GALLERY GUIDE

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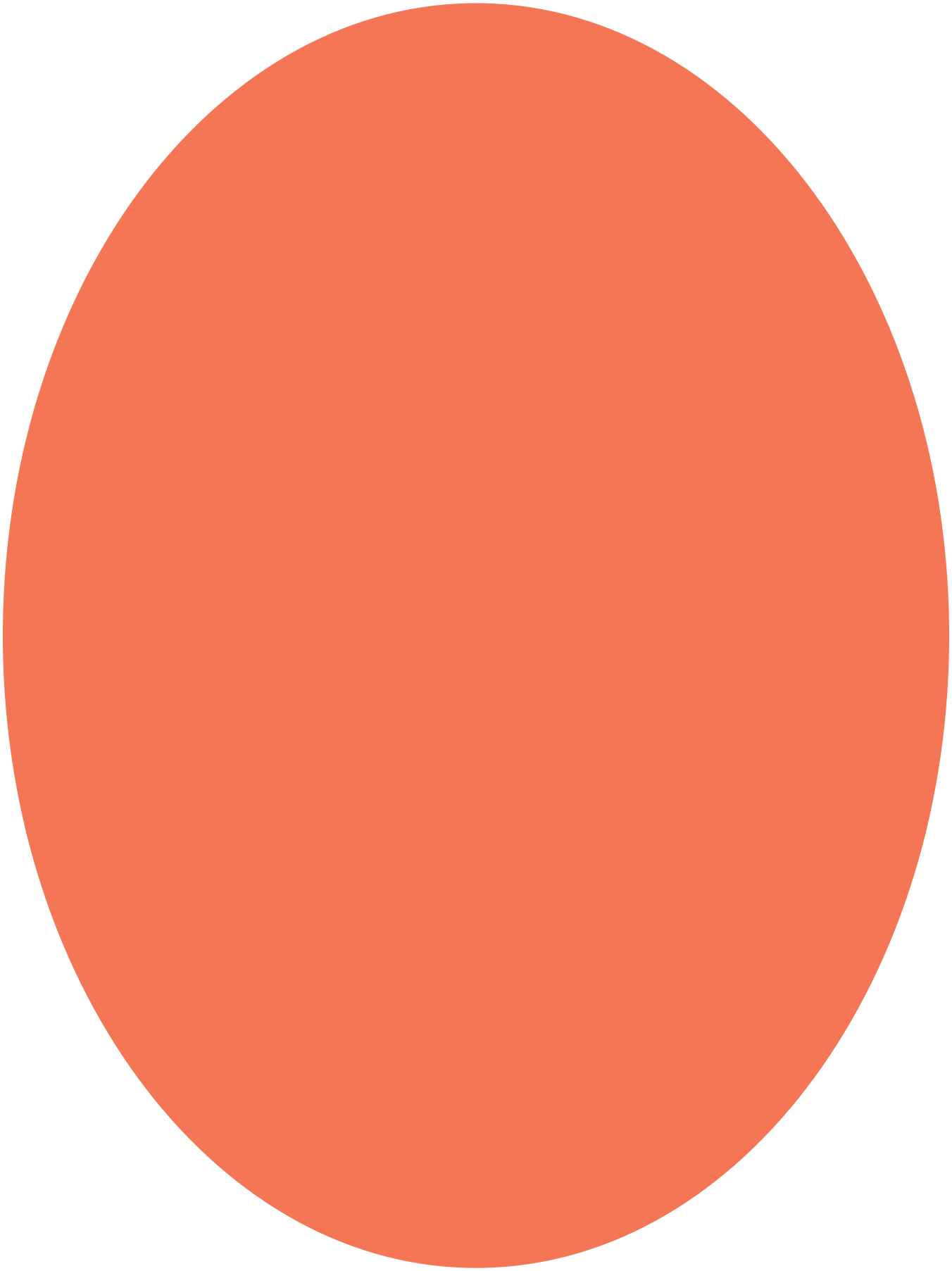

DESIGNING MOTHERHOOD

Things That Make and Break Our Births

Museum of Arts and Design
September 4, 2025–March 15, 2026

Credits

Designing Motherhood: Things That Make and Break Our Births was organized by the Designing Motherhood curatorial team in collaboration with the Museum of Arts and Design. Thank you to everyone who contributed to the design, development, and realization of this project.

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Since 2021, the *Designing Motherhood* exhibition has been hosted by the Mütter Museum and the Center for Architecture+Design in Philadelphia, MassArt Art Museum (MAAM) in Boston, the Bill and Melinda Gates Foundation Discovery Center in Seattle, the Houston Center for Contemporary Craft, and the Swedish Centre for Architecture and Design (ArkDes) in Stockholm. Thought partners across these venues have included Maternity Care Coalition (Philadelphia), the University of Pennsylvania's Weitzman School of Design, Neighborhood Birth Center (Boston), and advisory groups in Seattle, Houston, and Stockholm.

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#DesigningMotherhoodMAD @MADmuseum

Graham Foundation

The Pew Center for Arts & Heritage

Maternity Care Coalition

NEIGHBORHOOD BIRTH CENTER

DESIGNING MOTHERHOOD

Things That Make and Break Our Births

Museum of Arts and Design
October 4, 2025–March 15, 2026

Birth is the way we all arrive in this world—and each of us will repeat, prevent, delay, or reject reproduction during our lives. In so doing, we will interact with designs of all kinds: products, devices, programs, and policies. While being born is a universal human experience, the designs that shape that experience—and the entire reproductive arc, from menstruation to menopause—are not.

But who shapes these designs? Some of the objects and systems in this exhibition, like the Kuddle-Up baby blanket, are the product of industrialized medicine, while others, such as the NYC Baby Box of essential supplies for newborns and their caregivers, have been informed by need and collective political will. Still others were conceptualized by activist designers frustrated at the lack of innovation in designs for reproductive health; these include twenty-first-century pregnancy tests that are biodegradable and flushable, or that are tactile rather than based on sight cues.

Designs can make and break our experiences around reproduction, yet many of us are unaware of what goes into their development. *Designing Motherhood* invites us to consider the motivations and processes behind designs that facilitate reproductive health and to ponder their social, economic, and political implications. Here, the term "motherhood" goes beyond biology and gender to embrace diverse experiences and circumstances of reproductive health and care. This exhibition highlights MAD's location in New York City and, by exploring the psychology of parenting, this museum's longstanding engagement with the knotty contours of material culture. These are not just women's issues; they are human issues, and they matter to us all.

Access

Every baby requires some basics, including diapers, clothing, and feeding supplies. With the introduction of its “baby boxes” in 1938, Finland became the first country to provide these items free of charge to new parents. At first, the boxes were available only to low-income families, but since 1949, they have been accessible to all expectant Finnish citizens.

Many European countries have followed Finland’s example, but the United States—where, according to a recent national survey, nearly 50% of families struggle to afford diapers—has not. Some US cities and aid organizations have designed their own programs to provide families with essential items.

Beginning in 2025, New York City is supplying baby boxes to all parents giving birth at four public NYC Health + Hospitals locations in partnership with Welcome Baby USA and United Way. Meanwhile, the nonprofit Saving Mothers has offered mPOWHER kits to expectant mothers in New York City since 2020. Designed to reduce maternal mortality, each kit contains tools for improving health outcomes, including sample scripts to help women challenge structural racism and sexism within the healthcare system.

001

NYC Baby Box, 2025
Courtesy The City of New York

002

***Äitiyspakkaus* [Maternity Package], 2024**
Courtesy Kela (The Social Insurance Institution of Finland)

003

Saving Mothers (United States, est. 2009)
mPOWHER Mom’s Kit, 2020
Courtesy Saving Mothers

Our Bodies, Ourselves

While birth affects everyone, some bodies' relationships to human reproduction have historically been more politicized than others. This introductory section examines the politics of reproduction and its effects on our day-to-day lives, past and present. The objects on view introduce some of the myriad ways we relate to human reproduction, highlighting the experiences of New Yorkers. Some designs address specific sociopolitical issues, including reproductive rights, bodily autonomy, and the maternal mortality crisis, while others speak more generally to cultural perceptions of birth and motherhood.

004

Ani Liu (United States, b. 1986)
Technical Collaborator: Philip Sawyer (United States, b. 1956)
***Untitled (pregnancy menswear)*, 2020**
Silk organza and suiting boning
Courtesy the artist

Ani Liu is a research-based artist working at the intersection of art and technoscience. Integrating emerging technologies with cultural reflection and social change, Liu's work examines the biopolitics of reproduction, labor, and care work. This suit is "a sketch of an idea," an ongoing project informed by a series of conversations between the artist and trans and nonbinary persons regarding fertility.

005

Alison Croney Moses (United States, b. 1983)
***My Belly*, 2021**
Cedarwood
Museum of Fine Arts, Boston; The Wornick Fund for Contemporary Craft (2025.185)

Alison Croney Moses studied furniture design at the Rhode Island School of Design and currently works at the Eliot School of Fine & Applied Arts in Boston. In her work, Croney Moses creates sculptures with wood—a material that, even after being cut down, still mimics life by changing with its environment. In the artist's words:

> *Pregnancy and motherhood are life changing and full of contradictory experiences of pain and pleasure, heartache and love, fear and hope, and sadness and joy. Our bodies are literally rearranged, torn apart, and drained while growing humans within our womb, birthing those humans, sustaining those lives, and nurturing those tiny people in the critical years of development. When we come out the other end, all mothers are fundamentally changed and it's often difficult to see and feel who we once were. We then begin the journey of bringing back together the different parts of who we were and who we are now and rebuilding ourselves to be something new.*
>
> *For Black mothers, this transformation occurs while living through systemic racism and personal implicit bias, all made worse during the current health crisis due to COVID-19. Our physical survival of the*

birthing process and living is what we are tasked with as humans. The ability to care for ourselves, to celebrate, and to commune with each other is what we need to thrive.

006

Deborah Willis (United States, b. 1948)
***I Made Space for a Good Man*, 2009**
Lithograph, edition of 28
Printed at the Brandywine Workshop and Archives in Philadelphia
Courtesy the artist

"You took the space from a good man." These words do not belong to Willis, but to a male professor who, in 1975, challenged the artist's position—her space—in a studio course at the Philadelphia College of Art. Thirty-four years later, the words resounded across the triptych of Willis's body. "I decided to play with the words that haunted me," she told Harvard Art Museums fellow Hannah Chew in a recent interview. The words morph with her body across the 1976 contact print, a series of photographic negatives brought into pink relief by the lithograph. An indefinite phrase ("A woman ...") turns to citation ("You took …") and ends, with a raising of arms and eyes, in declaration ("I made …"). From the multiplication of text and the transformation of print formats (photograph to lithograph), making space becomes a generative act. Willis makes space for herself; for her practice as an artist, historian, photographer, and writer; and for her "good man," her future son (and fellow artist) Hank Willis Thomas.

Written by Alejandro Octavio Nodarse for the exhibition Prints from the Brandywine Workshop and Archives: Creative Communities, March 4–July 31, 2022, Harvard Art Museums, Cambridge, MA.

JEB (Joan E. Biren) (United States, b. 1944)

007 ***Mobilize for Women's Lives, A Pro-Choice March and Rally in Washington,* DC, 1989**

008 ***Dessie Woods (later Rashida Muhammad Mustafa) at a Take Back the Night March in Washington, DC*, 1981**

009 ***Darquita and Her Mother, Denyeta*, 1979**

Archival pigment prints
Courtesy the artist

JEB (Joan E. Biren) is a photographer and documentary filmmaker who has chronicled social justice movements and the lives of lesbians for more than four decades. JEB came out in the 1960s and realized the need for affirming images of lesbian culture. In the 1970s, JEB toured the US., photographing lesbians at events such as the Michigan Womyn's Music Festival, anti–Ku Klux Klan demonstrations, and gay and lesbian pride marches. Her groundbreaking images are intimate portraits of daily life that also document the emerging women's health movement.

010

Unknown photographer
A group photo of the participants in the New York City Chinatown baby contest (reproduction), June 17, 1939
Museum of Chinese in America (MOCA), The Meiling Dai Collection (2012.002.002)

Zeva Oelbaum (United States, b. 1955)

011 ***Mother and Child, Interior #4* (reproduction), 1978**
Museum of the City of New York (2004.44.2)

012 ***Mother and Crying Child* (reproduction), 1980**
Museum of the City of New York (2004.44.5)

013

Zeva Oelbaum (United States, b. 1955)
***Woman and Child on Subway* (reproduction), 1978**
Courtesy the artist

The photographer and documentary filmmaker Zeva Oelbaum took these photographs of residents she met and spent time with at the Women's Survival Space, which opened in Brooklyn in 1977 and was one of the first publicly funded domestic violence shelters in New York State.

014

Hazel Kingsbury (United States, 1907–1982)
Fathering Class. Bathing baby—practice period (reproduction), 1948
Museum of the City of New York (X2010.11.9978)

015

Director: Attia Taylor (United States, b. 1989)
***Embracing Doula Care: How Doulas Provide Maternal Support In and Out of the Hospital Environment*, 2024**
Digital video with sound
TRT: 00:04:21
Produced by and courtesy Womanly in partnership with the HOPE Community Doula Program, Icahn School of Medicine at Mount Sinai: Arnhold Institute for Global Health, NYC Health + Hospitals | Elmhurst, NYC Health + Hospitals | Queens, Ancient Song, and Caribbean Women's Health Association

016

Poster: *Freedom of Choice: 50 Ways to Save Our Right to Choose* (reproduction), 1992
Schlesinger Library, Harvard Radcliffe Institute

017

***New York Times Magazine*, April 15, 2018**
Featuring cover photography by LaToya Ruby Frazier (United States, b. 1982)

018

Open letter: *A National Call for Birth Justice and Accountability*
***New York Times*, July 25, 2020**
The Designing Motherhood Archive

The United States has the highest rate of maternal deaths of any high-resource nation, and that rate disproportionately affects women of color. In New York City, Black women are nine times more likely than white women to suffer a pregnancy-related death—a far starker disparity than the national rates. The New York State Department of Health's latest report on maternal mortality clearly states that the vast majority (78%) of these deaths are fully preventable. Calls to action by advocacy groups, investigative journalists, and artists have helped to bring this crisis into the public eye, but medical racism and unequal access to healthcare continue to put many birthing people at substantial risk in New York and across the country.

019

Poster: *The Women's Health Show exhibition* (reproduction), 1994
Courtesy A.I.R. Gallery, Brooklyn, NY and Fales Library and Special Collections, New York University

020

Posters: *New York City Abortion Access Hub*, 2022
Courtesy NYC Department of Health and Mental Hygiene

Established in November 2022, the New York City Abortion Access Hub is a website and hotline that provides confidential support and connects people with abortion care providers as well as resources like financial assistance, transportation, and lodging. The Hub's graphic identity is consistent across a range of promotional materials, including free downloads in fourteen languages and billboards appearing in states such as Georgia, Texas, and Florida, where abortion rights have been restricted following the repeal of Roe v. Wade. The inclusion of the image of Lady Liberty in the Hub's graphic design underscores New York's history as a safe haven for reproductive rights. Abortion has been legal in New York state since 1970—three years before the Roe v. Wade decision permitted abortion throughout the country—and in 2019, the state passed the Reproductive Health Act, protecting abortions in later stages of pregnancy and ensuring that any federal decisions to limit access to abortion will not impact abortion rights in New York.

021

Los Angeles Self-Help Clinic (United States, est. 1971)
Del Em device, 1971
The Designing Motherhood Archive

The Del Em device was used to perform abortions in the early weeks of pregnancy. This design, made from easy-to-find parts, emerged from a consciousness-raising meeting of the Los Angeles-based Self-Help Clinic in 1971. Once the tube was fed through the cervix and into the uterus, the syringe plunger was extended to create a vacuum, which extracted the contents of the uterus through the tube into the jar. Lorraine Rothman, a teacher and mother of four, made a lifesaving addition of a one-way valve that prevented air from being pushed back into the uterus, where it could enter the bloodstream and cause a fatal embolism. Earlier, in 1966—and unbeknownst to the Self-Help Clinic—British obstetrician and gynecologist Dorothea Kerslake produced a teaching film on vacuum aspiration. Reproductive scientist Malcolm Potts dates the first manual vacuum aspiration from the uterus to the Scottish gynecologist James Young Simpson (1811–1870), who was Queen Victoria's physician. As Potts remarked, "Only in a field as controversial as abortion would the same idea need to be discovered three times, each independently."

022

Manual vacuum aspiration foot pump, c. 1960
Courtesy Ipas (International Project Assistance Services)

This foot-pump-activated manual vacuum aspiration (MVA) is used to perform abortions in the early weeks of pregnancy. Once the tube is fed through the cervix and into the uterus, the foot pump is activated to create a vacuum, which extracts the contents of the uterus into the jar. This twentieth century foot-pump for use by medical providers and its cousin, the at-home Del Em device, are part of a long history of the collective struggle over control of the uterus.

023

Mifepristone oral tablets, 2025

Mifepristone is one of two drugs used in a medication abortion, now the most common method of terminating pregnancies in the United States. Taken first, mifepristone

blocks the body's production of the hormone progesterone to stop the pregnancy from growing; the second drug, misoprostol, causes cramping and bleeding to empty the uterus. Following the US Supreme Court's overturning of Roe v. Wade in June 2022, 21 states have significantly restricted abortion access, with 17 of those barring the procedure at six weeks or earlier. "Abortion pills," which can be sent by mail, have been an effective way for people pursuing abortion in those states to get access to this form of healthcare. In 2024, the Supreme Court unanimously rejected an effort to restrict access to mifepristone, but the legal landscape surrounding the medication remains complex and varies significantly by state. Find clear and up-to-date information on this shifting national landscape from the nonprofit Guttmacher Institute (guttmacher.org).

024

Protest buttons, 1960s–1990s
The Designing Motherhood Archive

Since the pin-back button was invented at the turn of the 20th century, buttons have been a popular way to declare individual or collective demands, desires, and beliefs through words or images. Take, for example, the image of a wire coat hanger. In the 1960s and 1970s, supporters of abortion rights in the US sometimes held hangers as an eloquent yet grisly reminder that desperate women used them for often-fatal self-induced abortions.

025

The Doula Project (United States, est. 2007)
Zine: *DIY Doula: Self—Care for Before, During, & After Your Abortion*, 2016
Courtesy The Doula Project, New York

Emulsify (United States, active 21st century)
Mick Moran (United States, active 21st century)
Zine: *My Choice Always in All Ways: A Zine About Abortion for Trans & Nonbinary Folk*s, 2025
Courtesy the authors

026

Boston Women's Health Book Collective (United States, est. 1969)
***Our Bodies, Ourselves*, second edition, 1974**
First published in Boston in 1970 as *Women and Their Bodies*
The Designing Motherhood Archive

Like many grassroots efforts, *Our Bodies, Ourselves* had humble origins. The original text—which included chapters on basic anatomy, sexuality, sexually transmitted diseases, birth control (including abortion), pregnancy, childbirth, and postpartum care—was written by a group of white middle-class women for a course that ran only once in 1969. First-person testimonials formed the core of the book, which was handwritten and then photocopied for distribution. It cost readers 75 cents.

Today, *Our Bodies, Ourselves* is still one of the best-selling feminist books worldwide. The latest edition, published in 2011 and more than 900 pages long, is available in at least 34 languages.

Means of Reproduction

Design is never neutral. Some methods of examining, monitoring, and assisting bodies have been developed and used in ways that are uncomfortable at best and that at worst violate consent. Some newer tools and practices have been designed from the patient's perspective, enabling exams and treatments that prioritize comfort alongside culturally appropriate, gender-affirming, and trauma-informed care. This section examines how design affects the arc of human reproduction, highlighting social and cultural norms and stigmas and the designs that have emerged to challenge or change them.

Exam

027

JEB (Joan E. Biren) (United States, b. 1944)
***Jan Dixon (later Jamilah Ali) and Barbara Lewis Doing a Cervical Examination*, 1979**
Archival pigment print
Courtesy the artist

028

Seymour Chwast (United States, b. 1931)
Designed for the American Cancer Society, New York, NY
Poster: *El Pap Test*, 1974
Offset lithograph on paper
Cooper Hewitt, Smithsonian Design Museum, Smithsonian Institution; gift of Push Pin Studios (1991-69-72)

029

Susan Ferreyra (United States, active 20th century)
Katrine Hughes (United States, active 20th century)
Anne Walzer (United States, active 20th century)
Planned Parenthood of San Francisco (United States, est. 1929)
***Table Manners: A Guide to the Pelvic Examination for Disabled Women*, 1982**
Courtesy Planned Parenthood

Table Manners provides an important corrective to health care norms and is based on "the assumptions that disabled women are sexual, and that they deserve quality health care services which are accessible and sensitive to their needs." Illustrations by Anne Walzer show how patients and providers can collaborate to make a pelvic examination as comfortable and empowering as possible for every person.

030

Eden Laurin (United States, b. 1983)
Nyssa (United States, est. 2018)
VieVision Between Legs Self-Check Mirror, 2021
Courtesy Nyssa

Founded by three new mothers, the company Nyssa launched with a focus on postpartum recovery. This hands-free mirror is shaped so it can sit between the thighs while the user is in a seated or standing position. True to its tagline—"Get to know your vulva in a whole new light"—an LED light illuminates the vulva and vagina. Nyssa's founders suggest using the VieVision mirror for routine checks, for self-grooming, for guiding the insertion of a tampon, menstrual cup, or contraceptive device, or during birth.

031

YouScreen Self-Sample Kit, 2021
North Central and East London Cancer Alliance and NHS England—London Region and Public Health England
The Designing Motherhood Archive

YouScreen was a 2021 research study supported by the UK's National Health Service (NHS) that offered 31,000 people with cervixes in North and East London the opportunity to take a "do-it-at-home" self-sample to check for human papillomavirus (HPV), the virus known to be the primary cause of cervical cancer. The study cited several barriers that can prevent attendance for cervical screenings, including fear, embarrassment, and dislike of pelvic examinations. The YouScreen swabbing involves using a long, thin cotton bud to take a sample from inside the vagina, which is then sent by mail for testing.

032

Canton Surgical and Dental Co.
Exam table stirrups, c. 1885
The College of Physicians of Philadelphia

The lithotomy position—in which a person lies on their back with legs raised and bent at the knees, often with their feet in stirrups—is commonly used for pelvic exams and surgical procedures. This posture is also common in hospital births. An increasing number of providers are now working with patients to address the discomfort that many associate with this position. As Chicago-based midwife Stephanie Tillman says, "Many providers see stirrups or foot pedals as making their day easier because they keep everyone in the same position and facilitate getting to the cervix easily. But we can get to the cervix easily from many different positions. Having people find their most comfortable position and working around that ultimately takes less time."

033

Pompeii quatra-valve speculum, 19th century reproduction of c. 79 CE design
The College of Physicians of Philadelphia

For centuries, the speculum was the only tool available for internal examination of the uterus. It has three or four prongs that are inserted into the vagina. As outward pressure is applied, the prongs separate and stretch the surrounding tissue to enlarge the opening. Use of the speculum fed into prevailing perceptions of female anatomy and women generally as inferior. Even at the beginning of the 20th century, physicians believed that disturbances to the uterus changed women's behavior. Drawing on the Greek and Latin words for uterus, hysteria became a common pseudo-scientific diagnosis that attributed women's issues to their uteruses, not their subjugation in society.

034

J. Marion Sims (United States, 1813–1883)
Lucy (Sims) speculum, c. mid-19th century
The College of Physicians of Philadelphia

Physician J. Marion Sims specialized in a field that later became known as gynecology. Among his contributions was a method to repair fistula, a potentially life-threatening complication of prolonged or obstructed labor. The method involved using a speculum fashioned from a bent pewter spoon and repairing the damage using silver sutures. His speculum design is still in use today.

Although Sims's work has improved women's health, his major success was built on experimentation on enslaved African American women—some of whose names are known, including Betsey, Anarcha, and Lucy. The enslaved patients endured multiple surgeries without anesthesia even after it became available. In 2020, obstetrician Kameelah Phillips decided to rename the Sims speculum "Lucy" as a tribute to one of Sims's patients. Phillips said, "I wasn't going to give honor to a man who operated on the backs and developed instruments on the backs of women who looked like me."

035

Fran Wang (United States, b. 1990)
Rachel Hobart (United States, b. 1991)
frog design (Germany, est. 1969; now headquartered in the United States)
Yona speculum prototype, 2019 (currently in development)
Aluminum and silicone
Courtesy Yona Care

More than 60 million pelvic exams using the speculum are conducted each year in the US. For too long, people with vaginas had little voice in the design of these tools. Women designers at frog, a San Francisco-based design consultancy, have created a redesigned speculum "for people with vaginas by people with vaginas." The designers interviewed patients and medical professionals and created and evaluated prototypes for efficiency of use, ergonomics, and even auditory effects. Their device, called the Yona (from the Hindu yoni, or the life force symbolized by the vulva), features surgical-grade silicone to eliminate the feel of cold steel and diminish the metallic sounds many associate with a speculum. The redesign also modifies the angle of the handle to improve comfort. The designers hope that when the Yona is used, it will alleviate stress and ultimately shorten pelvic exams.

Menstruation

036

Sanitary belt, c. mid–20th century
The Designing Motherhood Archive

037

Fax internal sanitary napkins, 1930s

Tampax (United States, est. 1934)
Tampons, 1936
The Designing Motherhood Archive

038

Kotex (Kimberly-Clark) (United States, est. 1920)
New Freedom pads, c. 1970
The Designing Motherhood Archive

Many reproductive health products owe their development to wartime designs and technologies. During World War I, U.S. Army nurses repurposed a cotton substitute that was used to absorb blood, called Cellucotton, for their periods. After the war, businesses quickly commercialized Cellucotton to sell leftover products. This modest invention proved

groundbreaking. By the early 1920s, Kimberly-Clark's Kotex brand was born. Since then, some "feminine hygiene" brands have become near-universal. The Tampax brand produced a compressed cotton tampon with a cardboard applicator. Invented by American doctor Earl Hass and patented in 1933, the applicator allowed insertion without touching the vagina. It was marketed as "hygienic and discreet." In 1969, Kotex introduced a new innovation—the Stayfree mini pad—that adhered to underwear and eliminated the need for safety pins and belts to keep the pad in place.

039

Brenda Mallory (Cherokee Nation, b. 1955)
GladRags (United States, est. 1993)
Packaging and marketing materials for GladRags reusable menstrual pads, c. 1993
Courtesy GladRags, Portland, OR

040

Rael (United States, est. 2017)
Reusable pantiliner, 2017
The Designing Motherhood Archive

041

Suzanne Siemens
(Canada, active 21st century)
Madeleine Shaw (Canada, b. 1970)
Aisle (formerly Lunapads)
(Canada, est. 1999)
Boxer brief, 2020
The Designing Motherhood Archive

Concerns over the environmental impact of single-use period products have led to the design of alternatives. Brenda Mallory, the founder of GladRags, started sewing cloth pads at home in 1993, after realizing that the use of cloth to replace disposable options didn't have to stop with her baby's diapers. In the past decade, new underwear products have emerged to free users from the need for single-use sanitary pads or tampons through a patented combination of absorbent materials in the lining of the garment. Such products are antimicrobial, leak resistant, and designed to be inconspicuous yet stylish to accommodate a wider spectrum of people who menstruate.

042

Leona Watson Chalmers
(United States, active 20th century)
Robert P. Oreck (United States, active 20th century)
Tassette menstrual cup, 1959
Rubber
The Designing Motherhood Archive

043

Jane Hartman Adamé (United States, active 21st century)
Andy Miller (United States, active 21st century)
FLEX Cup (originally Keela Cup), 2017
100% medical grade silicone
The Designing Motherhood Archive

Menstrual cups are more affordable and environmentally friendly than disposable alternatives and can last about ten years. Their design dates back as far as the mid-19th century. In 1932, the midwifery group McGlasson and Perkins improved the menstrual cup by developing a bullet-shaped prototype out of rubber. In 1935, former Broadway actress Leona Watson Chalmers designed what would eventually become the first commercially available menstrual cup, and she later collaborated with businessman Robert Oreck to produce the Tassette. (Tasse means cup in French and, with the suffix -ette, indicates a little cup). Today, menstrual cups are more popular than ever, with everyone from global health advocates to large companies promoting their efficacy, comfort, affordability, and sustainability.

044

Herbert Bayer (Austria, 1900–1985)
Designed for Schering Corporation, Bloomfield, New Jersey
The Menstrual Cycle Brochure (reproduction), 1939
Original: Offset lithograph on paper

Before emigrating to the US, Herbert Bayer studied and then taught typography at the Bauhaus, the esteemed German art school that integrated craft, art, and daily life.
Bayer's work at the school and for advertising clients in Europe and the US made him an influential figure in the modern discipline of graphic design. In 1939, the pharmaceutical company Schering commissioned him to design illustrations for its new forms of estrogen, Progynon-B and Progynon-DH. The resulting brochure is full of anatomical detail and depicts the menstrual cycle with cosmic reverence: the black background evokes a night sky, and a uterus at the center appears to radiate out into the universe. Bordered by phases of the moon, an ovum circles the page, its satellite journey proceeding from ovary to fallopian tube to uterus and beyond. The uterus appears in perfect harmony with the cosmos—an idealized view that reflected Schering AG's goal of promoting estrogen to correct "menstrual disturbances."

Contraception

045

Martha Poggioli (Australia, b. 1988)
***Incomplete Patent Chronology, 1867–2021*, 2018–ongoing**
Printed on fabric
Courtesy the artist

This timeline shows the evolution of reproductive tools and devices. Each object depicts a unique patent claim related to IUDs, pessaries, and other insertable devices. The drawings are proposed inventions within the category "A61F" in the Cooperative Patent Category classification system. Patents on this map are from the US, China, Russia, Japan, Denmark, France, South Korea, Spain, Switzerland, and the UK. As online databases containing these kinds of patents continue to expand, so too will this chronology.

046

Gabrielle Stanley Blair
(United States, active 21st century)
***Ejaculate Responsibly: A Whole New Way to Think About Abortion*, 2022**

In her New York Times bestselling book, Gabrielle Stanley Blair deftly makes the argument for shifting the abortion debate away from controlling and legislating women's bodies to instead direct the focus on men's lack of accountability in preventing unwanted pregnancies. She builds her argument by walking readers through the basics of fertility (men are 50 times more fertile than women), the unfair burden placed on women when it comes to preventing pregnancy (90% of the birth control market is for women), and the stigmas around birth control for men (the fallacy that condoms make sex less pleasurable, or that vasectomies are scary and emasculating). While

the book still defaults to a rigid gender binary in its language, the result is a compelling case for not placing the responsibility—and burden—of preventing unwanted pregnancies solely on people with uteruses.

047

Intrauterine devices

Small, delicate, and usually made of polyethylene or copper, intrauterine devices (or IUDs) are inserted in the uterus by a medical professional to prevent pregnancy. IUDs are 99% effective over many years—and reversible, as fertility resumes shortly after removal. But access to IUDs is often limited due to the training required to perform the procedure, as well as the cost, which can range from $500 to $1,300.

Clockwise from top left:
Birnberg Bow IUD
Unidentified 375 Copper Coil IUD
Cushion Shaped Disc ICD (Intracervical Device) in 14 Karat Gold
Margulies Spiral IUD
Hall-Stone Tyle Ring IUD: Uterine Shaped
Lippes Loop IUD
Unidentified Silver IUD
Majzlin Spring IUD
Paragard Copper IUD
Saf-T-Coil IUD
Mirena IUD
Dalkon Shield IUD, 1971

The College of Physicians of Philadelphia

IUDs are regulated in part because of side effects experienced by women who used the Dalkon Shield in the 1970s and 1980s. After the Dalkon Shield had been prescribed to 2.5 million women, it was found to have caused widespread pelvic inflammatory disease and infertility because its multifilament string allowed bacteria to enter the uterus. Loretta J. Ross, a pioneer of the reproductive justice movement, shared her story to prevent future generations from suffering as she did:

> *The design flaw was the wick [that] caused an infection and caused me to lapse into a coma. I underwent a total hysterectomy at the age of 23 that ended my fertility prematurely. By age 25, I was experiencing menopausal symptoms. I wasn't able to give permission for the hysterectomy; there was no informed consent. I did not wake up until the doctor who had performed my hysterectomy was standing by my bedside. He was the same doctor who for six months had been misdiagnosing my symptoms as a venereal disease, or what we call an STD [sexually transmitted disease] today. He didn't remove the Dalkon Shield until my fallopian tubes erupted.*

048

Bioceptive, Inc. (United States, est. 2010)
Cervical retractor and IUD inserter,
in development
Courtesy Bioceptive, New Orleans, LA

While IUDs are exceptionally effective, many people opt out of them due to fears about insertion. The pain or bleeding that some experience with IUD insertion is due to the tenaculum forceps, a device originally designed to remove bullets from Civil War soldiers. The tenaculum clamps tissue to stabilize the cervix so a physician can position the IUD within the uterus. New Orleans-based Bioceptive has designed a gentler alternative. A retractor uses suction to stabilize the cervix and create a pathway into the uterus. Then an IUD inserter is used to position the IUD. Bioceptive's design will allow IUD procedures to be performed by trained providers other than doctors. The patented system will also pair the cervical retractor with future devices to support a variety of uses, including biopsies and fertility-related procedures.

049

NYC Department of Health and Mental Hygiene (distributor)
NYC-branded external condom, 2007

050

Veru Inc. (formerly The Female Health Company) (United States, est. 1971)
FC2 Female Condom (internal condom), 2009

The New York City Department of Health began providing free external (male) condoms to the city's STD clinics in 1971. It expanded distribution to include HIV and social services organizations in the 1980s and all New York City public high schools by 1991. The internal (female) condom was added to the NYC Condom Availability Program in 1998, five years after it was first approved by the US Food and Drug Administration. In 2007, the program launched the "NYC Condom" as the nation's first municipally branded condom. Featuring Helvetica typeface in colorful circles on a black background, the NYC Condom's original wrapper referenced the iconic graphic identity of the city's subway system, designed by Massimo Vignelli and Bob Noorda for Unimark International between 1966 and 1970.

051

David P. Wagner
(United States, active 20th–21st century)
DialPak contraceptive dispenser, patented 1964 (this example 2001)
The Designing Motherhood Archive

Illinois engineer David P. Wagner invented the DialPak in 1962 when he and his wife had difficulty remembering whether she had taken her daily contraceptive pill. The principle is similar to many such packs used today: four sets of seven-day weeks. By moving away from a jar of pills to this round dial, the design offered greater precision and control over contraception.

052

Cooper Surgical
(The Netherlands, est. 1990)
Omniflex diaphragm (size 75), 2021
The Designing Motherhood Archive

Diaphragms have been around nearly as long as sex has. In ancient times, people inserted items like leaves and lemons into the vagina, but the first recognizable diaphragm was developed in the 1880s by German gynecologist Wilhelm Mensing. Mensing published the first description of a rubber contraceptive device with a spring molded into the rim that was sold as an effective barrier method of birth control. Birth control activist (and eugenicist) Margaret Sanger learned about the diaphragm in the 1910s and illegally imported large quantities of diaphragms from Germany and the Netherlands. The diaphragm became one of the most widely used contraceptives in the US in the twentieth century. According to Planned Parenthood, they are 94% effective when used correctly every time. In 1940, one-third of all American couples used a diaphragm for contraception. That number dropped dramatically after the 1960s introduction of the IUD and the pill. Today, most public health professionals perceive the diaphragm as having low acceptability. Yet the diaphragm remains an important contraceptive option for people who can't or don't want to use hormones or Intrauterine Devices (IUDs).

053

NuvaRing, 2001

054

Sayana Press, 2011
The Designing Motherhood Archive

The Sayana Press is an easy-to-use injectable contraceptive that can be self-administered to prevent pregnancy for three months. The device features a small plastic bubble that comes prefilled with a hormone, depot medroxyprogesterone acetate. To support equity, a consortium of partners, donors and aid organizations have ensured that the Sayana Press is available for 85 cents per dose in 69 low- and middle-income countries.

055

Plan B One Step, 2009

Medications that are referred to as "emergency contraception" contain hormones that prevent ovulation, and can be taken up to 72 hours after intercourse to prevent pregnancy. Their use began in the 1960s when doctors would prescribe estrogen off-label (for a use other than what was intended) for victims of rape. From the 1970s to 1990s, different formulations were used, and many organizations advocated for "prescriptive delegation," so pharmacists could dispense emergency contraception by working on behalf of a patient's doctor or nurse. In 1999, the emergency contraceptive pill Plan B was approved by the US Food and Drug Administration (FDA). While this ended off-label use of such drugs to prevent pregnancy, it ushered in a new era of struggle over access until 2006 when the FDA approved Plan B for over-the-counter purchase by people 18 years and older. It became available at retail pharmacies across the US in 2009 and it later became available without age restrictions in 2011.

056

***LIFE* Magazine, April 17, 1970**
The Designing Motherhood Archive

057

Zero Population Growth (now Population Connection), NYC Chapter (United States, est. 1968)
Poster: *Leave Room for Nature*, 1970
The Designing Motherhood Archive

The Zero Population Growth (ZPG) movement emerged in the late 1960s, advocating for stabilization of the global population through reduced birth rates. It was popularized by Paul R. Ehrlich's 1968 book, *The Population Bomb*, which highlighted concerns about overpopulation and environmental issues. However, Ehrlich—among other ZPG champions—had ties to the eugenics movement, known for its both racist and sexist motivations. Headquartered in Connecticut, the ZPG organization gained traction in the United States, with 325 chapters operating nationally by 1971.

Fertility

058

Forecaster Co. (United States, 20th century)
The Forecaster, 1948
The Designing Motherhood Archive

059

Pregmate LLC (United States, est. 2014)
Ovulation Strips, 2021
The Designing Motherhood Archive

While designers began to explore ways to detect ovulation in the 1960s, it wasn't until the mid-1980s that over-the-counter ovulation monitors became widely available. Ovulation monitoring requires routine measurement of luteinizing hormone (LH) that can be traced in urine. Produced by the pituitary gland, LH is secreted at very low levels throughout the

menstrual cycle but surges once a developing egg follicle reaches a certain size, triggering ovulation about 24 to 48 hours later. A positive result on an ovulation strip indicates high levels of LH and the beginning of ovulation.

060

Maria Hengstberger (Austria, b. 1941)
Cycle Technologies (Austria, est. 2002)
CycleBeads, 2002
The Designing Motherhood Archive

The Austrian gynecologist Dr. Maria Hengstberger developed the Baby Necklace in 1989 as part of her work in Ethiopia. After establishing a local health clinic, Hengstberger worked closely with women to design many tools, including a necklace of color-coded beads based a standard 28-day cycle. Hengstberger's necklace was instrumental in the development of CycleBeads, which help people identify their potentially fertile windows.

061

Hubertus Rechberg (Germany, 1948–2019)
Werner Steinschulte (Germany, active 20th century)
Natalie Rechberg (Germany, b. 1980)
Niklas Nathe (Germany, b. 1980)
Herman Ramsauer (Germany, b. 1964)
Klaus Puchinger (Germany, b. 1965)
Therese Nauf Milani (Switzerland, b. 1971)
Britta Pukall (Switzerland, b. 1965)
AEG Berlin and Valley Electronics (Germany, est. 1986)
BABY-COMP 1.0, 1986
The Designing Motherhood Archive

In 1983, German businessman Dr. Hubertus Rechberg laid the foundation for a series of fertility trackers when he and his wife searched for alternatives to hormonal contraception. His computational design for cycle tracking combined a thermometer with a computer and software. Users simply measured their basal body temperature under their tongue with the device in the morning, immediately after waking up and before getting up. Three years later, Dr. Rechberg founded Valley Electronics GmbH and launched the world's first fertility tracker: the Baby-Comp. The company's products have been continuously developed, with Dr. Rechberg's daughter, Natalie, working with an all-female Swiss design team to create the Daysy 1.0 (2014) and Daysy 2.0 (2019), the latter of which incorporates a smartphone app. These designs allow users to make informed choices about their menstrual cycle, their fertility, and their body.

062

Pascal Koenig (Switzerland, active 21st century)
Philipp Tholen (Switzerland, active 21st century)
Lea von Bidder (Switzerland, active 21st century)
Ava Bracelet, 2014
The Designing Motherhood Archive

While many period-tracking apps help identify peak fertility, the Ava Bracelet is the first wearable fertility tracker that monitors nine indicators of fertility. Data collected from the bracelet is displayed on an app to pinpoint the most fertile days of a wearer's cycle. The Ava bracelet also helps people track their general health during pregnancy.

063

Danielle Hall (United States, active 21st century)
Patrick Hall (United States, active 21st century)
MyVitro (United States, est. 2019)
IVF injection trainer, 2020

064

Maureen Brown
(United States, active 21st century)
Marc Brown
(United States, active 21st century)
Mosie LLC (United States, est. 2014)
Syringe from the Mosie Baby Kit for At-Home Insemination, 2016
The Designing Motherhood Archive

Fertility challenges affect about one out of eight people. The best-known (and often wildly expensive) option to address infertility is in vitro fertilization, in which eggs are retrieved in a medical procedure, fertilized in a lab, and implanted in the uterus. A less expensive option, intrauterine insemination inserts sperm past the cervix and into the uterus just before ovulation. A third option, intravaginal insemination can be performed at home using a syringe or even a turkey baster. Most syringes, however, have a tip that can be painful to the user and can also trap sperm. As part of their own fertility journey, Maureen and Marc Brown developed a new syringe with a rounded nub to ease at-home insemination. They launched a company, Mosie, and their son Francis (Frank) became the first Mosie baby. This patented design has helped single, surrogate, straight, and LGBTQ+ parents successfully conceive.

065

Toni Weschler (United States, b. 1955)
Fertility Awareness Method Chart from *Taking Charge of Your Fertility, originally* published 1995
Photocopy of chart, 2012
Courtesy Amber Winick

In 1996, Toni Weschler published *Taking Charge of Your Fertility*, popularizing the Fertility Awareness Method and ushering in a more nuanced model of body literacy. In the book, Weschler explains the phases of fertility and identifies three indicators of fertility: waking (basal body) temperature, cervical fluid, and cervical positioning. Her account helps readers track their fertility with ready-made templates that link temperature changes with one's unique fertility phases.

066

Tamar Ettun (b. 1982)
***IVF Documents*, 2025**
HD video, sound; TRT: 00:09:31
Courtesy the artist

IVF Documents is a personal reimagining of an ancient healing ritual, inspired by the artist's emotional and physical experiences of in vitro fertilization. In the video, performers—who are themselves either undergoing IVF or are post-menopausal—move with large bags filled with natural dyes in an empty pool, referring to the derivation of IVF medications from hormones found in the urine of postmenopausal people. The video also incorporates animations using printed genetic testing results and medical bills. Ultimately, this work aims to establish a visual language for an experience that our culture continues to find difficult to articulate.

Conception

067

Margaret Crane (United States, b. 1941)
The Predictor pregnancy test, 1967
The Designing Motherhood Archive

In 1967, while working at the pharmaceutical company Organon in New Jersey, graphic designer Margaret "Meg" Crane wondered why the urine tests routinely performed in the company's labs to determine pregnancy status weren't available for use at home. Observing long rows of test tubes suspended over

mirrored surfaces, she learned from a bench technician that the process was relatively simple: urine was added to a chemical mixture and left to rest for two hours. The result could then be read in the mirrored reflection of the tube bottom: a red ring indicated pregnancy, and a milky substance the opposite. Using her skills in packaging design, Crane created a prototype for the Predictor—a sleek kit in a clear acrylic container that neatly and transparently housed the mirror, pipette, and liquids needed to carry out the diagnosis at home. Her design for the Predictor became the first patented home pregnancy test.

068

Bethany Edwards
(United States, active 21st century)
Anna Couturier Simpson
(United States, active 21st century)
Lia biodegradable pregnancy test prototype, in development
Courtesy LIA

Many young designers are taking on industry norms that have gone unchallenged, as seen in the first plastic-free and biodegradable home pregnancy test designed by Lia Diagnostics. The company name plays on the scientific term *lateral immunoassay*, a fiber test strip that's part of a pregnancy test. For this design, Lia developed biodegradable paper that remains durable in contact with urine yet breaks down when flushed, reducing the environmental impact of pregnancy testing.

069

Josh Wasserman
(United Kingdom, active 21st century)
Royal National Institute of Blind People, UK
Tactile pregnancy test prototype, in development
Courtesy Joshua Wasserman

People who are blind or visually impaired often have to rely on others—partners, friends, health care workers, even strangers—to learn the results of a pregnancy test. This prototype of a tactile pregnancy test, developed by the UK Royal National Institute of Blind People, aims to remove this barrier. The prototype features bright yellow and pink panels so people with low vision can differentiate the top from the bottom. It works with the same kind of sensors as other pregnancy tests, but it relays that information through tactile bumps. A small bump on the underside of the stick confirms that the urine has been absorbed. Bumps on the top become raised to indicate a positive result. In its accessibility to all users, not just those with sight loss, this test is an example of universal design.

070

Advertisement: e.p.t. at-home pregnancy test, 1978

071

Sonogram, 2024
Private collection

072

Pinard's Ear fetal stethoscope, mid-20th century
The College of Physicians of Philadelphia

Part stethoscope, part ear trumpet, the Pinard is a simple horn-shaped object made of wood or metal for listening to a fetus's heart.

Designed in 1895 by French obstetrician Adolphe Pinard, it revolutionized medicine. The Pinard is uncomplicated, inexpensive, and unquestionably safe. Unlike the ultrasound, it doesn't require batteries or external power, and it is intuitive to learn to use. The Pinard is all but obsolete in the American hospital system, but some midwifes prefer to use them, while others prefer to use a fetal doppler.

073

Fetal doppler, c. 2022
Courtesy Nettle Wellness, Brooklyn, NY

074

Photograph of the first diasonograph, c. 1964
Built at Kelvin & Hughes, Hillington, Glasgow, c. 1964
Courtesy Dugald Cameron

075

Dugald Cameron (Scotland, b. 1939)
Technical drawing of ultrasonic unit, 1963
Courtesy Dugald Cameron and the Glasgow School of Art Archives, Scotland

Ultrasound machines were invented to spot submarines during World War I. In the 1950s, Ian Donald, a professor of obstetrics and gynecology at the University of Glasgow, reasoned that there was not much difference "between a fetus in utero and a submarine at sea." Donald, together with obstetrician John MacVicar and industrial engineer Tom Brown, built prototypes of obstetric ultrasound scanners. An industrial designer, Dugald Cameron, was recruited in 1961 to streamline the apparatus, which had a menacing appearance.

Emergence

076

Photograph: Mrs. Connie Fleischner, seven and a half months pregnant, holding the output from an EKG-500 "medical telemetering unit" in Chicago, 1962
Courtesy the Cleveland Press Archives

077

ECG Toco Fetal Chart Paper
The Designing Motherhood Archive

078

B. Braun Medical Inc. (Germany, est. 1839)
PERIFIX Filter Continuous Epidural Set, 21st century
The Designing Motherhood Archive

The epidural, a procedure to provide local pain relief, was developed in the late 19th century when American neurologist James Leonard Corning injected cocaine into the spine of a male volunteer. The technique was explored again in the early 20th century by Spanish military surgeon Fidel Pagés, who used it when treating wounded soldiers. Today, 60% to 70% of births in the US reportedly involve an epidural. Applied by an anesthesiologist, a needle is used to introduce an infinitesimally thin plastic catheter into the spine, through which medication is delivered. An epidural blocks the nerves that send pain messages to the brain. Many people receiving an epidural describe a significant decrease in pain and a numbness in the legs, which prevents lower movement and necessitates using a catheter for urination.

079

Chamberlen forceps, locking, 19th c. reproduction of a 17th century design
The College of Physicians of Philadelphia

080

William Smellie (Scotland, 1697–1763)
Smellie straight forceps, c. 1752
The College of Physicians of Philadelphia

Forceps are used to grasp a baby's head, hold it firmly, and exert traction to assist with vaginal birth. Their use has always been controversial. Forceps were invented in the late 1600s by the Chamberlen (or Chamberlain) family in England. They promoted midwifery based in part on their invention, which they kept a family secret. After more than a century, they sold the design—and over subsequent centuries medical providers introduced modifications. Scottish obstetrician William Smellie (1697–1763) separated the blades for more comfortable insertion and, in some cases, to conceal the forceps from his patients, which meant that consent may not have been provided. He also wrapped leather around the blades, believing this adaptation would reduce the temperature difference between the steel and the body. However, the absorbent leather could not be properly sanitized between uses and thus posed an infection risk.

081

Stork umbilical clamps, early 20th century
The College of Physicians of Philadelphia

Used primarily by midwives since the 19th century, umbilical clamps stop bleeding from blood vessels in the umbilical cord after delivery. These clamps, made of silver to avoid corrosion, feature a stylized stork decoration to indicate their tie to birthing. Sewing scissors later embraced the stork motif—a crossover that is believed to have occurred when midwives brought their sewing work to pass the time while waiting on labor and delivery.

082

Zubaida Bai (India, active 21st century)
Janma Clean Birth Kit, 2011
Courtesy ayzh Ltd.

According to the WHO, more than 800 people die every day in pregnancy and childbirth from preventable causes such as sepsis and other severe infections. After encountering a midwife in rural India who did not have access to sterile tools, mechanical engineer Zubaida Bai created an improvised clean birth kit for less than $2 that she calls Janma, which means "birth" in Sanskrit. Each kit contains off-the-shelf products to support sterile birth conditions: an apron, a sheet, antiseptic soap, a cord clip, and a surgical blade. In 2010, Bai founded the health-care company ayzh, which has distributed more than 250,000 kits in India, Afghanistan, Gambia, Ghana, Malawi, Nigeria, Zambia, Haiti, and Laos.

083

American College of Obstetricians and Gynecologists (United States, est. 1951)
Sample birth plan template, 2022

Labor

During labor, the fetus and placenta are delivered from the uterus to the outside world. Whether this process takes place vaginally, by cesarean section, in a hospital, at home, in a pool, and with or without pain medication, it involves designs that vary depending on cultural, political, and economic factors. The designs in this section relate to the birthing experience, which is increasingly centered on the needs and choices of birthing people rather than just their survival.

084

Anni McLaughlin (United States, b. 1950)
Resus-A-Cradle Easy Transport II, 2019
Courtesy Nettle Wellness, Brooklyn, NY

Invented by Certified Nurse Midwife and Registered Nurse Anni McLaughlin, the Resus-A-Cradle serves to stabilize a newborn's head, neck, and body during emergency resuscitation, ensuring an open airway. The device features soft foam fins for head stabilization, a chest angle to achieve the recommended "sniff" position, and a firm foam body to create a stable surface for chest compressions. McLaughlin created her first prototype for the Resus-A-Cradle from clay, using measurements taken from the babies she had delivered to ensure the design would support different newborn sizes. The clay model was then used to test various silicone casts before the dimensions were refined in CAD. After nearly four years of development, the first official Resus-A-Cradle was sold in November 2017, and the design is now a staple in many midwives' kits across the country. McLaughlin designed this version specifically for ambulance transport in collaboration with EMTs, underscoring the experience-based knowledge that informs its design.

085

Kara Springer (Barbados, active 21st century)
Kaya Birth Stool, c. 2008
Courtesy Nettle Wellness, Brooklyn, NY

086

Birthing stool, 2020
The Designing Motherhood Archive

Birthing furniture and other objects, such as backless stools, have balanced and supported laboring people for centuries across cultures, ethnicities, and geographic regions. An Egyptian wall relief, dating to 1450 BCE, depicts the stool that held Queen Mutemwia during the birth of her son Amenhotep III. The body's position on the stool uses gravity as the newborn emerges from the womb, while the structure engages the birthing person's abdominal, back, stomach, legs, arm, and vaginal muscles.

087

Birthing ball, 2025

088

Kim Jarrelle (United States, active 21st century)
Debbie Burbic (United States, active 21st century)
Jessamine O. Niccoli (United States, active 21st century)
Clever Medical (United States, est. 2015)
Immediate Skin-to-Skin C-Section Drape, 2015
Courtesy Clever Medical

089

Ina May Gaskin (American, b. 1940)
***Spiritual Midwifery*, 1976**
The Designing Motherhood Archive

090

Raven Lang (United States, b. 1943)
***The Birth Book*, 1972**
The Designing Motherhood Archive

Knowledge from birth workers has often been passed down orally. In the early 1970s, self-trained midwife Raven Lang opened a birth center in Santa Cruz, California, and wrote the *Birth Book*. She found a potential publisher but was told that she would have to remove all pictures of female genitalia. She chose instead to self-publish.

091

Dilation chart, c. 2021
The Designing Motherhood Archive

Cervical dilation charts demonstrate how the cervix effaces (thins and stretches) and dilates (opens) in the days and weeks before childbirth so a baby can fit through the vaginal canal. Once the cervix opens to ten centimeters, the person is ready to birth their baby. While cervical dilation checks have become routine with medicalized childbirth, many midwives, doulas, and obstetricians believe that cervical dilation does not predict the timeline, speed, or cadence of birth.

092

Grantly Dick-Read (British, 1890–1959)
LP vinyl record: *Natural Childbirth: A Documentary Record of the Birth of a Baby*, 1957
The Designing Motherhood Archive

093

Michelle Leclaire O'Neill (United States, active 20th and 21st century)
***Creative Childbirth: The Leclaire Method of Easy Birthing Through Hypnosis*, 1991**
The Designing Motherhood Archive

094

Marie "Mickey" Mongan (United States, 1933–2019)
CDs: *HypnoBirthing: The Mongan Method*, 1992
The Designing Motherhood Archive

In his books *Natural Childbirth* and *Childbirth Without Fear*, British obstetrician Grantly Dick-Read claimed that "healthy childbirth was never intended by the natural law to be painful." Hypnosis, he argued, would assist birthing people in interrupting the "fear-tension-pain syndrome," a vicious cycle in which fear of pain contributes to pain and affects the circulation of blood by directing it away from reproductive organs to larger muscle groups in the ligaments. This new approach launched a movement in the US. during the 1970s. By the 1980s, two birth educators were promoting the importance of focusing inward, reframing labor sensations as positive and productive, and feeling safe and relaxed. Marie "Mickey" Mongan and Michelle Leclaire O'Neill both used the term "HypnoBirthing" to describe their technique without either holding a trademark.

A decade later, Mongan filed a lawsuit against Leclaire O'Neill for common law trademark infringement. The case was dismissed, and today both educational programs lay claim to HypnoBirthing in their birth training.

095

Betamax video cassette: *The Lamaze Method: Techniques for Childbirth Preparation*, 1983

Produced by Embassy Home Entertainment, 1982
The Designing Motherhood Archive

French obstetrician Dr. Fernand Lamaze introduced the Lamaze method in 1951, which was heavily informed by a trip to what was then the Soviet Union, where he studied the medical findings of Ukrainian psychotherapist Dr. I. Z. Velvovskii. The Lamaze method consists of relaxation strategies, breathing techniques, childbirth education, and emotional support from a specialized nurse. The familiar "hee, hee, hoo!" seen in Hollywood portrayals of childbirth was popularized in part through Marjorie Karmel's 1959 book *Thank You, Dr. Lamaze*, which promoted the Lamaze method with US audiences.

096

***Ladies' Home Journal*, May 1958**
The Designing Motherhood Archive

Among the usual representations of midcentury motherhood—gleaming appliances, cake recipes, and lipstick-wearing women in aprons—the May 1958 issue of *Ladies' Home Journal* contained a shocking exposé called "Cruelty in Maternity Wards." It relayed stories of inhumane treatment in labor and delivery wards during childbirth, including the following letter from an anonymous nurse:

> *When I first started in my profession, I thought it would be wonderful to help bring new life into this world. I was and am still shocked at the manner in which a mother-to-be is rushed into the delivery room and strapped down with cuffs around her arms and legs and steel clamps over her shoulders and chest. It is common practice to take the mother right into the delivery room as soon as she is "prepared." [This preparation would have meant shaved pubic hair and an enema.] Often she is strapped in the lithotomy position, legs in stirrups with knees pulled far apart, for as long as eight hours. On one occasion, an obstetrician informed the nurses on duty that he was going to a dinner and that they should slow up things. The young mother was taken into the delivery room and strapped down hand and foot with her legs tied together.*

The article touched a nerve. Women from across the country wrote in to share their own stories of abuse and lack of consent, including being drugged in an effort to keep them still, quiet, and passive during labor.

097

Advertisement for Twilight Sleep (reproduction), c. 1914
The Designing Motherhood Archive

In 1906, German obstetricians Bernhardt Kronig and Karl Gauss presented research at the Berlin National Obstetrics Conference on a birthing method they called Twilight Sleep. Touted as a "painless labor" alternative, the method involved injecting the laboring person with morphine at the start of birth pains, and then administering doses of scopolamine, an amnesiac with hallucinogenic side effects. As the baby's head emerged, chloroform could also be administered. The drug combination was designed to erase the memory of labor pains, but it was not always effective. In 1915, a patient who had been an advocate of Twilight Sleep (Frances Carmody) died during its use while she was in labor with her third child. Although the national news coverage lessened the method's popularity, Twilight Sleep was used well into the late 1960s.

098

Time Inc. Office Memorandum, April 13, 1938, from Mr. Prentice to Mr. Larsen re: impounded copies of April 11th issue of *LIFE* (reproduction), Time Inc. Archive, MS 3009. RG 1.
The New York Historical

The film *Birth of a Baby* was commissioned by the American Committee on Maternal Welfare to educate the public about the process of childbirth, with the aim of reducing the nation's maternal mortality rate. The April 11, 1938, issue of *LIFE* magazine highlighted the film in support of the committee's efforts. While the depiction of birth in the magazine's pages may appear sanitized by today's standards, it provoked controversy upon publication, with at least 45 cities—including New York—working to remove it from newsstands over concerns of indecency. This office memorandum sent to *LIFE's* then editor, Roy Larsen, outlines how thousands of copies were seized by police under the direction of Bronx District Attorney Samuel J. Foley, who decried the story as "a flagrant offence against good taste."

099

***LIFE* Magazine, April 11, 1938**
Featuring stills from the educational film *Birth of a Baby*, commissioned by the American Committee on Maternal Welfare and directed by Al Christie (Canada, 1881–1951)

100

Director: George C. Stoney (United States, 1916–2012)
Featuring: Mary Francis Hill Coley (United States, 1900–1966)
Created for the Georgia Department of Public Health
***All My Babies: A Midwife's Own Story*, 1953**
16mm film converted to video; TRT: 00:55:00
Added to the Library of Congress National Film Registry, 2002

All My Babies: A Midwife's Own Story was released as a training aid for midwives and health professionals at a time when birth was moving from the home to the hospital. The film paints a rare portrait of how a model of care among Black midwives coexisted alongside a growing medical-industrial complex. Commissioned by the Georgia Department of Public Health, filmmaker George C. Stoney shadowed midwife Mary Francis Hill Coley for four months in Albany, Georgia. While the film included some acting, actual homes, streetscapes, and medical offices were used as backdrops. The film shows in detail two births attended by Coley with skill and high standards of care, and it captures the uncomfortable and enforced deference of Black midwives to white doctors and nurses at the county clinic. It even shows Coley questioning her own seasoned practices after a group lecture by a white doctor.

Filmed during the Jim Crow era, *All My Babies* captures the fading lifeline of Black midwives, who provided critical care for pregnant women of all races throughout the American South. Across slavery, segregation, and institutional racism, Black midwives inherited and passed down generations of knowledge, and their presence at home births was a constant—even as the turn to hospital births denied many Black women hospital care during segregation.

101

Director: Juliet Jordan
(United Kingdom, b. 1966)
Featuring: Miriam Schwarzschild
(United States, active 20th and 21st century)
Production Company: Dog Rose Films
***Miriam: Home Delivery*, 2014**
Digital video, sound; TRT 01:11:00
Courtesy the director and Dog Rose Films

This documentary follows Miriam Schwarzschild, a Brooklyn-based home-birth midwife, as she visits expectant mothers, conducts sonograms and checkups, and delivers a baby in the midst of Superstorm Sandy. Director Juliet Jordan showcases how midwives continue to provide care to people in various stages of their pregnancies.

102

George Melville Wolff
(United States, 1898–1977)
Wolff and Phillips Architects
(United States, est. 1942)
Kaiser Permanente Sunset Boulevard
Hospital Maternity Ward, c. 1950
Courtesy Kaiser Permanente
Heritage Resources

Kaiser Permanente's "dream hospitals" promised deliberate, thoughtful maternity care to a postwar generation. This unique hospital design was based on concentric "circles of service" that separated sterile staff spaces from patients and separated both staff and patients from visitors. Beside each birthing person's bed in the maternity ward was a large metal drawer that transferred a baby's bassinet from the communal nursery to the privacy of their room. The baby drawer was one of many designs that were intended to offer a more efficient and humane environment.

The first Kaiser Permanente hospital was built on Los Angeles' Sunset Boulevard in 1952. Its design was the brainchild of Dr. Sidney R. Garfield, a pediatrician and right-hand man of Henry J. Kaiser, the industrialist who founded Kaiser Health Plan for his workers. Garfield had been influenced by Dr. Edith Jackson's projects at Grace-New Haven Community Hospital. Piloted between 1946 and 1952, Jackson's hospital designs encouraged bonding and breastfeeding by keeping infants and birthing parents together through "rooming-in." The practice was welcomed as an alternative to sedated deliveries and separated care.

Temporary Bodies

The notion of a "temporary body" applies to most humans. We all experience physical changes due to aging, illness, diet, and exercise, to name only a few factors. The designs in this section respond to the various bodily transformations that take place across the reproductive arc, while also calling attention to shifting norms surrounding what a pregnant body is expected to look like and do.

103

Jean-Paul Goude (France, b. 1940)
In collaboration with Antonio Lopez (Puerto Rico, 1943–1987)
Photo: Grace Jones in Constructivist maternity dress designed by Jean-Paul Goude in collaboration with Antonio Lopez, New York, 1979
Courtesy Jean-Paul Goude

104

Butterick (United States, est. 1863)
Butterick Classics Pattern, 5784 Misses' Maternity Dress, Scarf & Collar, 1987
The Designing Motherhood Archive

Abandoning the idea that pregnant people should maintain dangerously waisted silhouettes that were in vogue in the early 20th century, maternity fashions began to adopt looser silhouettes by mid-century. Stretch fabrics were increasingly available in ready-to-wear garments, although one tried-and-true way to make maternity fashion meet one's own personal style was to sew at home or get something tailor-made.

105

Metropolitan Transportation Authority (MTA)
***Baby on Board!* button, 2017**
The New York Transit Museum (2024.52.1.1)

106

Transport for London (TfL)
***Baby on Board* badge, 2005**
The Designing Motherhood Archive

107

Unknown maker
***Don't Touch My Bump* button, 2021**
The Designing Motherhood Archive

Developed by the in-house design team at Transport for London, which manages the city's public transit system, the Baby on Board button—or badge, to use the British term—was introduced in 2005. It evokes the bespoke typeface and bullseye symbol of the London Underground, which were designed by the calligrapher Edward Johnston in the late 1910s. The badge has proven popular: more than one million have been distributed to help make pregnant people's journeys safer and more comfortable. Inspired by that success, New

York City's subway system introduced a pilot program offering buttons to pregnant riders in 2017, though the buttons were discontinued when the program concluded later that year. These buttons, and the homemade Don't Touch My Bump button, highlight the physical and interpersonal considerations involved in navigating a pregnant body through public space.

108

The Nu-Life Company Inc.
(United States, active 20th century)
Maternity support girdle, c. 1950
The Designing Motherhood Archive

The practice of wearing a corset or girdle during pregnancy to cinch, compress, and reshape the abdomen in order to conform to a fashionable silhouette was introduced in the 15th century and persisted well into the 20th, despite such clothing being uncomfortable or even dangerous. Until the last century, such undergarments were used to conform to a fashionable silhouette. Today, abdominal support during pregnancy is recognized as desirable for some. Smaller than a corset, a modern girdle can be worn to relieve—or at least redistribute—the weight of a third trimester bump.

109

Ryan Mario Yasin
(United Kingdom, active 21st century)
Petit Pli Expandable Children's Pants, 2017
Courtesy of the designer

Children typically grow seven sizes in their first two years. Aeronautical engineer Ryan Mario Yasin was shocked to see his young niece and nephew quickly outgrow clothes, which inspired him to design versatile garments that grow with the child who wears them. Clothes in the Petit Pli line are pleated to stretch and grow bidirectionally, snugly fitting a range of sizes from four months to three years. The proprietary textile is windproof, waterproof, and resists tearing and staining. Because it's made of a recycled mono-fiber, it doesn't have to be separated into component fibers for recycling. Petit Pli garments gesture toward a new paradigm of reducing waste in fashion.

110

Chas L. Lewis, Inc.
(United States, est. 20th century)
Two-piece romper with maternity stretch panel, c. 1960
The Designing Motherhood Archive

111

Page Boy Maternity Clothing
(United States, est. 1938)
Tie-waist skirt, c. 1960
The Designing Motherhood Archive

In the early 20th century, the prevailing norm in the US was to use clothing to hide pregnancy, masking what was still often "unutterable" in polite society. Maternity corsets and dress types that could downplay a pregnant person's changing shape were favored. The Page Boy tie-waist skirt introduced a norm-defying twist to this trend. Run by sisters, the maternity line Page Boy opened their first boutique in 1938 in Dallas, Texas, next to an obstetrician's office—where they launched the tie-waist skirt. The skirt could be conveniently let out as pregnancy progressed and as the wearer's hip and rib circumferences expanded. Snaps on the waistband adjusted the fit while maintaining an even hemline. The tie-waist skirt remained popular until 1959, when stretchy Lycra fabric was invented.

112

United States Army
(United States, est. 1775)
Maternity uniform, Organizational Clothing & Individual Equipment (OCIE), 2024
Courtesy Alexandra Ronske

113

Bumpsuit (United States, est. 2020)
Crushed velvet maternity unitard, c. 2023

Postpartum

Every person who gives birth experiences its aftereffects, which can include physical pain and discomfort, hormonal surges, and emotional fluctuations. The designs in this section address various experiences during this postpartum period.

114

A.L. Mills (United States, active 20th century)
Mills Hospital Supplies, Inc. (now Medline Industries, Inc.)
(United States, est. 1910)
Kuddle-Up Blanket, first produced in the 1950s
Cotton
The Designing Motherhood Archive

115

Newborn Caps, 21st century

Many hospitals issue a Kuddle-Up blanket and a stockinette cap to newborn babies, providing warmth and serving as the child's first garments. A simple white cotton blanket with alternating stripes of pink and blue, the iconic Kuddle-Up is used around the world. In 1910, a group of nurse-nuns approached A.L. Mills, a garment maker who produced aprons for Chicago's meatpacking industry, to create hospital garments. As a result, the medical garment and textile supply business was born, and Mills Hospital Supplies would later become Medline, the world's largest privately held manufacturer and distributor of medical supplies.

Medline also manufactures these pink and blue striped caps, though versions are produced by many companies. The cap with the large bow is intended for baby girls, though some parents have resisted its immediate evocation of sartorial gender norms. This "rainbow baby" cap—not standard-issue hospital clothing but sold commercially—refers to a popular term for babies born to parents who previously experienced pregnancy loss. These tiny caps, intended to help newborns regulate their body temperature immediately after birth, represent one of the first ways parents may seek to express their values and tastes through the items they give their children.

116

Linda Foss (United States, active 21th century)
BoogieBulb Eco-Friendly Nasal Aspirator, 2008
The Designing Motherhood Archive

The blue bulb syringe is commonly found in discharge packs for new parents or in a seasoned midwife's birthing kit. It is used during delivery if babies have meconium (stool) in their mouth or nose—or nasal obstructions in the early weeks of life. The suction tip is often slightly larger than the opening of a newborn's nostrils to protect against injuring the nasal passages.

117

Frida Baby (United States, est. 2014)
NoseFrida-The Snotsucker, 2015

118

Prefold cloth diaper and Snappi fastener, 2017
The Designing Motherhood Archive

Until the mid-20th century, diapering involved folding and pinning cloth towels in place and then tugging rubber pants over the diaper to minimize leaks. It wasn't until the 1960s that disposable diapers were introduced. More than 80 years later, disposable diapers account for more than 90% of all diaper changes in the US, with about 18 million diapers ending up in landfills each year. The environmental impact has prompted a search for alternatives, with some turning back to washable, reusable cloth diapers.

119

Certificate of Life, 2024
The Designing Motherhood Archive

The birth certificate is among the first legal documents an individual acquires. Certificates of life, such as this example created by the Vancouver, WA-based group GriefWatch, are sometimes issued at hospitals to parents experiencing pregnancy loss who may not otherwise be issued a birth certificate depending on state regulations.

120

ScarAway clear silicone scar sheets for C-section, 21st century
The Designing Motherhood Archive

Silicone scar strips like ScarAway are often used to reduce the itchiness and discomfort of a healing incision after a cesarean birth.

121

Perineal irrigation bottle, 21st century
The Designing Motherhood Archive

After a vaginal delivery, a perineal irrigation bottle provides self-care for the postpartum person, who can squirt pH-balancing water against their urine flow to temper the sting on stretched or stitched skin.

122

Generic postpartum mesh underwear, 21st century
The Designing Motherhood Archive

Designed for postpartum care, these stretchy panties made of an expandable synthetic mesh hold liners that absorb uterine discharge or ice packs and other treatments for localized pain relief and healing. They are encountered by most postpartum people, regardless of whether the birth took place in a hospital, at a birthing center, or at home.

123

Medical bill for a cesarean birth in New York, c. 1940
The Designing Motherhood Archive

Childbirth in the US costs more per capita than in any other high-income country. Of those births, 99% take place in hospitals. More hospital stays in the U.S. are for pregnancy, childbirth, and newborn care than for any other reason. In 2017, the average cost for hospital fees alone was $11,200 for a vaginal birth and $15,000 for a cesarean birth when covered by private insurance. Costs can be even higher for the uninsured or underinsured. Home birth is not universally covered by health insurance, but many midwives accept Medicaid and have the ability to customize bills for their patients.

124

John L. Cox (Scotland, active 20th century)
Jenifer Holden (Scotland, active 20th century)
Ruth Sagovsky (Scotland, active 20th century)
The Edinburgh Postnatal Depression Scale, 1987
The Designing Motherhood Archive

An estimated one in seven postpartum people in the US suffers from postpartum depression. Ranging from "baby blues" to severe psychosis, postpartum mental distress is common yet often undiagnosed or underdiagnosed due to both stigma around mental illness and stereotypes of maternal joy. The Edinburgh Postnatal Depression Scale was designed to set a threshold for clinical intervention. While its ten-question format provides a means to assess mood, its designers insisted that it be considered holistically in relation to a patient's wider social support system.

125

Elvie (United Kingdom, est. 2013)
Elvie perineometer, 2015
The Designing Motherhood Archive

126

Nerissa Nefeteri
(United States, active 21st century)
Yoni Eggs in rose quartz, 2017
Courtesy Gabriella A. Nelson

While the muscles of the pelvic floor can weaken in anyone for any number of reasons, childbirth can make it worse. Perineometers, first developed in 1946 by Dr. Arnold H. Kegel, measure pelvic floor strength and can be used to retrain weakened muscles through a daily regimen of exercises. Since their invention, perineometers have shifted medical practice from a reliance on surgery toward rehabilitation. Today, smart devices use biofeedback "games'' to guide users through exercises that support postpartum recovery, while other products are unplugged, such as weighted vaginal balls or yoni eggs.

127

Adam Dubrowski (Canada, b. 1972)
Christine Goudie (Canada, b. 1980)
Artur Arutiunian (Canada, b. 1999)
Perineal repair simulators, 2018 (open-source design)
Developed by MUN MED 3D, Memorial University, Newfoundland, Canada, and maxSIMhealth, Ontario Tech University, Ontario, Canada
Manufactured by proxSIMity, Ontario, Canada
Polylactide, silicone
Courtesy Adam Dubrowski, Ontario Tech University, Canada

128

ProxSIMity Perineal Repair Simulator video, 2021
Digital video; TRT: 00:07:04
Courtesy Adam Dubrowski, Ontario Tech University, Canada

The perineum is the area between the vulva and the anus. During birth, it can tear or be intentionally cut to hasten birth, a procedure called an episiotomy. About one-third of all postpartum people in the UK and US require stitches for a torn or cut perineum. Skilled repair is critical. Dr. Adam Dubrowski, a scientist at Ontario Tech University, is part of a team that creates inexpensive, open-source medical training models, including 3D-printed silicone models for training in perineal repair. Anyone can 3D-print models with perineal tears of different depths and severity. The Ontario Tech design team chose to print their models in a hot pink color to avoid racial or ethnic bias.

129

Tabitha Soren (United States, b. 1967)
Digital projection of photographs from the "MOTHERLOAD" series, 2006-2007/2022
Postpartum Blues Begin
Fragile Assets
Becoming A Big Sister
Running With Weights On
The Month I Stopped Peeing On Myself
One Night of Nursing
The Night The Baby Only Woke Up Twice
The Morning After The Baby Slept Through The Night
Going Down Swinging
All That Lost and Impossible Love
A Napping House
He Couldn't Be Stopped
Changing Lens on Camera In The Middle of the Night
Involuntary Darkness of the Soul
Rude Awakening
The Night The Panic Attacks Started
My Great American Novel – All 400 Photographs 2006-2007
The Week His Sisters Had School Vacation
The Week The Baby Ended Up In The Emergency Room
Perfect Madness, All the Overnight Photographs
Courtesy the artist

The artist used a suspended camera to capture images of the first three months of life for a mother-baby dyad which she then layered to evoke the immediate postpartum period. The project records the blur of hazy, repetitive gestures of newborn parenting life. Soren intentionally clouds the visual field with these accumulated experiences, a way to explore the erasure of boundaries between two bodies. Originally shot in 2006 and 2007, the project began "as a hedge against life as a mother overtaking life as an artist." The images were developed and codified as a series 15 years after they were shot. Soren reflects, "There have always been women artists, including very driven ones, who have never harbored doubts about the feasibility of straddling the line between motherhood and creative accomplishment. Motherload is not for them."

130

Jess T. Dugan (United States, b. 1986)
***Self-portrait with Vanessa and Elinor (2 days old),* 2018**
Archival pigment prints
Courtesy the artist

Jess Dugan's creative practice centers around an exploration of identity—particularly gender and sexuality— through photography, video, and writing. As a queer, non-binary person, Dugan is motivated by an existential need to understand and express themself and connect with others. Their intention is to create work that facilitates intimacy and encourages empathy, understanding, and critical conversations about identity and contemporary social life.

In 2011, the artist began an ongoing project photographing their family. *Self-portrait with Vanessa and Elinor (2 days old)* was an unplanned addition to the series, made in the hospital when the new parents realized they had some quieter moments in the immediate postpartum period.

131

Donut pillow, 2025

Pessaries

A pessary is a device inserted into the vagina to treat prolapse, a condition in which reproductive organs descend due to weakened pelvic floor muscles. Resulting from childbirth or other factors, prolapse affects around 50% of people with vaginas over the age of fifty. Yet many people don't hear about prolapse, for reasons ranging from a lack of investment in women's health to shame around reproductive health.

In the past, objects including pomegranates and balls of wool were used as pessaries; pessaries have also been made from wood, metal, glass, or plastic. Along with historic examples, this case features prototypes and the final to-market version of the Reia pessary. Created by an all-female design team, the Reia pessary collapses to half its diameter, making it easier to insert and remove.

132

Curved Brass Pessary
Thomas-Cutter Retroversion Pessary in Vulcanite
Zwank Pessary in Wood and Steel
Double Concave Glass Disc Pessary
Cube Pessary in Gum Rubber
Brass Prolapsus Pessary
Hollow Plastic Ring Pessary
Spooner's Pessary for Precenture in Pewter
Self-Retaining Variation of Goddard's Ring and Stem Pessary
Gellhorn Pessary Reproduction in Lucite
V-Shaped Horseshoe Pessary
Ball and Stem Pessary in Vulcanite
Jackson Stem Pessary
Gum Rubber Ring Pessary with Brass Springs
Self-Retaining Cutter's Retroversion Pessary
Globe Pessary in Bakelite
The College of Physicians of Philadelphia

133

Meegan Daigler (United States, b. 1992)
Ariana Sopher (United States, b. 1991)
Kaitlin Maier (United States, b. 1992)
Paul Manissian (United States, b. 1965)
Reia LLC (United States, est. 2015)
Reia Pessary Prototype (Frankenstein 1)
Reia Pessary Prototype (Frankenstein 2)
Reia Pessary Prototype (V8), 2015–2020
Reia 4 (final prototypes) and instructions for use, 2023
Courtesy Reia, LLC

Feeding

Feeding is one of the most critical postpartum experiences for babies and caregivers alike. Milk can be consumed at the breast, pumped, donated, or created in a lab. For some, feeding babies is a deeply enjoyable act, while for others, it can be a complex or distressing endeavor. While the designs here were intended to ease the feeding process, they don't address the physical and emotional labor involved—nor the social and economic conditions that can make "best practices" difficult to achieve.

134

Corinne Botz (United States, b. 1977)
***Milk Factory: Inside a Lactation Room at the US Capitol*, 2021**
4K video color, sound; TRT: 00:10:47
Courtesy the artist

Milk Factory focuses on the Longworth House of Representatives lactation room. This bipartisan space was established in 2007 when Nancy Pelosi became speaker. The footage was filmed days before the Capitol closed to the public after COVID-19 was declared a national emergency, and a year before the Capitol insurrection in Washington, D.C. One of the filming dates coincided with the passage of the Federal Employee Paid Leave Act (FEPLA). Despite this advance, the US remains the only high-resource country in the world that does not offer mandated paid family leave. Without paid leave, many postpartum people return to work soon after giving birth, which contributes to the pervasiveness of pumping in the workplace. Focusing on the gendered nature of care work and filmed in the very place where laws are decided regarding parental policies and reproductive rights, this film is especially relevant in light of the pandemic, which has underscored the systemic failings and institutional barriers that largely affect working parents, especially women of color.

135

Unknown maker working in Greenwood, Nova Scotia
Breastfeeding demonstration set (head and breast), 2021
The Designing Motherhood Archive

136

Maker: Caroline Reid (Germany, b. 1980)
Pattern designer: Lorna Hartwell (United Kingdom, b. 1955)
Breastfeeding Knitted breast teaching models, made 2025 from pattern designed c. 1998
The Designing Motherhood Archive

Part of the history of functional craft, this type of breastfeeding demonstration aid is popular among midwives, as well as among health visitors in the United Kingdom, who visit postpartum people at home as part of the free National Health Service. They are used to show the best way to get a baby to latch, as well as how to manually express milk and deal with issues like clogged ducts and engorgement. Knitters can adapt downloadable patterns to illustrate an endless variety of breast and nipple sizes and shapes.

137

Boxwood nipple shield, c. 1775–1825
Glass nipple shield, c. 1800–1850
Pewter nipple shield containing lead, c. 1850–1900
The College of Physicians of Philadelphia

A nipple shield is worn over the areola and nipple during breastfeeding to provide a larger surface for the baby to latch onto and also offer some protection to the nursing parent. Modern nipple shields are made of soft, thin, flexible silicone and have holes to allow the breast milk to pass through, much like these 18th and 19th century examples. The glass design caught milk under clothing between feedings, with a hole to empty collected milk.

138

Carnation (formerly the Pacific Coast Condensed Milk Company) (United States, est. 1899)
Advertisement, c. 1944

139

Erik Hans Krause, (Germany, 1899–1990)
Designed for the Works Progress Administration (WPA) Federal Art Project, 1935–1943
Poster: *Nurse the Baby* (reproduction)), c. 1938

This poster promoting breastfeeding as "protection against trouble"–perhaps inferring the vitamins and antibodies offered by breastmilk to baby–was designed by artist Erik Hans Krause as part of the WPA Federal Art Project during the New Deal. Issued a few years later, during World War II, the advertisement suggests that a baby becomes especially strong when fed Carnation-brand evaporated milk. These historical examples of the conflicting imperatives regarding the "best" approach to nourishing a child speak to the ongoing deluge of messaging directed at caregivers, while their political overtones accentuate the pressure to make the "right" choice.

140

Materna-line, Inc.
(United States, est. mid–20th century)
Nursing bra (style 56), c. 1950
The Designing Motherhood Archive

Before the invention of off-the-rack clothing, nursing attire was often repurposed from existing garments. A notable change occurred when Samuel M. Perry, an inventor in Plainfield, New York, applied for a patent for a nursing corset with a hinged flap over the bust in 1866. In the early 20th century, the US Patent and Trademark Office began issuing patents for nursing bras that built on this design. Mainstream companies such as Maidenform began marketing nursing bras with support cups that featured leak protection through rubberized linings and pockets for absorbent pads. Designers aimed to balance form and function with bras that reflected the era's preferred breast shape without sacrificing the nursing bra's objectives.

141

Mead Johnson & Company
(United States, est. 1905)
Dextri-Maltrose carbohydrate formula powder, c. 1960 (introduced 1911)
The Designing Motherhood Archive

142

Alfred Bosworth (United States, 1879–1963)
M & R Dietetic Laboratories (United States, est. 1903)
Similac infant formula, c. 1950 (introduced 1926)
The Designing Motherhood Archive

143

Medela (Switzerland, est. 1961)
Breast milk storage cooler bag with contoured ice pack, 21st century

144

Willow (United States, est. 2014)
Willow wireless breast pump, 2021 (first generation released in 2017)
The Designing Motherhood Archive

145

Haakaa (Aotearoa New Zealand, est. c. 2013)
Haakaa breast pump, 2014
The Designing Motherhood Archive

The market for breast pumps has reached up to $7 million with room to grow, according to a 2017 article in *The New Yorker* by Jessica Winter, who wrote about the amount of money Silicon Valley kingmakers were "leaving on the table by shunning women and mothers and babies." Newer designs are finally reaching the market. The Haakaa pump attaches to the breast with suction and can work mechanically or manually. The Willow pump has no tubes or electrical cords and tracks the amount of milk pumped on a mobile app.

146

Einar Egnell (Sweden, 1880–1976)
Sister Maja Kindberg
(Sweden, 1880–1976)
Egnell SMB breast pump, c. 1956
The Designing Motherhood Archive

Einar Egnell, a Swedish civil engineer, was one of the first mechanical breast pump designers. In the mid-1950s, after a gynecologist friend challenged him to improve upon existing technologies, Egnell started with human anatomy rather than that of cows, on which previous mechanical pumps had been based. His breast pump was named for "Sister Maja" Kindberg, the nurse who collaborated on its testing with new mothers in Stockholm's maternity hospital. Breast pumps were initially restricted to medical spaces until the early 1990s, when the home electric pump became widely available. In 2010, the breast pump experienced its biggest public boost in the US when the Affordable Care Act mandated that health insurance cover its cost.

147

Whitall Tatum & Co
(United States, 1857–1901)
Phenix breast pump, c. 1879
The College of Physicians of Philadelphia

148

Emulait (United States, est. 2019)
Emulait Anatomy Bottle and replacement nipples, c. 2024

149

Baby bottles and nursing bottle caps, 20th–21st century
The Designing Motherhood Archive

Before the modern nursing bottle, infants were fed milk out of any container with a spout or narrowed end. In the 1840s, the American inventor Elijah Pratt patented his design for a rubber nipple, and further developments came through the invention of heat-resistant glass and plastic. By the 1940s, the US Patent Office had issued more than 200 patents for baby bottle designs. As bottle shapes have evolved, design goals such as improving flow and mimicking the nipple's shape have remained the same.

150

Make the Breast Pump Not Suck Collective (Catherine D'Ignazio, Alexis Hope, Bex Michelson, Jennifer Roberts, Kate Krontiris, and Binta Beard; video documentation by Elizabeth Bayne)
"Make the Breast Pump Not Suck" Hackathon, 2018
MIT Media Lab, Cambridge, Massachusetts
Courtesy the Make the Breast Pump Not Suck Collective

The breast pump is often praised as a timesaving device that makes extracting breastmilk look effortless. Yet the effort required to use the pump has not been matched by efforts to improve its design. A multidisciplinary group of more than 100 designers, technologists, and community partners met in 2014 at the Massachusetts Institute of Technology's Media Lab to reimagine the future of breastfeeding. Called "Make the Breast Pump Not Suck," the project centers the experiences of breastfeeding people, embraces the perspectives of marginalized people, and breaks taboos related to bodies and bodily fluids. A second gathering in 2018 widened the focus to policies surrounding paid leave, breastfeeding in public, and health care innovation. Through its "hackathon" format, the project has played an interventionist role by using the breast pump to expose the need for family leave policies.

151

Mamava (United States, est. 2013)
Breastfeeding bench prototype, 2025
Courtesy Mamava Inc., Burlington, VT

The lack of dedicated lactation rooms in workplaces and public areas led Sascha Mayer and Christine Dodson to create Mamava, a company that manufactures lactation space solutions. The company takes a human-centered design approach, conducting research and speaking with breastfeeding people and employers, with the mission of creating a healthier society through infrastructure and support for breastfeeding. This semiprivate bench is a brand-new prototype, designed for spaces too small to accommodate one of the brand's enclosed pods.

The Baby Gear Industrial Complex

The baby gear industry is big business, especially thanks to online marketing algorithms that can target expectant parents from the moment they purchase an ovulation kit. Capitalizing on new parents' anxieties as they adjust to their increased responsibilities, manufacturers promise products that will make caregivers' lives easier and children safer. But the constant stream of "new and improved" offerings can be overwhelming and expensive, and poses major problems in terms of sustainability. Objects in this section raise questions about the promise of "better living through design" by shedding light on the sociology, psychology, aesthetics, and environmental impact of baby gear.

Monitoring

In reproductive healthcare, monitoring can be an important tool, helping to detect and prevent illness, facilitate conception, and ensure healthy pregnancies and deliveries. After delivery, monitoring is used to track growth and to alert caregivers when a baby is crying or otherwise needs attention. While monitoring can empower individuals, families, and communities, it can also magnify anxieties and, at worst, compromise bodily autonomy, personal freedoms, and civil liberties.

152

Isamu Noguchi (United States, 1904–1988)
Zenith Radio Corporation (United States, est. 1918)
Radio Nurse Transmitter and advertisement, 1937–38
Bakelite, metal, and electronic components
Cooper Hewitt, Smithsonian Design Museum, Smithsonian Institution; gift of Mel Byars (1991-59-61)

On February 27, 1932, Charles Lindbergh Jr., the 20-month-old son of aviators Anne Morrow Lindbergh and Charles Lindbergh, was taken from his crib and carried out an upstairs window while his parents sat, unaware, by the living room fire. In the wake of this kidnapping, Eugene McDonald, president of the Zenith Radio Corporation, crafted a prototype that would help ease the anxieties of his own growing family. Using a microphone, speaker, and radio, McDonald fashioned a monitoring

device that transported the sounds of the room where his newborn daughter slept to a portable speaker, enabling caregivers to listen in from any room. In 1937, McDonald commissioned Japanese American sculptor Isamu Noguchi to design the device's casing. The resulting Zenith Radio Nurse had a sculptural, abstract form that was reminiscent of a human head.

153

Fisher-Price (United States, est. 1930)
Fisher-Price nursery monitor, 1983
The Designing Motherhood Archive

Considered a luxury item well into the 1970s, the baby monitor was a major shift in the way adults care for babies. It not only bridged rooms, but it also revolutionized the way we interpret babies' cries. Baby monitors helped further the notion that a baby's cry is a signal that must be noticed immediately and responded to promptly.

154

Safety 1st (United States, est. 1984)
Safety 1st Child View monitor and television, 2002
The Designing Motherhood Archive

In the 1990s, several television news stations ran stories of caregiver misconduct caught on video monitors, paving the way for so-called nanny-cams. Today, most video monitors are used in connection with a child's sleep routines. Infrared LEDs have made it possible to see video images at night, and Wi-Fi allows caregivers to stream a camera's video feed on smartphones and computers.

155

Rest Devices Inc. (United States, est. 2011)
Mimo Smart Baby Breathing & Activity Monitoring Onesie, 2014
The Designing Motherhood Archive

156

Owlet Baby Care (United States, est. 2013)
Owlet Smart Sock with monitoring sensor (second generation), 2018
Courtesy Rachel Swartz Robinson

Today's wearable, connected devices can gather data on everything from a baby's sleeping patterns and position (on the stomach or back) to breathing rates, skin temperature, room temperature, and even blood-oxygen levels and heart rates. The "internet of toddlers" now also includes smart onesies, diapers that detect urinary tract infections, and pacifiers that warn of elevated temperatures. Information can be continuously tracked via smartphone app.

157

Emmi Pikler (Hungary, 1902–1984)
***Unfolding of Infants' Natural Gross Motor Development*, 2006 (adapted from Pikler's *Terminology of Basic Body Postures and Movements*)**
Courtesy Resources for Infant Educarers® (RIE®)

158

Magda Gerber (Hungary, 1910–2007)
Thomas Forrest (United States, active 20th century))
Penny Wright (United States, active 20th century)
Resources for Infant Educarers (United States, est. 1978)
***On Their Own/With Our Helps*, 1978**
Digitized video; TRT: 00:13:43
Courtesy Resources for Infant Educarers® (RIE®)

In 1948, Hungarian pediatrician Dr. Emmi Pikler established a facility to care for war orphans in Budapest. There, she developed principles that elevated caregiving, promoted children's self-initiated play, and emphasized the benefits of sensitive observation for caregivers and children alike. In 1978, Magda Gerber, a child development specialist and Hungarian American émigré, honed Pikler's work into a methodology. Called Resources for Infant Educarers (RIE), the method teaches caregivers to connect meaningfully with children during caregiving acts (such as feeding or diapering) and to trust in children's self-initiated playful explorations. According to the RIE-Pikler method, observation is a mutually beneficial form of monitoring. Adults observe as children are given the freedom to explore, play, learn, and solve problems on their own with adult intervention as needed. Through observation, caregivers can also better understand children's needs, abilities, and ways of communicating. Such moments demonstrate the value of caregivers—and how crucial it is to support and compensate them fairly.

Strollers

In a walking city like New York, a stroller is a helpful piece of baby equipment. Urban parents use strollers to transport not only their young children but also their copious stuff, including diapers, clothes, snacks, and toys. When running errands, parents may use the stroller as a shopping cart. A well-designed, comfortable stroller that fits everything but can be safely and easily maneuvered through narrow aisles and crowded subways can seem like the holy grail. This display features influential stroller designs from the 1950s to the present, demonstrating how the precarious balance between practicality, affordability, and style has shifted repeatedly over the years.

159

Earl E. Hoyt, Jr. (1936–2024)
Donald Deskey Associates (United States, est. 1943)
Designed for the Union Carbide Corporation (1936–2024)
Drawing: Design for Blow-Molded, All-Weather Baby Stroller, 1960-65
Black marker, red color pencil on newsprint
Cooper Hewitt, Smithsonian Design Museum, Smithsonian Institution; gift of Donald Deskey (1988-101-1540)

160

Matt Zigler (United States, active 21st century): Lab Coordinator, Bullis Innovation and Technology, Bullis School, Potomac, MD
Featuring the work of students Cami Murphy, Jacob Zlotnitsky, Evan Beach, Benjamin Gordon, Jewel Walker, Kieran Anzelone, and Ibenka Espinoza
Wheelchair Stroller Design in *Making for Social Good* course, 2021
Digital video, sound; TRT: 00:02:27
Courtesy Bullis School

161

A. E. Peterson Manufacturing Co. (United States, active 20th century)
Folda-Rola stroller, c. 1950

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Owen F. Maclaren
(United Kingdom, 1907–1978)
Andrews Maclaren Ltd.
(United Kingdom, est. mid–20th century)
B-01 "Umbrella" Baby Stroller, 1966
Aluminum alloy tubing and saran polythene fabric
The Designing Motherhood Archive

Aeronautical designer Owen Finlay Maclaren applied his experience in designing fighter planes to the problem of his granddaughter's baby carriage when he created the first collapsible stroller. His design pared the product to its essential components. With a lightweight aluminum frame, the stroller weighed just six pounds—less than many newborns. Its handles mimicked the classic umbrella shape, and its fabric chair made a perfect canvas for eye-catching patterns. Maclaren took his prototype to Silver Cross, a British manufacturer of strollers, which said there would be little market interest and rejected the concept. In response, Maclaren formed his own company to mass produce the umbrella stroller. A decade after the stroller's debut, more than 600,000 were being produced annually.

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Colugo (United States, est. 2017)
Colugo Compact Stroller, 2019

164

Max Barenbrug (Netherlands, 1964–2023)
Bugaboo (Netherlands, est. 1996)
Bugaboo Frog Stroller, designed 2001

165

UPPAbaby (United States, est. 2006)
UPPAbaby Vista Stroller, designed 2008

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Babyzen (France, est. 2009)
Babyzen YOYO Stroller, designed 2012

167

Silver Cross (United Kingdom, est. 1877)
Silver Cross Arcadia Pram, designed 1967

168

Peg Perego (Italy, est. 1949)
Perego "Go-Go" Stroller, c. 1970

169

Aprica (Japan, est. 1947)
Aprica Stroller, c. 1983

170

Jeremy Scott (United States, b. 1975)
Cybex (Germany, est. 2005)
Priam Stroller, from the "CYBEX Car Collection by Jeremy Scott" line, 2024
Courtesy CYBEX US

Furniture and Carrying

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Yves Béhar (Switzerland, b. 1967)
Deb Roy (Canada, active 21st century)
Harvey Karp (United States, b. 1951)
Nina Montée Karp (Serbia, b. 1963)
Happiest Baby, Inc. (United States, est. 2001)
SNOO Smart Sleeper Bassinet, 2016

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Sam Maloof (United States, 1916–2009)
Cradle Cabinet, 1968
Walnut and brass screws
Museum of Arts and Design, New York; gift of the Johnson Wax Company, through the American Craft Council, 1977

Like much design, baby gear can function as a status symbol. Constructed by hand from fine walnut, Sam Maloof's Cradle Cabinet is considered an icon of mid-century American studio craft but is, by today's standards, utterly impractical. Suspended between storage compartments, the cradle's boned structure would require padding and present an infant suffocation hazard. The SNOO bassinet, designed a half-century later by Yves Béhar in collaboration with doctors Harvey Karp and Deb Roy, electronically produces movements, vibrations, and sounds intended to soothe newborns into a full night's sleep. But the SNOO does not work for all babies and, retailing at around $1,700 or around half as much for a six-month rental, is a gamble few parents can afford.

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John Forsén (Sweden, active 20th century)
IKEA (Sweden, est. 1943)
ANTILOP highchair, designed 1991 (this example 2025)

174

Peter Opsvik (Norway, 1939–2024)
Stokke (Norway, est. 1932)
Tripp Trapp chair, designed 1972 (this example c. 2015)
Courtesy C'naan Hamburger

At the high end of the high chair market, the Tripp Trapp, designed in 1972 by Peter Opsvik for Stokke, adjusts to fit a growing child. It remains a favorite among affluent consumers who admire its elegant lines and sustainable wood construction. At the low end, the ANTILOP, designed by IKEA engineer John Forsén, rivals the Tripp Trapp in its minimalist functionality but costs about one-sixteenth the price.

175

Bernard Holdaway (United Kingdom, 1939–2009)
Hull Traders, Ltd. (United Kingdom, est. 1957)
Tomotom children's chair, 1966
Cardboard, particle board, and enamel spray paint
Courtesy Lora Appleton, Kinder Modern

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Vanessa Yuan (Taiwan, active 21st century)
Joris Vanbriel (Belgium, active 21st century
ecoBirdy (Belgium, est. 2016)
Charlie chair, designed 2018
(this example 2025)
Ecothylene (100% recycled plastic)
Courtesy ecoBirdy

These two chairs, made 50 years apart, reflect shifting ideas about sustainability and design. Bernard Holdaway's Tomotom collection was conceived as "throwaway" furniture; made from cheap materials and priced to appeal to young families, it emphasized fashion over longevity. Designers Vanessa Yuan and Joris Vanbriel took a different approach to disposability with their development of Ecothylene, a material derived from recycled plastic children's toys. Their line of children's furniture, ecoBirdy, aims to create a circular economy for plastic toys and introduce children to the concept of sustainability.

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Rebozo, 2022
The Designing Motherhood Archive

A rebozo is a long, hand-woven garment used in pregnancy as well as the postpartum period. Usually four to seven feet long, the textile reflects Mexico's long history of weaving alongside centuries of midwifery. Mexican midwives wrap and move the rebozo against the body to ease ligament, muscle, and back pain as the fetus grows and the pregnant body changes. Midwives and doulas can also use it to reposition the fetus, including using a technique commonly known as "sifting." In the weeks after delivery, the rebozo can be used to massage the postpartum person—or it can be wrapped around the body to support baby wearing and baby carrying.

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Ann Moore (United States, b. 1940)
Lucille Aukerman (United States, 1909–1983)
Snugli, 1971
The Designing Motherhood Archive

One of the first mass-produced baby carriers, the Snugli's origins are directly connected to the first generation of Peace Corps volunteers in the 1960s. Trained as a pediatric nurse, Ann Moore and her husband Mike volunteered to live and work in Togo, West Africa. They were fascinated by the cloth used to bind newborn infants and toddlers to their caregivers. When the Moores returned to the US and had their own daughter, Mandela, Ann asked her mother to help her fashion something similar. After several iterations, the Snugli was "born." It was patented in 1969.

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Susan Olivia Poole
(Ojibwe Nation, 1889–1975)
Jolly Jumper baby swing, designed
1910 (patented 1957)

Growing up on the White Earth Reservation in Minnesota, Susan Olivia Poole observed mothers attaching their babies—already snuggled up tight against cradleboards—to structures like sturdy tree branches, allowing the babies to swing happily. This practice inspired her invention of the Jolly Jumper in 1910. The swing was first produced for the retail market in 1948 and patented in 1957, making Poole one of the first Indigenous women in Canada to patent an invention.

Safety Standards

Before the establishment of the US Consumer Product Safety Commission (CPSC) in 1972, child product safety was largely a matter of state and local regulations, consumer awareness, and industry self-regulation. The CPSC's safety recalls have resulted in substantial decreases in injuries and deaths among children, though recent federal funding and staffing cuts have left the fate of the agency uncertain. While safety standards are an unequivocal good, they may also, for parents, highlight the stakes of choosing the "wrong" product. These images show designs that predate the CPSC and seem outrageous by today's safety standards. The refuse bin contains more recent products that have been pulled from the market for safety reasons.

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Photographic reproductions of past designs for baby gear:

Archival press images, 20th century

James Hennessey (United States, 1945–2020)
Victor Papanek (Austria, 1923–1998)
Instructions for DIY car seat, from *Nomadic Furniture*, 1973

Ford Motor Company (United States, est. 1903)
Tot-Guard car seat, designed 1968 (this photograph 1973)
Courtesy The Henry Ford Museum, Dearborn, Michigan

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Installation: refuse bin containing recalled items dating from 1972–present, accumulated 2025

Reproductive Design Futures

What is the future of design for reproductive health, and who decides? Featured here are examples of recent designs that aim to improve the lives of their users. Some—including prototypes offering relief from menstrual cramps and menopausal hot flashes—are currently in development. Stiliyana Minkovska's design for a flexible, sanctuary-like birthing environment is actively in use for training and education purposes at London's St Thomas' Hospital, to which the designer donated it in 2020. App prototypes for sharing baby gear and navigating New York's MTA with a stroller present novel solutions to real problems, but development has stalled due to lack of investment. Even a great design is dependent on a panoply of factors—including commercialism—for its ultimate success. Yet design remains a powerful tool for reflecting on the issues of the present and dreaming a better world into being.

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Digital slideshow containing images of the following designs:

Elisabeth Lorenz (Germany, b. 2002)
Marc Hackländer (Germany, b. 2001)
Hottie prototype belt for menstrual pain relief, designed 2025 (in development)
Courtesy the designers

Aphra Hallam (United Kingdom, b. 2001)
Zera Cooling Crescent prototype for relief from hot flashes, designed 2023 (in development)
Courtesy the designer

Stiliyana Minkovska (Bulgaria, b. 1990)
Ultima Thule Birthing Environment, designed 2020 and donated to St. Thomas' Hospital in London on July 6, 2020
Courtesy the designer

Ntianu Eastmond
(United States, active 21st century)
Wayfinder NYC app prototype demonstration, 2020
Digital video; TRT 00:00:26
Courtesy the designer

Project Orbit (United States, est. 2022)
Youngryun Cho (South Korea, b. 1992)
Lokesh Fulfagar (India, b. 1997)
Laura Pedrosa (United States, b. 1991)
Wei-Chieh Wang (China, b. 1993)
Orbit app prototype (introduction), 2022
Digital video; TRT: 00:02:00
Courtesy the designers

Glossary

You may encounter terms or phrases in this exhibition that are new to you. We offer these descriptions to help clarify their use.

Birthing, pregnant, or postpartum person
In popular and professional discourse, the language of reproductive health—including pregnancy, birth, and the postpartum period—is gendered in ways that do not encompass the full spectrum of human experience. In this exhibition, we generally use "person" to describe someone experiencing pregnancy, birth, or the postpartum period. The word embraces transgender, intersex, genderqueer, and nonbinary people. We also use "women" for consistency with certain moments in time when discussing more historical designs, and for people in cultures around the world and across time where norms related to sex or gender limit opportunities for education, employment, self-determination, and fulfillment in life.

Body literacy, bodily autonomy
"Body literacy" is the accumulation of knowledge about the dynamic inner workings of the human body, which counters a more common "knowledge deficit" about bodies. Often it is forged within communities—in scientific and medical fields, in groups that share a kind of kinship (such as families of birth or of choice), and in social and cultural movements. The drive to develop knowledge about bodies has been instrumental to consciousness raising around shared struggles, for example among women, people of color, members of the LGBTQIA+ community, gender non-conforming people, and those who live at the intersections of these identities. Wherever the right to make decisions about one's body—referred to as "bodily autonomy"—has been contested or denied, body literacy has offered a means to assert agency over one's own health.

Childfree
"Childfree" simply denotes "without children." This neutral term contrasts with "childless," which implies a thwarted desire to procreate that is often followed by the qualifier "by choice" or "by circumstance," the former denoting deliberate agency and the latter reflecting circumstances where having a child has proven difficult or risky. While the term emerged from second-wave feminist consciousness raising and access to increasingly reliable forms of contraception, it was challenged by women-of-color feminists who formed the reproductive justice movement that recognized the social and cultural factors that determine who gets to procreate, and how.

Culturally appropriate care

Culturally appropriate care is deeply felt. The experience of it often goes unarticulated except when the care that is offered misses the mark. We first come to know care as rituals and remedies passed down through generations, and our understanding of care evolves across our lifetime as we give and receive care in a range of human encounters. Within health-seeking contexts, each person deserves a kind of care that centers on them—their needs, their innate knowledge of themselves, their dignity, and the set of practices that reflect care within the cultures or communities that sustain them.

Low-resource settings

Low-resource settings can be found anywhere—from regions with limited or no electricity, to health facilities that can't afford expensive tools to support standards of care. While "high-income" or "low- to middle-income countries" capture the uneven distribution of wealth that can make or break experiences like birth, those terms also create false confidence that development delivers on a promise of health. Low-resource settings, however, can emerge wherever a commitment to resource health systems breaks down—either formally through bad policies and poor governance, or informally through systemic inequality.

Maternity care deserts

"Maternity care deserts" are areas with no hospitals that offer obstetric care, no birth centers, and no obstetrics providers, where people who are (or are seeking to become) pregnant must travel a considerable distance to receive care. In the US., more than 2.2 million people with uteruses aged 15-45 live in maternity care deserts, where roughly 150,000 babies are born annually. While the reasons that maternity care deserts emerge may vary across rural, suburban, and urban settings, they ultimately represent a failure to adequately address the needs of communities.

Medical racism

Medical racism is the wide-spread discrimination against people of color within the medical system. Medical racism denies their bodily autonomy and agency with innumerable reports where feelings of pain or self-knowledge about the body are routinely dismissed. Whether conscious or unconscious, medical racism encompasses not only biases held by healthcare workers; it also includes systematic disparities in case that have effectively made race into an underlying condition for worsening health outcomes. After the COVID-19 pandemic exposed these disparities, the Centers for Disease Control and Prevention (CDC) declared racism to be an epidemic and public health threat.

Midwife, doula, birth companion
A midwife is a trained professional who cares for pregnant, birthing, and postpartum people, guiding them through childbirth. A doula (or birth attendant) provides support for a spectrum of reproductive experiences and outcomes—from conception and contraception, birth, miscarriage, medical termination, stillbirth, surrogacy, and adoption. A birth companion is a trusted person who provides advocacy for a laboring person.

Motherhood
Motherhood is shorthand for acts that go beyond a gender binary and beyond being pregnant or giving birth. It is a descriptor that can be embodied, deferred, refused, taken on as a duty or expectation, or otherwise engaged with in all its knotty contours. Motherhood is myriad.

Pregnancy loss
Pregnancy loss covers both miscarriage before the 20th week of gestation and stillbirth after that. While every experience is unique, pregnancy loss can come with searing physical or emotional pain, disappointment, guilt, shame, or relief. The difficulty of this loss is compounded by the fact that it is often treated as a taboo subject, keeping in silence those who experience such loss.

Reproductive justice
Reproductive justice is the human right to maintain personal bodily autonomy, have children, not have children, and parent children in safe and sustainable communities. Its definition was pioneered by a group called Women of African Descent for Reproductive Justice in 1994, building on the work of Indigenous women, women of color, and trans people.

Social determinants of health
Social determinants of health influence health outcomes as much and sometimes more than medical interventions. They explain how the environments in which we are born, live, and age are riddled with economic, ableist, gendered, ethnic, and racial disparities, which then manifest in our relative access to (or barriers from) fair housing, employment, free movement, nutritious food, or clean air and water. Social determinants of health help to explain the persistence of health inequity, disproportionate risk, and extreme vulnerability.

Trauma-informed care
Trauma-informed care is defined as practices that promote a culture of safety, empowerment, and healing. This care aims to avoid circumstances that embarrass, insult, or harm patients who may otherwise avoid medical care due to past negative experiences.