

Additional Trans Facts and Resources Related to Sports

1. **The LGBT community is divided over this issue.** Nine-time Wimbledon singles champion, lesbian, and longtime LGBT advocate [Martina Navratilova stated](#) that it's "insane" and "cheating" to permit biological males who declare themselves to be trans women to compete against women in women's sports. She wrote:

*"A man can decide to be female, take hormones if required by whatever sporting organisation is concerned, win everything in sight and perhaps earn a small fortune, and then reverse his decision and go back to making babies."*¹

2. **Men have multiple physical advantages over women.** [According to Live Science](#), well-documented physical advantages men have over women include:

height, weight, broader shoulders, greater circulating blood volume, greater resistance to dehydration, larger lung capacity, thicker skin, faster sensory frame shifting, more hemoglobin in the blood, greater upper-body strength, faster reaction times, greater bone density in the arms, larger sweat capacity, higher systolic blood pressure, higher muscle-to-fat ratio, and larger hearts.²

3. **Men are physically stronger than women, on average.** A study in the *Journal of Applied Physiology* found that men had an average of 26 lbs. (12 kilograms) more skeletal muscle mass than women. Women also exhibited an average of about 40 percent less upper-body strength and 33 percent less lower-body strength.³
4. **In general, men are also faster than women.** The fastest woman in the world, Florence Griffith Joyner, ran the 100-meter dash in just 10.49 seconds in 1988, and that record remains unbroken. Yet her fastest time wouldn't have even qualified her for the men's 2016 Olympic competition, which requires competitors to finish the 100-meter sprint in 10.16 seconds or less.
5. **An increase in testosterone enhances physical performance.** Males have an average testosterone of about 25 nmol/L; women about 3.0 nmol/L.
6. **ICO standards for testosterone of women is less than 10nmol/L, which is at least three times the female average.** Many are pushing for this to change to less than 5nmol/L. Transgender women need testosterone suppression medication to fit this criterion.
7. **The performance gap between males and females on average is 10-30 percent** depending on the sport, and men have a large advantage in speed and power over women.
8. **The physical advantages of pubescent testosterone exposure that remain after transition** include:
 - larger bone structure including broader shoulders, larger hands and feet, smaller hips

- larger organs including the heart (increases the capacity of the body to carry oxygen)
 - a higher muscle mass to bone ratio (Males have 80 percent more muscle mass in upper bodies and 55 percent more in their legs than females.)
 - higher hemoglobin levels (carries oxygen to the cells)
 - increased muscle myonuclei (aids in training and increases muscle memory)
9. **Men do not have to deal with the hormonal fluctuations of menstruation and menopause that can negatively affect performance.** For women, menstruation can cause a decrease in power, a compromise in recovery, increased lethargy, psychological aspects, cramping, and the issue of containing flow.

News Articles About Transgender Athletes

- [Comparing Athletic Performances: The Best Elite Women to Boys and Men](#) – “If you know sport, you know this beyond a reasonable doubt: there is an average 10-12% performance gap between elite males and elite females. The gap is smaller between elite females and non-elite males, but it’s still insurmountable and that’s ultimately what matters.”
- [Transgender Athlete Wins Connecticut Girls State for Second Time](#) – “We all know the outcome of the race before it even starts; it’s demoralizing,” she said. “I fully support and am happy for these athletes for being true to themselves. They should have the right to express themselves in school, but athletics have always had extra rules to keep the competition fair.”
- [Female-to-Male Transgender Teen Dominates Texas Girls State Wrestling](#) – Male-born transgender weight lifter, Laurel Hubbard, won gold in the heavyweight female category at 2017 Australia Weightlifting Open. Laurel was expected to win gold at 2018 Commonwealth Games but pulled out due to injury and is expected to qualify as a woman for the 2020 Tokyo Olympic Games.
- [Transgender Volleyball Player Stirs Controversy](#) – Thirty-three-year-old, 6’ 3” tall Brazilian volleyball player Tifanny Abreu is expected to be one of the first male-born transgender athletes competing as a woman in the Olympics at Tokyo 2020.
- [Transgender Cyclist Wins World Women’s Title](#) – Male-born transgender cyclist Rachel McKinnon won gold in female track cycling at 2018 UCI Masters Track Cycling World Championships.

Fair Play for Women Links to Trans Sports Issues

<https://fairplayforwomen.com/>

Why is transgender inclusion a problem in female competitive sport?

Is it fair to allow transwomen to compete in female sport?

Sport may be a human right but the spirit of fair play must prevail

Open Letter to the International Olympic Committee by Ana Paula Henkel

What are the biological sex differences between males and females?

USA Powerlifting stands up for facts and fairness and makes the female category for females only?

Guidelines Supporting Single Sex Sport Policy Development

Public campaign to prompt sports governing bodies to review their policies to ensure fair play for women and girls

Transgender sport: Advantage upon advantage

IOC Consensus Meeting on Sex Reassignment and Hyperandrogenism

USA Powerlifting Transgender Participation Policy

Professor of physiology says transgender athletes have advantages in speed, power.

Circulating testosterone as the hormonal basis of sex differences in athletic performance
(pages 803-829)

Transgender Sports: Men and Women Have Physical Differences That No Surgery or Hormone Treatment Can Change

¹ Savage, R. (2019, February 18). Trans sportswomen hit back at tennis ace Navratilova's "cheating" comments. Retrieved from <https://www.reuters.com/article/britain-lgbt-sport/trans-sportswomen-hit-back-at-tennis-ace-navratilovas-cheating-comments-idUSL5N20D467>

² Ghose, T. (2015, December 7). Women in Combat: Physical Differences May Mean Uphill Battle. Retrieved from <https://www.livescience.com/52998-women-combat-gender-differences.html>

³ Janssen, I., Heymsfield, S. B., Wang, Z., Ross, R. (2000). Skeletal muscle mass and distribution in 468 men and women aged 18–88 yr. *Journal of Applied Physiology* 89(1), 81-88.