



FREQUENTLY ASKED QUESTIONS – ABOUT SCIENCE AND SEX

WomensSportsPolicy.org

Q23. When post-pubescent trans girls take gender-affirming hormones, do their athletic performances decline? If so, does any performance or "legacy" advantage remain?

A23. Going on gender affirming hormones causes a decline in circulating levels of testosterone which, if consistently maintained over time, has some effect on athletic performance. This effect seems to be primarily on endurance, not on strength and power. The effect on speed seems to be dependent on the extent to which the event is endurance- as opposed to strength- and power-based. Thus, the nature and extent of the decline in male performance advantage, also known as the "legacy advantage", appears to depend on the sport and the event. It also depends on the extent to which the individual experienced male puberty before they began their physical transition, and on how high they choose to maintain their testosterone levels once they do go on gender affirming hormones. Regardless, as we explain in our answer to Question 15, the current state of the peer reviewed literature is that legacy advantages remain significant.