



**A statement from Athlete Ally on the future of women’s sport,
co-authored by affiliated academics and endorsed by leading scholars in the
fields of Kinesiology, Law and Policy, and Gender Studies**

The Future of Women’s Sports Includes Transgender Women and Girls

“We can’t make demands for a false sense of fairness while ignoring the actual needs of women and girls.” - Megan Rapinoe, two-time World Cup Champion and Co-Captain of the US Women’s National Soccer Team

As advocates and scholars dedicated to advancing equality for women and girls in sport, we believe in the power of sport to empower all people—and to change the world by doing so. Exclusion and restrictions for transgender¹ athletes undermine this cause.

Transgender athletes are not and have never been a threat to women’s sport.

Many scholars and women’s organizations—including the Women’s Sports Foundation, the Tucker Center for Girls & Women in Sport, and the International Working Group on Girls and Women in Sport—have conducted extensive research into the issues women and girls in sport are confronting over the last 50 years. Women and girls continue to face unequal opportunities, inequitable funding, pay inequities, uneven media coverage driven by gender stereotypes, a lack of sponsorship opportunities, higher rates of sexual harassment and abuse, and incomplete implementation of Title IX in sport.² The consensus among scholars from multiple disciplines, including human biology, kinesiology, law and policy, and gender studies, is clear: the future of sports for women and girls includes both transgender and cisgender women and girls.

This document utilizes a close reading of peer-reviewed, credible sources to better understand trans athletes, to dispel misinformation about trans athletes that has spread in recent media and political debates, to outline critical legal and policy discussions about trans athletes, and to highlight why access to sport matters for everyone.

The real meaning behind “Protecting Women’s Sports”.

There is a robust and longstanding record of work on the part of countless advocates and professionals, inside and outside of sport, to protect and defend women’s sports by fighting for athletic opportunities, combating sexual assault, campaigning for quality media coverage, and demanding representation in leadership positions.

In the past few years, spurious concerns around “protecting women’s sports” have been amplified. Meanwhile, little attention has been given to the documented and critical issues facing women in sport. The idea that women’s sport needs protecting has become a vehicle expressly geared to excluding trans women and girls from sports.³

Who is leading this “protect women’s sports” call to action?

Trans youth are the most recent focus of a political agenda that positions trans people—especially trans women and girls—as a threat. Recently, anti-LGBTQ+ groups and lawmakers have targeted the rights of trans people in multiple realms, including sports.⁴

In the UK and US, attempts to frame trans athletes as a threat have been spearheaded by a handful of sports organizations led primarily by cisgender women who speak to the media at conferences and provide legislative testimony in support of banning or restricting the access of transgender people to sports. Behind the scenes, some of these organizations are supported by anti-LGBTQ+ conservative political organizations like the Alliance Defending Freedom (which the Southern Poverty Law Center classifies as a hate group⁵) and the Heritage Foundation. The rhetoric of groups that position themselves as being more moderate—such as the Women’s Sport Policy Working Group—is also widely applied in polemical attacks openly targeting trans youth.

The Alliance Defending Freedom filed a lawsuit in 2020 that contested the eligibility of two Black, trans girls who compete in high school track.⁶ In addition to illustrating the central role of anti-LGBTQ+ groups to the movement against trans athletes, the suit highlights the role of race in anti-trans politics. It follows a historic and racist pattern of targeting athletes of color who do not conform to white, western expectations of femininity. Narratives about protecting women’s sports have been tied to narratives against women of color who excel athletically, both in this case and within elite sports.⁷ State-sanctioned restrictions on trans women and girls in sports began in earnest when Idaho passed H.B. 500, the “Fairness in Women’s Sports Act,” in 2020. In 2021, legislators proposed 150 laws that target trans youth in sport and advanced restrictions on gender-affirming health care and access to public restrooms across thirty-six state legislatures.⁸ Multiple bills called for invasive medical examinations for children whose gender is called into question. Although there was a sharp uptick in attention to trans athletes in right-wing media,⁹ when the Associated Press interviewed lawmakers responsible for sponsoring recent legislation, none could identify specific instances of conflict over the participation of transgender athletes in their state.¹⁰ Still, as of June 18, 2021, nine additional laws have been signed or passed as Executive Order.

The proliferation of anti-trans messaging and bills starkly counters public opinion.¹¹ Recent, nationwide representative opinion polls find that 67% of American adults oppose laws to ban transgender students from joining teams that match their gender identity.¹² This opposition runs across political party lines with over 70% of Republicans and 75% of Democrats indicating their disapproval of legislation targeting trans athletes.¹³ Moreover, roughly half of Americans affirmatively support the right of transgender athletes to participate on youth teams that match their gender identity.

Access to sport participation is important—for everyone.

Sport imparts numerous social, physical, and mental health benefits, across all ages but particularly during the peak development years of childhood and young adulthood.¹⁴



Nearly 7 in 10 people in the United States between the ages of 6-12 participate in some form of athletics.¹⁵ Sport can help young people develop critical life skills such as communication, teamwork, and leadership, while providing them a community of peers with whom to connect and develop positive relationships.¹⁶ Girls who have access to sport consistently report better grades, better health, higher self-esteem, fewer risky behaviors, and a stronger belief in their abilities and competencies.¹⁷

Sport participation can also build cohesion across different social groups by increasing knowledge and understanding.¹⁸ Interpersonal relationships among cisgender and transgender young people can engender empathy and acceptance. Meaningful personal interactions with transgender people, like those fostered on athletic teams, can increase awareness about the lived experiences of transgender people and significantly reduce prejudice, exclusionary attitudes, and transphobia among cisgender people.¹⁹

Access to sport participation is critical for transgender youth.

Many transgender youth face an uphill battle in almost every part of their lives. Nearly 85% feel unsafe at school and 70% report avoiding bathrooms at school altogether.²⁰ Transgender young people are more likely to be the target of violence and harassment than their cisgender peers and nearly half of transgender youth attempt suicide.²¹

Sport can be a powerful tool for fighting depression, building community, and cultivating lasting self-confidence. Trans young people—like all people—deserve access to the support, care, and sense of belonging sport can create. Yet trans youth report significantly lower rates of sport participation than their cisgender peers.²² Despite most trans youth wanting to participate in physical activity, numerous barriers such as misinformed physical education teachers, social constraints around being out, and processes like registering for sports, complicate or prevent trans participation in sport.²³

Low participation rates for trans youth are especially troubling given research that indicate youth who participate in sport often have higher academic performance and lower rates of depression than those who do not.²⁴ Though 81.7% of trans youth would like to exercise more, they commonly report feeling hindered by fear of exercising in public and/or logistical constraints, such as financial limitations.²⁵

Transgender and nonbinary youth who have access to a gender-affirming space at school, like a sports team, are 25% less likely to report a suicide attempt within a year.²⁶

U.S. federal and state legal protections for transgender inclusion matter.

Major legal victories concerning the rights of trans people at work and at school have been won by those who argue for inclusion. Civil rights law under Title IX of the Education Amendments of 1972 forbids sex discrimination and ensures fairness of access for students in any educational program or activity that receives federal funding.²⁷ In nearly every K-12 school, college, and university across the United States, students are protected from exclusion on the basis of sex—including on athletic teams.



Seventeen states protect trans students from gender identity discrimination at school.²⁸ In these states, athletes cannot be denied opportunities to try out for the team that aligns with their gender identity.

Gender identity protections at the national level are less straightforward. On one hand, the U.S. Congress has not passed a law to create such protections for students at school. On the other, congressional lawmaking is not the only way that legal protections are secured; courts and federal agencies play important roles in codifying or overturning policies. Key mandates have been established through judicial and official agencies.

Several recent cases have evaluated existing laws that prohibit sex discrimination, including Title VII of the Civil Rights Act of 1964 (a federal law that outlaws workplace discrimination) and Title IX. In 2020, the U.S. Supreme Court announced a landmark ruling in *Bostock v. Clayton County*.²⁹ The Court held that existing sex discrimination law protects gay and trans employees. The implications of this ruling – that discrimination based on gender identity is a form of sex discrimination outlawed under federal law – are critically important for the future of transgender inclusion in sport.

Two federal appellate courts ruled in 2020 that Title IX protects trans students from discrimination in school restrooms and locker rooms.³⁰ Shortly after assuming office, President Biden issued Executive Order 13988 requiring all federal agencies charged with implementing civil rights laws to review current policies and to ensure they are in compliance with the U.S. Supreme Court decision in *Bostock v. Clayton County*.³¹ In June, the U.S. Department of Education issued its policy response stating that gender identity discrimination is a form of sex discrimination under Title IX, and that the decision in *Bostock* applies to Title IX's prohibition of discrimination at school.³²

As it stands, schools are allowed to host separate teams for girls and boys but recent federal guidance indicates schools cannot deny trans athletes opportunities that are available to their peers, including trying out for a team that matches their gender identity. Denying the use of restrooms or locker rooms or the opportunity participate on teams that align with their identity comes with mental and physical health risks for trans youth.³³ Educational programming, including athletics, must be available to all students.

Women's rights advocates and athletes support transgender inclusion in sport.

An overwhelming number of women's rights and gender justice organizations have stated that policing gender harms *all* women and girls. The growing list includes:

- American Association of University Women
- Black Women's Health Imperative
- Center for American Progress
- National Center for Lesbian Rights
- National Council of Jewish Women
- National Organization for Women
- Planned Parenthood Federation of America
- Women's Sports Foundation



These groups have worked ceaselessly to protect girls' and women's rights. They've joined forces with over 80 groups to affirm:

Girls and women who are transgender should have the same opportunities as girls and women who are cisgender to enjoy the ... benefits of sports, such as higher grades, higher graduation rates, and improved psychological well-being.³⁴

In 2020, advocacy groups denounced the onslaught of state-level legislation designed to discriminate against trans youth. According to the National Women's Law Center:

Given the many forms of violence and prejudice trans kids already face at school, banning trans girls from participation further tilts the scales against them while doing nothing to solve the genuine problems facing girls' athletics programs. In fact, many of these laws would subject all girl athletes to invasive medical examinations—all in the name of policing the bodies of transgender students and any girl who doesn't conform to their school's stereotypes of femininity.³⁵

The ACLU maintains that "politicians who introduce these anti-trans bills are not concerned with the integrity of girls' athletics ... We must see these efforts for what they are: fear mongering intended to push transgender and nonbinary people out of public spaces."³⁶ Ultimately, as the Women's Sports Foundation reminds us:

Sport can help break down barriers, create understanding and provide a place to belong. It is the power of sport that spurs our mission for all girls and women to have equal access and opportunity to play, regardless of their race, ethnicity, gender identity or expression, sexual orientation, ability, ZIP code or family income. We believe humanity wins when all girls and women, including transgender girls and women, have the opportunity to play.³⁷

High profile women athletes across the country are vocal supporters of trans inclusion in sports. United States Women's National Team star Megan Rapinoe, former World No. 1 tennis player Billie Jean King, and decorated professional basketball player, Candace Parker, joined nearly 200 other professional, Olympic, and National Collegiate Athletic Association (NCAA) women athletes in an amicus brief supporting trans youth in sport.³⁸

Close to 1,000 NCAA student-athletes mobilized to send two letters in support of trans athletes, calling on the NCAA to move championships out of states that passed athlete bans.³⁹ WNBA players Sue Bird and Natasha Cloud, WNBA Minnesota Lynx coach Cheryl Reeve, USWNT member Ali Krieger, U.S. Paralympian Alana Nichols, and dozens of additional athletes signed on to a similar letter to the NCAA last year.⁴⁰ In the words of King: "There is no place in any sport for discrimination of any kind. I'm proud to support all transgender athletes who simply want the access and opportunity to compete in the sport they love. The global athletic community grows stronger when we welcome and champion all athletes – including LGBTQI+ athletes."⁴¹ Women athletes, like advocacy groups, have a clear message: we support and welcome transgender women and girls in all areas of life, including on our sports teams.



Women's sports have a history of including transgender athletes.

Trans athletes' participation in sport is not new. Sport governing bodies have successfully negotiated trans inclusion at all levels of sport for decades. The International Olympic Committee has allowed trans athletes to compete since 2003 and not a single athlete, in over 54,000 Olympians, has been openly trans. The 2021 Games are poised to have the first trans athletes—Laurel Hubbard, a weightlifter from New Zealand; Chelsea Wolfe, a freestyle BMX rider, and a few others depending on the outcome of the Olympic Trials.⁴² The NCAA has had similar guidelines since 2011.⁴³

Though sport governing bodies have guidelines about trans athletes that require varying levels of medical interventions, from mandated surgery to specific hormone levels and identity document changes, most organizations have removed unscientific and exclusionary restrictions that prevent access in recent years. The evolution of these policies indicates that inclusion of trans women and girls is the future of women's sport.

Research on transgender athletes in women's sports supports inclusion.

In 2021, the Center for American Progress found that the inclusion of trans athletes at the high school level has had no negative impact on sport participation or athletic achievements for cisgender women and girls.⁴⁴ In fact, in states such as California and Connecticut that have had trans-inclusive policies for years, participation of women and girls overall has continued to grow.⁴⁵ Moreover, recent studies focusing on club and intercollegiate college athletes found a growing rate of acceptance for trans athletes and support for LGBTQ+ nondiscrimination policies from cis, heterosexual teammates.⁴⁶

For adolescent athletes, state-level high school athletic association policies are key to determining the terms of inclusion. These policies are also key to helping schools fully implement and comply with Title IX. However, the inclusion of transgender athletes at the high school level is currently contingent upon policies in the state where they live.⁴⁷ While state rules must be in compliance with federal law, state legislators vary in the extent to which their laws and state high school athletic association policies address questions about inclusion of transgender athletes on school sport teams.⁴⁸

Targeting transgender women in sport negatively impacts cisgender women.

Several states that have introduced anti-transgender legislation propose that eligibility for participation in the women and girls' category should be determined via invasive physical exams. Legislators in multiple states have proposed monitoring the testosterone levels of girls and women, testing their chromosomes, and/or inspecting their anatomy. Such proposals stem from contested policy changes at the international level that target gender nonconforming women competing in elite sport. Both the United Nations and Human Rights Watch argue that such practices violate basic human rights and have lasting negative impacts on the targeted athletes, especially Black and Brown women from Global South countries.⁴⁹ Meeting these eligibility requirements, the proposed legislation suggests, could extend to cisgender athletes.



Narrow definitions of how women should look also harms cisgender girls and women. Suspicion-based testing that is provoked by superficial comparisons of the physical appearances of girls and women is capricious at best and at worst explicitly disparages people who do not comply with stereotypical views of femininity.⁵⁰

Trans athlete bans distract from the many aforementioned and profound challenges facing women and girls in sport—including a lack of funding, pay inequities, a decreasing number of women coaches, unequal access to participation, underrepresentation in the media, vulnerability to sexual harassment and abuse, and insufficient implementation of Title IX. Narrow attempts to frame trans athletes as *the* problem for the survival of women's sport diverts attention from the more pressing problems for women's sport.

The science on transgender athletes is limited and often flawed.

The overwhelming majority of scientific studies on trans athletes report inconclusive results, rely on false comparisons, or explicitly mention an inability to use their findings to support a ban on transgender athletes. Too often, studies are cherry-picked to support ideology. Research findings around sex and gender are complex and studies that are most frequently cited are laden with limitations, flaws, and biases.

Scientific studies suggest multiple factors contribute to athleticism.⁵¹ Research shows a positive correlation between sport ability and aerobic capacity, cardiac capacity, flexibility, height, lean body mass, limb length, muscle mass, and red blood cell counts.⁵² Other studies reveal that socioeconomic status and access to external resources, such as coaching, facilities, and nutrition, similarly enhance performance.⁵³

Despite the numerous elements that shape athleticism, state lawmakers have focused primarily on testosterone levels when creating policy. Yet, nearly every study they cite acknowledges that the link between testosterone and athleticism is inconclusive at best, and inherently flawed, at worst.⁵⁴ The few studies on testosterone and transgender athletes relay different findings about athleticism; as a result, authors frequently note their inability to draw conclusive results about advantage based on evidence.⁵⁵

These studies contain a number of empirical issues as most are based on small, non-generalizable samples of participants.⁵⁶ Transgender athletes are rarely included in the population of study participants, so little is known about their athletic abilities generally, much less about how gender-affirming medical treatments impact their capacities.⁵⁷

Most studies erroneously suggest trans women are physiologically equivalent to cisgender men.⁵⁸ Much of the scholarship focuses on elite athletes and cannot accurately gauge the capabilities or experiences of K-12 student athletes. These concerns lead to biases and the misuse of findings. Furthermore, the research ignores historical, cultural, racial, ethnic, and geographical influences on sex and gender.



Perhaps most importantly, though, is the fact that transgender inclusion in sport is fundamentally an ideological, rather than a scientific, issue. People may turn to certain forms of scientific knowledge to understand the nuances of athletic performance, but what is at stake is not a scientific matter but the health and wellbeing of trans people. All people, including young, transgender and gender-diverse people, need the support, care, and a sense of belonging offered by access to sport.

Conclusion

The struggle for transgender inclusion in sport has tremendous ripple effects and is key to battles over transgender inclusion in society generally. Yet, increased visibility has been met with escalating—often violent—attempts to dehumanize transgender people of all ages. We urge a deeper commitment to the values that are foundational to a fair and just society, including respect across difference, inclusion, and equity, for *all* athletes. The movement demanding legal rights, equal opportunities, and full dignity for transgender people must be pursued within sport, not carved out from it. We affirm:

- Sport participation can support social, physical, and mental health and development. For transgender youth, sport participation can be lifesaving.
- Transgender athletes' participation in sport is not new. Trans inclusion policies have been in place at the youth and elite level for decades without any issues.
- There is no empirical evidence that transgender women and girls are currently – or have ever – dominated women's sports.⁵⁹
- Scientific evidence does not support the idea that transgender athletes have an unfair advantage in high school sport. Rather, significantly flawed studies have been exploited to serve ideological ends.
- Women's rights advocates and athletes overwhelmingly support transgender inclusion in sport.
- "Protecting women's sports" has become code for excluding transgender women and girls from playing sports, despite a lack of meaningful empirical evidence that transgender athletes have, or ever will, pose a threat to dominate women's sports. If we want to protect women's sports, we must focus on the instances of discrimination women athletes face at every level.

As scholars, athletes, and advocates, we have an opportunity to be leaders, modeling the welcoming of trans people for other areas of society where acceptance is lacking.

The future of women's sports includes transgender women and girls.

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Further Readings

In addition to the academic research cited in this document, there are a number of well-informed, accessible articles that make similar arguments. For further reading, see:

Tom Blunt, “Don’t Believe Everything You Read About Trans Women in Sports,” Athlete Ally, March 1, 2019, <https://www.athleteally.org/tom-blunt-trans-women-sports/>.

Gillian Branstetter, “Stop Using Girl Athletes to Justify Your Transphobia,” National Women’s Law Center, February 16, 2021, <https://nwlc.org/blog/stop-using-girl-athletes-to-justify-your-transphobia/>.

Ashleigh Carter, “‘Let Them Be Who They Are’: Missouri Father of Trans Daughter Testifies Against Anti-trans Bill,” *Now This*, March 16, 2021, <https://nowthisnews.com/news/let-them-be-who-they-are-missouri-father-of-trans-daughter-testifies-against-anti-trans-bill>.

Center for American Progress, “Access to Organized Sports is Vital for Transgender Students, New CAP Study Finds,” February 8, 2021, <https://www.americanprogress.org/press/release/2021/02/08/495546/release-access-organized-sports-vital-transgender-students-new-cap-study-finds/>.

David Crary and Lindsay Whitehurst, “Lawmakers Can’t Cite Local Examples of Trans Girls in Sports,” *AP News*, March 3, 2021, <https://apnews.com/article/lawmakers-unable-to-cite-local-trans-girls-sports-914a982545e943ecc1e265e8c41042e7>.

Dallas Ducar, “Title IX and Transgender Athletes,” *Boston Globe*, June 12, 2020, <https://www.bostonglobe.com/2020/06/12/opinion/title-ix-transgender-athletes/>.

Annie Hayes, “The Truth About Transgender Athletes and Performance,” *Men’s Health*, March 27, 2019, <https://www.menshealth.com/uk/fitness/a26798247/trans-athletes-sporting-performance/>.

Katrina Karkazis, “Stop Talking about Testosterone, There’s No Such Thing as ‘True Sex,’” *Guardian*, March 6, 2019, <https://www.theguardian.com/commentisfree/2019/mar/06/testosterone-biological-sex-sports-bodies>.

Shayna Medley and Galen Sherwin, “Banning Trans Girls from School Sports Is Neither Feminist nor Legal,” ACLU, March 12, 2019, <https://www.aclu.org/blog/lgbtq-rights/transgender-rights/banning-trans-girls-school-sports-neither-feminist-nor-legal>.



Chase Strangio and Gabriel Arkles, “Four Myths About Transgender Athletes Debunked,” ACLU, April 30, 2020, <https://www.aclu.org/news/lgbtq-rights/four-myths-about-trans-athletes-debunked/>.

Jack Turban, “Trans Girls Belong on Girls Sports Teams,” *Scientific American*, March 16, 2021, <https://www.scientificamerican.com/article/trans-girls-belong-on-girls-sports-teams/>.

¹ Transgender is an umbrella term for people whose gender identity differs from the sex they were assigned at birth. This includes people who may describe themselves using one or more of a wide variety of terms. This document will use some of these terms interchangeably including transgender, trans, gender nonconforming, and/or nonbinary, among others. Transgender identity is not dependent upon physical appearance or medical procedures. This document does not focus on people with intersex variations or nonbinary people (though some nonbinary people do identify as transgender) because much of the legislation in the United States and sport policy targets transgender people. See, “Key Concepts and Terms,” GLSEN, accessed June 6, 2021, <https://www.glsen.org/sites/default/files/2020-04/GLSEN%20Terms%20and%20Concepts%20Thematic.pdf>.

² See, as examples, Ellen J. Staurowsky, Nicholas Watanabe, Joseph Cooper, Cheryl Cooky, et al., *Chasing Equity: The Triumphs, Challenges, and Opportunities in Sports for Girls and Women* (New York: Women’s Sports Foundation, 2020), <https://www.womenssportsfoundation.org/wp-content/uploads/2020/01/Chasing-Equity-Executive-Summary.pdf>; Nicole Zerunyan, “Time’s Up: Addressing Gender-Based Wage Discrimination in Professional Sports,” *Loyola of Los Angeles Entertainment Law Review* 38 (2017): 229-258; Madeleine Pape, “Gender Segregation and Trajectories of Organizational Change: The Underrepresentation of Women in Sports Leadership,” *Gender and Society* 34, no. 1 (2020): 81-105; Kristine Bisgaard and Jan Toftegaard Støckel, “Athlete Narratives of Sexual Harassment and Abuse in the Field of Sport,” *Journal of Clinical Sport Psychology* 13, no. 2 (2019): 226-242; Lauren C. Hindman and Nefertiti A. Walker, “Sexism in Professional Sports: How Women Managers Experience and Survive Sport Organizational Culture,” *Journal of Sport Management* 34, no. 1 (2020): 64-76; Cheryl Cooky, LaToya D. Council, Maria A. Mears, and Michael A. Messner, “One and Done: The Long Eclipse of Women’s Televised Sports, 1989-2019,” *Communication and Sport* 9, no. 3 (2021): 347-371; Nancy Lough and Greg Greenhalgh, “Sponsorship of Women’s Sport,” in *Routledge Handbook of the Business of Women’s Sport*, ed. Nancy Lough and Andrea N. Geurin, 439-452 (London: Routledge, 2019); Julie Novkov, “Law, Policy, and Sexual Abuse in the #MeToo Movement: USA Gymnastics and the Agency of Minor Athletes,” *Journal of Women, Politics and Policy* 40, no. 1 (2019): 42-74; Alexandra Raso, “Abused in the Pursuit of a Dream: How USA Gymnastics Failed to Protect Its Gymnasts,” *Hofstra Labor and Employment Law Journal* 37 (2019): 439-476; Alixandra Yanus and Karen O’Connor, “To Comply or Not to Comply: Evaluating Compliance with Title IX of the Educational Amendments of 1972,” *Journal of Women, Politics and Policy* 37, no. 3 (2016): 341-358.

³ Ellen J. Staurowsky, Nicholas Watanabe, Joseph Cooper, Cheryl Cooky, et al., *Chasing Equity*.

⁴ Kristen Schilt and Laurel Westbrook “Bathroom Battlegrounds and Penis Panics,” *Contexts* 14, no. 3 (2015): 26–31; Esther Wang, “The Unholy Alliance of Trans-Exclusionary Radical Feminists and the Right Wing,” *Jezebel*, May 9, 2019, <https://jezebel.com/the-unholy-alliance-of-trans-exclusionary-radical-femin-1834120309>; Joanna Wuest, “A Conservative Right to Privacy:



Legal, Ideological, and Coalitional Transformations in US Social Conservatism,” *Law & Social Inquiry* (2021): 1-29, <https://doi.org/10.1017/lsi.2021.1>.

⁵ Southern Poverty Law Center, “Alliance Defending Freedom,” accessed June 21, 2021, <https://www.splcenter.org/fighting-hate/extremist-files/group/alliance-defending-freedom>.

⁶ *Soule et al. v. Connecticut Association of Schools, Inc. et al.*, No. 3:2020cv00201 (D. Connecticut 2020).

⁷ Katrina Karkazis and Rebecca Jordan-Young, “The Powers of Testosterone: Obscuring Race and Regional Bias in the Regulation of Women Athletes,” *Feminist Formations* 30, no. 2 (2018): 1-39.

⁸ Three additional pieces of legislation banning trans athletes were also proposed in the U.S. Congress in 2021. See bill tracking at Freedom for All Americans, “Legislative Tracker,” accessed June 18, 2021, <https://freedomforallamericans.org/legislative-tracker/> and at Equality Federation, <https://www.equalityfederation.org/equality-tracker/>.

⁹ Brianna January, “Fox News Has Aired More Segments on Trans Athletes so Far in 2021 than It Did in the Last Two Years Combined,” Media Matters for America, May 3, 2021, <https://www.mediamatters.org/fox-news/fox-news-has-aired-more-segments-trans-athletes-so-far-2021-it-did-last-two-years-combined>.

¹⁰ David Crary and Lindsay Whitehurst, “Lawmakers Can’t Cite Local Examples of Trans Girls in Sports,” *AP News*, March 3, 2021, <https://apnews.com/article/lawmakers-unable-to-cite-local-trans-girls-sports-914a982545e943ecc1e265e8c41042e7>.

¹¹ See, as examples, Naima Reddick, “Let Trans Women Play,” *Advocate*, August 31, 2020, <https://www.advocate.com/commentary/2020/8/31/usa-rugbys-naima-reddick-let-trans-women-play>; Megan Rapinoe, “Bills to Ban Transgender Kids from Sports Try to Solve a Problem That Doesn’t Exist,” *Washington Post*, March 28, 2021, [washingtonpost.com/opinions/2021/03/28/megan-rapinoe-transgender-kids-sports-ban/](https://www.washingtonpost.com/opinions/2021/03/28/megan-rapinoe-transgender-kids-sports-ban/); Brief of Amici Curiae 176 Athletes in Women’s Sports, Women’s Sports Foundation, and Athlete Ally in Support of Plaintiffs-Appellees and Affirmance, *Hecox, et al. v. Little et al.*, No. 20-35813 (U.S. Circuit Court of Appeals, Ninth District filed Dec 21, 2020) (“Hecox Athletes Brief”).

¹² Danielle Kurtzleben, “Republicans and Democrats Largely Oppose Transgender Sports Legislation, Poll Shows,” *NPR*, April 16, 2021, <https://www.npr.org/2021/04/16/987765777/republicans-and-democrats-largely-oppose-transgender-sports-legislation-poll-sho>. Margin of error is 3.3 percentage points on the full sample and slightly higher among partisan subgroups.

¹³ Danielle Kurtzleben, “Republicans and Democrats Largely Oppose Transgender Sports Legislation, Poll Shows,” *NPR*, April 16, 2021, <https://www.npr.org/2021/04/16/987765777/republicans-and-democrats-largely-oppose-transgender-sports-legislation-poll-sho>. Margin of error is 3.3 percentage points on the full sample and slightly higher among partisan subgroups.

¹⁴ Molly C. Easterlin, Paul J. Chung, Mei Leng, and Rebecca Dudovitz, “Association of Team Sports Participation with Long-term Mental Health Outcomes among Individuals Exposed to Adverse Childhood Experiences,” *JAMA Pediatrics* 173, no. 7 (2019): 681-688; Ellen J. Staurowsky, Mary Jane De Souza, Kathleen E Miller, Don Sabo, et al., *Her Life Depends On It III: Sport, Physical Activity, and the Health and Well-Being of American Girls and Women* (East Meadow, NY: Women’s Sports Foundation, 2015), <https://files.eric.ed.gov/fulltext/ED598621.pdf>.

¹⁵ Project Play, *State of Play 2018: Trends and Developments* (Aspen, CO: Aspen Institute, 2018), https://www.aspeninstitute.org/wp-content/uploads/2018/10/StateofPlay2018_v4WEB_2-FINAL.pdf.

¹⁶ Jennifer Turnnidge, Jean Côté, and David J. Hancock, “Positive Youth Development from Sport to Life: Explicit or Implicit Transfer?” *Quest* 66, no. 2 (2014): 203-217.



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- ¹⁷ Andrew J. Martin, "Examining a Multidimensional Model of Student Motivation and Engagement Using a Construct Validation Approach," *British Journal of Educational Psychology* 77, no. 2 (2007): 413-440; Staurowsky, De Souza, Miller, Sabo, et al., *Her Life Depends on It III*.
- ¹⁸ Elizabeth Levy Paluck and Chelsey S. Clark, "Can Playing Together Help Us Live Together?" *Science* 369, no. 6505 (2020): 769-770.
- ¹⁹ David Broockman and Joshua Kalla, "Durably Reducing Transphobia: A Field Experiment on Door-to-Door Canvassing," *Science* 352, no. 6282 (2016): 220-224; Joshua L. Kalla and David E. Broockman, "Reducing Exclusionary Attitudes through Interpersonal Conversation: Evidence from Three Field Experiments," *American Political Science Review* 114, no. 2 (2020): 410-425.
- ²⁰ Movement Advancement Project and GLSEN, *Separation and Stigma: Transgender Youth and School Facilities*, 2017, <https://www.glsen.org/sites/default/files/2020-06/Separation%20and%20Stigma%20-%20Full%20Report.pdf>.
- ²¹ National Academies of Sciences, Engineering and Medicine, *Understanding the Well-Being of LGBTQI+ Populations* (Washington, DC: The National Academies Press, 2020); Russell B. Toomey, Amy K. Syvertsen, and Maura Shramko, "Transgender Adolescent Suicide Behavior," *Pediatrics* 142, no. 4 (2018): e20174218.
- ²² The Trevor Project, "LGBTQ Youth Sports Participation," June 23, 2020, <https://www.thetrevorproject.org/2020/06/23/research-brief-lgbtq-youth-sports-participation/>.
- ²³ Ryan Storr, Kerry Robinson, Cristyn Davies, Lucy Nicholas, and Anneke Collison, *Game to Play? Exploring the Experiences and Attitudes Towards Sport, Exercise and Physical Activity Amongst Same Sex Attracted and Gender Diverse Young People* (Sydney: Western Sydney University, 2020), <https://researchdirect.westernsydney.edu.au/islandora/object/uws:55635/datastream/PDF/view>.
- ²⁴ The Trevor Project, "The Well-Being of LGBTQ Youth Athletes," August 31, 2020, <https://www.thetrevorproject.org/2020/08/31/research-brief-the-well-being-of-lgbtq-youth-athletes/>.
- ²⁵ Penelope Strauss, Angus Cook, Sam Winter, Vanessa Watson, D. Wright-Toussaint, and Ashleigh Lin, *Trans-Pathways: The Mental Health Experiences and Care Pathways of Trans Young People: Summary of Results* (Perth: Telethon Kids Institute, 2017), <file:///Users/jls1024/Downloads/TransPathwayReportLOWRESSinglepages.pdf>.
- ²⁶ The Trevor Project, "The Trevor Project Research Brief: LGBTQ and Gender-Affirming Spaces," December 2020, <https://www.thetrevorproject.org/wp-content/uploads/2020/12/LGBTQ-Affirming-Spaces-December-2020.pdf>.
- ²⁷ Title IX of the Education Amendments of 1972, 20 U.S.C. § 1681 (1972).
- ²⁸ Movement Advancement Project, "Equality Map: Safe School Laws," accessed March 29, 2021, https://www.lgbtmap.org/equality-maps/safe_school_laws/discrimination.
- ²⁹ *Bostock v. Clayton County, Georgia*, 590 U.S. ___ (2020).
- ³⁰ *Grimm v. Gloucester County School Board*, 972 F.3d 586 (4th Cir. 2020); *Adams v. School Board of St. Johns County*, 968 F.3d 1286 (11th Cir. 2020).
- ³¹ Exec. Order. No. 13988, 86 Fed. Reg. 7023 (January 20, 2021), <https://www.federalregister.gov/documents/2021/01/25/2021-01761/preventing-and-combating-discrimination-on-the-basis-of-gender-identity-or-sexual-orientation>.
- ³² U.S. Department of Education, Office for Civil Rights, *Federal Register Notice of Interpretation: The Department's Enforcement of Title IX of the Education Amendments of 1972 with Respect to Discrimination Based on Sexual Orientation and Gender Identity in Light of Bostock v. Clayton County*, Washington, DC: GPO, 2021, <https://www2.ed.gov/about/offices/list/ocr/docs/202106-titleix-noi.pdf>.
- ³³ <https://www.hrw.org/report/2016/09/14/shut-out/restrictions-bathroom-and-locker-room-access-transgender-youth-us>
- ³⁴ National Organization for Women, "Statement from Women's Rights and Gender Justice Organizations in Support of the Equality Act," accessed June 7, 2021, <https://now.org/media->



[center/press-release/statement-of-womens-rights-and-gender-justice-organizations-in-support-of-the-equality-act/](#).

³⁵ Gillian Branstetter, “Stop Using Girl Athletes to Justify Your Transphobia,” National Women’s Law Center, February 16, 2021, <https://nwlc.org/blog/stop-using-girl-athletes-to-justify-your-transphobia/>.

³⁶ Shayna Medley and Galen Sherwin, “Banning Trans Girls from School Sports Is Neither Feminist nor Legal,” ACLU, March 12, 2019, <https://www.aclu.org/blog/lgbtq-rights/transgender-rights/banning-trans-girls-school-sports-neither-feminist-nor-legal>.

³⁷ Women’s Sports Foundation, “WSF Statement on President Biden’s ‘Executive Order on Preventing and Combating Discrimination on the Basis of Gender Identity or Sexual Orientation,’” January 27, 2021, https://www.womenssportsfoundation.org/media_statement/wsf-statement-on-president-bidens-executive-order-on-preventing-and-combating-discrimination-on-the-basis-of-gender-identity-or-sexual-orientation/.

³⁸ Hecox Athletes Brief.

³⁹ Julie Kliegman, “Nearly 550 College Athletes Demand NCAA Pull Championships from States with Anti-Trans Sports Legislation,” *Sports Illustrated*, March 10, 2021, <https://www.si.com/college/2021/03/10/ncaa-petition-anti-trans-legislation>.

⁴⁰ Athlete Ally, “500+ Student Athletes Call on NCAA to Stand with Trans Athletes,” June 10, 2020, <https://www.athleteally.org/student-athletes-ncaa-idaho/>.

⁴¹ Hecox Athletes Brief.

⁴² Jack Turban, “Trans Girls Belong on Girls’ Sports Teams: There is No Scientific Case for Excluding Them,” *Scientific American*, March 16, 2021, <https://www.scientificamerican.com/article/trans-girls-belong-on-girls-sports-teams/>.

⁴³ The NCAA guidelines highlight the importance of transgender inclusion in all educational programs, including intercollegiate athletics. According to the guidelines, “the NCAA believes in and is committed to diversity, inclusion and gender equity among its student-athletes, coaches and administrators.” National Collegiate Athletic Association, “NCAA Inclusion of Transgender Student-Athletes,” 2011, http://www.ncaa.org/sites/default/files/Transgender_Handbook_2011_Final.pdf. In addition, the NCAA’s 2016 nondiscrimination policy explicitly prohibits discrimination on the basis of gender identity. National Collegiate Athletic Association, “NCAA Championships - Antidiscrimination Policy,” 2016, https://www.ncaa.org/sites/default/files/DIII-INC_LGBTQPolicyGuide_Web_20180822.pdf. As of 2021, championship sites hosting NCAA events in all divisions must verify how they will provide an environment free of discrimination. National Collegiate Athletic Association, “NCAA Board of Governors Statement on Transgender Participation,” 2021, <https://www.ncaa.org/about/resources/media-center/news/ncaa-board-governors-statement-transgender-participation>.

⁴⁴ Goldberg, “Fair Play.”

⁴⁵ National Federation of High Schools, “2018-19 High School Athletics Participation Survey,” accessed April 23, 2021, https://www.nfhs.org/media/1020412/2018-19_participation_survey.pdf.

⁴⁶ Brittanie Atteberry-Ash and Michael R. Woodford, “Support for Policy Protecting LGBT Student Athletes among Heterosexual Students Participating in Club and Intercollegiate Sports,” *Sexuality Research and Social Policy* 15, no. 2 (2018): 151-62; Andrew R. Flores, Donald P. Haider-Markel, Daniel C. Lewis, Patrick R. Miller, Barry L. Tadlock, and Jami K. Taylor, “Public Attitudes about Transgender Participation in Sports: The Roles of Gender, Gender Identity Conformity, and Sports Fandom,” *Sex Roles* 83, nos. 5-6 (2020): 382–98.; Katrina Pariera, Evan Brody, and D. Travers Scott, “Now That They’re Out: Experiences of College Athletics Teams with Openly LGBTQ Players,” *Journal of Homosexuality* 68, no. 5 (2021): 733-51.



⁴⁷ Chris Mosier, “K-12 Policies,” *Transathlete*, accessed April 9, 2021, <https://www.transathlete.com/k-12>.

⁴⁸ In some states, such as Minnesota and Massachusetts, transgender athletes are allowed to compete on the teams that match their identity without any restrictions. In others states, including Illinois and Virginia, high school association policies require transgender athletes to document a medical transition in order to be eligible for athletic participation on the team that matches their gender identity. In states such as Georgia and New Mexico, athletic eligibility is determined only by the sex designated on a student’s birth certificate. Then there are select states, like Pennsylvania, where local schools decide on eligibility rules for transgender athletes. Ten states offer no statewide guidance for incorporating transgender athletes. See Mosier, “K-12 Policies.”

⁴⁹ United Nations, *Intersection of Race and Gender Discrimination in Sport: Report of the United Nations High Commissioner for Human Rights*, June 15, 2020, <https://undocs.org/en/A/HRC/44/26>; Human Rights Watch, “‘They’re Chasing Us Away from Sport’: Human Rights Violations in Sex Testing of Elite Women Athletes,” December 2020, <https://www.hrw.org/report/2020/12/04/theyre-chasing-us-away-sport/human-rights-violations-sex-testing-elite-women#>

⁵⁰ Kathryn Henne, “The ‘Science’ of Fair Play in Sport: Gender and the Politics of Testing,” *Signs* 39, no. 3 (2014): 787-812; C. Riley Snorton, *Black on Both Sides: A Racial History of Trans Identity* (Minneapolis: University of Minnesota Press, 2017).

⁵¹ For examples, see Tom D. Brutsaert and Esteban J. Parra, “What Makes a Champion? Explaining Variation in Human Athletic Performance,” *Respiratory Physiology & Neurobiology* 151, nos. 2-3 (2006): 109-123; and Lisa M. Guth and Stephen M. Roth, “Genetic Influence on Athletic Performance,” *Current Opinion in Pediatrics* 25, no. 6 (2014): 653-658.

⁵² For examples, see Ross Tucker and Malcolm Collins, “What Makes Champions? A Review of the Relative Contribution of Genes and Training to Sporting Success,” *British Journal of Sports Medicine* 46, no. 8 (2012): 555-561; Goran Ranković, Vlada Mutavdžić, Dragan Toskić, Adem Preljević, et al., “Aerobic Capacity as an Indicator in Different Kinds of Sports,” *Journal of the Association of Basic Medical Sciences* 10, no. 1 (2010): 44-48; Ysabel Jacobs, Tania Spiteri, Nicolas H. Hart, and Ryan S. Anderton, “The Potential Role of Genetic Markers in Talent Identification and Athlete Assessment in Elite Sport,” *Sports* 6, no. 8 (2018): <https://doi.org/10.3390/sports6030088>.

⁵³ Andrew B. Bernard and Meghan R. Busse, “Who Wins the Olympic Games: Economic Resources and Medal Totals,” *Review of Economic and Statistics* 86, no. 1 (2004): 413-417.

⁵⁴ As just one example of taking scientific conclusions out of context, several state bills (Arizona, Idaho, and Montana) cite Neel Burton’s June 2, 2012 “The Battle of the Sexes” blog in *Psychology Today* as evidence that trans girls and women possess an unfair advantage in sport due to testosterone levels. Although Burton focuses on differences between cisgender men and cisgender women, and does not reference transgender individuals, he concludes that “biological advantages and disadvantages are more or less equally distributed between the sexes. . . . [A]nd it would seem there is no clear winner between men and women.” Neel Burton, “Men vs. Women: No Clear Winner,” *Psychology Today*, July 2, 2012, <https://www.psychologytoday.com/us/blog/hidden-and-see/201207/the-battle-the-sexes>.

⁵⁵ Timothy A. Roberts, Joshua Smalley, and Dale Ahrendt, “Effect of Gender Affirming Hormones on Athletic Performance in Transwomen and Transmen: Implications for Sporting Organisations and Legislators,” *British Journal of Sports Medicine* 55, no. 11 (2021): 577-583. Similarly, in reviewing policies, Jones et. al concluded that “there is no direct or consistent research suggesting transgender female individuals (or male individuals) have an athletic advantage at any stage of their transition.” Bethany Alice Jones, Jon Arcelus, Walter Pierre Bouman, and Emma Haycraft, “Sport and Transgender People: A Systematic Review of the



Literature Relating to Sport Participation and Competitive Sport Policies,” *Sports Medicine* 47, no. 4 (2017): 701-716.

⁵⁶ See, as example, Roberts, Smalley, and Ahrendt, “Effect of Gender Affirming Hormones on Athletic Performance.”

⁵⁷ Those in favor of exclusionary practices frequently cite a handful of flawed studies to support their position. In “Effect of Gender Affirming Hormones on Athletic Performance,” Roberts, Smalley, and Ahrendt highlight one aspect of their research to suggest a difference in athletic performances between trans and cis athletes; however, their overall evidence shows no difference in abilities. In a non-peer reviewed study, Wiik and colleagues assessed the effects of gender-affirming treatment on muscle function, size, and composition in eleven trans women and twelve trans men. In addition to the small, non-generalizable sample size, the authors acknowledge that in focusing on non-athletes, “it is still uncertain how the findings would translate to transgender athletes undergoing advanced training regimens during the gender-affirming intervention.” They also admit that in looking at muscles, they “only assessed proxies for athletic performance.” Anna Wiik, Tommy R. Lundberg, Eric Rullman, Daniel P. Andersson, et al., “Muscle Strength, Size, and Composition Following 12 Months of Gender-Affirming Treatment in Transgender Individuals,” *Journal of Clinical Endocrinology and Metabolism* 105, no. 3 (2020): e805-e813.

⁵⁸ Emma N. Hilton and Tommy R. Lundberg, “Transgender Women in the Female Category of Sport: Perspectives on Testosterone Suppression and Performance Advantage,” *Sports Medicine* 51, no. 2 (2020): 199-214; Michael J. Joyner, “Physiological Limits to Endurance Exercise Performance: Influence of Sex: Sex, Exercise and Elite Endurance Performance,” *The Journal of Physiology* 595, no. 9 (2017): 2949-2954; Women’s Sport Policy Working Group, “The Issue,” accessed April 1, 2021, <https://womenssportspolicy.org/the-issue/>.

⁵⁹ Shoshana K. Goldberg, “Fair Play: The Importance of Sports Participation for Transgender Youth,” Center for American Progress, February 8, 2021, <https://www.americanprogress.org/issues/lgbtq-rights/reports/2021/02/08/495502/fair-play/>; David Crary and Lindsay Whitehurst, “Lawmakers Can’t Cite Local Examples of Trans Girls in Sports,” *AP News*, March 3, 2021, <https://apnews.com/article/lawmakers-unable-to-cite-local-trans-girls-sports-914a982545e943ecc1e265e8c41042e7>.