



COMPETITION

Title IX, Male-Bodied Athletes, and the Threat to Women's Sports

SECOND EDITION





Independent Women's Forum ("IWF") is a nonprofit, non-partisan 501(c)(3) organization founded by women to develop and advance policies that aren't just well-intended, but actually enhance people's freedom, opportunities, and well-being.



Independent Women's Law Center ("IWLC") advocates—in the courts, before administrative agencies, in Congress, and in the media—for equal opportunity, individual liberty, and the continued legal relevance of biological sex.



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"[T]here will always be significant numbers of boys and men who would beat the best girls and women in head-to-head competition. Claims to the contrary are simply a denial of science."

> MARTINA NAVRATILOVA Winner of 18 Grand Slam Tennis Singles Titles

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"I can attest to the tears that I witnessed from finishers who missed being named an All-American by one place. I can attest to the extreme discomfort in the locker room from 18-year-old girls exposed to male body parts and having to undress with a male watching in the same room."

> RILEY GAINES 12x NCAA All-American, 5x SEC Champion

LETTER TO READERS

On March 17, 2022, at the NCAA Division I Swimming and Diving Championships in Atlanta, Georgia, swimmer Lia Thomas of the University of Pennsylvania beat female Olympians and American record holders to claim the national title in the women's 500-yard freestyle. Thomas, a biological male, had competed for three years on the Penn men's team as Will Thomas before switching to the women's team in 2021.

The next day, I raced Thomas in the 200-yard freestyle. We tied. And, yet, NCAA officials told me that the trophy belonged to Thomas. The officials claimed this was necessary for public relations. I was shocked. I felt betrayed and belittled, reduced to a photo-op. But my feelings did not matter. What mattered to the NCAA were the feelings of a biological male.

Although the NCAA claimed it acted in the name of "inclusion," its policies, in fact, excluded female athletes.

And that's not all. From the beginning, the female athletes who objected to Thomas's participation in women's swimming were told to remain silent. The gaslighting of female swimmers has felt intimidating at times. But I will not be silent. I will tell people the truth about my experience, and I will do my best to speak for those female athletes who have been threatened into submission.

To help athletic directors and policymakers understand the growing threat to women's sports, Independent Women's Law Center and Independent Women's Forum offer this update to their first-of-its-kind report that summarizes the science, the law, and the stories of some of the females who have been forced to compete with or against biological males.

It is my sincere hope that those who are in a position to make athletic decisions will read this report and take the necessary steps to keep women's sports female. Because without single-sex competition, there can be no equal athletic opportunity.

Riley Găines 12x NCAA All-American 5x SEC Champion

"[T]he essence of sports categories is exclusion.... If you're 20 years old, you are excluded from participation in the senior category, because of your natural advantages.... [T]he female category is no different."

> CAROLE HOOVEN Evolutionary Biologist, Harvard University

EXECUTIVE SUMMARY

It is undisputed that the average male is bigger, faster, and stronger than the average female.* In almost every sport, allowing males to compete on women's teams or in women's events puts female athletes at a competitive disadvantage. It is for this reason that, when it comes to competitive sports, single-sex competitions have long been the norm.

Recently, however, biological males who identify as women have been seeking access to women's sports. Lia Thomas, the University of Pennsylvania swimmer who smashed women's records as a senior after previously competing on the Penn men's team, is the most high-profile example of this trend. But there are many more.

And it is not only trans athletes who are challenging eligibility requirements for women's sports. Across the United States, high school boys increasingly are seeking spots on women's field hockey and volleyball teams when the schools offer no corresponding men's team.



The harm caused by males in women's sports is significant. In head-to-head competitions, allowing biologically male athletes into the women's division can severely limit the chances of success for female athletes. On teams with limited roster spots, allowing even one biological male to participate takes a spot and playing time (and potentially a scholarship) from a female athlete. And in many sports, allowing males to compete against females increases the risk of injury to female athletes. As the number of males seeking to compete in women's sports grows, the harm to female athletes also grows. Claims to the contrary deny science, defy logic, and undermine Title IX.

^{*}A word about terminology: As in the first edition of this report, this edition uses the terms **"male**" and **"female**" to refer to the two main biological categories into which humans and most other living things are divided based on reproductive roles/sexual anatomy. This edition also continues to use the term **"sex**" to refer to the condition of being either male or female, as observed at birth. (Sex, which is biological, differs from **"gender**," which is cultural and relates to social expectations/norms.) We continue to use the term **"gender identity**" to describe the way in which a person understands and expresses himself or herself as male, female, or something else.¹ This second edition of *Competition* uses the term **"trans-identified biological male**" to refer to males who identify as women.

< Back The Washington Times

June Eastwood, Montana transgender runner, named Big Sky Conference 'Women's Athlete of the Week'

By Victor Morton The Washington Times Wednesday, October 30, 2019



CNN Sports

Girls high school basketball team forfeits tournament rather than play against transgender player

By Sara Smart and Jennifer Henderson, CNN Published 7:11 AM EST, Wed March 1, 2023



Mid Vermont Christian School (MVCS) was set to play Long Trail School on February 21, but forfeited the game according to the head of school at MVCS, Vicky Fogg.



Transgender Cyclist Rachel McKinnon Wins Second-Straight World Masters Title

HER LATEST VICTORY AT THE MASTERS TRACK CYCLING WORLD CHAMPIONSHIPS REIGNITES DEBATE OVER FAIR PLAY AND SPORTS AS A HUMAN RIGHT.

BY REBECCA REZA Published: Oct 24, 2019

FOX

Trans footy pioneer Hannah Mouncey plans legal action against AFL so she can play local footy

Max Laughton from Fox Sports January 16th. 2021 8:06 an



ey, playing at VFLW level, says she is planning legal action against the AFL in order to play inberra. (AAP Image/James Ross)

Swimmer Lia Thomas beat 2 Olympic medalists amid protests to make history as the first trans athlete to win an NCAA title



nas on the podium after winning the 500-yard race at the 2022 NCAA er Lia Th hins. Justin C

🗧 Daily Mail

'I've dropped 17 seconds!' Trans high school runner boasts about new PB after finishing second in girls' race and sparking furious response from other competitors who missed out on state finals

By Alex Lang and David Averre 11:16 22 May 2023, updated 18:53 22 May 2023



HUFFPOST

Chelsea Wolfe Makes History As First Trans Athlete To Go Ťo **Olympics With Team USA**

Wolfe, a BMX rider, will travel to Tokyo as a reserve for the U.S. team and will officially compete if one of the other two qualifying athletes drops out.

> By Sarah Ruiz-Grossman un 17, 2021, 02:47 PM EDT Updated Jun 18, 2021

The Washington Post ΞQ

Girls say Connecticut's transgender athlete policy violates Title IX, file federal complaint



Bloomfield High School's Terry Miller, second from left, wins the final of the 55-meter dash over Andrava Yearwood, far left, and other runners in the Connecticut state indoor track championships in February. (AP Photo/Pat Eaton-Robb, File)

NEW YORK POST

LOG IN

New Zealand weightlifter to become first trans athlete to compete in Olympics By Kenneth Garger June 21, 2021 | 1:47am | Updated

Ξ



New Zealand's Laurel Hubbard lifts in the snatch of the women's +90kg weightlifting final at the 2018 Commonwealth Games on the Gold Coast, Australia. AP

I THE DAILY SIGNAL

High School Girls Explain Why They're Uncomfortable Having a Biological Male in Their **Locker Room**

Mary Margaret Olohan / @MaryMargOlohan / October 13, 2022



High school volleyball players push back against a biological male using their locker room. (Photo: The Daily Signal)

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Newsweek

NEWS

8

Sasha Jane Lowerson, First Transgender Surfer, Wins Women's Competitions

BY GERRARD KAONGA ON 5/20/22 AT 10:46 AM EDT

MARCA 🚳 EN 🐃 NFL V NBA V Soccer V MLB NCAA

High School volleyball player Payton McNabb urges ban on transgender athletes after serious injury

A female player was injured by a transgender woman.

LW Actualizado 21/04/20



I. WOMEN'S SPORTS AND AMERICAN LAW

A. Title IX

Title IX of the Education Amendments of 1972 bans sex discrimination in all federally-funded education programs. It states:

No person in the United States shall, on the basis of sex, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any education program or activity receiving Federal financial assistance.²

Congress enacted Title IX to end unjust discrimination in education.³ Although the statute originally made no mention of athletics, in 1974, Congress passed an amendment proposed by Senator Jacob Javits of New York that directed the Department of Health, Education, and Welfare to issue regulations "which shall include with respect to intercollegiate athletic activities reasonable provisions considering the nature of particular sports."⁴

Title IX's athletic regulations, promulgated pursuant to the Javits Amendment, were intended to expand athletic opportunities for women and girls.⁵ These

regulations state that schools "may operate or sponsor separate teams for members of each sex where selection for such teams is based upon competitive skill."⁶ For non-contact sports, the regulations allow schools to offer sex-specific athletic teams, so long as the sport is offered to both sexes.⁷ For contact sports, schools may offer a single-sex team without offering a team for the opposite sex,⁸ so long as they provide "equal

Congress enacted Title IX to expand opportunities for women and girls. Under the statute, schools may operate single-sex teams, so long as they offer equal athletic opportunities for both males and females.

athletic opportunit[ies] for members of both sexes."⁹ In other words, educational institutions may operate single-sex sports,¹⁰ but the opportunities for females and males to compete athletically must be equal.

The National Collegiate Athletic Association (NCAA) and the various governing bodies for each sport (*i.e.*, USA Swimming, USRowing, etc.) are not technically covered by Title IX¹¹ because they are not "education program[s] or activit[ies] receiving Federal financial assistance."¹²

The colleges and universities that offer athletic programs as members of the NCAA, however, are covered by Title IX¹³ and must comply with the statute and its dictates irrespective of the policies of individual athletic associations.¹⁴

B. Women's Progress in Sports

Prior to the passage of Title IX, fewer than 5% of female students participated in high school sports; by 2019, that number had grown to approximately 43%.¹⁵

At the college level, fewer than 30,000 women participated in college sports during the 1971-1972 school year.¹⁶ During the 2021-2022 school year, 226,212 women played college sports.¹⁷ That same school year, women made up approximately 43.5% of college athletes in NCAA sports.¹⁸



The female share of athletic scholarships has also increased dramatically during this time. In 1972, almost no such scholarships existed. By 2017, women received from 41% to 45% of athletic scholarship dollars, depending on the division in which they competed.¹⁹

Since the passage of Title IX, there has also been a steady increase in female participation in the **Olympic Games**. In 1972, there were 84 women and 316 men in the U.S. delegation to the Summer

Olympics in Munich, Germany.²⁰ At the 2016 Rio Games, there were 291 women and 263 men in the U.S. delegation.²¹ At the 2020 Summer Olympics, held in Tokyo in 2021, there were 329 women and 284 men in the U.S. delegation.²²

None of this progress in women's sports would have been possible without a binary approach to athletics that takes into account the average differences in the athletic performance of males and females and offers separate, sex-specific athletic divisions.

"I don't know of a woman athlete who doesn't want trans [athletes] to be treated fairly.... But the cost of treating [them] fairly should not come at the cost of discriminating against a biologicallyfemale-at-birth woman."

DONNA LOPIANO Former CEO, Women's Sports Foundation "We deserve fairness in sports, and we're currently losing out on opportunities, titles, paychecks, scholarships, and more while being made to feel like we can't receive what we've earned for our hard work and being made to feel unimportant in a space that was created for us."

> TAYLOR SILVERMAN Professional Skateboarder

II. THE THREAT

Challenges to single-sex athletic competition fall into three primary categories: (a) policies that allow biologically male athletes who identify as women to participate in women's sports; (b) policies that allow *any* male athlete to participate on women's teams that lack a male counterpart (usually field hockey or volleyball); and (c) efforts to eliminate sex-specific sports altogether.

A. Trans-Identified Biological Males in Women's Sports

Athletic Associations

• In 2019, 19 state high school athletic associations allowed athletes to compete according to their gender identity *without restriction*,²³ meaning without surgery or hormone therapy. Under such policies, the only requirement for participation on teams designated for women or girls is self-identification as a woman or

girl.²⁴ (Since 2020, a number of states have passed laws limiting women's and girl's sports to biological females. **See Section V(B)**, *infra*. Two of those states, Florida and South Carolina, were home to state athletic associations that had previously allowed trans

The explosion of women's sports since the 1970s was made possible by the creation of separate teams for female athletes.

athletes to compete according to their gender identity.)²⁵

- The National Collegiate Athletic Association (NCAA) allows biological males who identify as women to participate in women's sports if they (1) complete a year or more of testosterone suppression; and (2) meet sport-specific testosterone levels twice annually—at the beginning of their competition season and again six months later—for one year.²⁶
- In November 2022, the International Olympic Committee (IOC) handed over eligibility determinations to the governing bodies of each sport, urging sporting agencies to consider ten guiding principles in setting criteria to compete in single-sex events.²⁷ The IOC places "inclusion" first on that list, above "prevention of harm" and "fairness," which rank second and fourth, respectively.²⁸ The new recommendations discourage any sporting agency from requiring medical transition prior to allowing athletes to compete in the female category.²⁹

Most sport-specific governing bodies either: (1) have no official position or requirements for trans-identifying athletes; (2) require documentation of "sincerely held" gender identity; or (3) make participation of biological males in women's events and teams contingent upon testosterone reduction.³⁰ For example, in February 2022, USA Swimming issued a policy requiring transidentified biological males to lower their testosterone levels to 5 nmol/L or less for a period of at least thirty-six (36) months.³¹ Note that the normal 95% reference range for healthy menstruating women under 40 years of age is 0 to 1.7 nanomoles per liter.³² See Section III(D), infra.

Federal Rules: Title IX and Its Implementing Regulations

Despite Title IX's clear legal mandate that schools offer equal athletic opportunities for members of *both* sexes, the Biden administration's Department of Education has announced new rules that would limit athletic opportunities for females.

New rules issued by the Biden administration will require schools to allow trans-identified biological males to participate in women's sports. First, a rule proposed by the Department of Education in **June 2022** defines discrimination "on the basis of sex" to include discrimination on the basis of gender identity³³ and requires schools to allow students to participate in all school programs and activities consistent with their gender identity.³⁴

A separate rule, proposed in **April 2023**, specifically addresses school athletics. The April rule would require schools to allow trans athletes to join purportedly single-sex teams "consistent with their gender identity," unless a school has adopted an evidence-based, sport-specific policy limiting participation based on biological sex.³⁵ Significantly, the April 2023 rule states that the Department of Education will regard any such policies as unlawful unless they: (1) are tailored to "each sport, level of competition, and grade or education level"; (2) are "substantially related to the achievement of an important educational objective"; and (3) "[m]inimize harms to" the trans athletes "whose opportunity to participate . . . consistent with their gender identity would be limited."³⁶

The Department has also suggested that "few, if any," attempts to limit teams based on biological sex in elementary or middle school would be permissible under the proposed regulation.³⁷ And although the Department has recognized

TYR

Penn swimmer Lia Thomas (Thomas previously competed for the Penn men's team as Will Thomas.)

that schools "have an interest in ensuring competition is fair" and "in the prevention of sports-related injury," the Department has also insisted that "ensuring fair competition and prevention of sports-related injury does not necessarily require schools to adopt or apply sex-related criteria."³⁸

Under the proposed rules, schools must presumptively allow males who identify as women to participate in women's sports. In other words, under the proposed rules, schools must presumptively allow biological males to participate in women's sports. A school that wishes to keep a particular team female has the burden of proving that the single-sex policy is needed to preserve safety or fairness for that particular team.

Both sets of rules are examples of gross administrative overreach **[See Text Box 1]** and are, in fact, a complete misapplication of Supreme Court precedent.

[See Text Box 2]

TEXT BOX 1

A NOTE ABOUT ADMINISTRATIVE RULE-MAKING

Our Constitution is clear: only the people's representatives—not unelected bureaucrats—have the authority to make law.³⁹ The Department of Education's June 2022 rule usurps that power by rewriting Title IX to include new categories (including "gender identity") that were not mentioned in the original statute, something the agency has no authority to do.⁴⁰ Indeed, the very same month that the Biden administration was rewriting Title IX by administrative fiat, the Supreme Court issued a ruling in an unrelated case, reiterating the importance of the constitutional separation of powers, and holding that executive agencies may not adopt regulations that go beyond the scope of the statutes written by Congress. West Virginia v. Environmental Protection Agency, 142 S. Ct. 2587, 2608-10 (2022). The Court emphasized that in "extraordinary cases" of "economic and political significance," and particularly when the agency uses "unheralded" or new authority, the agency must be able to point to a clear authorization from Congress for its actions. Id. at 2608.

PHOTO BY ANNA ROSE

AYDEN / STRINGER VIA GETTY IMAGSS

With respect to the issue of federal antidiscrimination laws, Congress has many times considered expanding civil rights protections to include protections for "gender identity." And each time, such proposals have failed.⁴¹ The June 2022 rules are, therefore, an unlawful attempt to accomplish through the back door that which Congress has not authorized. Although supporters of the Biden administration's proposed athletic rule have described it as a "compromise" that allows trans-identified athletes to compete without jeopardizing fairness,⁴² that is incorrect for two reasons:

First, the April 2023 athletic rule wrongly presupposes that unrestricted participation of trans athletes on teams that do not correspond to their biological sex is the appropriate baseline from which school policies should be judged.⁴³ In other words, it places the burden of proving unfairness on the school attempting to protect single-sex sport⁴⁴ and (by default) on athletes or their advocates who want the school to do so. As such, the proposed rule places a heavier burden on female students, who are far more likely to be displaced by trans-identifying athletes, than on male students. who have little to fear from female bodies seeking opportunities on men's teams.

Second, by allowing biological males to join women's teams, the proposed rules undermine Title IX's equal opportunity mandate. Every time that a biological male is selected for a women's team, a female athlete loses that spot. When a biological male takes the field in a women's game, a female athlete loses playing time. In each instance, the coach and the school that have allowed this to occur have denied a female student an athletic opportunity. And in each instance. the school is authorizing sex discrimination that violates Title IX, regardless of the new proposed rules, which cannot change the dictates of that law.

TEXT BOX 2

A NOTE ABOUT BOSTOCK

The Biden administration claims that its new rules are compelled by the Supreme Court's 2020 ruling in Bostock v. Clayton County.⁴⁵ Bostock held that Title VII of the Civil Rights Act of 1964 prohibits workplace discrimination against gay and trans-identified employees. That case is simply not applicable to school sports.

To begin with, the Bostock Court did not equate "sex" and "gender identity." Rather, it explicitly proceeded on the assumption that, as used in Title VII, the term "sex" refers to **the biological state of being either male or female**.⁴⁶

The Court nevertheless found that an employer who fires a male employee for presenting as a woman but who would not have fired a similarly-situated female employee from presenting the same way has discriminated "because of sex."⁴⁷ That is because the employer fired an employee "for traits or actions it would not have questioned in members of a different sex."48 The Court emphasized that "[a]n individual employee's sex is not relevant to the selection, evaluation, or compensation of employees."49

When it comes to athletics, however, the two sexes are not "similarly situated."⁵⁰ In fact, **sex is not only relevant with respect to athletics, it is often dispositive**.⁵¹ The Supreme Court in Bostock was, therefore, careful to emphasize that Bostock concerned only Title VII (employment law) and not other statutes.⁵²

B. Male Participation on Women's Teams Without a Male Counterpart

Across the U.S., many schools offer field hockey, volleyball, or other sports for females only. Significantly, many schools initially created such programs to increase opportunities for female athletes in order to comply with Title IX.⁵³



And, yet, some states have compelled the inclusion of male athletes on these teams. For example, the Supreme Judicial Court of Massachusetts has held that the state's equal rights amendment prohibits schools from banning boys from girls' teams where the school offers no male counterpart.⁵⁴ As a result, and despite protest from parent groups,⁵⁵ Massachusetts today requires that public schools allow boys to play on girls' teams where the school does not offer that sport for boys. This policy applies even though such teams

traditionally have limited rosters and need to cut students after tryouts.⁵⁶ In other words, males are allowed to play even where their participation means that female athletes get cut from the team or lose playing time.

Although Title IX's implementing regulations explicitly contemplate singlesex sports,⁵⁷ the Biden administration's new interpretation of federal law could require schools across the country to allow all males to try out for and compete on women's teams where the school does not offer the same sport for men. That is because the Biden administration's rule is based on the Supreme Court's reasoning in *Bostock v. Clayton County*, which adopted a **"but for" test** for determining when sex discrimination has occurred.⁵⁸

In the Title IX context, this would always prove fatal to single-sex teams. That is because a coach who decides that an otherwise qualified male athlete cannot play on a women's team is clearly making a decision that would have been different "*but for*" the particular student's sex. This is exactly the type of "*but for*" decision-making that *Bostock* prohibits—at least in the context of employment governed by Title VII.⁵⁹

"(I)f sex classifications are abandoned ... female athletes would almost always lose to males This is as true of athletes at the highest echelons like Serena Williams and Katie Ledecky as it is of the development athletes in high school, college, and beyond who aspire to take their place."

PROF. DORIANE LAMBELET COLEMAN Duke Law School Suppose, for example, that a male student who is cut from the men's lacrosse team then tries out for the women's team and demonstrates that he is a better player than any of the female students. Or suppose that a male student wants to play college field hockey, but his college only offers women's field hockey



PHOTO BY KATHERINE FREY/THE WASHINGTON POST VIA GETTY IMAGES

(as is the case at most American colleges that offer the sport). The wholesale incorporation of the *Bostock* "but for" standard in the context of Title IX athletics would forbid coaches from denying roster spots to athletically superior male players simply because they are male.⁶⁰

C. Efforts to Eliminate Single-Sex Sports Altogether

Some activists argue for the elimination of sex-specific sports altogether,⁶¹ claiming that allowing males and females to compete in separate divisions reinforces harmful stereotypes about male and female abilities and perpetuates the supposedly pernicious presumption that sex is binary.⁶²

Writing in the *The Washington Post* in April 2021, for example, **Professor Elizabeth Sharrow** of the University of Massachusetts Amherst argues that single-sex athletic teams are a form of segregation that damages women and girls.⁶³ For some gender activists, therefore, trans-inclusion is not a goal in and of itself: it is a vehicle for abolishing single-sex sports.

The goal of complete sex integration in sport could very well become the law of the land if the United States adopts the proposed **Equal Rights Amendment (ERA)** to the Constitution. Although the ERA makes no mention of sports, its language is sufficiently broad that courts might well interpret it as prohibiting the separation of the sexes in most contexts,⁶⁴ including athletics.⁶⁵

Activists may not have to wait for a constitutional amendment to achieve their objective of open, sex-neutral sport, as the Biden administration's interpretation of court rulings calls into question the entire legal basis for separate men's and women's sports teams. **[See Text Box 3]**

TEXT BOX 3

_

BOSTOCK'S "BUT FOR" TEST

Applying Bostock's "but for" test to sports could call into question not just individual coaching decisions about particular players. It could also call into question the very existence of single-sex teams.⁶⁶ Indeed, if federal courts (incorrectly) hold that Bostock applies to Title IX, as some already have,⁶⁷ it may become unlawful ever to separate athletes into men's and women's teams because to do so would require consideration of the participants' sex, the very thing that the majority opinion in Bostock prohibits. Furthermore, the Supreme Court has explained that the constitutional basis for allowing differential treatment on the basis of sex depends upon the "enduring" physical differences between the sexes.⁶⁸ If gender ideologues are able to convince the courts in the Title IX context that there are no enduring differences between biological females and trans-identified biological males, that would severely undermine, if not eradicate, the constitutional basis for single-sex teams.⁶⁹



"Men are able to celebrate fairness in their sports, so it should only make sense that we can as well."

LINNEA SALTZ Former Athlete at Southern Utah University

III. THE DATA

On average, male bodies have about a 10% athletic advantage over female bodies.⁷⁰ This male-female athletic gap is not simply the result of unequal opportunity, socialization, or lack of funding for women's sports.⁷¹ Rather, the difference is almost entirely the result of biology.⁷²

A. Physiological Differences Between Males and Females

Physiological differences between females and males begin *in utero*,⁷³ becoming vastly more pronounced during puberty. Below are just some of the many differences that contribute to the male athletic advantage:

Men have: Lungs, Hearts, Hemoglobin, and Aerobic Capacity



larger lungs oxygenate the blood.⁷⁵ • Adult males have larger hearts than females,⁷⁶ which helps to

• From birth, males have larger lungs than females,⁷⁴ which helps to

- larger hearts
 - pump blood to the muscles more efficiently.⁷⁷
 Adult males have, on average, a 12% higher level of circulating hemoglobin than females,⁷⁸ which helps to transport oxygen in the blood.⁷⁹
 - As a result, adult males typically have better aerobic capacity than females.⁸⁰

Bones/Skeletal Structure

- Grown males are, on average, 4.5 inches taller⁸¹ and have longer, larger, and denser skeletal structures⁸² than grown females.
- Ø

more

bone mass

more muscle mass



stronger muscles



less fat

- Iarger, and denser skeletal structures²² than grown females.
 Grown males tend to have greater bone mass, even after taking body size into account.⁸³
- On some parts of the body, males have different bone geometry than females.⁸⁴
- As a result, male and female bodies have different biomechanics, with the female body "set up to produce less force in running, jumping and throwing."⁸⁵

Muscle Mass, Muscle Strength, and Fat Distribution

• Grown males have approximately 36% greater muscle mass than grown females (with about 40% more muscle mass in the upper body, and 33% more muscle mass in the lower body).⁸⁶

- Grown males have a larger portion of fast-twitch muscle mass than females, "which allows them to generate greater force, speed, and anaerobically produced energy" than females.⁸⁷
- Grown males have less fat (and a different distribution of body fat) than grown females.⁸⁸
- Even in males and females with similar body mass, male muscles are stronger than female muscles (both absolutely and relative to lean body mass).⁸⁹

B. The Male Athletic Advantage

How do physiological differences between the sexes impact athletic performance? When it comes to sport-specific actions, such as tackling or throwing, the physiological differences between males and females combine in ways that are "likely synergistic" and in ways that "widely surpass[] the sum of individual magnitudes of advantage in isolated fitness variables."⁹⁰

The science is consistent and irrefutable: the 20-fold boost in testosterone that occurs during male puberty creates a significant, and lasting, athletic advantage for males. Although much of the malefemale athletic gap does not emerge until around age 12,⁹¹ male bodies nevertheless carry some athletic advantages over female bodies even in early childhood. For example, in one 2012 study of physical fitness differences between prepubescent boys and girls, boys performed better in tests of aerobic fitness, strength, speed, and agility, while girls performed better in tests of

balance and flexibility.⁹² Some studies also indicate significant sex differences in throwing ability from an early age.⁹³ Other studies indicate that boys have an advantage over girls in running, jumping, and aerobic capacity even before the age of 10.⁹⁴

Irrespective of the debate surrounding any childhood athletic gap, the science is consistent and irrefutable that the 20-fold boost in testosterone that occurs during male puberty⁹⁵ creates a significant, and lasting, athletic advantage for males. Because most American boys begin puberty between ages 9 and 14,⁹⁶ the male-female athletic gap is significant by age 15.⁹⁷

"Those with a male sex advantage should not be able to compete in women's sport."

SHARRON DAVIES British Olympic Silver Medalist



Males **jump** approximately **25% higher** than females



Males **throw** about **25% further** than females



Males **run** approximately **11% faster** than females



Males **accelerate** around **20% faster** than females



Males **punch 30–162% harder** than females



Males are around **30% stronger** than females of equivalent stature and mass This advantage is particularly prominent with respect to activities where speed, size, power, strength, or cardiorespiratory/anthropometric characteristics are determinative of performance.⁹⁸ Males may also have an advantage in sports where aggressive behavior and risk-taking influence performance, as these behaviors are more common in individuals exposed to higher levels of testosterone.⁹⁹

With regard to specific skills, studies indicate that postpubescent males can *jump* (25%) higher than females,¹⁰⁰ *throw* (25%) further than females,¹⁰¹ *run* (11%)¹⁰² faster than females, and *accelerate* (20%)¹⁰³ faster than females.

Perhaps the largest performance gap is seen in the area of strength. Some studies show that males are able to *lift* 30% more than females of equivalent stature and mass.¹⁰⁴ Males can also *punch* significantly harder than females. Andrew Langford, a performance scientist and strength and conditioning

coach, estimates that males can punch with 30% greater force than females.¹⁰⁵ But at least one study has found that "even with roughly uniform levels of fitness, the males' average power during a punching motion was 162% greater than females', with the least-powerful man still stronger than the most powerful woman."¹⁰⁶ Studies also suggest that even *untrained* males are stronger than athletically trained females.¹⁰⁷ In addition to these significant performance gaps, studies indicate that males are much less prone to sports-related injuries than females.¹⁰⁸ All of these physiological gaps contribute to significant gaps across specific athletic activities. For example, British biologist Emma Hilton and Swedish researcher Tommy Lundberg reviewed performance gaps in a variety of specific athletic activities and found disparities of **more than 50%** in activities such as a baseball pitch or a field hockey drag flick, where upper body effort plays a significant role.¹⁰⁹



Male Advantage for Particular Sport-Related Skills

Source: Emma N. Hilton and Tommy R. Lundberg, *Transgender Women in the Female Category of Sport: Perspectives on Testosterone Suppression and Performance Advantage*, 51 SPORTS MED. 199, 202-03 (2021), https://link.springer.com/article/10.1007/s40279-020-01389-3 (data demonstrating the male performance advantage over females in selected sporting disciplines with the female level set to 100%).



In 2017, men and boys around the world outperformed Allyson Felix's best 400-meter more than 15,000 times.

C. Differences in Men's and Women's Athletic Performance

Performance gaps are evident not just with respect to specific athletic skills, but also with respect to overall athletic performance at all levels of athletic competition.¹¹⁰ Not surprisingly, then, we see significant disparities in men's and women's **world records** across events. To take just one example, the gap between men's and women's world-record times in running is 9-10% at every distance up to the marathon.¹¹¹



Men's and Women's World Records



Even the most talented female athletes would have an extremely difficult time beating the top male athletes in their sport. For example:

- Allyson Felix is the most decorated U.S. track and field athlete in Olympic history. She has competed in five Olympic Games, winning 11 medals (one more than Carl Lewis). Seven of her medals are gold.¹¹² And, yet, Felix's best 400-meter speed (49.26 seconds)¹¹³ is almost four seconds slower than Usain Bolt's personal best (45.28 seconds)¹¹⁴ and more than six seconds slower than Wayde van Niekerk's world record (43.03 seconds).¹¹⁵
- Florence Griffith Joyner ("Flo-Jo") died in 1998.¹¹⁶ But she still holds the women's world record in both the 100-meter (10.49 seconds) and 200-meter (21.34 seconds).¹¹⁷ Compare this to Usain Bolt's 100-meter world record of 9.58 seconds.¹¹⁸ Bolt also holds the men's world record for the 200-meter race, which he ran in 19.19 seconds¹¹⁹—2.15 seconds faster than Flo-Jo.



- At the 2020 Tokyo Olympics (held in 2021), American Sydney McLaughlin broke the women's world record in the 400-meter hurdles with a time of 51.46 seconds; Karsten Warholm of Norway broke the men's world record in the same event with a time of 45.94 seconds.¹²⁰
- Great Britain's Bethany Shriever won a gold medal in women's BMX racing in Tokyo with a time of 44.538 seconds.¹²¹ The winner of the men's event in Tokyo, Niek Kimmann of the Netherlands, finished with a time of 39.053 seconds.¹²²
- Swimmer Lydia Jacoby earned a gold medal in the 100-meter breaststroke in Tokyo with an impressive time of 1 minute and 4.95 seconds.¹²³ Meanwhile, Adam Peaty, the men's 100-meter breaststroke gold medal winner in Tokyo, finished with a time of 57.37 seconds.¹²⁴



PHOTO BY MADDIE MEYER VIA GETTY IMAGES



PHOTO BY IAN MACNICOL VIA GETTY IMAGES



PHOTO BY CLIVE ROSE VIA GETTY IMAGES



PHOTO BY MADDIE MEYER VIA GETTY IMAGES

 Even among athletes who are basically the same size, sex matters significantly. As Duke Law Professor Doriane Lambelet Coleman explains. Olympic swimmers Missy Franklin and Ryan Lochte are both about the same height (6'2") and have approximately the same wingspan (6'4"). And yet Franklin's record in the 200-meter backstroke is 2:04.06, while Lochte's world record is 1:53.94-a full nine seconds faster. Writes Professor Coleman,

If Franklin had been in [Lochte's] race, at her best she would have been about half a lap behind Lochte when he finished Franklin would not have had a world record; she would not have been on the podium; in fact, she would not have made the team. In those circumstances, we might not even know her name.125

But it is not just the top male athletes who can beat the world's best females:

• Tennis player Serena Williams is widely regarded as one of the greatest athletes of all time. Yet, in 1998, Karsten Brassch, the 203rd-ranked men's player, beat both Serena and her sister Venus in back-to-back sets.¹²⁶





PHOTO BY AELTC/JED LEICESTER - POOL VIA GETTY IMAGES PHOTO BY OLIVER HARDT/AFP VIA GETTY IMAGES

Serena later recounted that Andy Murray-a two-time Olympic gold medalist and highly ranked male tennis player¹²⁷-had been "joking" about playing her in a match, but she declined.¹²⁸ Serena explained:

For me, mens' tennis and womens' tennis are completely, almost, two separate sports. If I were to play Andy Murray, I would lose 6-0, 6-0 in five to six minutes, maybe 10 minutes. . . . It's a completely different sport. The men are a lot faster and they serve harder, they hit harder, it's just a different game. I love to play women's tennis. I only want to play girls, because I don't want to be embarrassed. . . . So Andy, stop it. I'm not going to let you kill me.¹²⁹

- At the 2022 FINA World Championships, all eight men in the final of the 1500-meter freestyle swam faster than the female gold medalist.¹³⁰ The man who came in first place at this competition swam the race in 14:32.80– nearly one minute faster than the women's champion.¹³¹
- In 2019, high school student Matthew Boling ran the 100-meter race in just 9.98 seconds¹³²—0.51 seconds faster than Flo-Jo's world record. In 2021, two high school students, Connor Washington and Jose Garcia, ran the same distance in just 10.00 seconds—0.49 seconds faster than Flo-Jo's world record.¹³³

In many events, males outperform the best female athletes thousands of times a year.¹³⁴ For example, Coleman and Shreve found that, in 2017 alone, men and boys around the world beat the best women's time in the 400-meter dash more than 15,000 times.¹³⁵ The professors put it simply: men and boys beating the world's best female athletes "is far from the exception. It's the rule."¹³⁶



In 2017, the U.S. women's national soccer team lost to a top U-15 boys' academy soccer team in a scrimmage.

PHOTO BY ERIN CHANG/ISI PHOTOS VIA GETTY IMAGES

Because of the significant male athletic advantage, it is common for elite women's teams to prepare for competition by scrimmaging younger boys' teams. For example, in 2013 and 2014, the U.S. Women's National Ice Hockey Team prepared for the 2014 Winter Olympics in Sochi by facing off against top-ranked male high school hockey teams-and losing 6-3 to Dexter Southfield in Massachusetts and 3-1 to the Salisbury School in Connecticut.¹³⁷ Even the celebrated U.S. Women's National Soccer Team. which won the 2019 FIFA Women's World Cup, has prepared for competition by scrimmaging top boys' teams-losing 5-2 to FC Dallas' U-15 team.138

The male-female athletic advantage exists not only in elite competition, but also at ordinary levels of competition between males and females.¹³⁹ That advantage is evident in the charts below, which show the best times in the nation in high school track and swimming events in 2019.



Sources: athletic.net/TrackAndField/Division/; USASwimming.org

D. What Role Does Testosterone Suppression Play?

It is clear that men have a substantial athletic advantage over women. But some advocates still argue that trans-identified biological males should be allowed to participate in women's sports even if they have not taken any steps to medically transition.¹⁴⁰

Others recognize the inherent unfairness of allowing athletes with a male athletic advantage to compete in women's sports but argue that the advantage can be mitigated with testosterone suppression.¹⁴¹ So does hormone therapy eliminate the male athletic advantage? And do current testosterone levels accurately predict athletic performance? The answer to both these questions is no.

Testosterone suppression cannot eliminate the significant male athletic advantage conferred by male puberty.** That is because many of the changes that occur during puberty (such as changes to skeletal architecture) cannot be erased with hormone therapy.¹⁴²

^{**} It is worth noting, also, that many sporting organizations do not require trans-identified biological males to lower their testosterone levels to within average female levels.¹⁴³ (See chart on pg. 37)

Consider the following:

• <u>Bone Density and Bone Size</u> – According to a review of the literature by Hilton and Lundberg, post-pubescent trans-identified biological males maintain **bone mineral density** over years of testosterone suppression and do not lose height, limb length, or other skeletal parameters.¹⁴⁴ Thus, athletes who begin testosterone suppression after the onset of male puberty are likely to retain an athletic advantage in sports such as basketball, volleyball, and handball, where **height, limb length, and handspan** are relevant.¹⁴⁵ Moreover, such athletes are likely to continue to be **less**

injury-prone than their female counterparts, even after years of testosterone suppression and hormone therapy.¹⁴⁶

• Lung Volume and Heart <u>Size</u> – Taryn Knox, Lynley C. Anderson, and Alison Heather cite research indicating that hormone therapy will not alter the lung volume or heart size of a trans-identified biologically male athlete, "so natural advantages including . . . stroke volume and maximal oxygen uptake will be maintained."¹⁴⁷



 <u>Muscle Size</u> – Hilton and Lundberg note that testosterone suppression

does reduce muscle size, although *not to female levels*.¹⁴⁸ Hilton and Lundberg reviewed twelve longitudinal studies that collectively suggest that 12 months of testosterone suppression to female-typical levels result in only about a 5% loss of lean body mass or muscle size.¹⁴⁹ They conclude that "given the large baseline differences in muscle mass between males and females . . . , the reduction achieved by 12 months of testosterone suppression can be reasonably assessed as small relative to the initial superior mass" of males.¹⁵⁰

Testosterone suppression in post-pubescent males does not erase differences in:
- <u>Strength</u> Biologically male athletes cannot eliminate their strength advantage by suppressing testosterone.¹⁵¹ In fact, even after multiple years of testosterone suppression, biological males remain significantly stronger than most females,¹⁵² with one study showing a reduction in handgrip strength of only about 9% after two full years of hormone therapy.¹⁵³ Even if a biological male could reduce his strength to close to female levels for a period of time, that athlete may have different muscle responses to training than biological females with the same testosterone levels, meaning that he would regain his male athletic advantage while training to compete.¹⁵⁴
- Endurance The most significant reduction in athletic advantage after hormone therapy seems to be in hemoglobin counts, with an 11-14% change.¹⁵⁵ Although further study is needed, it is possible that testosterone suppression brings trans-identified biologically male athletes closer to



USA Swimming max testerone levels to compete on the women's team
 USA Fencing and National Women's Soccer League max testerone levels to compete on the women's team

the female baseline for **endurance** sports than for sports that depend on strength or explosive power.¹⁵⁶ On the other hand, one recent study that analyzed women's exercise performance across their menstrual cycles determined that "women reached exhaustion from muscle fatigue about 18% faster than men, even when adjusting for muscle mass, possibly because women's bodies may naturally reserve more energy."¹⁵⁷

<u>Speed</u> – A study of members of the United States Air Force, published in the British Journal of Sports Medicine, found that, even after hormone therapy, biological males who identify as women maintain a significant advantage in **speed** over biological females.¹⁵⁸ It is perhaps not surprising, then, that after at least one year of hormone treatment, college athlete **CeCé** (formerly Craig) **Telfer** ran the indoor 200-meter dash in 24.45 seconds–faster than Telfer's 2017 pre-transition time of 24.64.¹⁵⁹

In sum, while testosterone suppression will certainly impair male athletic performance, it will not come close to reducing male performance to normal female levels.



Craig Telfer 200 Meter (2017): 24.64 seconds

CeCé Telfer 200 Meter (2019, after hormone therapy): 24.45 seconds Some trans-identified athletes acknowledge as much. Even after 15 years of hormone therapy, IOC advisor and trans-athlete Joanna Harper "carr[ies] more muscle mass than a woman [of the same] size, absolutely."¹⁶⁰

And former tennis player and transgender pioneer **Renee Richards** (formerly Richard Raskin) admits that biology provided a competitive advantage over female players. Richards, who won a legal battle for the right to play in the female category of the U.S. Open,¹⁶¹ now says that biological males should not participate in competitive women's sports.



"Having lived for the past 30 years," Richards says, "I know if I'd had surgery at the age of 22, and then at 24 went on the tour, no genetic woman in the world would have been able to come close to me."¹⁶²

What about biological males who take puberty blockers from an early age and never experience male puberty? Would this meaningfully reduce or eliminate the male athletic advantage? Not necessarily.

To begin with, males experience some degree of heightened exposure to testosterone even prior to puberty—both in the womb and shortly after birth.¹⁶³ This could account for the differences in athletic performance between sexes that have been measured even pre-puberty. For example, one review of fitness data from Australian children reveals that, when compared with 9-year-old females, 9-year-old males were 9.8% faster over short sprints, were 16.6% faster over a mile, could jump 9.5% further from a standing start, could complete 33% more push-ups in 30 seconds, and had a 13.8% stronger grip.¹⁶⁴

In addition, the increased testosterone to which males are exposed in "mini puberty" (which occurs between one to six months of age) "may be correlated with higher growth velocity and an 'imprinting effect' on BMI and bodyweight."¹⁶⁵ Thus, unsurprisingly, at least one study of males treated with puberty blockers as young as 12, followed by hormone treatment at 16, found that early intervention did *not* reduce height, lean body mass, or grip strength to age-matched female levels.¹⁶⁶

Finally, it is worth noting that **female bodies have athletic** *disadvantages* **that biological males cannot create for themselves**. For example, the female pelvis has less joint rotation than a male pelvis, making females slower than biological males.¹⁶⁷ Menstrual cycles and potential pregnancies, factors that *cannot* affect biological males, may also impact training and performance in females.¹⁶⁸ For these and other reasons, even biological males who never experience male puberty are likely to have an athletic advantage over females.

"I knew that I was the fastest girl here, one of the fastest in the state.... Then, the gun went off. And I lost."

CHELSEA MITCHELL Canton, CT

Lost four state championships, two all-New England awards, and additional other honors to male-bodied competitors.

IV. THE HARM

Allowing male-bodied athletes to displace female athletes denies those women the equal athletic opportunities mandated by Title IX and thus discriminates against them on the basis of sex. Although sporting organizations claim they are acting in the name of "inclusion," their policies, in fact, *exclude* female athletes, the very athletes whom Title IX was passed to protect.

Supporters of male "inclusion" in women's sports often argue that the number of males seeking to compete in women's sports is relatively small and, so, the harm to females as a group is negligible.¹⁶⁹ But to the individual female athletes impacted by males in their sport, the harm is A male who suppresses his naturally occurring testosterone won't perform as well as he did prior to hormone therapy, but he will still perform better than most females.

significant and substantial (and, as the number of trans-identified youth increases, the threat to female athletes also grows).¹⁷⁰

The inclusion of male-bodied athletes in women's sports harms female athletes by (a) decreasing the chances of female athletic success; (b) demoralizing female athletes; (c) taking away opportunities to train and compete from female athletes; and (d) (in some sports) increasing the chances of injury.

A. Decreasing Chances of Female Athletic Success

To begin, allowing biologically male athletes to compete against females hurts female athletes by decreasing the opportunity for female athletic success.

Between 2003 and 2022, there have been dozens of reported instances of biological males winning women's sports titles.¹⁷¹

That count almost certainly understates the opportunities for success that males have taken from female athletes, for a number of reasons. First, it is impossible to quantify the unreported cases of biological males participating in women's sports, particularly at the high school level. Second, a focus on titles fails to account for the numerous second- and third-place finishes by biological males, finishes that still harm female athletes. Biological males who take second- and third-place finishes from female athletes not only prevent those women from standing on the podium but also can deprive those athletes of securing honors such as an All-America designation, which in some sports is determined by competing in a championship final.¹⁷²

Indeed, during the 2021-22 school year, University of Pennsylvania swimmer Lia Thomas, who previously competed for the Penn men's swim team as Will Thomas,



took the top spot in 25 finals, thus displacing at least 25 female athletes from the top of the podium.¹⁷³ At the NCAA women's national tournament in March 2022, Thomas placed first in the 500-meter freestyle, finishing more than one second ahead of the other competitors, two of whom were Olympic medalists.¹⁷⁴ And because of Thomas's performance in the NCAA Championship 100-yard, 200-yard, and 500-yard freestyle preliminary races, Thomas

deprived three ninth-place-finishing women of the chance to compete in the championship finals—which prevented those women from being named All-Americans in those events.¹⁷⁵

Lia Thomas might be the most famous trans-identified biological male to beat out the female competition, but Thomas is certainly not alone. During the 2019-20 school year, **June (formerly Jonathan) Eastwood**¹⁷⁶ took a podium spot from multiple female competitors.¹⁷⁷ And **CeCé (formerly Craig) Telfer** competed as a man as recently as January 2018 but then won the NCAA Division II women's title in the 400-meter hurdles in 2019, beating the female competition by more than a second and beating the previous time Telfer set when competing as Craig.¹⁷⁸

Girls competing in high school athletics and women competing post-college have faced similar challenges. For example, in Connecticut in 2017-2019, two natal males, **Terry Miller and Andraya Yearwood**, set 17 Connecticut track meet records and captured **15 women's State Championship titles** previously held by girls.¹⁷⁹





A MOTHER AND DAUGHTER FIGHT FOR WOMEN'S SPORTS

In early 2020, high school student **Margaret Oneal Monteleone** of Maui, Hawaii, lost a 400-meter women's track race to a transidentified biological male. It was the first and only race of Margaret's freshman year at St. Anthony School in a track season cut short by the COVID-19 pandemic.¹⁸⁰

Just a year and a half earlier, **Cynthia Monteleone**, Margaret's mother and a Team USA Track & Field Masters athlete, also competed against a trans-identified biological male at the 2018 World Masters Athletics Championships in Málaga, Spain. Monteleone beat Yanelle Del Mar Zape by a hair to make it to the

final round in the 200-meter race. But Del Mar Zape beat Monteleone's teammate in the 80-meter hurdles at the April 2019 World Championship indoor meet in Toruń, Poland.¹⁸¹ The fact that both mother and daughter competed against biological males within such a short time span demonstrates that the threat to women's sports is significantly more widespread than activists are willing to admit.

B. Demoralizing Female Athletes

The inclusion of male-bodied athletes in women's sports also harms female athletes by lowering their self-esteem. **Chelsea Mitchell**, who ran for Canton High School in Connecticut, lost four state championships to trans-identified biological males.¹⁸² "That's a devastating experience," Mitchell wrote for *USA Today*. "It tells me that I'm not good enough; that my body isn't good enough; and that no matter how hard I work, I am unlikely to succeed, because I'm a woman."¹⁸³

Former University of Kentucky swimmer Riley Gaines puts it this way,

When schools give women's trophies to biologically male athletes who suppressed their testosterone, they publicly humiliate female athletes by telling them they don't measure up to even a hormonally-impaired male body. ... These messages are regressive and misogynistic.¹⁸⁴



In some cases, the participation of biological males in female sports is so demoralizing that it decreases the desire of women and girls to compete at all. Track coach and USA Masters Athlete Cynthia Monteleone reports that the prospect of racing against a male-bodied competitor was so devastating for one of her female athletes that the young woman "didn't even want to run track for the rest of the season."¹⁸⁵

"What was the point?" Monteleone recalls her athlete saying. "I trained so hard for my events and I have no chance of winning the conference championship."¹⁸⁶ "We know who's going to win the race before it even begins. . . . It just seems like all our hard work is going down the drain."

ALANNA SMITH Danbury, CT

Connecticut track star who was forced to compete against biological males who identify as women. "I didn't feel it was fair for [this athlete] to be playing [and taking] away a position from girls who could have started, which to me was so wrong on so many levels."

> DESTINY LABUANAN Maui, HI

Played on a high school volleyball team with a student who had previously competed on the men's team.

"I would have won my firstever high school track meet if it weren't for this [malebodied] athlete.... It was very disappointing."

MARGARET ONEAL Hawaii "We're all about equality for women in sport but right now that equality is being taken away from us."

PHOTO BY MICHAEL BRADLEY VIA GETTY IMAGES

Placed 2nd behind a trans-identified competitor who previously competed in high school sports as a male.

C. Taking Away Opportunities to Compete from Female Athletes

As disappointing as it is for a female athlete to lose a competition to a malebodied competitor, it is perhaps even more frustrating to lose the chance to compete at all. Yet, when biological males are allowed to compete in women's events or are selected for limited roster women's teams, female athletes are displaced and deprived of equal athletic opportunities.



PHOTO BY DAN MULLAN VIA GETTY IMAGES

For example, in 2021, New Zealand weightlifter **Laurel (formerly Gavin) Hubbard** made history as the first openly transgender athlete to compete in an individual event at the Summer Olympics.¹⁸⁷ Hubbard finished last in the over-87-kilogram division and was eliminated without registering a single lift.¹⁸⁸ But that does not make Hubbard's selection less problematic—when the New Zealand team added Hubbard to its Olympic delegation, a biological female weightlifter lost a chance to compete in Tokyo.

According to Tasmania Senator Claire Chandler, that weightlifter was Roviel Detenamo. "Eighteen-year-old **Roviel Detenamo** could have become the first wom[a]n in 20 years to qualify to represent Nauru at the Olympic Games," Sen. Chandler said in August 2021.¹⁸⁹ "She could have been in Tokyo proving that, if you have the talent and the work ethic, even a teenager from a nation of 12,000 people can make the Olympics and compete on the same stage as world champions from China and the USA. But we didn't witness that, because Roviel was denied the opportunity to become an Olympian, one of the most celebrated and respected titles in the world."¹⁹⁰

Similarly, swimmer **Lia Thomas** didn't just take awards from female athletes. At every single meet in which Thomas participated, Thomas took a lane in the pool from a female swimmer. As noted above, because of Thomas's performance in three NCAA championship preliminary races, Thomas also deprived three ninth-place finishers of



PHOTO BY OLI SCARFF/AFP VIA GETTY IMAGES

"Coaches at the collegiate level are rewarded for winning, so these coaches will choose biological males in order to remain competitive in their conference. Where are the spaces for biological females then? What does this mean for equal opportunity for women?"

CYNTHIA MONTELEONE Team USA Masters Track Athlete, Coach, and Metabolic Practitioner

> Competed against trans-identified athlete Yanelle Del Mar Zape of Colombia while representing Team USA in the 2018 women's World Masters Athletics Championships in Málaga, Spain.

the chance to compete in those championship finals and prevented them from being named an All-American in those events.¹⁹¹

While Hubbard's and Thomas's participation in women's sports garnered international attention,¹⁹² similar outcomes at the high school level often go unreported. In Maui, Hawaii, for example, when a biological male who had previously competed on the school's men's volleyball team Allowing males to take spots on teams with limited rosters means that female athletes lose varsity spots and playing time.

joined the women's program, a biological girl lost the opportunity to start for her team,¹⁹³ although this never made the news. In jurisdictions where males are allowed to compete on women's high school teams that lack male counterparts, males inevitably take varsity spots and playing time from girls. This, of course, directly undermines Title IX, the purpose of which is to increase opportunities for women and girls—not limit them.

D. Increasing the Risk of Injury

In some sports, allowing males to compete with and against females increases the chance of injury. For example, in a women's MMA fight, trans-identified biological male **Fallon Fox** famously fractured Tamikka Brents's orbital bone. Not surprisingly, Brents said she felt "overwhelmed" by Fox's power.¹⁹⁴

Female athletes at the high school level are also susceptible to injury at the hands of their male counterparts. In the 2010 Western Massachusetts Division I title game for women's field hockey, for example, the male player who scored the winning goal "collid[ed] at full speed" with the female goaltender, who experienced a concussion on



PHOTO BY ROB KIM / STRINGER VIA GETTY IMAGES

the play and suffered severe headaches for about six months thereafter.¹⁹⁵

More recently, North Carolina high school volleyball player **Payton McNabb** suffered a similarly serious injury "after a transgender player spiked a ball at her head at . . . [an] 'abnormally fast' speed" that was estimated by one outlet to be

"approximately 70 mph."¹⁹⁶ McNabb reportedly "experienced trauma to the head and neck" and "long-term concussion symptoms, including problems with her vision."¹⁹⁷ The school board for the injured player's school ultimately voted to forfeit all future games against the transgender athlete's school "due to safety concerns."¹⁹⁸

Often, the media fail to cover injuries caused by biological males in women's high school sports. For example, although a volleyball player from Maui, Hawaii, reported that a biologically male athlete injured at least two girls and caused a concussion after transferring from the men's to the women's team, the incidents were not reported by the mainstream media.¹⁹⁹

Still, some organizations have appropriately recognized and responded to the physical threat posed to females by biologically male players. For example, World Rugby in October 2020 established a rule banning the participation of males on women's teams. After consulting with numerous experts from the fields of medicine, physiology, and psychology, as well as players, transgender representatives, and rugby experts, the organization concluded that the "size, force- and power-producing advantages" that male-bodied individuals enjoy over female athletes translate into an unacceptable risk to player safety.²⁰⁰



PHOTO BY ISTOCK PHOTOS

Other institutions, like the North Carolina school described above, have refused to put their athletes in a position where they may be injured by biologically male athletes, choosing instead to forfeit games that pose such a threat.²⁰¹ But those decisions have come at a cost. After one Vermont school opted to forfeit a girls' basketball playoff

game rather than "jeopardize[]... the safety of [its] players," the governing body for high school sports in that state informed the school that it would be fully "banned from further state-run activities and athletic competitions."²⁰² The school vowed to appeal the ban, noting that: "[c]ancelling our membership is not a solution and does nothing to deal with the very real issue of safety and fairness facing women's sports in our beloved state."²⁰³ "Allowing biological males to compete against biological females is dangerous. I may be the first to come before you with an injury, but if this doesn't pass, I won't be the last."

> PAYTON MCNABB North Carolina High School Athlete

"It is the height of hypocrisy that as we stand here today, there are those who claim to be feminists, who claim to be champions for women's rights, who are at the very same time simultaneously denying the fact that we exist. Denying the fact that there is a woman that is biologically distinct from a man."

> TULSI GABBARD at the Our Bodies, Our Sports Rally

V. THE PUSHBACK

A. The Public

As the number of male-bodied athletes participating in women's sports continues to grow, several Olympic and professional athletes have begun to speak out against the practice. **Martina Navratilova**, LGBTQ activist and winner of 18 Grand Slam Tennis Singles Titles, has written widely about the unfairness of letting males compete against women. "It's insane and it's cheating," Navratilova has said. "I am happy to address a transgender woman in whatever form she prefers, but I would not be happy to compete against her. It would not be fair."²⁰⁴

Former British Olympic swimmer **Sharron Davies** put it succinctly: "Those with a male sex advantage should not be able to compete in women's sports."

More recently, professional surfer **Bethany Hamilton** objected to her sport's policy allowing trans-identifying biologically male athletes to compete and noted that the league's policy was "not supported by a majority of women ... [then-] competing on the tour."²⁰⁵ In an Instagram video, Hamilton asked, "Is a hormone level an honest and accurate depiction that someone indeed is a male or female? Is it as simple as this?"²⁰⁶ Hamilton added, "I personally won't be competing in or supporting the World Surf League if this rule remains."²⁰⁷

Female athletes are not alone in their opposition to including males in women's sports. A 2022 *Washington Post*-University of Maryland poll found "55 per cent of Americans [are] opposed to allowing transgender [athletes who are biological males] to compete with other women and girls in high school sports."²⁰⁸ The same poll found 58% opposed to allowing trans-identified biological males to participate in college and professional sports.²⁰⁹

The Washington Post



In June 2022, on the **50th anniversary of Title IX**, 18 advocacy groups from across the political spectrum rallied for **"Our Bodies, Our Sports,"** demanding that lawmakers protect equal athletic opportunities for women.²¹⁰

In addition, at the NCAA's annual convention in San Antonio, Texas, in January 2023, demonstrators gathered to protest the organization's discriminatory policy of allowing biological males in women's collegiate sports.²¹¹ Protestors hand-delivered a petition opposing that policy, which has allowed male-bodied athletes to compete in women's sports since 2010.²¹² The petition can be found in **Appendix A** of this report.

B. Legislative Efforts



On February 1, 2023, the 37th annual National Women and Girls in Sports Day, U.S. Rep. Greg Steube (R-FL) reintroduced **The Protection of Women and Girls in Sports Act**.²¹³ The bill amends Title IX to ensure that schools comply with Title IX's recognition of a person's reproductive biology and genetics at birth and *puts athletic* organizations, athletic directors, and bureaucrats on notice that it is a violation of Title IX to allow biological males to take roster spots, titles, awards, or scholarships from female athletes.

As of April 2023, 21 states had banned biological males who identify as girls from participating in publicly-funded sports.²¹⁴ (**Idaho** was the first state to pass a law limiting eligibility for women's teams to biological females in 2020.²¹⁵)

Unfortunately, some legislative fixes miss the mark by excluding collegelevel competitive sports, where the male physiological differences are most prominent and most disadvantage female athletes. The best legislative solutions are ones that not only include collegiate sports but also statutorily require equal athletic opportunity for both sexes and provide exceptions for practice players and/or noncompetitive instructional leagues.²¹⁶ Model legislation can be found in **Appendix B** of this report.



Rep. Claudia Tenney on steps of the Capitol with female athletes.

"How did whoever decided these hormone rules come to the conclusion that 12 months of testing testosterone make it a fair and legal switch?"

SURE RANCH

BETHANY HAMILTON Professional Surfer

C. Court Battles

Although the various state laws that protect women's sports differ somewhat, they all expressly contradict the federal Department of Education's proposed rules. This conflict between state law and federal administrative rules will, ultimately, have to be resolved in court.

Indeed, advocates for the inclusion of biological males in women's sports have filed a number of lawsuits seeking to block the enforcement of several of the above-mentioned state laws. Ironically, these lawsuits argue that state policies that prohibit male-bodied athletes from participating in women's sports constitute unlawful sex discrimination under both the Equal Protection Clause of the 14th Amendment and Title IX, the statute Congress passed in 1972 to expand opportunities for women and girls.²¹⁷ In fact, the exact opposite is true. Allowing a biologically male athlete to displace a female athlete on a women's team unfairly *discriminates on the basis of sex* by denying women the equal opportunity to compete in athletics that is required by Title IX and its implementing regulations.

Ironically, some activists claim that prohibiting male-bodied athletes from participating in women's sports discriminates on the basis of sex in violation of Title IX, the statute that Congress passed to expand opportunities for women and girls. On August 30, 2021, attorneys general from 20 states countered with a lawsuit of their own. The lawsuit, filed in the U.S. District Court for the Eastern District of Tennessee, sought (among other things) a declaration that Title IX does not prohibit schools from determining eligibility for men's and women's sports teams on the basis of biological sex. The lawsuit also sought an injunction prohibiting the Department of Education from enforcing any non-binding guidance

that administratively rewrites Title IX.²¹⁸ The district court enjoined federal officials from implementing the Department's interpretation of Title IX, and the decision is currently on appeal in the Sixth Circuit.²¹⁹

In resolving these cases, the courts will need to consider the specific language of the legislation at issue (including the legal definition of the term "on the basis of sex" under Title IX), the authority (if any) given to the Department of Education's new administrative rules, as well as the scientific evidence regarding the malefemale athletic differential.

CONCLUSION

The world of competitive sport is a zero-sum game where some athletes make the team and others do not; where someone wins and others lose. And in a zero-sum competition, the inclusion of male-bodied athletes in women's sports inevitably means that females lose out.

In the short term, inclusion of males in women's sports hurts individual female athletes. But in the long run, the logic of allowing male participation in women's events and on women's teams could be used to eliminate sex-specific sports altogether. It is, therefore, imperative that we protect the female sporting category and resist calls for inclusion that result in the *exclusion* of even a single female athlete from competitive sport.



"When it comes to women's sports, biology matters."

INGA THOMPSON 10x National Champ, 3x Olympian, 3x World Medalist, 2x Podium Finisher in the Women's Tour de France

Competed at the 1984, 1988, and 1992 Olympic Games.

APPENDIX A: NCAA PETITION

Tell the NCAA: STOP DISCRIMINATING AGAINST FEMALE ATHLETES



We demand that the NCAA stop discriminating against women and establish rules to keep women's sports female. In the world of college sports, it is impossible to provide equal opportunities for both sexes without singlesex teams. Allowing biological males on women's teams discriminates against female athletes. The NCAA is not above the law.

MAKE YOUR VOICE HEARD SCAN CODE TO SIGN THE PETITION



Riley Gaines stands with IWN chapter leaders Megan Burke and Margo Knorr on Girls & Women in Sports Day, U.S. Capitol (February 1, 2023)

GIRLS' SPORTS FO<u>R GIRLS ONL</u>Y





An Act to Protect **Equal Athletic Opportunities**

Section 1: Name. This statute shall be known as the Equal Athletic Opportunities Act.

Section 2. Equal athletic opportunities in education. Any accredited school, school district, or institution of higher education that offers, operates, or sponsors interscholastic or intercollegiate athletics shall provide equal athletic opportunities for members of both sexes.

Section 3: Separate athletic opportunities. Notwithstanding the requirements of Section 2, a school, school district, institution of higher education, or private athletic club located within [INSERT STATE] may operate or sponsor single-sex teams where selection for such teams is based upon competitive skill or the activity involved is a contact sport.

Section 4: Designation of athletic opportunities.

- (A) All public and private schools, school districts, institutions of higher education, and athletic clubs that participate in athletic competitions or events with or against other schools or clubs must designate each athletic team, sport, athletic competition, or athletic event as a:
 - (1) team, sport, competition, or event for males, men, or boys;
 - (2) team, sport, competition, or event for females, women, or girls; or
 - (3) a co-educational or mixed team, sport, competition, or event.
- (B) An individual who competes in any sport, athletic competition, or athletic event designated for females, women, or girls must be biologically female. The biological sex listed on a participant's birth certificate may be relied on to establish the participant's eligibility under this section if the sex designated on the birth certificate was designated at or near the time of the participant's birth.





Section 5: Protecting women's athletic opportunities.

- (A) No school, school district, athletic club, athletic association, or institution of higher education that operates, sponsors, or permits athletic competitions or events may allow any male to compete for, against, or with a team designated for females, women, or girls to compete in any event designated for females, women, or girls.
- (B) A school, school district, athletic club, athletic association, or institution of higher education that operates, sponsors, or permits athletic competitions or events may not:
 - allow any male to occupy a roster spot on any team designated for females, women, or girls; or
 - (2) allow any male to receive a scholarship designated for female athletes.

Section 6: Permitting male practice players. Nothing in this Act shall prohibit a school, school district, athletic club, athletic association, or institution of higher education from allowing males to practice or train with teams designated for females, women, or girls, so long as no such male player takes a roster spot, opportunity to compete, scholarship, or spot at the school from any female.

Section 7: Definitions.

- (A) *Sex:* For purposes of this statute, "sex" refers to a person's biological sex (either male or female) at birth;
- (B) *Athletic event:* For purposes of this statute, an "athletic event" includes any competition, contest, game, jamboree, scrimmage, tournament, showcase, combine, or tryout related to a sport or physical activity.
- (C) *Athletic club:* For purposes of this statute, "athletic club" refers to any privately or publicly operated organization that operates sports teams, trains athletes for competition, or allows athletes or athletic teams to use its facilities on a regular basis.
- (D) *Athletic association:* For purposes of this statute, "athletic association" refers to any governing body for athletic competition or sport or any organization of athletic conferences.





- (E) Compete: For purposes of this statute, "compete" means to take part in a contest, game, jamboree, tournament, showcase, combine, tryout, or other event after which team(s) or any individual(s) are designated as winners, roster spots are determined, or prizes awarded.
- (F) *Team:* For purposes of this statute, "team" means any group of people that participate in athletic or physical competitions for the same organization, school, club, college, university, or cause.

Section 8: Compliance protected. No governmental entity, licensing or accrediting organization, athletic association, or school district may consider a complaint, open an investigation, or take adverse action against a school or school district for complying with this law.

Section 9: Liability.

- (A) Any individual who is deprived of an athletic opportunity or who suffers or who will suffer direct or indirect harm resulting from a violation of this statute may bring a private cause of action for injunctive relief, compensatory damages, and legal fees, against the violating entity.
- (B) Any school, school district, athletic association, or athletic club that suffers or will suffer direct or indirect harm as a result of a violation of this statute may bring a private cause of action against the violating entity for injunctive relief and compensatory damages.
- (C) Any individual, athletic team, or athletic club subjected to retaliation or other adverse action as a result of reporting a violation of this statute to an employee or representative of a school, school district, athletic association, or athletic club, or subjected to retaliation or other adverse action as a result of reporting a violation of this statute to a state or federal government entity with oversight authority, may bring a private cause of action against the retaliating entity for injunctive relief, damages, and any other relief available under law.
- (D) An action brought under this section must be commenced within one year of the event giving rise to the complaint.

"[When it comes to competitive athletics,] sex segregation is the only way to achieve equality for girls and women."

MARTINA NAVRATILOVA Winner of 18 Grand Slam Tennis Singles Titles

ENDNOTES

- See Jennifer C. Braceras, Legal Policy Focus: Sex is Better Than Gender, INDEP. WOMEN'S L. CTR. (Aug. 2022), https://www.iwf.org/2022/09/07/legal-policy-focus-sex-is-better-than-gender/.
- 2. 20 U.S.C. § 1681(a).
- 3. See Neal v. Bd. of Trs. of Cal. State Univs., 198 F.3d 763, 766 (9th Cir. 1999) (explaining that Title IX was designed to eliminate significant "discrimination against women in education"). According to Senator Birch Bayh, one of Title IX's primary sponsors, the statute promised women "an equal chance to attend the schools of their choice, to develop the skills they want, and to apply those skills with the knowledge that they will have a fair chance to secure the jobs of their choice with equal pay for equal work." *Id.* (quoting 118 Cong. Rec. 5808 (1972)).
- Education Amendments of 1974, Pub. L. No. 93-380, § 844, 88 Stat. 484, 612 [hereinafter the Javits Amendment]; see also McCormick ex rel. McCormick v. Sch. Dist. of Mamaroneck, 370 F.3d 275, 287-88 (2d Cir. 2004) (explaining the history of the Javits Amendment and the regulations promulgated thereunder).
- 5. See Williams v. Sch. Dist. of Bethlehem, 998 F.2d 168, 175 (3d Cir. 1993) (although Title IX's athletic regulation "appl[ies] equally to boys as well as girls, it would require blinders to ignore that the motivation for [the] promulgation of the regulation on athletics was the historic emphasis on boys' athletic programs to the exclusion of girls' athletic programs in high schools as well as colleges").
- 6. 34 C.F.R. § 106.41(b).
- Id.; see also O'Connor v. Bd. of Ed. of Sch. Dist. 23, 449 U.S. 1301, 1307-08 & n.5 (1980) (Stevens, J., in chambers) (refusing to vacate a stay that prohibited a female student from trying out for the boys' basketball team where the school also had a girls' team).
- 8. 34 C.F.R. § 106.41(b).
- 9. Id. § 106.41(c).
- 10. The Equal Protection Clause of the United States Constitution forbids arbitrary discrimination on the basis of sex, but it does not presumptively prohibit separation of the sexes in the same way that it forbids racial segregation. See Craig v. Boren, 429 U.S. 190, 197-98 (1976) (outlining the intermediate scrutiny standard for sex-based classifications); cf. City of Richmond v. J.A. Croson Co., 488 U.S. 469, 493 (1989) (describing "strict scrutiny" applied to racial classifications). The reason that courts scrutinize racial classifications more strictly than they scrutinize sex-based classifications is that biological sex differences sometimes provide relevant grounds for distinction, whereas racial classifications do not. By recognizing the inherent difference between race and sex, courts have carved out space to accommodate real distinctions between males and females, while still prohibiting unjust discrimination. See, e.g., Brief of Independent Women's Law Center as Amicus Curiae Supporting Appellee at 21-22, Equal Means Equal v. Ferriero, 3 F.4th 24 (1st Cir. 2021) (No. 20-1802), https://www.iwf.org/wp-content/uploads/2021/02/EqualandEqual_vs_Ferriero_Amicus_Brief_of_IndependentWomensLawCenter.pdf.
- 11. See generally Nat'l Coll. Athletic Ass'n v. Smith, 525 U.S. 459, 468-69 (1999).
- 12. 20 U.S.C. § 1681(a).
- 13. See *id.* § 1681(a)(1) (providing Title IX applies to "institutions of . . . professional education, and graduate higher education, and to public institutions of undergraduate higher education").
- 14. 14 C.F.R. § 1253.125(c) ("The obligation to comply with these Title IX regulations is not obviated or alleviated by any rule or regulation of any organization, club, athletic or other league, or association that would render any applicant or student ineligible to participate or limit the eligibility or participation of any applicant or student, on the basis of sex, in any education program or activity operated by a recipient and that receives Federal financial assistance").
- 15. Chris W. Surprenant, Accommodating Transgender Athletes, 18 GEO. J. L. & PUB. POL'Y 905, 908 (2021).
- 16. Lisa Maatz et al., *Title IX at 40: Working to Ensure Gender Equity in Education*, Nat'L Coal. FOR WOMEN AND GIRLS IN EDUC. 8 (2012), https://www.ncwge.org/TitleIX40/TitleIX-print.pdf.

- 17. NCAA Sports Sponsorship and Participation Rates Database, NAT'L COLL. ATHLETIC Ass'N (Dec. 2022), https://www.ncaa.org/about/resources/research/ncaa-sports-sponsorship-and-participationrates-database (click "Summary: 2021-22").
- 18. Id. (226,212 out of 520,470 athletes were women).
- 45 Years of Title IX: The Status of Women in Intercollegiate Athletics, Nat'L Coll. ATHLETIC Ass'N
 28-31 (June 2017), https://www.ncaapublications.com/p-4510-45-years-of-title-ix.aspx; see also
 The Battle for Gender Equity in Athletics in Colleges and Universities, Nat'L WOMEN'S L. CTR. 2 (June 2022), https://nwlc.org/wp-content/uploads/2022/06/BS_NWLC_GendEquityColl_50_FS.pdf.
- 20. United States at the 1972 München Summer Games, SPORTS REFERENCE, https://web.archive.org/ web/20200417043419/https://www.sports-reference.com/olympics/countries/USA/summer/1972/.
- 21. Greg Myre, U.S. Women Are The Biggest Winners At The Rio Olympics, NPR (Aug. 21, 2016), https://www.npr.org/sections/thetorch/2016/08/21/490818961/u-s-women-are-the-biggestwinners-in-rio-olympics.
- 22. Steve Keating, U.S. To Send Second Biggest Team Ever To Tokyo Games, REUTERS (July 13, 2021), https://www.reuters.com/lifestyle/sports/us-send-second-biggest-team-ever-tokyo-games-2021-07-13/.
- 23. Samantha Pell, Girls Say Connecticut's Transgender Athlete Policy Violates Title IX, File Federal Complaint, WASH. POST (June 19, 2019), https://wapo.st/2lZZ57v.
- 24. Guidance produced and distributed by the ACLU, Gender Spectrum, Human Rights Campaign, National Center for Lesbian Rights, and National Education Association urges schools to permit male students to play on female athletic teams even if they have not begun hormone therapy or taken any medical steps to alter their male physiology. Asaf Orr et al., Schools In Transition: A Guide for Supporting Transgender Students in K-12 Schools, Hum. Rts. CAMPAICN FOUND. 28-29 (July 2016), https://hrc-prod-requests.s3-us-west-2.amazonaws.com/files/assets/resources/Schools-In-Transition.pdf?mtime=20200713142742&focal=none (asserting that it is "inappropriate" for schools to require trans-identified students to begin any form of medical treatment prior to participating in sports according to their gender identity).
- 25. See FLA. STAT. § 1006.205(3)(c) (effective July 1, 2021); S.C. Code Ann. § 59-1-500(B)(3) (effective May 16, 2022).
- 26. In 2010, the NCAA adopted a policy allowing females who identify as men to compete on men's teams and allowing males who identify as women to compete on women's teams so long as they had completed at least one calendar year of testosterone suppression. Pat Griffin & Helen Carroll, NCAA Inclusion of Transgender Student-Athletes, NAT'L COLL. ATHLETIC ASS'N 13 (Aug. 2011), https://ncaaorg.s3.amazonaws.com/inclusion/lgbtq/INC_TransgenderHandbook.pdf. On January 19, 2022, the NCAA issued a new policy reaffirming its support for trans-inclusion in women's sports, but adding the requirement that such athletes prove that they have lowered their testosterone to levels set by the governing bodies for each sport, as measured twice annually, for one year. Transgender Student-Athlete Participation Policy, NAT'L COLL. ATHLETIC ASS'N (Jan. 27, 2022), https://www.ncaa.org/sports/2022/1/27/transgender-participation-policy.aspx.
- 27. IOC Framework on Fairness, Inclusion, and Nondiscrimination on the Basis of Gender Identity and Sex Variations, INT'L OLYMPIC COMM. 1-6 (Nov. 2022), https://stillmed.olympics.com/media/ Documents/Beyond-the-Games/Human-Rights/IOC-Framework-Fairness-Inclusion-Nondiscrimination-2021.pdf [hereinafter IOC 2022 Framework].
- 28. *Id.* at 2-3 (capitalization omitted).
- 29. Id. at 5 (Principle 7.1). Previously, IOC policies allowed biological females to compete in the male category without restriction, but allowed biological males to compete in women's competitions only if they declared a female gender identity without changing it, for sporting purposes, for at least four years, and demonstrated testosterone levels below 10 nanomoles per liter for at least a year prior to their first competition. Uğur Erdener et al., IOC Consensus Meeting on Sex Reassignment and Hyperandrogenism, INT'L OLYMPIC COMM. 2 (Nov. 2015), https://stillmed.olympic.org/Documents/Commissions_PDFfiles/Medical_commission/2015-11_ioc_consensus_meeting_on_sex_reassignment_and_hyperandrogenism-en.pdf [hereinafter IOC 2015 Consensus Statement]. Notably, the 95% reference range for testosterone in healthy menstruating women under 40 years of age is significantly lower, 0 to 1.7 nanomoles per liter, while the range for

post-pubescent males is 7.7 to 29.4 nanomoles per liter. David J. Handelsman et al., *Circulating Testosterone as the Hormonal Basis of Sex Differences in Athletic Performance*, 39 ENDOCRINE REVS. 803, 806-07 (2018); see also Sarah Farrell, *How Do IAAF Regulations Affect Female Athletes With High Testosterone Levels?*, GLOB. SPORT MATTERS (Nov. 15, 2019), https://globalsportmatters.com/health/2019/11/15/iaaf-regulations-for-female-athletes-with-high-testosterone/.

See Policies by Organization, TRANSATHLETE, https://www.transathlete.com/policies-by-organization 30. (last visited Mar. 3, 2023) (listing policies). For example, USA Climbing and the US Soccer Federation require documentation that an athlete's asserted "gender is sincerely held." Id. (citing Rulebook § 1.4.1, USA CLIMBING (2020), https://usaclimbing.org/wp-content/uploads/2021/07/ USA Climbing Rulebook 2020-2021 v10 20200902-2.pdf and Policy Manual § 601-5(6), U.S. Soccer Fed., Inc. (2022), https://www.ussoccer.com/governance/bylaws). Disability Sports Australia "supports the participation of trans athletes on the basis of the gender with which they identify, but encourages trans[] athletes to fill out the appropriate Therapeutic Use Exemptions necessary for competition in leagues which require them." Id. (citing National Member Protection Policy § 6.6, DISABILITY SPORTS AUSTL. (Jan. 28, 2014), https://www.transathlete.com/ files/ ugd/2bc3fc_63bb33953f554b7ab0fabfdde502d83d.pdf). The Premier Hockey Federation Bylaws provide that "Transgender women are eligible to compete in the PHF if they have been living in their transgender identity for a minimum of two years." PHF Transgender and Non-Binary Player Inclusion Policy, § 15.3(1), PREMIER HOCKEY FED. (updated Oct. 15, 2021), https://www. premierhockeyfederation.com/phf-transgender-and-non-binary-policy.

By contrast, USA Boxing follows what is known as the Stockholm Consensus, which requires genital surgery and gonadectomy. *Policies by Organization, supra* (citing *Medical Handbook and Medical Rules of AIBA Open Boxing* § 2.4.5, USA Boxinc (2013), https://www.transathlete.com/_files/ugd/2bc3fc_097c27dfc6784e9eb89d7c5ab44dd399.pdf). A few other organizations also require gender reassignment surgery of some type for athletes to compete or to have their times counted. See, e.g., United States Governing Bodies Policies, TRANSATHLETE, https://www.transathlete.com/us-ngbs (citing *Gender Policy for USCA Championships*, U.S. Colf Ass'n, https:// champ-admin.usga.org/player/articles/Gender-Policy) (last visited Mar. 6, 2023) (noting that U.S. Golf Association requires athletes to have surgery before competing). The Ladies Professional Golf Association requires "[i]ndividuals who have undergone gender reassignment from male to female after puberty" to "have undergone gender reassignment surgery (i.e., a gonadectomy) prior to submitting an application for membership or entering the tournament." *Gender Policy*, art. II, LADIES PROF'L GOLF Ass'n, https://www.lpga.com/gender-policy (last visited Mar. 26, 2023).

- 31. Athlete Inclusion, Competitive Equity, and Eligibility Policy, USA Swimming (Feb. 1, 2022), https:// www.usaswimming.org/docs/default-source/governance/governance-lsc-website/rules_policies/ usa-swimming-policy-19.pdf. In February 2023, World Aquatics adopted a policy permitting transidentifying biologically male athletes to compete in the women's category "if they can establish to World Aquatics's comfortable satisfaction that they have not experienced any part of male puberty beyond Tanner Stage 2 [the onset of puberty] or before age 12, whichever is later," including evidence that the athlete has "complete androgen insensitivity and therefore could not experience male puberty" or "had male puberty suppressed beginning at Tanner Stage 2 or before age 12, whichever is later, and they have since continuously maintained their testosterone levels in serum (or plasma) below 2.5 nmol/L." Competition Regulations, World Aquatics, §§ 5.4.2 (Feb. 21, 2023), https://resources.fina.org/fina/document/2023/03/30/561db432-9ac8-4706-ac3c-96ca798a27d8/ WORLD_AQUATICS_COMPETITION_REGULATIONS.pdf.
- Handelsman et al., *supra* note 29, at 806-07 (also noting that "the upper limit of serum testosterone in women with [polycystic ovary syndrome] PCOS is 3.1 [nanomoles per liter], or 4.8 [nanomoles per liter]," depending on the measurement used); *see also* Farrell, *supra* note 29 (explaining that the International Association of Athletics Federation considers 0.12 to 1.79 nanomoles per liter to be the normal testosterone range for women).
- 33. See Nondiscrimination on the Basis of Sex in Education Programs or Activities Receiving Federal Financial Assistance, 87 Fed. Reg. 41,390, 41,571 (proposed July 12, 2022) (proposed § 106.31(a) (2)) (providing that "prevent[ing] a person from participating in an education program or activity consistent with the person's gender identity subjects a person to more than de minimis harm

on the basis of sex") [hereinafter Proposed Rulemaking, Nondiscrimination on the Basis of Sex]; Brittany Bernstein, Education Department Extends Title IX Protections to Transgender Students, in Reversal of Trump-Era Guidance, NAT'L REV. (June 16, 2021), https://www.nationalreview.com/ news/education-department-claims-title-ix-protections-extend-to-transgender-students-inreversal-of-trump-era-guidance/ (noting that Obama administration used a similar definition to require schools to open "some sports teams to students based on their chosen gender identity" and that the new rule "could expose schools that seek to preserve sex-segregated spaces to litigation" and prompt challenges to "efforts to preserve female only sports"); Jennifer C. Braceras & Kelsey Bolar, Biden Administration's New Title IX Guidance Solidifies Threat To Girls' Sports, Indep. Women's Forum (June 17, 2021), https://www.iwf.org/2021/06/17/biden-administrationsnew-title-ix-guidance-solidifies-threat-to-girls-sports/ (explaining the impact of the new policy); see also Section II(B), infra (describing the law in this area).

- 34. See Proposed Rulemaking, Nondiscrimination on the Basis of Sex, 87 Fed. Reg. at 41,571. Although this rule does not explicitly cover sports, neither does it make an exception for athletics, which clearly constitute school "programs" and "activities." The proposed rule thus necessarily requires schools to allow male athletes who identify as women to compete on women's athletic teams. See Comment of Indep. Women's L. Ctr. and Indep. Women's Forum Regarding Implications of the Dep't of Educ.'s Proposed Title IX Rule on Women's Sports, INDEP. WOMEN's L. CTR. (Sept. 12, 2022), https://iwlc.org/wp-content/uploads/2022/09/FINAL-IWF-Title-IX-Comment-5-Sports-9-12.pdf.
- 35. Nondiscrimination on the Basis of Sex in Education Programs or Activities Receiving Federal Financial Assistance: Sex-Related Eligibility Criteria for Male and Female Athletic Teams, 88 Fed. Reg. 22,860, 22,891 (proposed Apr. 13, 2023) (proposed § 106.41(b)(2)) [hereinafter Proposed Rulemaking, Athletic Teams].
- 36. Id.
- 37. *Id.* at 22,875 (stating Department's belief that "few, if any, sex-related eligibility criteria" could be applied "to students in elementary school that could comply with the proposed regulation" and that it would be "particularly difficult for a recipient to comply with the proposed regulation by excluding students immediately following elementary school from participating on male or female teams consistent with their gender identity").
- 38. *Id.* at 22,872. It is thus unsurprising that the Department estimates that its new regulation would prompt "State athletic associations in approximately 60 percent of States" to revise their existing policies. *Id.* at 22,886.
- 39. See Erin Hawley, Placing the Administrative State in Constitutional Context, INDEP. WOMEN'S FORUM 2-4, 13 (2016), https://www.iwf.org/wp-content/uploads/pdfs/LegalBrief_AdminState.pdf.
- 40. See Bowen v. Geo. Univ. Hosp., 488 U.S. 204, 208 (1988) ("It is axiomatic that an administrative agency's power to promulgate legislative regulations is limited to the authority delegated by Congress.").
- 41. See, e.g., Equality Act, H.R. 5, 117th Cong. (as passed by House, Feb. 25, 2021). If enacted, the Equality Act would require schools and athletic associations to open up girls' and women's sports to males who identify as female. See Inez F. Stepman, The Equality Act Makes Women Unequal, WALL STREET J. (Feb. 23, 2021), https://on.wsj.com/3mqBThZ (explaining that the Equality Act would jeopardize myriad sex-specific programs, including women's sports, prisons, domestic violence shelters, and more); Doriane Coleman, Martina Navratilova, & Sanya Richards-Ross, Pass the Equality Act, But Don't Abandon Title IX, WASH. POST (Apr. 29, 2019), https://wapo.st/3EX7b6u (noting that "there will always be significant numbers of boys and men who would beat the best girls and women in head-to-head competition. Claims to the contrary are simply a denial of science."); see also Patsy T. Mink and Louise M. Slaughter Gender Equity in Education Act of 2021, S. 2186, 117th Cong. § 3(7)(C) (as introduced in Senate, June 23, 2021) (proposing to include "gender identity" in the definition of sex); Student Non-Discrimination Act of 2018, H.R. 5374, 115th Cong. (as introduced in House, Mar. 21, 2018) (proposing to prohibit discrimination in public schools based on gender identity); Student Non-Discrimination Act of 2015, S. 439, 114th Cong. (as introduced in Senate, Feb. 10, 2015) (same); Student Non-Discrimination Act of 2013, H.R. 1652, 113th Cong. (as introduced in House, Apr. 18, 2013) (same); Student Non-Discrimination Act of 2011, S. 555, 112th Cong. (as introduced in Senate, Mar. 10, 2011) (same); Student Nondiscrimination Act of 2010, H.R. 4530, 111th Cong. (as introduced in House, Jan. 27, 2010) (same).

- 42. Katie Rogers, Biden Plan for Transgender Title IX Rules Began on Inauguration Day, N.Y. TIMES (Apr. 7, 2023), https://www.nytimes.com/2023/04/07/us/politics/transgender-athletes-schools-title-ix.html.
- 43. See Proposed Rulemaking, Athletic Teams, 88 Fed. Reg. at 22,870, 22,891 (setting forth standards schools must meet if they attempt to limit trans-athletes from joining teams that do not correspond to the athletes' biological sex and stating the Department's belief "that students may be harmed significantly if a school denies them the opportunity to participate in its athletic program consistent with their gender identity").
- 44. *Id.* at 22,891 (providing that schools may adopt criteria limiting trans athletes' participation on a single-sex team only if the criteria is "substantially related to the achievement of an important educational objective" and the school's criteria "[m]inimize[s] harms" to trans athletes whose participation would be limited).
- 45. 140 S. Ct. 1731 (2020); see Proposed Rulemaking, Nondiscrimination on the Basis of Sex, 87 Fed. Reg. at 41,392, 41,531.
- 46. See Bostock, 140 S. Ct. at 1739, 1746-47 ("agree[ing] that homosexuality and transgender status are distinct concepts from sex"); *id.* at 1737 (indicating an understanding that the trans-identified employee belongs to "a different sex" than the one with which the employee identifies). Although "sex" and "gender" are commonly used as synonyms, they have distinct meanings. "Sex" is a scientific term that refers to either of the two categories of individuals (male or female) that occur in many species. "Gender" is a term borrowed from grammar that refers to cultural expectations regarding females and males. The term "gender identity" refers to how a person perceives him or herself. See Braceras, *supra* note 1. Thus, where "sex" is biologically determined, "gender" is culturally determined, and "gender identity" is subjectively determined. Michael Robillard, *The Incoherence of Gender Ideology*, QUILLETTE (Aug. 4, 2021), https://quillette.com/2021/08/04/the-incoherence-of-gender-ideology/; see also J.E.B. v. Alabama ex rel. T.B., 511 U.S. 127, 157 n.1 (1994) (Scalia, J., dissenting) ("gender is to sex as feminine is to female and masculine to male.").
- 47. Bostock, 140 S. Ct. at 1753.
- 48. Id. at 1737.
- 49. Id. at 1741 (internal quotation marks omitted).
- 50. Id. at 1740.
- 51. See, e.g., Kleczek v. R.I. Interscholastic League, Inc., 612 A.2d 734, 738 (R.I. 1992) ("Because of innate physiological differences, boys and girls are not similarly situated as they enter athletic competition.").
- 52. Bostock, 140 S. Ct. at 1753 (rejecting concerns that Court's "decision will sweep beyond Title VII to other federal or state laws that prohibit sex discrimination" because "none of these other laws are before [the Court]" and explaining that the Court "d[id] not prejudge any such question"). Significantly, both Title IX and the statute's implementing regulations repeatedly refer to "both sexes," see, e.g., 20 U.S.C. § 1681(a)(2); 34 C.F.R. § 106.21(c)(4), a phrase that would make no sense if the term "sex" were being used to describe the range of identifications included within the concept of gender identity. See, e.g., Pelcha v. MW Bancorp., Inc., 988 F.3d 318, 324 (6th Cir. 2021) (Bostock's holding "extends no further than Title VII").
- 53. See, e.g., Tom Daykin, This Milwaukee Facility Doesn't Need Ice—Just Girl Power, MILWAUKEE J. SENTINEL (Feb. 7, 2017), https://www.jsonline.com/story/money/real-estate/commercial/2017/02/07/ milwaukee-hockey-facility-doesnt-need-ice--just-girl-power/97557390/ (explaining that "[s]everal universities added field hockey as a women's sport after Title IX").
- 54. See Att'y Gen. v. Mass. Interscholastic Athletic Ass'n, 378 Mass. 342, 343-44 & n.4, 363 (1979) (relying on amended Article 1 of the Declaration of Rights of the Massachusetts Constitution in holding that the Massachusetts Equal Rights Amendment prohibits the state athletic association from adopting a rule that "No boy may play on a girls' team").
- 55. Tom Fargo, Coalition Takes Field Hockey Concerns to State House, Bos. HERALD (Jan. 23, 2020), https://www.bostonherald.com/2020/01/23/coalition-takes-field-hockey-concerns-to-state-house/ (explaining the objections of various parents to boys playing on high school field hockey teams).
- 56. See Buddy Thomas, Do Boys Belong on Field Hockey Teams?, SouthCoastToday (Oct. 10, 2018), https://www.southcoasttoday.com/story/sports/high-school/field-hockey/2018/10/10/do-boysbelong-on-field/9576513007/; see also Shira Springer, MIAA Must Draw a Line on Boys Playing

Girls' Hockey, Bos. GLOBE (Nov. 28, 2015), http://c.o0bg.com/sports/2015/11/27/miaa-must-drawline-boys-playing-girls-field-hockey/ENPcVkxZbQgjcMfYAkkhAI/story.html (objecting to the Massachusetts policy).

- 57. See 34 C.F.R. § 106.41(b), (c); see also, e.g., Clark v. Ariz. Interscholastic Ass'n 695 F.2d 1126 (9th Cir. 1982) ("Clark I"), cert. denied, 464 U.S. 818 (1983); Clark v. Ariz. Interscholastic Ass'n, 886 F.2d 1191, 1193-94 (9th Cir. 1989) ("Clark II") (rejecting claims of discrimination by a male high school student who was not allowed to compete for a place on the girls' volleyball team where the school offered no boys' team).
- 58. Bostock, 140 S. Ct. at 1739, 1742 (emphasis added). Prior to Bostock, courts had interpreted Title VII (and, indeed, most federal sex-discrimination laws) as prohibiting: (1) discrimination against individuals because they are female or male; and (2) policies that favor one sex over the other. Courts did not interpret federal law as prohibiting all policies that take sex into consideration. For example, prior to Bostock, courts would not have held an employer liable for sex discrimination under Title VII simply for offering separate male and female bathrooms, even though an employer clearly takes sex into consideration in providing sex-specific facilities. In Bostock, however, the Court reasoned that discrimination against a male employee who identifies as a woman necessarily requires awareness of the employee's biological sex in comparison to that employee's gender identity or mode of gender expression at work. Accordingly, the Court concluded that discrimination on the basis of "transgender status" is discrimination "because of sex," as prohibited by Title VII. *Id.* at 1740-41. Bostock, thus, established a "but for" test for determining liability. *Id.* at 1742. This means that any employer who relies, even in part, on biological sex when making a particular decision or adopting a particular policy may be held liable for sex discrimination under Title VII. *Id.*
- 59. See *id*. (holding that, under Title VII, "[i]f an employer would not have discharged an employee but for that individual's sex, the statute's causation standard is met, and liability may attach," even if "other factors may contribute to the decision"); Jennifer C. Braceras, *On Day One, Biden Eliminates Single-Sex Sports*, INDEP. WOMEN'S FORUM (Jan. 21, 2021), https://www.iwf.org/2021/01/21/bideneliminates-single-sex-sports/.
- 60. See id.; Bostock, 140 S. Ct. at 1742.
- 61. See, e.g., Nancy Leong, Against Women's Sports, 95 Wash. U. L. Rev. 1249 (2018) (arguing that dividing athletes by sex should not be our default position); see also Eileen McDonagh & Laura PAPPANO, PLAYING WITH THE BOYS: WHY SEPARATE IS NOT EQUAL IN SPORTS 260 (2008) ("Females playing sports with males must become standard practice, not the exception.").
- 62. See Nancy Leong & Emily Bartlett, Sex Segregation in Sport as a Public Health Issue, 40 CARDOZO L. REV. 1813, 1815-16 (2019); ADRIENNE N. MILNER & JOMILLS HENRY BRADDOCK II, SEX SEGREGATION IN SPORTS: WHY SEPARATE IS NOT EQUAL 2, 5 (2016) (arguing that "the concept[] of sex" is a "social construction" that is not itself real, and "sex segregation in sports is . . . a consequence of presumed innate biological differences between male and female athletes, which creates and reproduces a dominant sexist ideology that women are physically inferior, although there is no scientific or biological proof that a sex binary exists").
- 63. Elizabeth Sharrow, Five States Ban Transgender Girls from Girls' School Sports. But Segregating Sports by Sex Hurts All Girls, WASH. POST (Apr. 16, 2021), https://wapo.st/3EYkbbO (arguing that single-sex teams reinforce gender stereotypes and suggesting that Title IX's endorsement of single-sex teams was intended to be temporary); see also Robyn Ryle, The Case of Transgender Athletes. Why Sports Aren't Fair and That's OK, NEWSWEEK (Feb. 17, 2021), https://www.newsweek.com/case-transgender-athletes-why-sports-arent-fair-thats-ok-opinion-1569566 (arguing that "sports remain one of the last strongholds for the cult of gender differences" and suggesting that sex is not a meaningful category when it comes to competitive sport).
- 64. The Equal Protection Clause of the Fourteenth Amendment to the United States Constitution already prohibits discrimination against similarly-situated individuals. If the Equal Rights Amendment were layered on top of the existing Equal Protection mandate, courts might well interpret the new amendment as going further than current law and requiring that the government treat males and females not just equally, but the same. See Kim Forde-Mazrui, *Why the Equal Rights Amendment Would Endanger Women's Equality: Lessons from Colorblind Constitutionalism*, 16 DUKE J. CONST. L. & PUB. POL'Y 1, 22, 33-34, 54 (2021) (explaining that courts

would likely interpret the ERA as requiring the strictest of scrutiny for all sex-specific government policies and arguing, from a progressive standpoint, that this is bad for women); see also Inez Stepman, Equal Rights Amendment Will Replace Equality with Enforced Sameness, THE HILL (Jan. 17, 2020), https://thehill.com/opinion/civil-rights/478765-equal-rights-amendment-will-replaceequality-with-enforced-sameness/ (explaining, from a conservative perspective, the dangers of treating men and women the same in all circumstances).

- 65. See Forde-Mazrui, *supra* note 64, at 38-39 (explaining that the ERA could be interpreted to eliminate single-sex activities such as separate men's and women's sports).
- See Jennifer C. Braceras, On The Anniversary Of Title IX, Are Women's Sports In Jeopardy?, THE HILL (June 23, 2020), https://thehill.com/opinion/civil-rights/504011-on-the-anniversary-of-title-ix-arewomens-sports-in-jeopardy/.
- See, e.g., Grimm v. Gloucester Cnty. Sch. Bd., 972 F.3d 586, 616 (4th Cir. 2020), as amended (Aug. 28, 2020), reh'g en banc denied, 976 F.3d 399 (4th Cir. 2020), cert. denied, No. 20-1163, 141 S. Ct. 2878 (U.S., June 28, 2021).
- 68. United States v. Virginia, 518 U.S. 515, 533 (1996).
- 69. See Brief for Independent Women's Law Center as Amicus Curiae Supporting Appellant at 18-19, A.M. v. Indianapolis Pub. Schls. (7th Cir. Sept. 13, 2022) (No. 22-2332), https://www.iwf.org/wpcontent/uploads/2022/09/7th-circuit-court-of-appeals-amicus-brief-A.M.-v-indianapolis-publicschools-and-state-of-indiana.pdf.
- 70. See, e.g., Doriane Lambelet Coleman & Wickliffe Shreve, Comparing Athletic Performances: The Best Elite Women to the Boys and Men, Duke CTR. FOR SPORTS L. & PoL'Y (Summer 2017), https://law.duke.edu/sites/default/files/centers/sportslaw/comparingathleticperformances.pdf ("there is an average 10-12% performance gap between elite males and elite females"); Tyler K. Jobe et al., Sex Differences in Performance and Depth of Field in the United States Olympic Trials, 36 J. STRENGTH & CONDITIONING RES. 3122, 3123-24 (2022) (finding that men were 9-13% faster than women in all running events and 6-12% faster in all freestyle swimming events); Jennifer C. Braceras, Parsing Transgender Equality in Athletics, Bos. GLOBE (June 24, 2019), https://www.bostonglobe.com/opinion/2019/06/24/parsing-transgender-equality-athletics/oVJezCcyPCqGYoMrzJOJ8K/story.html?event=event12 (citing Eric Vilain, a professor of human genetics at UCLA, for the proposition that, with respect to running, "[t] here is 10 to 12 percent difference between male and female athletic performance.").
- 71. Were this the case, we would expect to see the male-female athletic gap continuing to narrow over time. In fact, over the last forty years, the gap has remained steady, despite increased opportunities and funding for women's sports. See CAROLE HOOVEN, T: THE STORY OF TESTOSTERONE: THE HORMONE THAT DOMINATES AND DIVIDES US 107 (2021); Emma N. Hilton & Tommy R. Lundberg, Transgender Women in the Female Category of Sport: Perspectives on Testosterone Suppression and Performance Advantage, 51 Sports Med. 199, 201 (2021); Valérie Thibault et al., Women and Men in Sport Performance: The Gender Gap Has Not Evolved Since 1983, 9 J. Sports Sci. & Med. 214, 219 (2010).
- 72. Coleman, Navratilova, & Richards-Ross, *supra* note 41 ("The sex differential isn't the result of boys and men having a male gender identity, more resources, better training or superior discipline. It's because they have androgenized bodies.").
- 73. See Doriane Lambelet Coleman, Sex in Sport, 80 Law & CONTEMP. PROBS. 63, 71 (2017) (most females have a matching XX pair of chromosomes and most males have an unmatched XY pair, and this genetic standard is the case in all but a few births per thousand); Sex Begins in the Womb in EXPLORING THE BIOLOGICAL CONTRIBUTIONS TO HUMAN HEALTH: DOES SEX MATTER? (Theresa M. Wizemann and Mary-Lou Pardue eds., 2001) (in utero, "developmental processes differentially organize tissues for later activation" in the male or female; "sex determination and differentiation occur in a series of sequential processes governed by genetic and environmental factors"); Emma Hilton, Remarks on Biological Sex at the #WPUKFairPly London Meeting (July 10, 2019) ("at 7 weeks gestation ... genetic makeup drives sex differentiation into male or female forms, and the dimorphic characteristics associated with sex begin to develop") [hereinafter Hilton Speech].
- 74. Michelle A. Carey et al., It's All About Sex: Male-Female Differences in Lung Development and Disease, 18 TRENDS IN ENDOCRINOLOGY & METABOLISM 308, 308 (Oct. 2007); Antonella LoMauro & Andrea Aliverti, Sex Differences in Respiratory Function, 14 BREATHE 131, 132 (2018) (describing sex differences in lung growth and development that start in the prenatal period).

- 75. Running: Why Are Men Faster than Women?, Оню State UNIV. (Mar. 10, 2015), https://www.ohioforum.com/2015/03/running-why-are-men-faster-than-women/ [hereinafter Ohio State Forum].
- 76. Stefan Pfaffenberger et al., Size Matters! Impact of Age, Sex, Height, and Weight on the Normal Heart Size, 6 CIRCULATION 1073, 1073, 1078 (2013); see also Albert Oberman et al., Heart Size of Adults in a Natural Population– Tecumseh, Michigan Variation by Sex, Age, Height, and Weight, 35 CIRCULATION 724, 729 (1967) ("Neither body size nor clinical status fully compensate for the discrepancies in heart size between [the] sexes.").
- 77. Ohio State Forum, supra note 75.
- 78. Handelsman et al., *supra* note 29, at 816 (increased levels of circulating hemoglobin give males a great capability of transporting oxygen from lungs to tissues, which enhances aerobic energy expenditure); William G. Murphy, *The Sex Difference in Haemoglobin Levels in Adults–Mechanisms, Causes, and Consequences,* 28 BLOOD REVS. 41, 41 (2014).
- 79. Ohio State Forum, supra note 75.
- 80. Id. (noting "men's higher aerobic capacity [VO2max], on average" and explaining that the "difference in VO2max can be explained by the fact that men tend to have a higher concentration of hemoglobin for transporting oxygen in the blood, larger hearts for pumping oxygen rich blood to the working muscles, and larger lungs for oxygenating the blood") (alteration in original); see Hilton & Lundberg, supra note 71, at 201-202 (noting men's "superior cardiovascular and respiratory function," including higher VO2max levels) (citing Russell R. Pate and Andrea Kriska, Physiological Basis of the Sex Difference in Cardiorespiratory Endurance, 1 SPORTS MED. 87-89 (1984)); see also Elisa Lodi et al., Sex and Physical Exercise: One Size Does Not Fit All, EUR. HEART J. SUPP. K248 (2022) (abstract); Hanjabam Barun Sharma & Jyotsna Kailashiya, Gender Difference in Aerobic Capacity and the Contribution by Body Composition and Haemoglobin Concentration: A Study in Young Indian National Hockey Players, 10 J. CLINICAL & DIAGNOSTIC RES. 9, 12 (2016) (males had greater aerobic capacity than females with similar training and competition level).
- 81. Max Roser et al., *Human Height*, Our World IN Data (updated May 2019), https://ourworldindata.org/ human-height#:~:text=Where%20are%20men%20much%20taller,3%25%20to%20over%2012%25.
- 82. Jeri W. Nieves et al., Males Have Larger Skeletal Size and Bone Mass Than Females, Despite Comparable Body Size, 20 J. BONE & MINERAL RES. 529, 529-30 (2005) (noting that women have "a naturally smaller skeleton" and that "periosteal growth, which enlarges bone diameter, accelerates at puberty in males" but is "inhibited by estrogen at puberty" in females); Handelsman et al., *supra* note 29, at 818 (men have "longer, denser, and stronger bones" than women); Hilton & Lundberg, *supra* note 71, at 201-02 (summarizing the research).
- 83. Nieves et al., supra note 82, at 529, 533-34; see also Handelsman et al., supra note 29, at 818 (male-female differences in bone geometry result in a male advantage in "leverage for muscular limb power exerted in jumping, throwing, [and] other explosive power activities").
- 84. Nieves et al., *supra* note 82, at 529; see *also* Handelsman et al., *supra* note 29, at 818.
- 85. Andrew Langford, Sex Differences, Gender, and Competitive Sport, QUILLETTE (Apr. 5, 2019), https:// quillette.com/2019/04/05/sex-differences-gender-and-competitive-sport/. In addition, male bodies have a lower incidence of stress and osteoporotic fractures than females. Nieves et al. *supra* note 82, at 529. And females lose bone mass faster and earlier than men as they age. Khaled A. Alswat, Gender Disparities in Osteoporosis, 9 J. CLINICAL MED. RES. 382, 382-83 (2017).
- 86. Ian Janssen et al., Skeletal Muscle Mass and Distribution in 468 Men and Women Aged 18-88 Yr, J. APPLIED PHYSIOLOGY 81, 85-86 (2000); see also Hilton & Lundberg, supra note 71, at 204 (in both athletes and non-athletes, sex differences in size and strength are more pronounced in upper body).
- 87. Ohio State Forum, *supra* note 75; *see also* Langford, *supra* note 85 (in skeletal muscle, "males have a higher proportion of type II fibres, which are able to contract quicker and produce more force than their counterparts").
- 88. Dong Hoon Lee et al., Development and Validation of Anthropometric Prediction Equations for Lean Body Mass, Fat Mass and Percent Fat in Adults Using the National Health and Nutrition Examination Survey (NHANES) 1999-2006, 118 BRIT. J. NUTR. 858, 860 (2017) (on average, men had 11% less body fat than women and men had higher variation in lean body mass, whereas women had higher variation in fat mass); Kalypso Karastergiou et al., Sex Differences in Human

Adipose Tissues-the Biology of Pear Shape, 3 BIOLOGY SEX DIFFERENCES 13 (2012), available at https://bsd.biomedcentral.com/counter/pdf/10.1186/2042-6410-3-13.pdf (women have higher percent body fat and deposit it in a different pattern then men with relatively more adipose tissue in the hips and thighs).

- 89. A. E. J. Miller et al., Gender Differences in Strength and Muscle Fiber Characteristics, 66 EUR. J. APPL. PHYSIOLOGY 254, 261 (1993); see also Ryo Kataoka et al., Sex Segregation in Strength Sports: Do Equal-Sized Muscles Express the Same Levels of Strength Between Sexes?, AM. J. HUM. BIOLOGY (2012) (finding that 76-88% of the strength assessments were greater in males than females with pair-matched muscle thickness, and males in the lightest weight division largely outperformed females in heavier weight divisions).
- 90. Hilton & Lundberg, supra note 71, at 204.
- 91. Marnee McKay & Joshua Burns, When it Comes To Sport, Boys 'Play Like a Girl', THE CONVERSATION (Aug. 3, 2017), https://theconversation.com/when-it-comes-to-sport-boys-play-like-a-girl-80328.
- 92. Carlos C. Marta et al., *Physical Fitness Differences Between Prepubescent Boys and Girls*, 26 J. STRENGTH & CONDITIONING Res. 1756, 1756 (2012).
- 93. Hilton & Lundberg, supra note 71, at 203 (citing J.R. Thomas and K.E. French, Gender Differences Across Age in Motor Performance: A Meta-Analysis, 98 Psychological Bull. 260 (1985)); see also Tamar Haspel, Throw like a Girl? With Some Practice, You Can Do Better, WASH. Post (Sept. 10, 2012), https://wapo.st/40aP1GE (noting that, beginning at 4 years of age, the overhand malefemale throwing gap is three times that of any other motor task; "[s]tudies of overhand ball throwing across different cultures have found that pre-pubescent girls throw 51 to 69 percent of the distance that boys do, at 51 to 78 percent of the velocity").
- 94. Hilton & Lundberg, supra note 71, at 201 (citing Mark J. Catley & Grant R. Tomkinson, Normative Health-Related Fitness Values for Children: Analysis of 85347 Test Results on 9-17-year-old Australians Since 1985, 47 BRIT. J. SPORTS MED. 98 (2013) (study of 85,000 Australian children found that 9-year-old boys could run faster, jump further, and complete more push-ups than 9-year-old girls); Konstantinos D. Tambalis et al., Physical Fitness Normative Values For 6-18-year-old Greek Boys and Girls, Using the Empirical Distribution and the Lambda, Mu, and Sigma Statistical Method, 16 EUR. J. SPORT Sci. 736 (2016) (male athletic advantage found in running and jumping in a study of Greek 6-year-olds); S. Eiberg et al., Maximum Oxygen Uptake and Objectively Measured Physical Activity in Danish Children 6-7 Years of Age: The Copenhagen School Child Intervention Study, 39 BRIT. J. SPORTS MED. 725 (2005) (study of 6- and 7-year-old Danish children found boys had a higher absolute and relative aerobic capacity than girls)).
- 95. Handelsman et al., *supra* note 29, at 804-05 ("after puberty men produce 20 times more testosterone than women" and have 15- to 20-fold greater circulating testosterone than children or women at any age).
- 96. When is Puberty too Early?, DUKE HEALTH (updated July 7, 2020), https://www.dukehealth.org/blog/ when-puberty-too-early (most boys begin puberty between the ages of 9 and 14); see also Irvin H. Hirsch, Men's Health Issues: Biology Of The Male Reproductive System / Puberty In Boys, MERCK MANUAL CONSUMER VERSION (last modified Feb. 2023), https://www.merckmanuals.com/home/men-shealth-issues/biology-of-the-male-reproductive-system/puberty-in-boys ("In boys, puberty usually occurs between the ages of 10 and 14 years. However, it is not unusual for puberty to begin as early as age 9 or to continue until age 16.").
- 97. See, e.g., Hooven, *supra* note 71, at 105 (noting that, by age 15, nearly every boy throws better than even the best girls); *see also* McKay & Burns, *supra* note 91 (significant male-female athletic differences emerge around age 12).
- 98. See Transgender Women Guidelines, WORLD RUGBY (Oct. 9, 2020), https://www.world.rugby/thegame/player-welfare/guidelines/transgender/women [hereinafter RUGBY REPORT].
- 99. Stéphane Bermon, Androgens and Athletic Performance of Elite Female Athletes, 24 CURRENT OP. in Endocrinology, Diabetes & Obesity 246, 249 (2017).
- 100. Langford, supra note 85; see also John J. McMahon et al., Sex Differences in Countermovement Jump Phase Characteristics, 5 Sports 8 (2017), available at https://www.mdpi.com/2075-4663/5/1/8 (finding that men jumped approximately 24% higher than women, in line with the range of 25%-27% reported in similar studies).

- 101. Langford, *supra* note 85; see *also* Jerry R. Thomas & Katherine T. Thomas, *Development* of Gender Differences in Physical Activity, 40 QUEST 219, 222 (1988) ("at 17 years of age the average male throws farther than 99% of the 17-year-old females"); Neil V. Watson, *Sex Differences in Throwing: Monkeys Having a Fling*, 5 TRENDS IN COCNITIVE SCI. 98, 98 (2001) (study found males were much better than females at throwing accuracy and rather than a learned characteristic, the data indicate that there is an innate component to the sexual differentiation).
- 102. Hilton & Lundberg, supra note 71, at 204.
- 103. Langford, supra note 85.
- 104. Hilton & Lundberg, *supra* note 71, at 203-04 (even after adjustment for mass, male Olympic weightlifters are 30% stronger than female weightlifters, and even "females who are 60% heavier than males do not overcome strength deficits"); see also Richard W. Bohannon et al., *Handgrip Strength: A Comparison of Values Obtained From the NHANES and NIH Toolbox Studies*, 73 AM.
 J. OCCUPATIONAL THERAPY 1, 1 (2019) (grip strength, a measure commonly used to indicate overall strength, differed significantly between males and females); D. Leyk et al., *Hand-grip Strength of Young Men, Women and Highly Trained Female Athletes*, 99 EUR. J. APPLIED PHYSIOLOGY 415, 415, 419-20 (2007) (males have significantly greater grip strength; even strength training by women will rarely make them stronger than the majority of untrained or not specifically trained men).
- 105. Langford, supra note 85.
- 106. Paul Gabrielsen, Why Males Pack a Powerful Punch, @THEU (Feb. 5 2020), https://attheu.utah. edu/facultystaff/carrier-punch/ (citing Jeremy S. Morris et al., Sexual Dimorphism in Human Arm Power and Force: Implications for Sexual Selection on Fighting Ability, 223 J. EXPERIMENTAL BIOLOGY 1 (2020)).
- 107. James R. Morrow, Jr. & W.W. Hosler, *Strength Comparisons in Untrained Men and Trained Women Athletes*, 13 MED. & SCI. SPORTS & EXERCISE 194, 196 (1981) (finding that untrained men were significantly stronger than trained female athletes in terms of relative strength for both the upper and lower body).
- 108. Robert H. Shmerling, *The Gender Gap In Sports Injuries*, HARVARD HEALTH BLOC (June 22, 2020), https://www.health.harvard.edu/blog/the-gender-gap-in-sports-injuries-201512038708 (citing Cindy Y. Lin et al., *Sex Differences in Common Sports Injuries*, 10 J. INJURY, FUNCTION, & REHAB.
 1073 (Oct. 2018)); see also Laurel Wentz et al., *Females Have a Greater Incidence of Stress Fractures Than Males in Both Military and Athletic Populations: A Systemic Review*, 176 MIL.
 MED. 420, 423-24, 428 (2011) (females may be more susceptible to stress fractures as a result of bone anatomy, lower aerobic capacity, and smaller muscle size); Neil K. McGroarty et al., *Sport-Related Concussion in Female Athletes: A Systematic Review*, 7 ORTHOPAEDIC J. SPORTS MED. 8, 10 (2020) (explaining that "female athletes may be more susceptible to concussion, have prolonged symptoms after a concussion, and are more likely to report a concussion than their male counterparts," and "[p]ossible factors that put female athletes at a higher risk . . . include biomechanical and hormonal differences").
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- 110. Coleman & Shreve, supra note 70.
- 111. Ohio State Forum, supra note 75.
- 112. Gary Klein, Allyson Felix Breaks Record For Most U.S. Olympic Track Medals, Surpassing Carl Lewis, L.A. TIMES (Aug. 7. 2021), https://www.latimes.com/sports/olympics/story/2021-08-07/ allyson-felix-us-womens-4x400-relay-tokyo-olympics; Ben Church & Hannah Ritchie, Allyson Felix Becomes Most Decorated US Track and Field Athlete in Olympics History, CNN (Aug. 7, 2021), https://www.cnn.com/2021/08/07/sport/allyson-felix-tokyo-2020-olympics-spt-intl/index.html.
- 113. Allyson Felix, World Athletics, https://worldathletics.org/athletes/united-states/allysonfelix-14309983 (last visited Mar. 6, 2023).
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- 130. See 19th FINA World Championships Budapest 2022, FINA, https://www.fina.org/competitions/ 2902/19th-fina-world-championships-budapest-2022/results?disciplines=&event=cd12364a-b18c-4f38-ab9e-8001eebd53c0 (winning time in women's 1500-meter freestyle was 15:30.15).
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- 134. Coleman & Shreve, supra note 70.
- 135. Id.
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- 137. U.S. Olympic Women's Hockey Team Preparing for Sochi Games by Playing High School Boys Teams in New England (Video), NESN (Jan. 12, 2014), https://nesn.com/2014/01/u-s-womensolympic-hockey-team-preparing-for-sochi-games-by-playing-boys-high-school-teams-in-newengland/.
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- 139. Hilton & Lundberg, *supra* note 71, at 204 (discussing "moderately-trained" individuals). The malefemale athletic advantage is also evident in individuals who are not athletically trained. *Id.* (male performance advantages are similar in magnitude in athletes and "untrained people").

- 140. See Orr et al., *supra* note 24, at 28-29, (taking this position for K-12 schools); *see also IOC 2022 Framework, supra* note 27, at 5 (Principle 7.1) ("Athletes should never be pressured by an International Federation, sports organization, or any other party (either by way of eligibility criteria or otherwise) to undergo unnecessary procedures or treatment to meet eligibility criteria.").
- 141. The degree of testosterone suppression required for males to compete in women's events varies by sport. See Section II(A), *infra* (discussing the various testosterone suppression policies of different athletic organizations).
- 142. Hilton & Lundberg, *supra* note 71, at 205; Hooven, *supra* note 71, at 128 (describing "the physical benefits of male puberty" that do not "disappear with the testosterone reduction that comes with a male-to-female gender transition"); Carole Hooven, *Opening Statements for New England University President's Forum* (Mar. 8, 2023), http://www.carolehooven.com/uploads/1/3/2/4/132403813/neu_forum_hooven.pdf (internal emphasis omitted).
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- 144. Hilton & Lundberg, *supra* note 71, at 205; *see also* Hooven, *supra* note 71, at 121 (certain effects of testosterone, such as "lengthening, enlarging, and strengthening [of bones]—are, for the most part, permanent"); Handelsman et al., *supra* note 29, at 818 ("developmental bone effects of androgens are likely to be irreversible.").
- 145. Hilton & Lundberg, supra note 71, at 205.
- 146. Id.
- 147. Taryn Knox et al, Transwomen in Elite Sport: Scientific and Ethical Considerations, 45 J. MED. ETHICS 395, 398 (2019) (citing L.J. Gooren et al., (Patho)physiology of Cross-Sex Hormone Administration to Transsexual People: The Potential Impact of Male-Female Genetic Differences, 47 ANDROLOGIA 5-19 (2015)).
- 148. Hilton & Lundberg, *supra* note 71, at 205 (citing Louis J.C. Gooren & Mathijs C.M. Bunck, *Transsexuals and Competitive Sports*, 151 EUR. J. ENDOCRINOLOGY 425 (2004)); see also Rugby Report, *supra* note 98 (most studies suggest muscle mass reduced by 5-10% after hormone therapy).
- 149. Hilton & Lundberg, supra note 71, at 205.
- 150. *Id.* at 207; see also Hooven, supra note 71, at 128 (noting that, "[i]n some trans women, no muscle at all is lost," and explaining that "the muscle gain in female-to-male transgender people, who move from female to male levels of [testosterone], is significantly larger than the muscle lost in the other direction").
- 151. For example, one study found that, even after 12 months of testosterone suppression, the knee strength of trans-identifying biological males remained "about 50% stronger" than a reference group of females. See Hilton & Lundberg, *supra* note 71, at 207 (citing Anna Wiik et al., *Muscle Strength, Size, and Composition Following 12 Months of Gender-Affirming Treatment in Transgender Individuals*, 105 J. CLINICAL ENDOCRINOLOGY & METABOLISM 805 (2020)).
- 152. See id. at 208 (citing Richard W. Bohannon et al., Reference Values for Adult Grip Strength Measured with a Jamar Dynamometer: A Descriptive Meta-Analysis, 92 Physiotherapy 11 (2006)) (describing study finding that grip strength of trans-identifying biological males with a mean of 8 years of hormone therapy was "25% higher than the female reference value"); Joanna Harper et al., How does Hormone Transition In Transgender Women Change Body Composition, Muscle Strength And Haemoglobin? Systematic Review With A Focus On The Implications For Sport Participation, 55 Brit. J. Sports Med. 865 (2020), available at https://bjsm.bmj.com/content/ bjsports/55/15/865.full.pdf ("even after 3 years of hormone therapy" trans-idenitfying male athletes may retain strength advantages over biological females).

- 153. Hilton & Lundberg, *supra* note 71, at 207 (citing E. Van Caenegem et al., *Preservation of Volumetric Bone Density and Geometry in Trans Women During Cross-Sex Hormonal Therapy: A Prospective Observational Study*, 26 OSTEOPOROS INT'L 35 (2015)). Significantly, muscle memory makes it likely that males who were athletically trained prior to undergoing hormone therapy can make up any loss in strength from testosterone reduction with continued training. *See* Knox et al., *supra* note 147, at 398 (strength training prior to muscle mass loss makes it "easier to regain muscle mass later"); Hilton & Lundberg, *supra* note 71, at 210 (noting that "muscle memory" in males who trained prior to hormone therapy may assist them in building and maintaining muscle as they retrain, suggesting that although testosterone is crucial for developing muscle mass, particularly during puberty, maintenance of that muscle mass "is not crucially dependent on circulating testosterone levels").
- 154. Blair R. Hamilton et al., Integrating Transwomen and Female Athletes with Differences of Sex Development (DSD) into Elite Competition: The FIMS 2021 Consensus Statement, 51 SPORTS MED. 1401, 1407 (2021) ("different populations of muscle cells may express different phenotypes of androgen sensitivity, raising the possibility that the muscle response to training may be different between men and women at the same testosterone concentrations").
- 155. Hilton & Lundberg, supra note 71, at 208.
- 156. Hilton & Lundberg, *supra* note 71, at 208-209; *see also* Harper et al., *supra* note 152 (reporting that hemoglobin levels decrease to those seen in biological women after just months of hormone therapy).
- 157. Christie Allen, Women Are Routinely Excluded from Exercise Research Across the Country. A New BYU Study Shows Why That's Misguided, BYU UNIV. COM. (Jan. 26, 2023), https://news.byu.edu/ women-are-routinely-excluded-from-exercise-research-across-the-country-a-new-byu-studyshows-thats-misguided#:~:text=A%20new%20BYU%20study%20published%20in%20the%20 Journal,women%E2%80%99s%20performance%20was%20just%20as%20consistent%20as%20 men%E2%80%99s.
- 158. Timothy A Roberts et al., Effect of Gender Affirming Hormones on Athletic Performance in Transwomen and Transmen: Implications for Sporting Organisations and Legislators, 55 BRIT.
 J. SPORTS MED. 577, 577, 580 (2021) (after a one-year period of testosterone suppression, transidentified biological males still maintained an advantage in push-ups and sit-ups and "ran 1.5 miles 21% faster than their female counterparts"; after two years of hormone therapy they lost an athletic advantage in ability to perform push-ups and sit-ups but "were still 12% faster").
- 159. See Verified Compl. at 20 & tbl. 6, Soule v. Connecticut Ass'n of Schools, 3:20-cv-00201-RNC (D. Conn. Feb. 12, 2020), ECF No. 1.
- 160. David Epstein, *Testosterone and the Transgender Athlete*, WALL ST. J. (Mar. 15, 2019), https://on.wsj.com/3IQHoy1 (quoting Joanna Harper).
- 161. *Richards v. U.S. Tennis Ass'n*, 93 Misc. 2d 713, 721-22 (N.Y. App. Div. 1977) (holding that under the New York Human Rights Law, Executive Law, § 290 *et seq.*, the United States Tennis Association could not use the "Barr body test" as the sole criterion for determining eligibility to play in the women's division of the U.S. Open, "where[,] as here, the circumstances warrant consideration of other factors").
- 162. JEWISH JOCKS: AN UNORTHODOX HALL OF FAME (Franklin Foer & Mark Tracy, eds., 2012), reprinted in Emily Bazelon, Cross-Court Winner, SLATE (Oct. 25, 2012), https://slate.com/culture/2012/10/jewish-jocksand-renee-richards-the-life-of-the-transsexual-tennis-legend.html.
- 163. Hooven, *supra* note 71, at 116.
- 164. Hilton & Lundberg, *supra* note 71, at 201. A study of Greek children found "[m]ale advantage of a similar magnitude." *Id.* (noting that 6-year-old Greek males "completed 16.6% more shuttle runs in a given time and could jump 9.7% further from a standing position").

165. *Id*.

- 166. Hilton Speech, supra note 73.
- 167. Knox et al., *supra* note 147, at 397.
- 168. Romuald Leper et al., Trends in Triathalon Performance: Effects of Sex & Age, 43 Sports Med. 851, 853 (2013); see Coleman, supra note 73, at 109-10.
- 169. See Hecox v. Little, 479 F. Supp. 3d 930, 982 (D. Ida. 2020) (questioning whether state law limiting participation of trans-identifying biologically male athletes ensures equality for female athletes in part because of "the incredibly small percentage of transgender women athletes in general"),

remanded Hecox v. Little, No. 20-35815, 2021 U.S. App. LEXIS 18903 (9th Cir., June 24, 2021), on remand, Order on Mootness Issue, No. 1:20-cv-00184-DCN (D. Idaho July 18, 2022) (holding case is not moot), affirmed, 2023 WL 1097255 (9th Cir. Jan. 30, 2023); see also Proposed Rulemaking, Athletic Teams, 88 Fed. Reg. at 22,884 (noting, in determining cost of proposed rule for athletic departments, "the relatively low number of transgender student-athletes relative to the overall population of student-athletes").

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- 172. See All America, College Swimming & Diving Coaches Association of America, https://www.cscaa.org/allamerican (last visited Apr. 6, 2023) ("Only student-athletes who competed in their championship finals are eligible for All-America Honors") [hereinafter All America].
- 173. *Lia Thomas*, swimcLoub, **https://www.swimcloud.com/swimmer/314430/meets/?page=1** (showing Thomas won races, including relays, at the following meets: NCCA Division I Women's Championship, Ivy League Championships, Penn vs. Dartmouth vs. Yale, Zippy Invite, Penn vs. Princeton v. Cornell, Penn vs. Brown, Villanova vs. Penn, and Penn vs. Columbia) (last visited Apr. 3, 2023).
- 174. NCAA Division I Women's Championship, SWIMCLOUD, https://www.swimcloud.com/results/194774/ event/3/0/ (in the 500 freestyle event, Thomas beat Emma Weyant and Erica Sullivan, both of whom won medals at the Tokyo 2020 Olympics); see Emma Weyant, TEAM USA, https://www. teamusa.org/usa-swimming/athletes/Emma-Weyant; Erica Sullivan, TEAM USA, https://www. teamusa.org/usa-swimming/athletes/Erica-Sullivan.
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- 215. See Idaho Code § 33-6203(c)(2)-(3) ("(2) Athletic teams or sports designated for females, women, or girls shall not be open to students of the male sex. (3) A dispute regarding a student's sex shall be resolved by the school or institution by requesting that the student provide a health examination and consent form or other statement signed by the student's personal health care provider that shall verify the student's biological sex. The health care provider may verify the student's biological sex as part of a routine sports physical examination relying only on one (1) or more of the following: the student's reproductive anatomy, genetic makeup, or normal endogenously produced testosterone levels."). The Idaho law applies to "[i]nterscholastic, intercollegiate, intramural, or club athletic teams or sports that are sponsored by a public primary or secondary school, a public institution of higher education, or any school or institution whose students or teams compete against a public school or institution of higher education." *Id.* § 33-6203(1).
- 216. Colleges routinely make use of practice players on women's teams. For example, women's basketball teams often scrimmage against male practice squads. Practice players may additionally act in assistant coaching roles to assist their teams.
- 217. See, e.g., Hecox v. Little, 479 F. Supp. 3d 930 (D. Idaho 2020) (blocking enforcement of Idaho's law prohibiting natal males from participating in girls' sports), remanded Hecox v. Little, No. 20-35815, 2021 U.S. App. LEXIS 18903 (9th Cir., June 24, 2021), on remand, Order on Mootness Issue, No. 1:20-cv-00184-DCN (D. Idaho July 18, 2022) (holding case is not moot), affirmed, 2023 WL 1097255 (9th Cir. Jan. 30, 2023); B.P.J. v. W. Va. State Bd. of Educ., 550 F. Supp. 3d 347 (S.D.W. Va. 2021) (temporarily enjoining West Virginia's law barring natal males from participating in girls' sports),

vacated 2023 WL 111875 (S.D.W. Va. Jan. 5, 2023) (holding state law was constitutional and did not violate Title IX), granting mot. for ini, pending appeal, No. 23-1078 (4th Cir. Feb. 22, 2023), denving appl. to vacate inj., No. 22A800 (U.S. Apr. 6, 2023); Compl., D.N. v. DeSantis, No. 21-cv-61344 (S.D. Fla June 29, 2021), ECF No. 1 (alleging that bill that would prevent biological males from participating in girls' sports is unconstitutional); A.M. by E.M. v. Indianapolis Pub. Sch., 617 F. Supp. 3d 950, 969-70 (S.D. Ind. 2022) (granting preliminary injunction prohibiting application of Indiana law prohibiting biological males from playing on girls' teams), dismissed as moot, 2023 WL 371646 (7th Cir. Jan. 19, 2023); Order Granting Pls.' Mot. for Prelim. Inj. at 2, Roe v. Utah High School Activities Ass'n, No. 220903262 (Utah 3rd Judicial Dist. Ct., Salt Lake City Aug. 19, 2022), https://www.acluutah.org/sites/ default/files/field_documents/roe_-_courts_order_granting_plaintiffs_motion_for_preliminary_ injunction.pdf (granting preliminary injunction blocking enforcement of portion of law "which effectively bans transgender girls from competing in pre-college school-related girls sports"); see also Bianca Quinlantan, 'This isn't the Olympics': GOP Transgender Laws Head to Court, Politico (July 3, 2021), https://www.politico.com/news/2021/07/03/transgender-laws-court-sportsrestrictions-gop-497892 (describing the lawsuits challenging state prohibitions on male-bodied athletes in female sport).

- 218. Compl. at 33, Tennessee v. U.S. Dep't of Educ., 615 F. Supp. 3d 807 (E.D. Tenn. 2022), ECF No. 1.
- 219. *Tennessee v. U.S. Dep't of Educ.*, 614 F. Supp. 3d 807, 816, 840 (E.D. Tenn. 2022) (enjoining federal officials from implementing the Department's Interpretation and holding plaintiffs were likely to succeed on their claim that the Department failed to follow applicable rulemaking requirements), appeal docketed, No. 22-5807 (6th Cir. Sept. 13, 2022).

If a biological male wins a women's event, a female athlete loses the event;

If a biological male is offered a spot on a women's team with limited roster spots, a female athlete loses a roster spot;

If a biological male is allowed to race in a women's event, a female athlete loses the opportunity to compete;

> If a biological male is allowed to take the field with a women's team, **a female athlete loses playing time**;

> And if a biological male is granted a women's athletic scholarship, a female athlete may lose a chance to attend the college of her dreams.

This is sex discrimination. And it is unlawful.



Questions about the report? Email info@iwf.org