs or with the intent of freezing and banking all eggs or embryos for future use are not included in the calculations of percentages in this section.

Consumers may want to know what percentage of cycles are performed for a clinic’s patients with the same diagnosis as they have. In addition, patients’ diagnoses may affect a clinic’s success rates. However, the use of these diagnostic categories may vary somewhat from clinic to clinic, and total patient diagnosis percentages may be greater than 100% because more than one diagnosis can be reported for each cycle.

4. Total number of cycles
The first number represents total ART cycles started at the clinic in 2013. It includes cycles started with the intent of freezing and banking all eggs or embryos for future use. It also includes cycles started with the intent of using frozen eggs, which is shown in parentheses. The total number of ART cycles excludes cycles started with the intent of evaluating a new procedure (a small number nationwide). The number of cycles at each clinic in which a new procedure was being evaluated is shown in footnote “d.” Cycles in which a new procedure was being evaluated and cycles with the intent to use frozen eggs are not used to calculate success rates presented in clinic tables or the national summary.

5. Success rates by type of cycle
Success rates are given for the three categories of ART cycles included in Sections 7, 8, and 10: cycles using fresh embryos from nondonor eggs, cycles using frozen embryos from nondonor eggs, and cycles using donor eggs. The number of egg/embryo banking cycles is given in Section 9. Success rates shown are calculated on the basis of data from all ART cycle procedures (IVF, gamete intrafallopian transfer or GIFT, and zygote intrafallopian transfer or ZIFT).

Success rates for term, normal weight, and singleton live births (births of a single live infant at 37 weeks or more and weighing at least 5 pounds and 8 ounces) are emphasized in the table because they are an important measure of success. Multiple-infant births are associated
with increased risk of adverse outcomes for mothers and infants, including higher rates of caesarean section, prematurity, low birth weight, and infant disability or death.

Clinic table success rates indicate the average chance of success for ART cycles started at the clinic in 2013. Depending on the type of cycle, success rates are calculated by the number of cycles started, the number of cycles that progressed to embryo transfer, or both, and by age group or for all ages combined. For example, if a clinic started 60 fresh embryo cycles using nondonor eggs in 2013, and these resulted in 15 live births, the average success rate for this type of cycle started at that clinic would be

\[
15 \text{ (births)} \div 60 \text{ (cycles)} = 0.250 \text{ or } 25.0\%
\]

Thus, the success rate per cycle was 25.0%, meaning that 25.0% of fresh embryo cycles using nondonor eggs started at the clinic in 2013 resulted in a live birth. Alternatively, if an embryo transfer was attempted in only 40 of the 60 cycles, the average success rate for transfers of this type of cycle at that clinic would be

\[
15 \text{ (births)} \div 40 \text{ (transfers)} = 0.375 \text{ or } 37.5\%
\]

Thus, the success rate per transfer was 37.5%, meaning that 37.5% of fresh embryo cycles using nondonor eggs in which an embryo transfer was attempted at the clinic in 2013 resulted in a live birth.

Success rate calculations may be misleading if they are based on a small number of cycles or transfers. Therefore, when fewer than 20 cycles or transfers are reported in a given category, the rates are shown as fractions rather than percentages. For example, suppose that the sample clinic started only 19 fresh embryo cycles using nondonor eggs among women aged 41–42 years. Of these 19 cycles, 2—or about 10%—resulted in a live birth. Because of the small number of cycles, 10% is not a statistically reliable success rate, so the success rate is presented as 2/19, meaning 2 out of the 19 cycles started resulted in a live birth.

6. Age of woman

Because a woman’s fertility declines with age, clinics report lower success rates for older women attempting to become pregnant with their own eggs. For this reason, success rates for women using nondonor eggs or embryos are reported separately for women younger than age 35, for women aged 35–37, aged 38–40, aged 41–42, aged 43–44, and for woman older than age 44. The sample clinic table illustrates the decline in ART success rates among older women. For example, for cycles that used fresh embryos from nondonor eggs, the percentage of cycles resulting in live births among women younger than age 35 was 37.4%, whereas the percentage of cycles resulting in live births among women aged 38–40 was 20.6%.

7. Cycles using fresh embryos from nondonor eggs

This section includes success rates for all ART cycles started with the intent to use fresh embryos from a woman’s own eggs. Cycles started with the intention of freezing and banking all eggs or embryos for future use are not included in the calculations of success rates in this section.

- **Number of cycles**

  This represents the number of ART cycles started by age of woman.

- **Percentage of cancellations**

  This refers to cycles that were stopped before an egg retrieval was attempted. A cycle may be canceled if a woman’s ovaries do not respond to fertility medications and thus do not produce a sufficient number of eggs. Cycles also may be canceled because of illness or other medical or personal reasons.

  This is calculated as follows: number of cycles canceled divided by the total number of cycles, expressed as a percentage of cycles.
• **Average number of embryos transferred**

The average number of embryos transferred varies from clinic to clinic. ASRM and SART have practice guidelines that address this issue. Further information can be obtained from ASRM or SART (both at telephone 205-978-5000 or at websites http://www.asrm.org and http://www.sart.org).

This is calculated as follows: number of embryos transferred divided by number of cycles in which one or more embryos were transferred.

• **Percentage of embryos transferred resulting in implantation**

This represents the number of fetuses with which the woman became pregnant out of the total number of embryos transferred for all cycles in which one or more embryos were transferred. Not all fetal hearts can be detected by ultrasound. For this reason, the number of fetuses with which a woman is pregnant is defined as the larger of either the maximum number of fetal hearts detected by ultrasound or maximum number of infants born, including live born and stillborn infants.

This is calculated as follows: the larger of either the maximum number of fetal hearts or maximum number of infants born (live born and stillborn) divided by number of embryos transferred, expressed as a percentage of embryos transferred.

• **Percentage of elective single embryo transfer (eSET)**

This represents the cycles in which one embryo is selected to be transferred from a larger number of available embryos, usually for the purpose of reducing the chance of having a multiple-infant birth. For these cycles, one or more of the extra embryos are cryopreserved (frozen) during the current cycle for future use.

This is calculated as follows: number of cycles in which one embryo was transferred and one or more embryos were cryopreserved, divided by number of transfer procedures in which either one embryo was transferred and one or more embryos were cryopreserved or more than one embryo was transferred, expressed as a percentage of these transfer procedures.

**7A. Outcomes per cycle**

In this section, success rates using fresh embryos from nondonor eggs are calculated as a percentage of fresh nondonor cycles started. The number of cycles started is not the same as the number of patients treated because some patients start more than one cycle in a year.

• **Percentage of cycles resulting in term, normal weight, and singleton live births**

This represents the cycles that resulted in the birth of a single live infant of normal weight and at term, out of all cycles started. For this report, births are defined as term if at least 37 full weeks gestation and normal weight if at least approximately 5 pounds and 8 ounces.

This is calculated as follows: number of single-infant live births with a birth weight of at least 2,500 grams (approximately 5 pounds, 8 ounces) and at least 37 full weeks gestation, divided by number of cycles, expressed as a percentage of cycles.

• **Percentage of cycles resulting in singleton live births**

This represents the cycles that resulted in the birth of a single live infant out of all cycles started.

This is calculated as follows: number of single-infant live births divided by number of cycles, expressed as a percentage of cycles.
• Percentage of cycles resulting in twin live births

This represents the cycles that resulted in a live birth of two infants out of all cycles started. A twin live birth may include one or both infants born live.

This is calculated as follows: number of twin live births divided by number of cycles, expressed as a percentage of cycles.

• Percentage of cycles resulting in live births

This represents the cycles that resulted in a live birth out of all cycles started. A cycle resulting in live birth may include one or more infants born live; that is, a multiple-infant birth (for example, twins or triplets) with at least one live-born infant is counted as one live birth.

This is calculated as follows: number of live births divided by number of cycles, expressed as a percentage of cycles.

• Percentage of cycles resulting in pregnancies

This represents the cycles that resulted in a pregnancy out of all cycles started. Because some pregnancies end in a miscarriage, induced abortion, or stillbirth, the percentage of cycles resulting in pregnancies is usually higher than the percentage of cycles resulting in live births.

This is calculated as follows: number of pregnancies divided by number of cycles, expressed as a percentage of cycles.

7B. Outcomes per transfer

In this section, success rates using fresh embryos from nondonor eggs are calculated as the percentage of these cycles in which an embryo transfer procedure was attempted, even if no embryos were successfully transferred. A clinic may begin cycles that do not proceed to transfer because not every cycle started results in successful egg retrieval and fertilization. For this reason, percentages of transfers resulting in pregnancies and live births generally are higher than percentages for cycles started.

• Number of transfers

This represents the number of transfer procedures attempted out of all cycles started, by age of woman.

• Percentage of transfers resulting in term, normal weight, and singleton live births

This represents the transfer procedures that resulted in the birth of a single live infant of normal weight and at term, out of all cycles in which a transfer was attempted. For this report, births are defined as term if at least 37 full weeks gestation and normal weight if at least approximately 5 pounds and 8 ounces.

This is calculated as follows: number of single-infant live births with a birth weight of at least 2,500 grams (approximately 5 pounds, 8 ounces) and at least 37 full weeks gestation, divided by number of transfers, expressed as a percentage of transfers.

• Percentage of transfers resulting in singleton live births

This represents the transfer procedures that resulted in the birth of a single live infant out of all cycles in which a transfer was attempted.

This is calculated as follows: number of single-infant live births divided by number of transfers, expressed as a percentage of transfers.

• Percentage of transfers resulting in twin live births

This represents the transfer procedures that resulted in a live birth of two infants out of all cycles in which a transfer was attempted. A twin live birth may include one or both infants born live.
This is calculated as follows: number of twin live births divided by number of transfers, expressed as a percentage of transfers.

- **Percentage of transfers resulting in live births**

  This represents the transfer procedures that resulted in a live birth out of all cycles in which a transfer was attempted. A transfer resulting in live birth may include one or more infants born live; that is, a multiple-infant birth (for example, twins or triplets) with at least one live-born infant is counted as one live birth.

  This is calculated as follows: number of live births divided by number of transfers, expressed as a percentage of transfers.

- **Percentage of transfers resulting in pregnancies**

  This represents the transfer procedures that resulted in a pregnancy out of all cycles in which a transfer was attempted. Because some pregnancies end in a miscarriage, induced abortion, or stillbirth, the percentage of transfers resulting in pregnancies is usually higher than the percentage of transfers resulting in live births.

  This is calculated as follows: number of pregnancies divided by number of transfers, expressed as a percentage of transfers.

8. **Cycles using frozen embryos from nondonor eggs**

  This section includes success rates for all ART cycles started with the intent to use frozen embryos from a woman's own eggs. It does not include cycles started with the intent to use frozen eggs.

  Cycles using frozen embryos are those in which previously frozen (cryopreserved) embryos are thawed and transferred. Because these cycles use embryos formed during a previous cycle, no stimulation or retrieval is involved in the current cycle. As a result, cycles using frozen embryos usually are less expensive and less invasive than cycles using fresh embryos. In addition, freezing some of the embryos retrieved during a fresh cycle may increase a woman’s overall chances of having a child from a single retrieval.

  The embryos transferred in frozen nondonor cycles may come from prior cycles with the original intent to retrieve and transfer embryos (fresh nondonor cycles) and in which one or more embryos were cryopreserved. Embryos transferred in frozen nondonor cycles also may come from previous banking cycles with the original intent to cryopreserve all retrieved eggs or resulting embryos for future use. Banking cycles may be performed to avoid potentially negative effects of stimulation, or when it is necessary to wait for results of genetic testing. Since some patients may only develop a small number of eggs during a single cycle, women may undergo several short-term banking cycles to improve availability of good-quality embryos for later transfer. In other situations, patients may choose to freeze eggs or embryos because the patient or partner needs to undergo medical treatment that may harm their future reproduction capabilities or to delay childbearing for other reasons.

  Success rates for frozen nondonor cycles are calculated as the percentage of these cycles in which an embryo transfer procedure was attempted, not the percentage of cycles started because not every cycle started results in successful thaw of frozen embryos or proceeds to a transfer procedure. The only success rate in the clinic table that includes banking cycles in the calculation is the estimated average number of frozen nondonor transfers per fresh nondonor retrievals. See the following interpretation of this measure, and Sections 7 and 7B on pages 15–18 for the interpretation of other success rates for frozen nondonor cycles.
• **Estimated average number of transfers per retrieval**

This represents an estimate of the average number of frozen nondonor cycle transfers for a patient per fresh nondonor cycle retrieval. All banking cycles started during the reporting year, and any fresh nondonor cycles performed during the reporting year among patients who received a transfer of frozen nondonor embryos are included. Frozen nondonor transfers performed early in the reporting year might have involved egg retrieval and egg or embryo cryopreservation during cycles performed in previous years. Additionally, cycles in which retrieval and cryopreservation occurred late in the reporting year may not contribute to frozen nondonor cycles in which thawed embryos are transferred until subsequent years.

This measure will be lower in clinics performing a larger number of short-term banking cycles to increase the number of good-quality embryos available for transfer, or in clinics performing a larger number of long-term banking cycles for fertility preservation. On the other hand, this measure will be higher in clinics practicing elective single embryo transfer (eSET) when one fresh nondonor cycle results in several subsequent frozen nondonor cycles.

This is calculated as follows: number of frozen nondonor cycles in which at least one embryo was transferred divided by the sum of: number of banking cycles among all patients in the age group and number of fresh nondonor cycles among those patients in the age group with one or more frozen nondonor cycles resulting in the transfer of at least one embryo.

9. **Number of egg/embryo banking cycles**

This section represents the number of cycles started with the intent of freezing and banking all eggs or embryos for future use, by age of woman. See Section 8 on page 18 for additional information about banking cycles.

10. **Cycles using donor eggs**

Women who are older, have premature ovarian failure (early menopause), whose ovaries have been removed, and who have a genetic concern about using their own eggs may consider using eggs that are donated by a young, healthy woman. Embryos donated by patients who previously had ART also may be available. Many clinics provide services for donor egg and embryo cycles.

In this section, success rates are presented separately for ART cycles using fresh donor eggs or embryos and those using frozen donor embryos. For both cycle types, results among women in all age groups are reported together because previous data show that patient age does not affect success rates with donor eggs. Success rates using donor eggs or embryos are calculated as the percentage of these cycles in which an embryo transfer was attempted, even if no embryos were successfully transferred. See Sections 7 and 7B on pages 15–18 for the interpretation of success rates for cycles using donor eggs or embryos.

11. **Current clinic services and profile**

• **Current name**

This may reflect a clinic name change that occurred since 2013, whereas the clinic name at the top of the table was the name of the ART clinic as it existed in 2013. Some clinics not only have changed their names but have reorganized as well. Reorganization is defined as a change in ownership or affiliation or a change in at least two of the three key staff positions (practice director, medical director, or laboratory director). In such cases, and in cases in which a clinic has closed since 2013, no current name is listed, but a statement that the clinic has closed or undergone reorganization since 2013 is included, and no current clinic services or profile are listed.
• Donor eggs

Some clinics have programs for ART in which a donor egg is retrieved from one woman (the donor), fertilized with either partner or donor sperm, and then the resulting embryo is transferred to the uterus of another woman (the recipient). Policies regarding sharing of donor eggs vary from clinic to clinic.

• Donor embryos

This refers to whether the clinic has a program for ART using embryos that were donated by other patients who previously underwent ART treatment and had extra embryos available.

• Gestational carriers

A gestational carrier is a woman who carries a child for others; sometimes such women are referred to as gestational surrogates. Policies regarding ART services using gestational carriers vary from clinic to clinic. Some states do not permit clinics to offer this service.

• Embryo cryopreservation

This refers to whether the clinic has a program for freezing extra embryos that may be available from a patient’s ART cycle.

• Single women

Clinics have varying policies regarding ART services for single (unmarried) women.

• SART member

In 2013, 385 of the 467 reporting clinics were SART members.

• Verified lab accreditation

If “Yes” appears next to this item, the ART clinic uses an embryo laboratory accredited by one or more of three specific accrediting organizations. If “Pending” appears here, it means that the clinic has submitted an application for accreditation to one or more of the three organizations and has provided proof of such application to CDC. “No” indicates that the embryo laboratory has not been accredited by any of these three organizations or has not provided proof of accreditation to CDC.

CDC provides this information as a public service. Please note that CDC does not oversee any of these accreditation programs. They are all nonfederal programs. To become certified, laboratories must have in place systems and processes that comply with the accrediting organization’s standards. Depending on the organization, standards may include those for personnel, quality control and quality assurance, specimen tracking, results reporting, and the performance of technical procedures. Compliance with these standards is confirmed by documentation provided by the laboratory and by on-site inspections. For further information, consumers may contact the three accrediting organizations directly:

College of American Pathologists (CAP): For a list of accredited laboratories, call 800-323-4040 and follow the prompts for Laboratory Accreditation.

The Joint Commission: Call 630-792-5800 to inquire about the status of individual laboratories.

New York State Tissue Bank Program (NYSTB): Call 518-485-5378 to find out which laboratories are certified under the tissue bank regulations.

Further information on laboratory accreditation for specific clinics is provided in Appendix C: 2013 Reporting Clinics, by State (pages 535–574).
Comparison of success rates across clinics may not be meaningful. Patient medical characteristics and treatment approaches vary (see pages 11–20).

## 2013 ART CYCLE PROFILE

### Type of ART and Procedural Factors

<table>
<thead>
<tr>
<th>Type of ART</th>
<th>Procedural Factors</th>
<th>IVF</th>
<th>&gt;99% With ICSI</th>
<th>Unstimulated</th>
<th>1% Used PGD</th>
<th>Used gestational carrier</th>
<th>&lt;1%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tubal factor</td>
<td>13%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ovulatory dysfunction</td>
<td>14%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Diminished ovarian reserve</td>
<td>32%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Endometriosis</td>
<td>9%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Patient Diagnosis

<table>
<thead>
<tr>
<th>Diagnosis</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tubal factor</td>
<td>13%</td>
</tr>
<tr>
<td>Ovulatory dysfunction</td>
<td>14%</td>
</tr>
<tr>
<td>Diminished ovarian reserve</td>
<td>32%</td>
</tr>
<tr>
<td>Endometriosis</td>
<td>9%</td>
</tr>
<tr>
<td>Uterine factor</td>
<td>5%</td>
</tr>
<tr>
<td>Male factor</td>
<td>33%</td>
</tr>
<tr>
<td>Other factor</td>
<td>15%</td>
</tr>
<tr>
<td>Unknown factor</td>
<td>13%</td>
</tr>
</tbody>
</table>

### Multiple Factors:
- Female factors only: 12%
- Female & male factors: 17%

### Type of Cycle and Procedural Factors

- IVF: >99%
- Unstimulated: 1%
- Used gestational carrier: <1%
- With ICSI: 69%
- Used PGD: 6%

### Patient Diagnosis

- Tubal factor: 13%
- Uterine factor: 5%
- Ovulatory dysfunction: 14%
- Male factor: 33%
- Other factor: 15%
- Unknown factor: 13%

### 2013 ART SUCCESS RATES

**Total number of cycles**: 190,773 (includes 2,655 cycle[s] using frozen eggs)

### Fresh Embryos from Nondonor Eggs

<table>
<thead>
<tr>
<th>Type of Cycle</th>
<th>&lt;35</th>
<th>35–37</th>
<th>38–40</th>
<th>41–42</th>
<th>43–44</th>
<th>&gt;44</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of cycles</td>
<td>40,083</td>
<td>19,853</td>
<td>18,061</td>
<td>9,588</td>
<td>4,823</td>
<td>1,379</td>
</tr>
<tr>
<td>Percentage of cancellations (%)</td>
<td>5.6</td>
<td>8.9</td>
<td>12.3</td>
<td>15.6</td>
<td>18.3</td>
<td>23.9</td>
</tr>
<tr>
<td>Average number of embryos transferred</td>
<td>1.8</td>
<td>2.0</td>
<td>2.3</td>
<td>2.7</td>
<td>2.9</td>
<td>2.5</td>
</tr>
<tr>
<td>Percentage of embryos transferred resulting in implantation (%)</td>
<td>39%</td>
<td>30.8</td>
<td>20.0</td>
<td>10.7</td>
<td>5.0</td>
<td>2.3</td>
</tr>
<tr>
<td>Percentage of elective single embryo transfers (eSET) (%)</td>
<td>21.4</td>
<td>12.6</td>
<td>5.1</td>
<td>1.8</td>
<td>0.6</td>
<td>0.8</td>
</tr>
</tbody>
</table>

### Outcomes per Cycle

- Percentage of cycles resulting in term, normal weight & singleton live births: 23.8%
- Percentage of cycles resulting in singleton live births: 28.2%
- Average number of embryos transferred: 1.8
- Percentage of embryos transferred resulting in implantation: 39.9%
- Percentage of elective single embryo transfers: 21.4%

### Frozen Embryos from Nondonor Eggs

<table>
<thead>
<tr>
<th>Type of Cycle</th>
<th>&lt;35</th>
<th>35–37</th>
<th>38–40</th>
<th>41–42</th>
<th>43–44</th>
<th>&gt;44</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of cycles</td>
<td>21,627</td>
<td>11,140</td>
<td>8,354</td>
<td>3,344</td>
<td>1,503</td>
<td>811</td>
</tr>
<tr>
<td>Number of transfers</td>
<td>20,423</td>
<td>10,374</td>
<td>7,713</td>
<td>3,005</td>
<td>1,329</td>
<td>732</td>
</tr>
<tr>
<td>Estimated average number of transfers per retrieval</td>
<td>1.3</td>
<td>1.1</td>
<td>0.8</td>
<td>0.6</td>
<td>0.4</td>
<td>0.4</td>
</tr>
<tr>
<td>Average number of embryos transferred</td>
<td>1.7</td>
<td>1.7</td>
<td>1.7</td>
<td>1.8</td>
<td>2.0</td>
<td>1.9</td>
</tr>
<tr>
<td>Percentage of embryos transferred resulting in implantation (%)</td>
<td>39.6</td>
<td>35.6</td>
<td>31.5</td>
<td>25.4</td>
<td>18.6</td>
<td>13.1</td>
</tr>
</tbody>
</table>

### Outcomes per Transfer

- Percentage of transfers resulting in term, normal weight & singleton live births: 28.6%
- Percentage of transfers resulting in singleton live births: 33.5%
- Average number of embryos transferred: 1.7
- Percentage of transfers resulting in implantation: 39.6%
- Percentage of transfers resulting in pregnancies: 54.5%

### Number of Egg/Embryo Banking Cycles

- Donor Eggs: 7,350
- Fresh Embryos: 9,718
- Frozen Embryos: 10,270

### CURRENT SERVICES & PROFILE

- Number of reporting clinics: 467
- Percentage of clinics that allow cycles involving:
  - Donor eggs: 92%
  - Donor embryos: 69%
  - Single women: 96%

### Clinic profile:

- SART member: 82%
- Verified lab accreditation:
  - Yes: 93%
  - No: 7%
  - Pending: 1%

---

* a Reflects features of fresh nondonor cycles. If IVF is <100%, the remaining cycles are GIFT, ZIFT, or a combination of these procedures with IVF.
* b Total patient diagnosis percentages may be greater than 100% because more than one diagnosis can be reported for each ART cycle.
* c Multiple-infant births (e.g., twins) with at least one live infant are counted as one live birth.
* d Total cycle number includes those using frozen eggs. It excludes 67 cycle(s) evaluating new procedures. Both cycle types are excluded from ART success rates.
* e In this report, births are defined as term if at least 37 full weeks gestation and normal birth weight if at least 2,500 grams (approximately 5 pounds, 8 ounces).
* f All ages are reported together because previous data show that patient age does not materially affect success with donor eggs.