# From Data to Decisions: The Evolution of Fertility Benefits in the U.S.

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# Introduction & Disclosures


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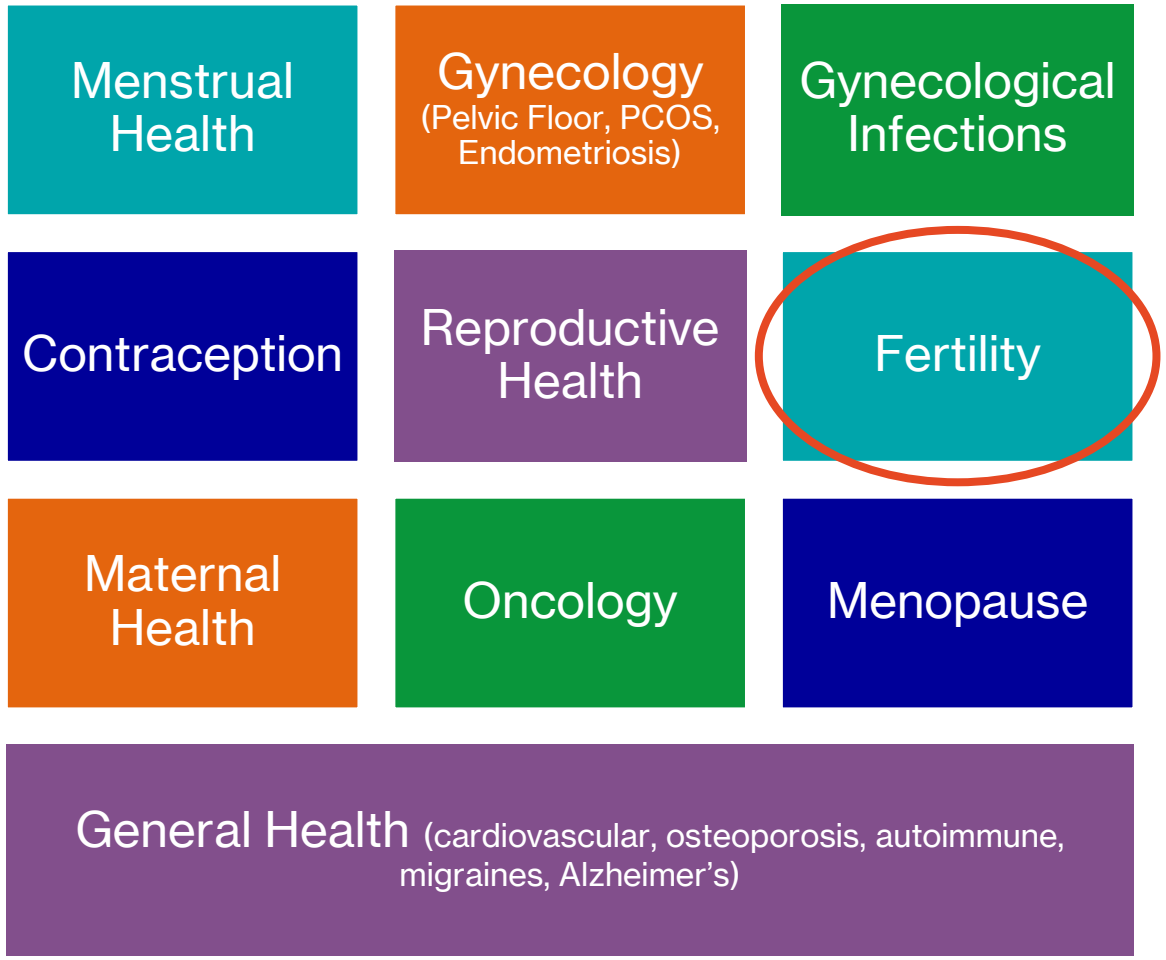
# Agenda

1. United States Fertility Rates & Births
2. Fertility Treatments
3. Fertility Benefit Coverage
4. State Regulation Impacting Infertility Coverage
5. Elective Egg Freezing

# Women's Healthcare In Focus



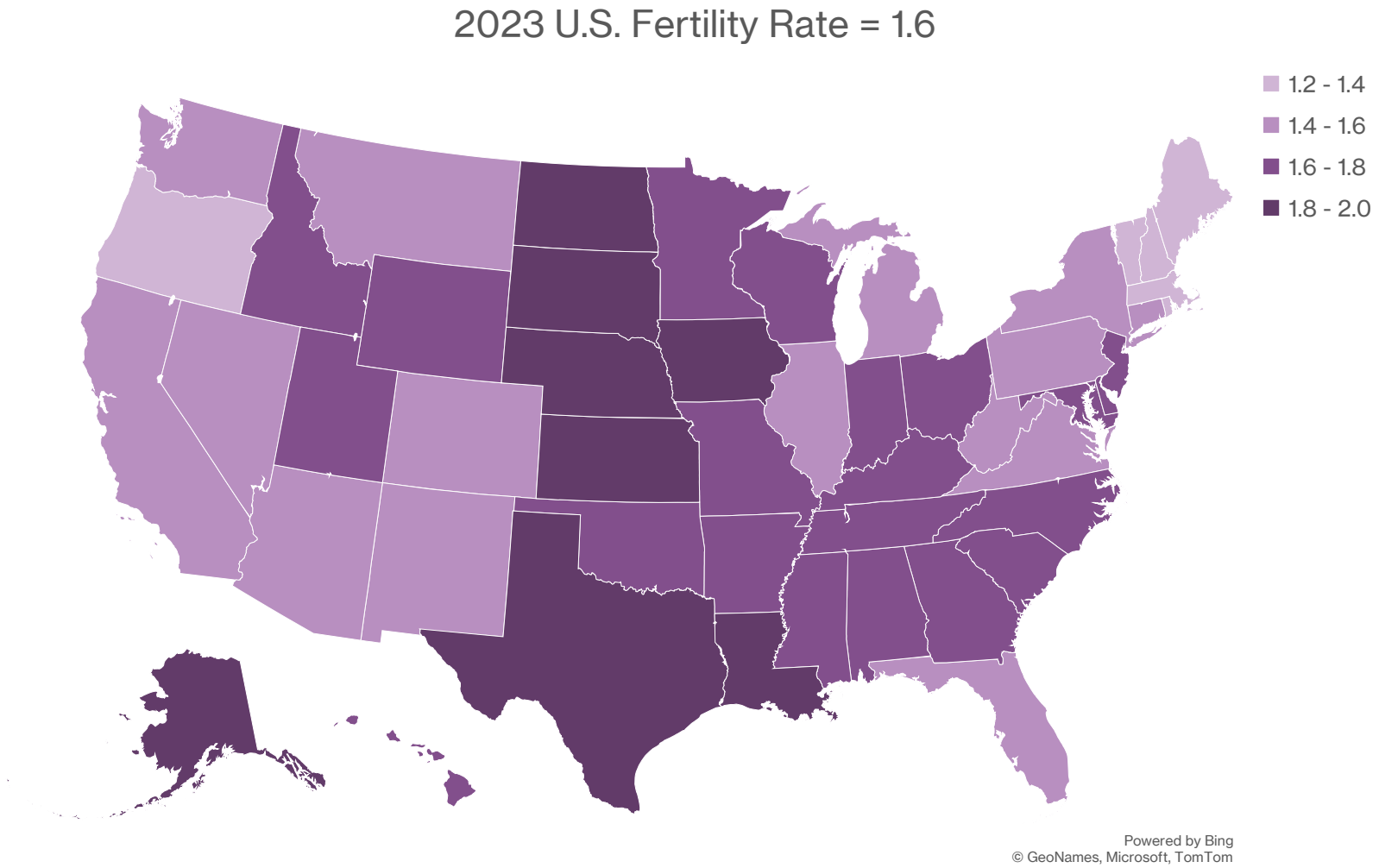

- Women's healthcare has historically been underfunded, under-researched, and under-tested.
  - Clinical trials rarely included women before 1993.
  - As of 2020, about 1% of healthcare research and innovation was invested in female-specific conditions beyond oncology.
- Increased awareness and advocacy along with advancements in research and technology have improved women's healthcare outcomes.
- "FemTech" boom is providing solutions to improve women's healthcare.
  - FemTech includes tools, products, services, wearables, and software designed to address women's health issues.

Sources: Why we know so little about women's health | AAMC, Unlocking opportunities in women's healthcare | McKinsey, The Rise of Female-Focused Healthcare - Factors and Implications for the Future, The state of US women's heart health | McKinsey

# United States
# Fertility Rate & Births

# Fertility Rate Background

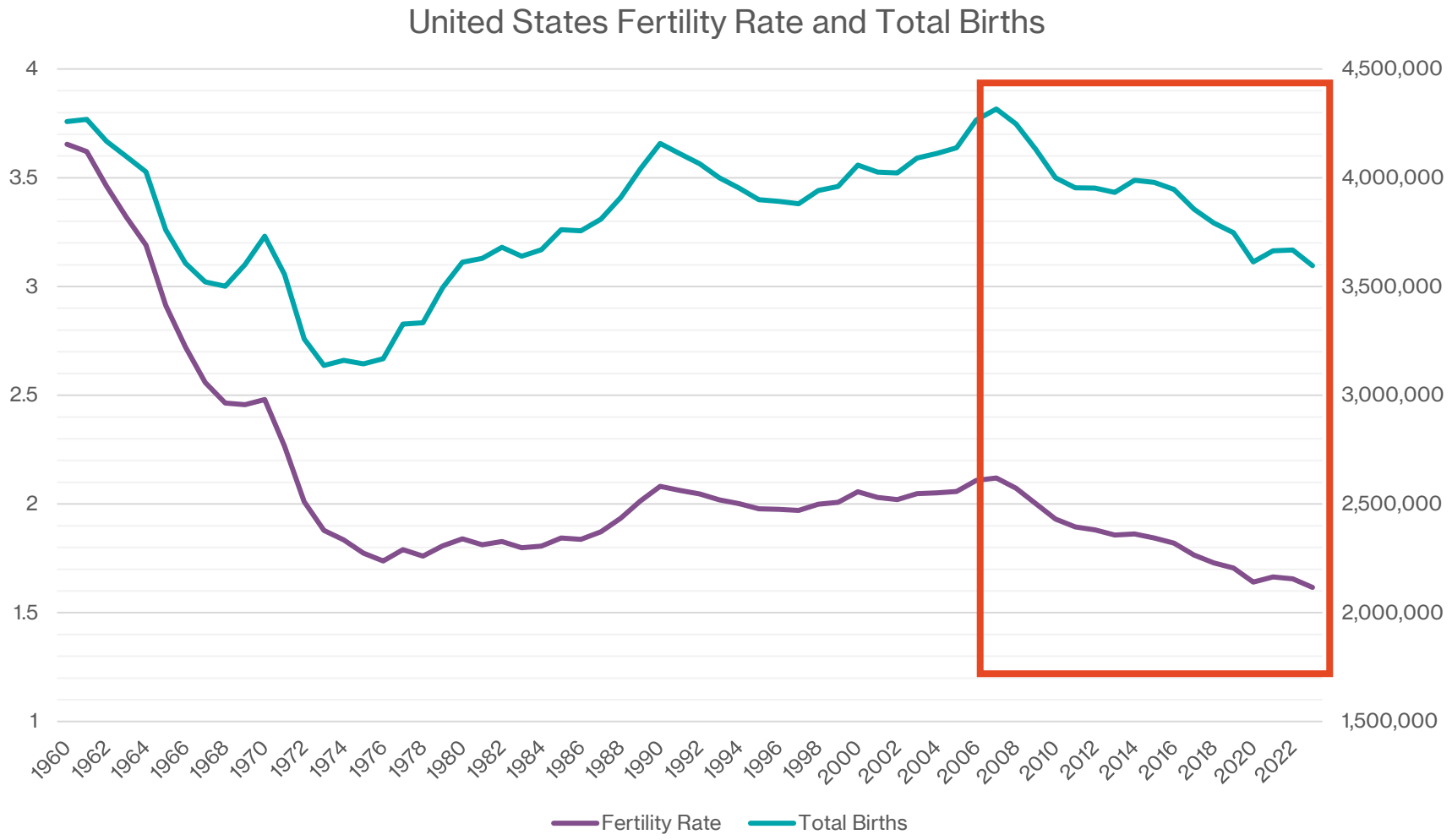
- Fertility Rate = Births Per Woman
  - Total fertility rate represents the number of children that would be born to a woman if she were to live to the end of her childbearing years and bear children in accordance with age-specific fertility rates of the specified year.
- Fertility Rate for Replacement = 2.1





Source: National Vital Statistics Reports, Volume 74, Number 1, March 18, 2025, Births: Final Data for 2023
Appendix

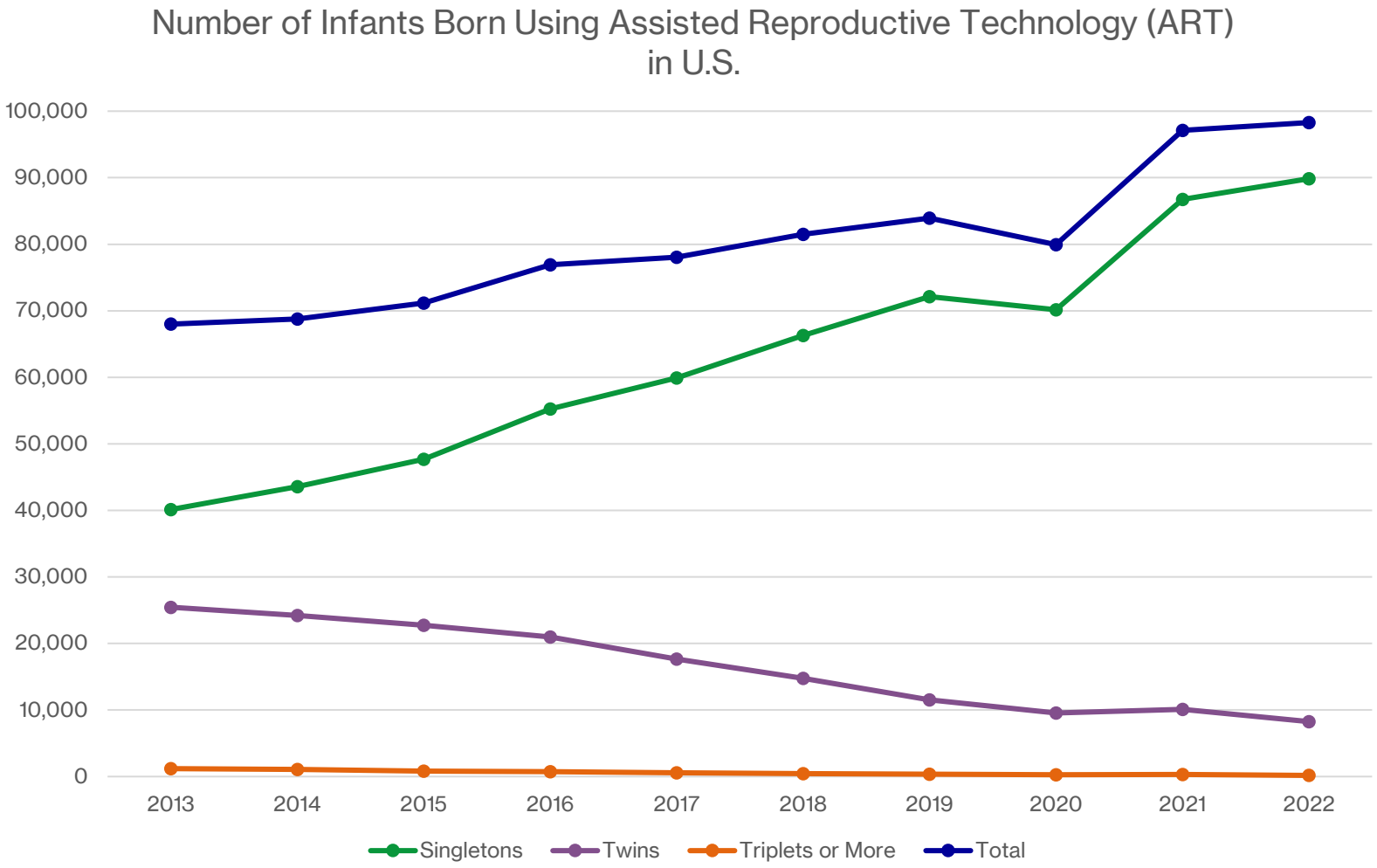
# United States Fertility Rate and Births: 1960-2023




- Fertility rate and total births have been declining over the past two decades.
- Potential Theories:
  - Financial & Economic Concerns
  - Career Focus
  - Relationship Status
  - Personal Beliefs
  - Delaying Parenthood
  - Forgoing Parenthood

Sources: Fertility rate, total (births per woman) - United States | Data,
NCHS - Births and General Fertility Rates: United States | Data | Centers for Disease Control and Prevention ,
National Vital Statistics Reports Volume 74, Number 11 August 27, 2025 Trends in Births and Deaths: United States, 2010–2023

# Number of Infants Born Using ART in U.S.




- Steadily increasing utilization of Assisted Reproductive Technology (ART) vs decreasing total births.
- Triplet and multiple births have decreased significantly as ART technologies have improved.
- In 2023, infants born using ART accounted for 2.6% of total infants born in the U.S.



Sources: National ART Summary | ART | CDC,
US IVF usage increases in 2023, leads to over 95,000 babies born | American Society for Reproductive Medicine | ASRM

# Fertility Treatments

# Most Common Fertility Treatments

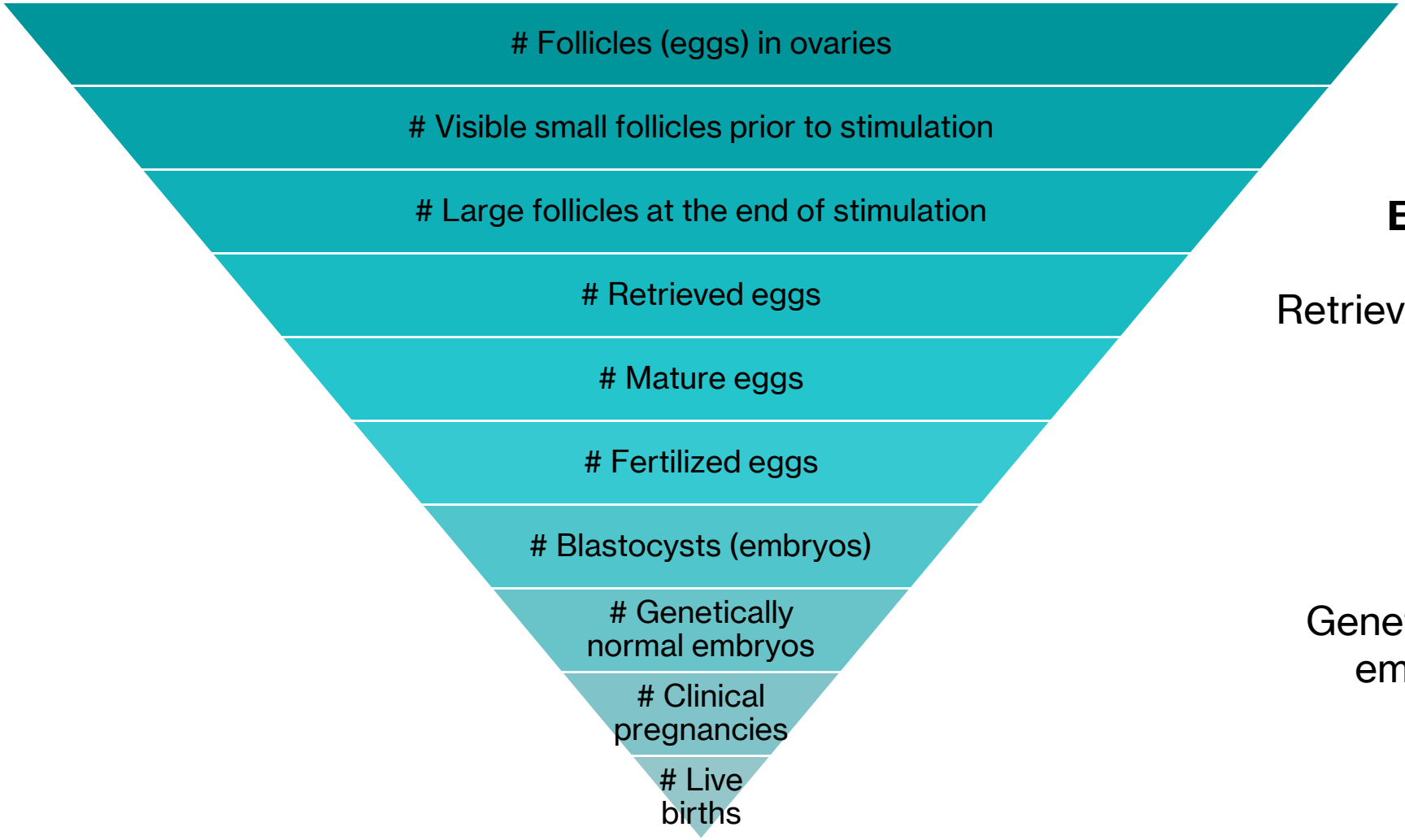
- **Intrauterine Insemination (IUI)**
  - Procedure: sperm is collected and cleaned, sperm is inserted directly into uterus during ovulation.
  - IUI can be paired with oral medications (most common), no medication, or injectable medications (gonadotropins).
  - IUI is not a form of ART.
  - Average Cost of IUI: $500-$4,000
  - Success Rate: 15%-20% (similar to average success rate without fertility treatments)

- **In Vitro Fertilization (IVF)**
  - Procedure: eggs are retrieved from ovaries via surgery and fertilized by sperm in a lab, embryos develop and are tested, embryo(s) are implanted into uterus .
  - IVF treatment includes daily injections of gonadotropins for 8-14 days to promote growth of multiple eggs.
  - IVF treatment can include other injectable medications (progesterone).
  - Embryo transfer can be a separate step and requires medications (progesterone, estrogen, birth control pills, etc.).
  - IVF is the most common form of ART.
  - First IVF baby was born in 1978.
  - Average Cost of IVF: $15,000-$25,000
  - Success Rate of Embryo Transfer: ~50% for women under age 35, success rate decreases as age increases



Sources: Fertility Treatments: Types, Side Effects And More – Forbes Health, Types of Fertility Medications and How They're Used in IVF - GoodRx , IUI vs. IVF: What Are the Biggest Differences? - GoodRx

# IVF Attrition Pyramid




**Example**:

Retrieved eggs: 15-20

Genetically normal embryos: 2-4



Source: IVF with Dr. Aimee

# Additional Fertility Options

- Lifestyle/Holistic changes (diet, exercise, sleep, stress, supplements)
- Medications (stimulate ovulation, regulate blood sugar)
- Surgery to improve fertility (laparoscopic surgery to treat PCOS/Endometriosis/Fibroids, remove blockage of fallopian tubes or testicular blockage)
- Sperm/Egg Donor
- Surrogacy
- Adoption

*This is not an exhaustive list of fertility options. Ultimately, it is best to consult a medical professional to understand options in a specific scenario.*

# Fertility Benefit Coverage

# Designing Fertility Benefits Coverage

What services are covered?

How is the benefit structured?

Who is covered?

# What services are covered?

- Are **fertility testing** services covered? Are these services covered under the Fertility Benefit or the Medical Benefit?
  - Examples: hormone labs, ultrasounds, ovary and semen analysis, blockage assessment, genetic carrier screening, and consultations with fertility specialists.
- Are **medications and surgeries** resulting from fertility testing findings covered under the Fertility Benefit or the Medical/Pharmacy Benefit?
- Does the plan design cover **IUI**?
- Does the plan design cover **IVF** and other ART treatments?
- Does the plan design have any **requirements to try IUI or other fertility treatments before IVF**/ other ART treatments?
- Does the plan design include **case management** for those going through fertility treatments?
- Does the plan design cover or assist with **donor eggs/sperm, surrogacy, and/or adoption**?
- Do plan designs **automatically include** Fertility, **or** is it a **buy up** for employer groups?
- Is a **vendor partner** needed to administer these services?

# How is the benefit structured?

- Fertility benefits can be and are typically capped at a Lifetime Maximum and/or an Annual Limit.
  - ACA prevents maximums or limits on the list of essential health benefits (EHB).
  - Fertility services are not considered an EHB according to the ACA.

| | Dollar Maximum/Limit | Cycle Maximum/Limit |
|---|---|---|
| Definition | Plan covers up to a specific dollar amount for covered fertility services. | Plan covers up to a specific number of cycles for covered fertility services. |
| Example | Lifetime Max of $50k | Lifetime Max of 3 IVF Cycles |
| Questions to Consider<br>*(not meant to be an exhaustive list)* | • Do dollars accumulate under both Medical and Pharmacy benefit?<br>  • How to address accumulation when Pharmacy is not integrated with Medical?<br>• Does the maximum dollar amount selected cover the intended amount of services across different geographic regions? | • What is a “Cycle?”<br>• How to compare IVF to IUI (or other fertility treatments)?<br>• How are non cycle related services covered (i.e. testing, consultations, etc.)?<br>• Does the IVF cycle include the embryo transfer?<br>• How are additional embryo transfers covered? |
| Insurer Financial Risk | More Predictable Costs | Less Predictable Costs – services are bundled |
| Member Financial Risk | Less Predictable Costs – members might reach their maximum in the middle of a cycle | More Predictable Coverage – members know exactly how many cycles are covered |

 Source: Information on Essential Health Benefits (EHB) Benchmark Plans | CMS 

What services are covered?

How is the benefit structured?

Who is covered?

# Who is covered? – Diagnosis & Definition

- Does the Plan Design require a diagnosis of “infertility” or is a diagnosis not required?
  - How does the requirement or lack of requirement impact claims?
- What is the definition of “infertility” used in the Plan Design?

## American Society for Reproductive Medicine definition of “Infertility”:

“Infertility” is a disease, condition, or status characterized by any of the following:

- The inability to achieve a successful pregnancy based on a patient’s medical, sexual, and reproductive history, age, physical findings, diagnostic testing, or any combination of those factors.
- The need for medical intervention, including, but not limited to, the use of donor gametes or donor embryos in order to achieve a successful pregnancy either as an individual or with a partner.
- In patients having regular, unprotected intercourse and without any known etiology for either partner suggestive of impaired reproductive ability, evaluation should be initiated at 12 months when the female partner is under 35 years of age and at 6 months when the female partner is 35 years of age or older.

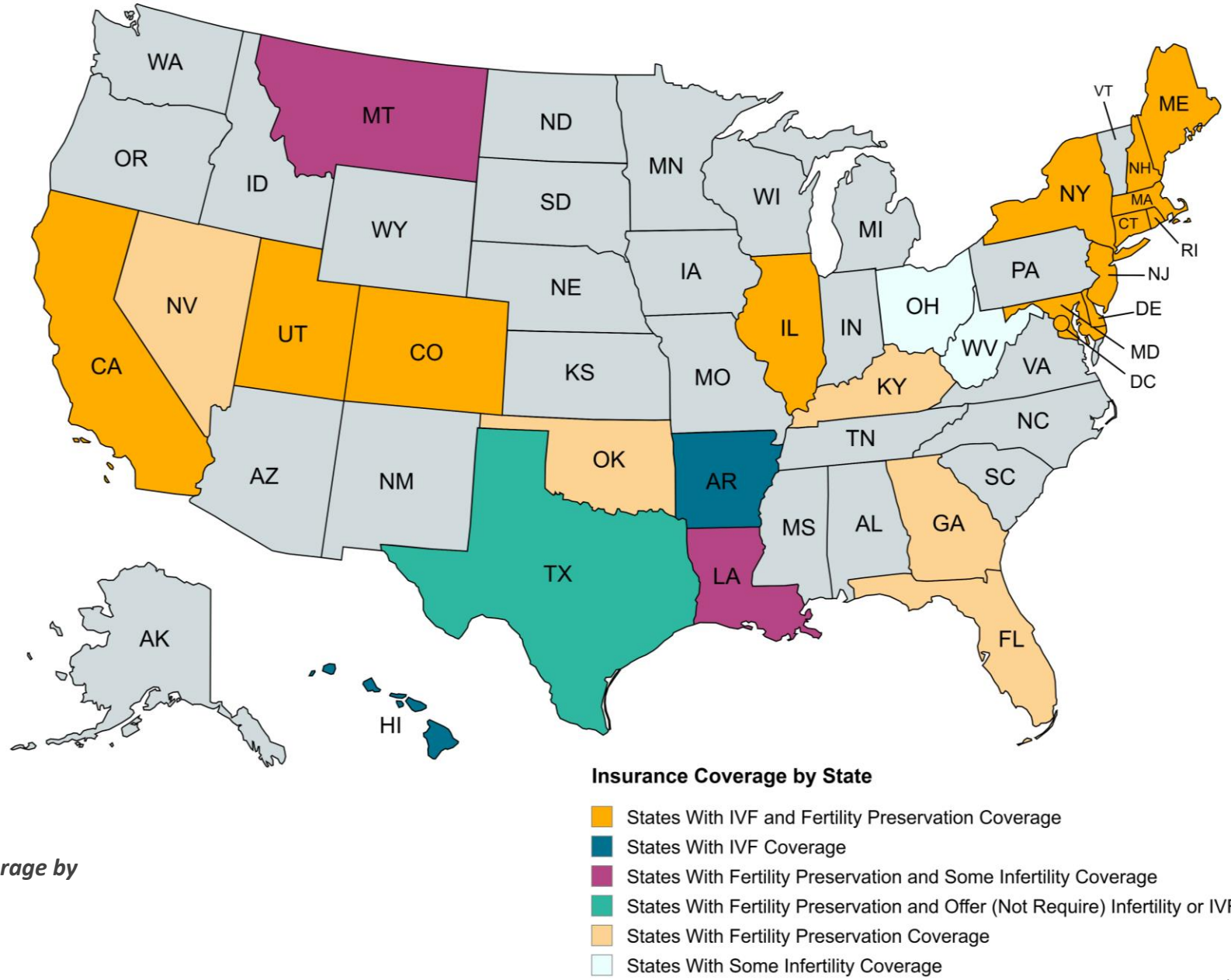
Nothing in this definition shall be used to deny or delay treatment to any individual, regardless of relationship status or sexual orientation.



Source: Definition of infertility: a committee opinion (2023) | American Society for Reproductive Medicine | ASRM

# State Regulation Impacting Infertility Coverage

# Quick Glance at regulations across the U.S.




1. **RESOLVE: The National Infertility Association.** ***Insurance Coverage by State*****.** Retrieved from https://resolve.org/learn/financial-resources/insurance-coverage/insurance-coverage-by-state/

# Some states might see infertility as a disease.

- The World Health Organization (WHO) and the American Medical Association (AMA) **recognize infertility as a disease**.[1]
- **No federal mandate** requiring insurers to cover infertility services.[2]
- From a population health perspective, state-level regulation can enhance **access** to care and promote **equity** in the management of this disease.[3]

*"**Every human being has a right** to the enjoyment of the highest attainable standard of physical and mental health. Individuals and couples have the right **to decide the number, timing and spacing of their children.** Infertility can negate the realization of these essential human rights"* - World Health Organization

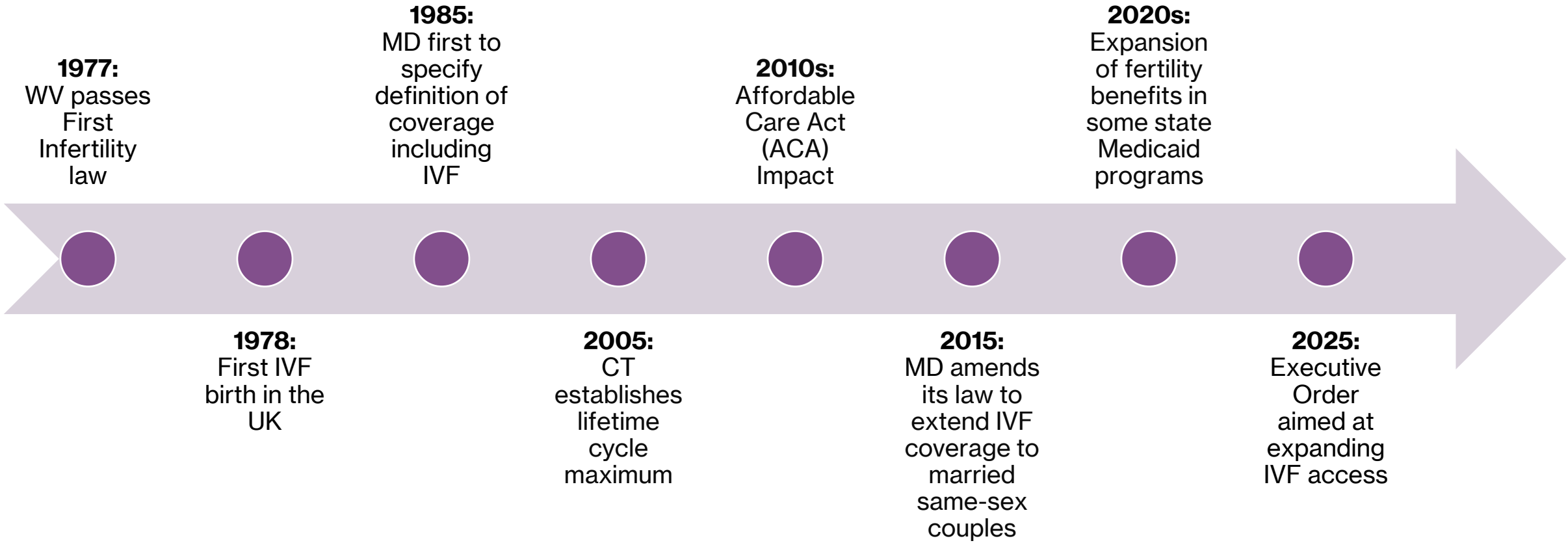

1. **World Health Organization. (n.d.).** *Infertility*. WHO. Retrieved October 10, 2025, from https://www.who.int/news-room/fact-sheets/detail/infertility
2. **Sheppard Mullin Healthcare Law Blog. Shifting Landscapes: How Federal and State Policies Are Expanding Access to IVF.** Published August 28, 2025. Available at: https://www.sheppardhealthlaw.com/2025/08/articles/healthcare/shifting-landscapes-how-federal-and-state-policies-are-expanding-access-to-ivf/
3. **Center for Reproductive Rights. (2021, July 7). Guiding principles for ensuring equitable access to infertility care.** [PDF file]. Retrieved October 10, 2025, from https://reproductiverights.org/wp-content/uploads/2021/07/Guiding-Principles-for-Ensuring-Equitable-Access-to-Infertility-Care_July-7_Final.pdf

# State Regulations have various motivations.

- Fertility rates may **incentivize governments** to implement regulation which aims to encourage higher/lower fertility rates.[1]
- Lower Fertility Rates have **Economic Implications**.[2]
- **No statistical evidence** to suggest that declining population is correlated to states passing infertility mandates.[1]


1. **IMPACT OF DECLINING FERTILITY RATES ON US STATE POLICIES** Bogaard, Katherine et al. Fertility and Sterility, Volume 118, Issue 4, e323
2. **Zhang, Y., Wang, Y., & Liu, H. (2024).** *Infertility and its treatment: A public health perspective*. *Journal of Reproductive Health*, 21(3), Article PMC10905510. https://pmc.ncbi.nlm.nih.gov/articles/PMC10905510/

# Evolution of Infertility Benefits over time





1. Fertility health coverage is still hard to come by in many states • West Virginia Watch
2. The first woman born by in vitro fertilization in Korea gave birth to a healthy baby through natural pregnancy - PMC
3. Impact of in vitro fertilization state mandates for third party insurance coverage in the United States: a review and critical assessment | Reproductive Biology and Endocrinology | Full Text
4. Connecticut Insurance | ReproductiveFacts.org
5. The Affordable Care Act: Early Implications for Fertility Medicine - PMC
6. Maryland Revamps Its In Vitro Coverage Mandate To Accommodate Same-Sex Couples - KFF Health News
7. Medicaid Coverage for Infertility Treatments and Fertility Preservation
8. Fact Sheet: President Donald J. Trump Expands Access to In Vitro Fertilization (IVF) – The White House

What services are covered?

How is the benefit structured?

Who is covered?

# Who is covered? – Plan Type

## Medicare

- Can cover "reasonable and necessary services" related to fertility, but "reasonable" and "necessary" are not defined by Medicare and it is not required.
- Medicare Part D excludes fertility drugs.

## Medicaid

- Coverage varies significantly by state.
- Generally not covered, and if fertility services are covered, coverage is very limited.

## Individual

- Coverage varies by state.
- Some states require coverage.
- Challenging dynamic since customer is making the purchasing decision.

## Group/Employer

- Coverage varies by employer choice, state, and funding type.
- Employer choice, not employee choice.
- Statistics:
  - 25%-50% of large employers cover IVF.
  - 20%-35% of large employers cover elective egg freezing.

Sources: Medicare Coverage for IVF, Coverage and Use of Fertility Services in the U.S. | KFF, Mandated Coverage of Infertility Treatment | KFF State Health Facts, Employers enhanced health benefits in 2024, adding coverage for weight-loss medications and IVF despite growing health cost, Access to Fertility Care: Findings from the 2024 KFF Women's Health Survey | KFF

# Elective Egg Freezing

# Elective Egg Freezing

## Overview

- Elective egg freezing became an accepted practice 10-15 years ago.
- Women go through IVF process and can either freeze eggs or embryos.

## Why?

- “Insurance policy” against the pressure from the “biological clock.”
- Desire to preserve eggs.

## Coverage

- Employer coverage is limited: 20%-35% of large employers offer coverage.

## Success is not guaranteed

- If freezing eggs, eggs must survive the thaw and the IVF attrition pyramid.
- If freezing embryos, embryos must survive the remainder of the IVF attrition pyramid.


Source: Egg freezing popularity increasing among young women to preserve their fertility - CBS News

# Elective Egg Freezing – Questions to Consider

- What are the impacts to providing more choice around fertility?
- Is there proper education about the risk of egg freezing not being a guarantee?
- How is delaying motherhood impacting careers?
- How is delaying motherhood impacting high risk pregnancies?
- Is this something health plans should cover?


Source: Egg freezing popularity increasing among young women to preserve their fertility - CBS News

# Parting Thoughts

- Women's healthcare is important (and is more than just fertility).
- U.S. Fertility Rate and Total Births are dropping.
- Fertility treatment utilization is increasing.
- Fertility benefit coverage design is complex.
  - Designing coverage.
  - Adhering to state regulations.
- States are navigating uncertainty.
- Elective egg freezing/fertility preservation is becoming more common.

# Appendix

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# 2023 U.S. Fertility Rate by State

| State | Fertility Rate |
|---|---|
| Alabama | 1.73 |
| Alaska | 1.83 |
| Arizona | 1.60 |
| Arkansas | 1.77 |
| California | 1.48 |
| Colorado | 1.45 |
| Connecticut | 1.52 |
| Delaware | 1.63 |
| District of Columbia | 1.20 |
| Florida | 1.60 |
| Georgia | 1.64 |
| Hawaii | 1.68 |
| Idaho | 1.79 |
| Illinois | 1.50 |
| Indiana | 1.76 |
| Iowa | 1.81 |
| Kansas | 1.81 |
| Kentucky | 1.80 |
| Louisiana | 1.83 |
| Maine | 1.40 |
| Maryland | 1.61 |
| Massachusetts | 1.40 |
| Michigan | 1.56 |
| Minnesota | 1.69 |
| Mississippi | 1.79 |
| Missouri | 1.67 |

| State | Fertility Rate |
|---|---|
| Montana | 1.55 |
| Nebraska | 1.91 |
| Nevada | 1.50 |
| New Hampshire | 1.38 |
| New Jersey | 1.70 |
| New Mexico | 1.55 |
| New York | 1.53 |
| North Carolina | 1.66 |
| North Dakota | 1.85 |
| Ohio | 1.68 |
| Oklahoma | 1.77 |
| Oregon | 1.35 |
| Pennsylvania | 1.55 |
| Rhode Island | 1.37 |
| South Carolina | 1.67 |
| South Dakota | 2.00 |
| Tennessee | 1.73 |
| Texas | 1.81 |
| Utah | 1.80 |
| Vermont | 1.30 |
| Virginia | 1.60 |
| Washington | 1.47 |
| West Virginia | 1.60 |
| Wisconsin | 1.63 |
| Wyoming | 1.68 |


Source: National Vital Statistics Reports, Volume 74, Number 1, March 18, 2025, Births: Final Data for 2023

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# Fertility Coverage State Mandates as of September 2024

| State | State Require Private Insurance Coverage of Infertility Services? | State Mandate to Cover in Medicaid? |
|---|---|---|
| Alabama | Not Covered | Not Covered |
| Alaska | Not Covered | Not Covered |
| Arizona | Not Covered | Not Covered |
| Arkansas | Covered: All individual and group insurers, excluding HMOs & self-insurers | No Mention of Infertility Services |
| California | Mandate to offer, not cover | Not Covered |
| Colorado | Covered: All large group plans, excluding self-insured, individual and small group plans, religious employers | Covered: Basic fertility and reproductive health counseling is provided; Not Covered: Sterilization reversal, infertility treatment, counseling and testing |
| Connecticut | Covered: Health insurance organizations, excluding persons on plan <12 months, religious employers, and self-insurers | Covered: Lab tests to detect the presence of conditions affecting reproductive health; Not Covered: Infertility treatment, sterilization reversal, IVF, IUI, cryopreservation, fertility drugs |
| Delaware | Covered: Individual and group insurers, HMOs, excluding employers with <50 employees, religious employers, and self-insurers | Not Covered |
| District of Columbia | Covered: All individual and group insurers beginning January 1, 2025, excluding self-insured | Covered: Diagnosis and fertility drugs |
| Florida | Not Covered | Not Covered |
| Georgia | Not Covered | Covered: Infertility assessment: history/physical, education, lab testing, counseling, referral; Not Covered: Infertility procedures and related services |
| Hawaii | Covered: Individual and group insurers, excluding self-insurers | Covered: Infertility assessment/some diagnostics covered by HMSA, Ohana, and Kaiser Permanente plans; Not Covered: No infertility services covered by Alohacare, HMSA, Kaiser Permanente, Ohana, or UnitedHealthcare Medicaid plans; Benefits vary between Medicaid managed care plans |
| Idaho | Not Covered | Not Covered |
| Illinois | Covered: Group insurers and HMOs, individual and group insurers for iatrogenic infertility, excluding employers <25 employees, religious employers, and self-insurers | Covered: Fertility preservation for iatrogenic infertility |
| Indiana | Not Covered | Not Covered |
| Iowa | Not Covered | Not Covered |

 Source: Mandated Coverage of Infertility Treatment | KFF State Health Facts 

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# Fertility Coverage State Mandates as of September 2024

| State | State Require Private Insurance Coverage of Infertility Services? | State Mandate to Cover in Medicaid? |
|---|---|---|
| Kansas | Not Covered | Not Covered; Benefits vary between Medicaid managed care plans |
| Kentucky | Covered: Health insurance organizations, excluding religious employers, self-insured | Not Covered |
| Louisiana | Covered: Health insurance organizations for cancer-related iatrogenic infertility, excluding self-insurers and religious employers | Covered: Education on fertility regulation; Not Covered: Fertility drugs; Benefits vary between Medicaid managed care plans |
| Maine | Covered: Health insurance organizations | Not Covered |
| Maryland | Covered: Individual and group insurers, excluding employers <50 employees, religious employers, and self-insurers | Not Covered |
| Massachusetts | Covered: All insurers and HMOs, excluding self-insurers | Covered: Counseling and diagnosis for infertility, including related services; Not Covered: Treatment of infertility (lab tests, drugs, procedures) |
| Michigan | Not Covered | Covered: Diagnosis of male or female infertility; Not Covered: Infertility treatment, anesthesia related to infertility treatment, genetic testing infertility |
| Minnesota | Not Covered | Covered: Counseling for and diagnosis of infertility, including related services; Not Covered: IUI, IVF, fertility drugs and related services, and sterilization reversal. |
| Mississippi | Not Covered | Not Covered |
| Missouri | Not Covered | Not Covered |
| Montana | Covered: HMOs; individual and group plans for cancer-related iatrogenic infertility, excluding all other insurers | Covered: Evaluation of laboratory assessments, fertility preservation; Not Covered: infertility treatment, experimental |
| Nebraska | Not Covered | Covered: Infertility diagnosis/treatment when infertility is a symptom of a suspected medical problem - no coverage if the sole purpose is achieving pregnancy; Not Covered: Fertility drugs |
| Nevada | Not Covered | Not Covered; Benefits vary between Medicaid managed care plans |
| New Hampshire | Covered: Group insurers, excluding small business health options program, extended transition to ACA-programs, and self-insurers | Covered: Infertility services if related to diagnosis/treatment of medical conditions; Not Covered: Operations/procedures and medications for the purpose of fertility; Benefits vary between Medicaid managed care plans |

 Source: Mandated Coverage of Infertility Treatment | KFF State Health Facts 

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# Fertility Coverage State Mandates as of September 2024

| State | State Require Private Insurance Coverage of Infertility Services? | State Mandate to Cover in Medicaid? |
|---|---|---|
| New Jersey | Covered: Group insurers, HMOs, State Health Benefits Program, School Employees Health Benefits Program, excluding employers <50 employees, religious employers, and self-insurers | Not Covered |
| New Mexico | Not Covered | Covered: The evaluation of infertility for Presbyterian Health Plan; Not Covered: Infertility treatment for Presbyterian Health Plan, All infertility services/treatment for BCBS of NM, Western Sky Community Care; Benefits vary between Medicaid managed care plans |
| New York | Covered: Large group insurance market for IVF (employers >100 employees), all commercial markets for cryopreservation, excluding individual and small group markets for IVF, and self-insurers | Covered: Infertility office visits, diagnosis (HSG, pelvic ultrasounds, lab tests), fertility drugs; Not Covered: infertility treatments outside of those specifically listed as covered |
| North Carolina | Not Covered | Not Covered |
| North Dakota | Not Covered | Not Covered |
| Ohio | Covered: HMOs, excluding self-insurers | Not Covered |
| Oklahoma | Covered: Health insurance organizations for cancer-related iatrogenic infertility after January 1, 2025, excluding religious employers | Not Covered |
| Oregon | Not Covered | Not Covered |
| Pennsylvania | Not Covered | Not Covered; Benefits vary between Medicaid managed care plans |
| Rhode Island | Covered: Insurers and HMOs, excluding self-insurers | Not Covered; Benefits vary between Medicaid managed care plans |
| South Carolina | Not Covered | Not Covered |
| South Dakota | Not Covered | Not Covered |
| Tennessee | Not Covered | Not Covered |

 Source: Mandated Coverage of Infertility Treatment | KFF State Health Facts 

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# Fertility Coverage State Mandates as of September 2024

| State | State Require Private Insurance Coverage of Infertility Services? | State Mandate to Cover in Medicaid? |
|---|---|---|
| Texas | Mandate to offer IVF, cover cancer-related iatrogenic infertility, excluding self-insurers and religious employers | Not Covered; Benefits vary between Medicaid managed care plans |
| Utah | Covered: Insurers, excluding self-insurers | Covered: Testing and IVF for individuals with certain genetic conditions, fertility preservation for cancer-related iatrogenic infertility |
| Vermont | Not Covered | Not Covered |
| Virginia | Not Covered | Not Covered |
| Washington | Not Covered | Not Covered |
| West Virginia | Covered: HMOs, excluding all other insurers | Not Covered |
| Wisconsin | Not Covered | Not Covered |
| Wyoming | Not Covered | Not Covered |


Source: Mandated Coverage of Infertility Treatment | KFF State Health Facts