

SEX SEGREGATION IN SPORTS AS A PUBLIC HEALTH ISSUE

Nancy Leong[†] & Emily Bartlett[†]

This Article contributes to the growing debate about the merits of sex segregation in sports by approaching sex segregation in sports as a public health issue. Participation in sports has profound consequences for women's health. Engagement in athletics affects physical fitness, disease prevention, self-esteem, mental wellness, eating disorders, and many other health-related issues.

Sex segregation in sports reduces women's participation in sports and changes the nature of the sports in which women participate. Both of these issues have implications for the myriad health issues we discuss. The Article argues that analysis under the Equal Protection Clause of governmentally-imposed sex segregation must incorporate these consequences. Even where the government has plausible reasons for segregating sports by sex, those reasons may not be sufficient to survive intermediate scrutiny when the health consequences of segregation are taken into account. The Article does not argue that sports should never be segregated by sex. Rather, it argues that the correct analysis must take into account all the relevant considerations, including those affecting health.

The Article proceeds as follows. Part I questions the default assumption of sex segregation in sports. Part II considers sex segregation as a public health issue, noting the relationship between sports participation and a variety of physical, mental, and emotional health issues for women. To the extent that sex segregation depresses or alters women's participation in sports for the worse, that issue is one implicating

[†] Professor, University of Denver Sturm College of Law. For thoughtful comments and suggestions, we are grateful to Rebecca Aviel, Owen Davies, Charlotte Garden, Anil Kalhan, Margo Kaplan, Justin Marceau, Rachel Moran, Justin Pidot, and Dara Purvis. We appreciate the helpful feedback we received on an earlier version of this Article from the participants at Duke University School of Law's "Sex and Sport" conference. Finally, we are grateful to the *Cardozo Law Review* for outstanding editorial work, including Jared Vasconcellos Grubow, Nick Herbert, Corey Hirsch, Austin Howard, Nathan Jablow, Dana Kennedy, Jesse Kitnick, Jacklyn Kleban, Rachel Klein, James Koenderman, Lauren Kostman, Ilana Kornfeld, and Jennifer Pierce.

[†] J.D. Candidate (May 2019), Washington University School of Law.

important public health considerations. Finally, Part III discusses the implications of treating sex segregation in sports as a public health issue, both for the law and for sports more broadly.

TABLE OF CONTENTS

INTRODUCTION	1814
I. SEX SEGREGATION IN SPORTS	1816
II. A PUBLIC HEALTH ISSUE?	1820
A. <i>What Is a Public Health Issue?</i>	1821
B. <i>The Health Implications of Sports Participation</i>	1822
1. Physical Health Implications	1823
2. Mental Health Implications	1830
C. <i>Sex Segregation as a Public Health Issue</i>	1836
III. IMPLICATIONS	1848
A. <i>The State of the Law</i>	1848
B. <i>Considering Sex Integration</i>	1852
CONCLUSION	1856

INTRODUCTION

Sex segregation remains the norm in sports of all kinds. Whether the athletes in question are elite gymnasts, high school lacrosse players, or kindergartners playing soccer, the default assumption is that sports should be segregated by sex.

Recently, scholars have begun to question whether sex segregation is necessary, appropriate, or even legal.¹ Although the answers to these questions likely vary depending on the nature of the sport and the level of participation, it is worth questioning the assumptions that lead uncritically to sex segregation across the board.

¹ See Nancy Leong, *Against Women's Sports*, 95 WASH. U. L. REV. 1249 (2018) (arguing that sex segregation is in many instances illegal under the Equal Protection Clause of the Fourteenth Amendment when intermediate scrutiny is applied to sex-segregated sports); see also EILEEN McDONAGH & LAURA PAPPANO, *PLAYING WITH THE BOYS: WHY SEPARATE IS NOT EQUAL IN SPORTS* (2008).

Governmental segregation of sports by sex is evaluated under the Equal Protection Clause.² The Supreme Court has held that sex or gender segregation must be evaluated under intermediate scrutiny, meaning that the government must show that the segregation is justified by an important interest and closely tailored to further that interest.³ As one of us has argued elsewhere, many current instances of sex segregation likely fail to survive intermediate scrutiny. Sex segregation incorporates disproven binary notions of both sex and gender, relies on unproven notions of male physical superiority, undesirably reinforces gender stereotypes, and prevents us from critically examining our basic assumptions about what a sport is in the first place.

This Article adds a critical yet previously unaddressed dimension to the intermediate scrutiny analysis by approaching sex segregation in sports as a public health issue. Participation in sports has consequences for women's health, ranging from physical fitness to disease prevention to self-esteem to mental wellness to eating disorders. Critically, sex segregation in sports both reduces women's participation in sports and changes the nature of the sports in which women participate, both of which have implications for myriad health issues. The equal protection analysis must incorporate these consequences. Even where the government has some plausible reasons for segregating sports by sex, those reasons may not be sufficient to survive intermediate scrutiny when the health issues are taken into account.

This Article proceeds as follows. Part I surveys the arguments regarding sex segregation in sports. Part II considers sex segregation as a public health issue, noting the relationship between sports participation and a variety of physical, mental, and emotional health issues for women. To the extent that sex segregation depresses or alters women's participation in sports, there are important public health implications.

² See, e.g., *Mercer v. Duke University*, 190 F.3d 643 (4th Cir. 1999); *Beattie v. Line Mtn. Sch. Dist.*, 992 F. Supp. 2d 384 (2014). Non-government-imposed sex segregation might be evaluated under a number of frameworks, including Title VII for professional sports, Title IX for college and high school sports when the segregation is implemented by an educational institution that receives federal funding, and myriad state and local laws that, in some instances, reach private entities. Given the wide array of sports and levels of competition, for purposes of this Article we will focus on sports that are regulated by various governmental entities and are subject to the Equal Protection Clause. In other arenas, we think that an equivalent standard should be used to evaluate the appropriateness of sex segregation, even when such segregation would not be illegal.

³ See generally *United States v. Virginia*, 518 U.S. 515 (1996); *Miss. Univ. for Women v. Hogan*, 458 U.S. 718 (1982); *Craig v. Boren*, 429 U.S. 190 (1976).

Finally, Part III surveys the state of the law governing sex segregation. It then discusses the implications of treating sex segregation in sports as a public health issue, both for the law and for sports more broadly.

I. SEX SEGREGATION IN SPORTS

Scholars have raised a number of arguments relating to sex segregation in sports. Some recommend it unqualifiedly; some believe in total or near-total integration; some believe that practices should vary by sport and by level of competition; and some believe in a menu of sex-segregated and sex-integrated options for athletes. As a foundation for the remainder of this Article, this Part will briefly summarize those arguments.

Laws, policies, and norms work together to create a presumption that when women play sports, they should generally play sports with other women—that is, they should both practice and compete with and against other women.⁴ This Article challenges the logic underlying this longstanding and largely unquestioned presumption. Previous research undermines the idea that sex should be the default organizing principle for sports at all ages and at all levels of competition: (1) sex and gender are not the same thing and neither is binary; (2) the assumption that women cannot compete against men, or that boys cannot compete against girls, is false and/or unproven with respect to many sports; (3) sex-segregated sports rely on and reinforce harmful gender stereotypes; and (4) sex-segregated sports blindly prioritize men’s physical abilities over women’s physical abilities.⁵ This Part briefly considers each of these in turn.

First, sex-segregated sports uncritically perpetuate the false assumption that sex and gender are both equivalent and binary. Sex is a biological category, and gender is a social construction.⁶ Sports continue to conflate the terms “sex” and “gender” and enforce a strict separation between sports teams classified as either “male” or “female.” Biologists, however, have long recognized that people cannot be forced into strict categories of either male or female. For biological classification purposes, male sex is typically determined by an “X” and “Y”

⁴ Leong, *supra* note 1, at 1262.

⁵ *Id.*

⁶ See generally JUDITH BUTLER, GENDER TROUBLE (2d ed. 1999); JUDITH BUTLER, UNDOING GENDER (2004).

chromosome, and female sex is characterized by two “X” chromosomes.⁷ Biologists also recognize other chromosomal possibilities, including “XXY” and “XYY.”⁸ Different combinations of chromosomes may lead to different physical attributes in addition to developmental differences.⁹ Similarly, research demonstrates that gender is also not binary.¹⁰ While it is not the focus of this Article, the uncritical decision to divide sports of all levels into binary categories that fail to capture the complexity of both sex and gender has and will continue to lead to unsatisfying solutions.¹¹

Despite the scientific evidence of traditional notions of male and female oversimplifying sex classification, many sports stakeholders remain wedded to the idea of a sex binary. One consequence of this notion is the invasive practice of so-called “gender testing”—although what is really being tested is an athlete’s biological sex.¹² Female athletes are subjected to gender testing at high levels of international and Olympic competition in order to prove they are female before participating in exclusively female sports.¹³ Proponents of gender testing might assert that the practice is important to ensure a level playing field. But gender testing unnecessarily conflates male sex with a competitive advantage in sports. While testosterone unquestionably confers an advantage for some sports, testosterone levels are not perfectly correlated with maleness, and in any event, athletes often differentiate themselves from one another through genetic traits that are unrelated to

⁷ *Gender and Genetics*, WORLD HEALTH ORG., <http://www.who.int/genomics/gender/en/index1.html> [<https://perma.cc/T5U2-3QDW>] (last visited July 9, 2017).

⁸ *Id.*

⁹ *Id.*

¹⁰ See, e.g., Jessica Clarke, *They, Them, and Theirs*, 132 HARV. L. REV. 894 (2019).

¹¹ See, e.g., Erin E. Buzuvis, “As Who They Really Are”: *Expanding Opportunities for Transgender Athletes to Participate in Youth and Scholastic Sports*, 34 LAW & INEQ. 341 (2016); Krista D. Brown, *Is There a Fourteenth Amendment Right to Participate on the Gender-Specific Team of Your Choice?*, 25 MARQ. SPORTS L. REV. 311 (2014); Erin E. Buzuvis, *Transgender Student Athletes and Sex-Segregated Sport: Developing Policies of Inclusion for Intercollegiate and Interscholastic Athletics*, 21 SETON HALL J. SPORTS & ENT. L. 1 (2011); Daniel Gandert et al., *The Intersection of Women’s Olympic Sport and Intersex Athletes: A Long and Winding Road*, 46 IND. L. REV. 387 (2013).

¹² Leong, *supra* note 1, at 1263.

¹³ See Laura A. Wackwitz, *Verifying the Myth: Olympic Sex Testing and the Category “Woman”*, 26 WOMEN’S STUD. INT’L F. 553 (2003) (explaining that the practice of “sex-testing” reinforces binary gender theory).

sex.¹⁴ Finally, gender testing fails to encompass the complex experiences of intersex and transgender athletes. Simply put, science and human experience tell us that sex and gender cannot be considered the gold-standard for categorizing athletes.

Second, the default assumption that men and women cannot compete against one another—in any sport, at any level—is not backed by evidence. Rather, the viability of integrated competition depends on a number of factors, ranging from the nature of the sport to the level of the competitors to the goals of the competitive environment. As others have explained, “[t]his view is inherently premised on the idea that males are ‘faster, stronger, and better’ at athletics than females. As a result, the same system that supposedly guarantees a space for women to compete simultaneously communicates women’s ‘competitive inferiority.’”¹⁵

In some sports, evidence suggests that women can successfully compete against men. In high school wrestling, several women have become state champions in their weight class in co-ed divisions, indicating that it is weight—not gender—that determines which wrestlers can compete against one another successfully.¹⁶ In endurance running, Courtney Dauwalter’s commanding victory in the Moab 240 endurance race—she bested the second place competitor, a man, by thirty miles and ten hours¹⁷—recently buttressed some researchers’

¹⁴ See, e.g., David Epstein, *The DIY Scientist, the Olympian, and the Mutated Gene*, PROPUBLICA, <https://www.propublica.org/article/muscular-dystrophy-patient-olympic-medalist-same-genetic-mutation> [https://perma.cc/DPM3-33SF] (last updated Jan. 17, 2016).

¹⁵ Leong, *supra* note 1, at 1264 (quoting Cheryl Cooky et al., “What Makes a Woman a Woman?” *Versus “Our First Lady of Sport”: A Comparative Analysis of the United States and the South African Media Coverage of Caster Semenya*, 37 J. SPORT & SOC. ISSUES 31 (2013)); see also Wackwitz, *supra* note 13.

¹⁶ See, e.g., Gary Abbott, *Women’s Wrestling Week: Alaska’s Michaela Hutchison Was First Girl to Win State Title Against Boys*, USA WRESTLING (Mar. 13, 2016, 1:19 PM), <https://www.teamusa.org/USA-Wrestling/Features/2016/March/13/Michaela-Hutchison-becomes-first-to-win-boys-state-meet> [https://perma.cc/W2TK-E52E].

¹⁷ Ariella Gintzler, *How Courtney Dauwalter Won the Moab 240 Outright*, TRAIL RUNNER (Oct. 18, 2017), <https://trailrunnermag.com/people/news/courtney-dauwalter-wins-moab-240.html> [https://perma.cc/3BBG-Q7AP]; Tim Huebsch, *Colorado Woman Wins Moab 240-Miler in Utah Outright by 10 Hours*, RUNNING MAG. (Oct. 17, 2017), <https://runningmagazine.ca/courtney-dauwalter-2017-moab-240-mile-endurance-run> [https://perma.cc/YS76-5VCC]. Indeed, Dauwalter is not an anomaly: another woman, Pam Reed, also finished inside the top ten at the 2017 Moab 240, taking seventh place. *MOAB 240 Endurance Run*, ULTRASIGNUP (Oct. 13, 2107), https://ultrasignup.com/results_event.aspx?did=43733 [https://perma.cc/7MWM-6JL4].

prediction that women will ultimately exceed men in ultramarathon running.¹⁸ In distance swimming, women's generally higher percentage of body fat can increase buoyancy and prevent loss of body heat when the water is cold.¹⁹ In other athletic events, gender simply does not matter. For example, in the integrated sport of dogsled racing, top finishers are generally divided evenly between women and men.²⁰ Other sports where gender is likely irrelevant include equestrian events, shooting, and NASCAR racing. In segregated athletic events like CrossFit and volleyball, the unnecessary segregation of athletes competing in essentially identical events leaves us unable to truly compare top male and female athletes.²¹

Third, sex segregation in sports reinforces harmful gender stereotypes. Tennis rules perpetuate the myth that women are weaker than men by limiting women to three sets and allowing men to play five sets.²² Gymnastics events evaluate women on whether they display "artistry" and impose strict requirements for women's makeup and hairstyles while competing; such rules are conspicuously absent from men's gymnastics guidelines. These gender stereotypes harm both women and men. For women, they serve as a reminder that even in contexts where their bodies should be valued for what they can do, their bodies are still valued for how they look.²³

Finally, the very notion of what counts as a "sport" uncritically prioritizes the physical abilities of men over those of women. Why is high jump—where men tend to be better than women—an Olympic sport, while limbo—where women tend to be better than men—is viewed as a party trick? Limbo requires incredible flexibility,

¹⁸ Jenefer Bam et al., *Could Women Outrun Men in Ultramarathon Races?*, 29 MED. SCI. SPORTS EXERCISE J. 244 (1997).

¹⁹ L.B. Ransdell & C.L. Wells, *Sex Differences in Athletic Performance*, 8 WOMEN SPORT & PHYSICAL ACTIVITY J. 55 (1999).

²⁰ Katie Orlinsky, *Meet the Women of the Iditarod*, OUTSIDE, <https://www.outsideonline.com/2060331/meet-women-itarod> [<https://perma.cc/D5XP-UG3M>] (last visited July 9, 2017).

²¹ Leong, *supra* note 1, at 1264.

²² *Id.* at 1275.

²³ *Id.* at 1276. Men, on the other hand, are bullied for participating in events perceived as more "female," like figure skating, gymnastics, and competitive cheerleading. See, e.g., *Tales of Childhood Bullying Reveal the Ugly Side of Figure Skating*, YAHOO SPORTS (Feb. 14, 2014, 8:21 AM), <http://sports.yahoo.com/news/tales-of-childhood-bullying-reveal-the-ugly-side-of-figure-skating-132139393.html> [<https://perma.cc/J24U-8BP9>]. While this Article focuses on harm to the health of women and girls, future work might profitably examine the way that sex segregation and sex stereotyping in sports also harms men.

coordination, and strength, with top limboists, such as world record holder Shamika Charles, practicing six hours a day.²⁴ Yet claims that limbo is a sport are typically met with derision. It is unsurprising that men—who invented most sports—chose to emphasize traits at which they tend to excel.²⁵ Highly valued sports like football and basketball prioritize speed, strength, force, and size. Other sports, the ones we think of as “women’s sports,” focus on traditionally less-valued skills like agility, coordination, balance, flexibility, and strategy. These sports do not receive the attention, endorsements, or pay that football or basketball currently command.²⁶ Proponents of sex-segregated sports might say these sports simply showcase more athleticism and are therefore inherently more exciting; however, this is an entirely socially-constructed idea that can, and should, be challenged.²⁷

This aim of this Article is not to argue that men and women should compete against each other in all athletic endeavors. Our argument is simply that sex segregation should not be the default. Sometimes men and women can and should play sports together. Sometimes sex-segregated divisions are the best answer. At other times divisions involving traits correlated with sex—for example, height and weight classes—may be the best solution. And sometimes men and women may simply want to play sports separately for other reasons: we acknowledge research attesting to the social value of, at times, preserving single-sex or single-gender environments. Ultimately, our goal is to prompt more careful thinking about the justification for sex segregation in sports, with an emphasis on public health reasons that may in some instances favor sex integration.

II. A PUBLIC HEALTH ISSUE?

This Part will reframe sex segregation in sports as a public health issue and describe the benefits yielded by that reframing. Section II.A describes the general criteria for treating a particular problem as a

²⁴ Daisy May Sitch, *This Woman Just Limboed Underneath a Car (and Broke Another World Record)*, METRO (June 15, 2015, 12:45 PM), <http://metro.co.uk/2015/06/15/this-woman-just-limboed-underneath-a-car-and-broke-another-world-record-5246437> [<https://perma.cc/3RRT-DVWN>].

²⁵ Leong, *supra* note 1, at 1278–81.

²⁶ *Id.* at 1278–80.

²⁷ *Id.* at 1280.

public health issue. Section II.B enumerates the many physical and mental health consequences of women's participation in sports, firmly establishing sports participation as a public health issue. Finally, Section II.C draws a connection between the nature and extent of women's sports participation and the overall issue of public health, concluding that sex segregation in sports has dramatic consequences for women's health, and, consequently, that sex segregation in sports meets the criteria for a public health issue.

A. *What Is a Public Health Issue?*

Scholars recognize the governmental responsibility to ensure the health of the general public.²⁸ The exercise of that power gives rise to the body of law known as public health law.²⁹ Public health law is an umbrella term that can refer to any law that is intended to address public health issues—it might include any area of law from tort law to education law to constitutional law.³⁰

The scope of public health law has broadened over the past several decades. Originally, public health law was primarily intended to address diseases.³¹ But in recent years the definition has expanded to include a more comprehensive definition of health. Currently, the World Health Organization's definition of "health," which has been adopted by the Centers for Disease Control and Prevention, is "a state of complete physical, mental, and social well-being and not merely the absence of disease or infirmity."³² There is a difference, this definition indicates, between being *well* and merely being *not sick*.

The breadth of the definition of health has allowed stakeholders to broaden the number and scope of issues that are considered public health issues and can, as a result, be addressed by public health laws.

²⁸ See LARRY GOSTIN ET AL., *PUBLIC HEALTH LAW: POWER, DUTY, RESTRAINT* (2d ed. 2008); *Public Health Law 101*, CDC, <https://www.cdc.gov/php/docs/phl101/PHL101-Unit-1-16Jan09-Secure.pdf> [<https://perma.cc/LNY9-AL54>] (last visited Dec. 27, 2018).

²⁹ GOSTIN, *supra* note 28, at 12.

³⁰ *Id.*

³¹ See *id.*; see also Camille M. Davidson, *What's Love Got to Do with It? Examining Domestic Violence as a Public Health Issue Using Their Eyes Were Watching God*, 81 *UMKC L. REV.* 867, 893 (2013). The seminal 1905 case of *Jacobson v. Massachusetts*, for example, upholds state power to mandate vaccination. 197 U.S. 11 (1905).

³² *Constitution of WHO: Principles*, WORLD HEALTH ORG., <http://www.who.int/about/mission/en> [<https://perma.cc/25PL-9HVL>] (last visited Mar. 5, 2019).

Examples of public health issues addressed by law include “education laws that mandate HIV-prevention information in health classes; environmental laws that improve air quality; employment laws that require safe working conditions; federal laws regulating the insurance market; laws that regulate firearm use and ownership; and criminal laws that prohibit driving while intoxicated.”³³ Another issue within the purview of public health law includes the government’s ability to mandate vaccines or impose certain restrictions on those who choose not to receive vaccines or to vaccinate their children.³⁴

Public health law scholars disagree to some extent about the outer limits of what constitutes a public health issue. The definition of what constitutes a public health concern—and is therefore susceptible to regulation via public health law—is necessarily vague because the very idea of “health” is subject to many interpretations. Is health merely the absence of disease? If so, how broadly do we define disease? Or, if we take literally the World Health Organization definition of health as “a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity,” then what problem is not a public health issue?

Although this debate raises important issues for public health scholars, this Article does not attempt to resolve the outer limits of public health law. The next two Sections will explain why sex segregation in sports falls squarely within the realm of public health law, with important implications for a wide variety of health issues affecting both women and men.

B. *The Health Implications of Sports Participation*

Participation in sports—and, more broadly, getting the medically-recommended amount of physical activity—have vast implications for

³³ See Margo Kaplan, *Rape Beyond Crime*, 66 DUKE L.J. 1045, 1078–79 (2017) (citing CTRS. FOR DISEASE CONTROL & PREVENTION, ENVIRONMENTAL PUBLIC HEALTH PERFORMANCE STANDARDS (2014)); KENNETH R. WING ET AL., PUBLIC HEALTH LAW 624–62 (2007) (firearm control); Sara Rosenbaum, *The Patient Protection and Affordable Care Act: Implications for Public Health Policy and Practice*, 126 PUB. HEALTH REP. 130 (2011); Don Nutbeam, *Health Literacy as a Public Health Goal: A Challenge for Contemporary Health Education and Communication Strategies into the 21st Century*, 15 HEALTH PROMOTION INT’L 259 (2006).

³⁴ F.E. Andre et al., *Vaccination Greatly Reduces Disease, Death, and Inequity Worldwide*, 86 BULL. WORLD HEALTH ORG. 81 (2008), <http://www.who.int/bulletin/volumes/86/2/07-040089/en> [<https://perma.cc/39KU-5VE7>].

women's physical health. Cardiovascular disease, breast cancer, colorectal cancer, sexual health, and maternal health are all intimately connected with a woman's physical activity levels.³⁵ Since sports provide many protective benefits against contracting physical diseases, women's participation in sports must be encouraged and barriers to full and equal participation, such as sex segregation, should be critically examined.

For purposes of this Part, the terms "sports" and "physical activities" will be treated largely interchangeably. Many studies use the broader term physical activity, which typically encompasses sports, so it is somewhat difficult to differentiate the two. Moreover, differentiation is not critical for our project.³⁶ This Article will note when a study specifically examines organized sports rather than generalized recreational exercise activities.

1. Physical Health Implications

This Section will discuss the positive physical effect of participation in sports. These effects include preventing cardiovascular disease and cancer, improving sexual health, and improving maternal health. While this discussion is not exhaustive, these examples demonstrate the breadth of positive consequences that sports participation cause for women's health.

Preventing cardiovascular disease: The term cardiovascular disease (CVD) covers most diseases related to the heart.³⁷ Diseases that fall under the CVD umbrella include coronary heart disease, cerebrovascular disease, peripheral artery disease, deep vein thrombosis, and pulmonary embolism.³⁸ CVD "is the number-one killer of women."³⁹ At least 41.3 million women are affected by CVD, and CVD affects women of all racial and socioeconomic backgrounds.⁴⁰ African

³⁵ See ELLEN J. STAUROWSKY ET AL., WOMEN'S SPORTS FOUND., HER LIFE DEPENDS ON IT II: SPORT, PHYSICAL ACTIVITY, AND THE HEALTH AND WELL-BEING OF AMERICAN GIRLS AND WOMEN (2009) (documenting the role that physical activity can play in preventing an array of health risks).

³⁶ Future work might profitably examine differences between "sports" and "physical activities."

³⁷ *Cardiovascular Diseases (CVDs)*, WORLD HEALTH ORG., <http://www.who.int/mediacentre/factsheets/fs317/en> [https://perma.cc/KS9Q-A5ER] (last visited July 9, 2017).

³⁸ *Id.*

³⁹ Staurowsky, *supra* note 35, at 9.

⁴⁰ *Id.*

American women have disproportionately high rates of CVD.⁴¹ Despite the prevalence of CVD among women, clinicians tend to recommend CVD preventative measures less frequently to women than they do to men.⁴² Clinicians, despite the vast evidence to the contrary, perceive women's risk for CVD to be lower: this false perception may lead to a higher mortality rate from CVD for women and to a higher rate of CVD-related impairment of quality of life.⁴³

Among those who self-identified as participating in sports and athletic activities versus walking, those participating in sports showed a reduced mortality from coronary heart disease, a disease which falls under the CVD umbrella.⁴⁴ The same study showed a statistically significant reduction in mortality from both CVD and coronary heart disease for women participating in sports five hours per week, compared to one to two hours per week.⁴⁵ Women thus not only get cardiovascular benefits from participating in sports at all, but get even more protection against CVD when the time spent participating in sports increases.

Interestingly, the link between sports and CVD may matter in the more immediate timeframe, as opposed to having a long-term protective effect. In other words, research suggests that what sports a woman does in the present matter more than what sports she did in the past when examining prevention of any presentation of CVD.⁴⁶ This finding highlights the importance of sports throughout a woman's lifespan—a woman cannot count on sports participation in her youth to protect her from CVD when she reaches retirement age. This is not to say that sports participation beginning at a young age is not at all beneficial for protecting against CVD. For many women, a pattern of sports participation during youth and young adulthood can help prevent CVD as they age “by establishing behavior patterns that continue into adulthood and keep the individual in better physical

⁴¹ *Id.*

⁴² Jodi R. Godfrey & JoAnn E. Manson, *Toward Optimal Health: Strategies for Prevention of Heart Disease in Women*, 17 J. WOMEN'S HEALTH 1271 (2008).

⁴³ *Id.*

⁴⁴ Kiroyuki Noda et al., *Walking and Sports Participation and Mortality from Coronary Heart Disease and Stroke*, 46 J. AM. C. CARDIOLOGY 1761, 1766 (2005).

⁴⁵ *Id.* at 1763.

⁴⁶ Andrea K. Chomistek et al., *Frequency, Type, and Volume of Leisure Physical Activity and Risk of Coronary Heart Disease in Young Women*, 134 CIRCULATION 290, 297 (2016) (“This is consistent with evidence suggesting that exercise has acute effects on cardiovascular disease risk factors such as blood lipids, blood pressure, and glucose control.”).

shape.”⁴⁷ A young woman who participates in competitive sports is more likely to be comfortable walking into a gym as an adult. Moreover, even after a CVD diagnosis, physical activity leads to a lower risk of a CVD recurrence and later death from CVD.⁴⁸

Similar results regarding sports participation occurred for younger women, a generally less-studied group when it comes to CVD research. One study showed that physical activity reduces coronary heart disease in young women.⁴⁹ This finding held true regardless of a woman’s weight, demonstrating the importance of sports participation regardless of a woman’s weight or body mass index (BMI). The type of sport also appears to matter for coronary heart disease prevention efforts. Traditionally “vigorous” sports like running and tennis are “more strongly inversely associated with [coronary heart disease]” than with other sports like swimming and biking, which have a “broader range of intensity.”⁵⁰ Given the prevalence of CVD among women and the positive impact sports have in preventing the disease, sex segregation in sports must be questioned in order to ensure women can participate to the fullest extent possible. In terms of CVD particularly, allowing women to participate fully, without segregation, in more vigorous sports like tennis and football may be especially important.

Preventing cancer: Cancer is another leading cause of death among women.⁵¹ Breast cancer is the second-leading cancer-related cause of death among women, followed by colorectal cancers.⁵² Next to CVD, cancer is also the second-most preventable physical disease.⁵³ Unlike with some cancers, such as lung cancer, ample evidence exists showing that sports and physical activity significantly reduce the likelihood of a breast or colorectal cancer diagnosis.⁵⁴

⁴⁷ Staurowsky, *supra* note 35, at 10.

⁴⁸ Yosuke Shibata et al., *Physical Activity and Risk of Fatal or Non-Fatal Cardiovascular Disease Among CVD Survivors*, 75 CIRCULATION J. 1368, 1371 (2011).

⁴⁹ See Chomistek, *supra* note 46, at 297.

⁵⁰ *Id.*

⁵¹ Staurowsky, *supra* note 35, at 12.

⁵² AM. CANCER SOC’Y, CANCER FACTS & FIGURES 2017 10 (2017), <https://www.cancer.org/content/dam/cancer-org/research/cancer-facts-and-statistics/annual-cancer-facts-and-figures/2017/cancer-facts-and-figures-2017.pdf> [<https://perma.cc/5TGT-DYVZ>].

⁵³ Staurowsky, *supra* note 35, at 12 (citing Wendy Denmark-Wahnefried et al., *Lifestyle Interventions to Reduce Cancer Risk and Improve Outcomes*, 77 AM. FAM. PHYSICIAN 1573 (2008)).

⁵⁴ See generally Staurowsky, *supra* note 35.

Broadly speaking, “high levels of physical activity have been consistently associated with reduced risk of postmenopausal breast cancer independent of body size.”⁵⁵ Similarly to CVD, sports are important regardless of a woman’s weight; women get positive, protective benefits from sports regardless of their BMI. Women who get thirty minutes or more of moderate to vigorous intentional physical activity at least five times per week experience a 22% lower occurrence of breast cancer.⁵⁶ Other studies comparing active versus inactive women show a 13% reduced risk of breast cancer in women who were active at least five times per week.⁵⁷ Moreover, one study suggests that the role of physical activity was especially potent in preventing estrogen receptor-positive breast cancer, a type of cancer that tends to occur in younger women and that tends to be more aggressive and fatal.⁵⁸ Women’s participation in sports across the lifespan can play a role in preventing breast cancer diagnoses and deaths.

Colon cancer presents another public health issue that intersects with sports. Much like CVD, women are less likely than men to receive the appropriate screening for colon cancer.⁵⁹ Since early detection can be critical when a woman is diagnosed with colon cancer, the fact that women receive less screening than men means that by the time women are diagnosed, their colon cancer is often at a more advanced stage, making women’s cancer harder to treat.⁶⁰ Given this reality, colon cancer-preventative measures are especially important for women.⁶¹ When women get thirty minutes or more of moderate to vigorous intentional physical activity at least five times per week, a 52% lower colorectal cancer occurrence follows.⁶² This is not an insignificant

⁵⁵ Tricia M. Peters et al., *Physical Activity and Postmenopausal Breast Cancer Risk in the NIH-AARP Diet and Health Study*, 18 *CANCER EPIDEMIOLOGY, BIOMARKERS & PREVENTION* 289 (2009).

⁵⁶ Cynthia A. Thomson et al., *Nutrition and Physical Activity Cancer Prevention Guidelines, Cancer Risk, and Mortality in the Women’s Health Initiative*, 7 *CANCER PREVENTION RES.* 42, 44–47 (2014).

⁵⁷ Peters, *supra* note 55, at 293.

⁵⁸ *Id.* at 294.

⁵⁹ Scott E. Woods et al., *The Influence of Gender on Colon Cancer Stage*, 14 *J. WOMEN’S HEALTH* 502, 504 (2005).

⁶⁰ *Id.* at 504–05.

⁶¹ Better screening is also critical. See *American Cancer Society Guideline for Colorectal Cancer Screening*, AM. CANCER SOC’Y, <https://www.cancer.org/cancer/colon-rectal-cancer/detection-diagnosis-staging/acs-recommendations.html> [<https://perma.cc/S55H-WE2G>] (last visited Jan. 25, 2019). Both measures can help reduce the incidence of cancer.

⁶² Thomson, *supra* note 56, at 44–47.

number—women can actually cut the risk of colon cancer in half by being highly physically active. When comparing women who did not play sports or exercise to women who participated in sports or exercised five or more times per week, researchers found an 18% reduction in colon cancer.⁶³ Given the large role sports can play in preventing deadly colon cancer, barriers to women's full participation in the sport of their choosing should be removed.

The role of sports participation is vital in protecting women from two of the three most common cancers that are fatal for women. The evidence speaks for itself in terms of the impact physical activity has in cancer prevention. This again points to the general importance of ensuring women can participate in all sports at all levels, regardless of traditional notions of the socially constructed ideas of “men's sports” and “women's sports.”

Improving Sexual Health: Sexual health is another critical area in which sports participation has an important protective effect, particularly for adolescent and young adult women. Although high-risk sexual behavior, such as unprotected sex, and its consequences, such as unwanted pregnancies and sexually transmitted infections, have generally declined, these problems still remain more common in the United States as compared to other industrialized nations.⁶⁴

One study of adolescent women's sports participation and sexual health found that:

Adolescent women who were more involved in organized sports during their high-school years were older at time of first sexual intercourse experience, had engaged in sexual intercourse with fewer partners, were more likely to have used birth control at all or more regularly while engaging in sexual intercourse, and were less likely to have been intoxicated while engaging in sexual intercourse. Moreover, the adolescent women who were relatively more involved in organized sports during their high-school years were less likely to have been pregnant or to have been treated for an STD.⁶⁵

⁶³ Regan A. Howard et al., *Physical Activity, Sedentary Behavior, and the Rise of Colon and Rectal Cancer in the NIH-AARP Diet and Health Study*, 19 *CANCER CAUSES CONTROL* 939, 942 (2008).

⁶⁴ Staurowsky, *supra* note 35, at 36.

⁶⁵ Stephanie Jacobs Lehman & Susan Silverberg Koerner, *Adolescent Women's Sports Involvement and Sexual Behavior/Health: A Process-Level Investigation*, 33 *J. YOUTH & ADOLESCENCE* 443, 451 (2004).

The same study also found that sports participation was correlated with better communication between adolescent female and male sexual partners: athletes are more likely to discuss birth control options and sexual health and history.⁶⁶ Moreover, female adolescent athletes are more likely to seek health professionals' advice regarding sex and undergo a gynecological exam.⁶⁷ Another study found that for sports to be most effective in preventing risky sexual behaviors, female adolescents needed to both be on a sports team and have the opportunity to vigorously participate in the sport itself—merely being on the team may not be enough.⁶⁸ This finding suggests not only the importance of physical activity, but also the critical importance of the feeling of belonging that often accompanies sports participation and that may help prevent risky sexual behaviors.⁶⁹

Studies of college-level female athletes versus non-athlete peers produced similar results to those seen in studies of adolescent athletes. Sexually active collegiate female athletes reported a statistically significant lower incidence of not using a condom compared to non-athletes.⁷⁰ Collegiate female athletes were also less likely to have ever reported being pregnant than their non-athlete peers.⁷¹

Studies suggest that the status of female athlete may serve as a protective factor against risky sexual behavior. But as we will discuss, the practice of sex-segregated sports may decrease the numbers of girls and

⁶⁶ *Id.*

⁶⁷ *Id.*

⁶⁸ Kimary Kulig et al., *Sexual Activity and Substance Use Among Adolescents by Category of Physical Activity Plus Team Sports Participation*, 157 ARCHIVES PEDIATRIC ADOLESCENT MED. 905, 911 (2003).

⁶⁹ See Margaret Taylor-Seehafer & Lynn Rew, *Risky Sexual Behavior Among Adolescent Women*, 5 J. SOC'Y PEDIATRIC NURSES 15, 22 (2000). For female adolescent athletes, racial and ethnic differences also emerge when analyzing sexual risk and sports participation. White female adolescent athletes showed a "stronger negative relationship between sexual risk and athlete status" when compared to Black female adolescent athletes. One study found that Hispanic and Asian/Pacific Islander adolescent female athletes did not show a correlation between athlete status and risky sexual behavior. Kathleen E. Millet et al., *Gender and Racial/Ethnic Differences in Predicting Adolescent Sexual Risk: Athletic Participation versus Exercise*, 43 J. HEALTH & SOC. BEHAV. 436, 447 (2002). In Kulig's study, Hispanic, Black, and White female athletes were all less likely to have had four or more sexual partners when compared to the study's control group. Kulig, *supra* note 68, at 908. While our Article focuses on gender, we endorse an intersectional approach to evaluating the role of sports participation in assessing public health issues.

⁷⁰ Patricia K. Kokotailo et al., *Health Risk Taking and Human Immunodeficiency Virus Risk in Collegiate Female Athletes*, 46 J. AM. C. HEALTH 263, 265 (1998).

⁷¹ *Id.*

women who play sports. Given the correlation between risky sexual behaviors and athlete status, important public health goals like reducing unwanted pregnancies and sexually transmitted diseases may be advanced with stronger women's sports participation.

Improving Maternal Health: Until quite recently, women were advised to refrain from physical activity during pregnancy for fear of harming the fetus, and instead encouraged to rest frequently and increase their food intake.⁷² These guidelines have drastically changed in recent years for all women, even women who are categorized as "obese." Physical activity and sports participation, with due care, are now considered safe and beneficial for all women who are pregnant.⁷³

Women who begin pregnancy at a normal weight can participate in activities like stationary cycling, swimming, and aerobic dance three to four days per week without fear of harming themselves or the fetus.⁷⁴ Women who began pregnancy with relatively sedentary lifestyles are encouraged to initiate a more active lifestyle while pregnant given the health benefits of exercise for both mother and child.⁷⁵ Even women with other risk factors during pregnancy such as hypertension or gestational diabetes are encouraged to be moderately active.⁷⁶

The health benefits of sports and physical activity while pregnant are vast. Women who exercise during pregnancy prevent excessive gestational weight gain and other associated problems like gestational diabetes mellitus, low back pain, preeclampsia, and urinary incontinence.⁷⁷ For breastfeeding women, physical activity appears to have no adverse effects on the production of breast milk or its

⁷² Amby Burfoot, *In New Report, Doctors Urge More Exercise for Pregnant Women*, WASH. POST (May 21, 2017), https://www.washingtonpost.com/lifestyle/wellness/in-new-report-doctors-urge-more-exercise-for-pregnant-women/2017/03/2122cca796-0d73-11e7-ab07-07d9f521f6b5_story.html?utm_term=.88adf27a73 [<https://perma.cc/TKD8-H7PA>].

⁷³ See María Perales et al., *Exercise During Pregnancy*, 317 J. AM. MED. ASS'N 1113 (2017). Of course, women who work out during pregnancy are still, at times, shamed and told they are selfishly risking the health of their fetus. For example, see comments on Miranda Chivers (@fearlessmiranda), INSTAGRAM (June 19, 2017), <https://www.instagram.com/p/BVhvkG1CY5> [<https://perma.cc/GB4C-P4YN>].

⁷⁴ Perales, *supra* note 73, at 1113.

⁷⁵ *Id.*

⁷⁶ *Id.*

⁷⁷ *Id.*

composition.⁷⁸ Exercise may also help lessen or prevent postpartum depression.⁷⁹

Women's sports participation is implicated in the prevention of many physical diseases. The risk of being diagnosed with three of the leading diseases that kill women (CVD, breast cancer, and colorectal cancer) is significantly lessened when women play sports and get adequate physical activity.⁸⁰ Sports participation lowers the risk of unwanted pregnancies and sexually transmitted diseases. Maternal and fetal health increases. These broad benefits illustrate the importance of robust sports participation among women. These statistics also help make the case for critically examining sex segregation in sports so that women may reap the full health benefits of participation.

2. Mental Health Implications

Sports participation is also strongly correlated with improved mental health. Research demonstrates that sports participation positively influences a wide range of mental health issues, including self-esteem, depression, eating disorders, and many others.⁸¹ Women's self-esteem, body image, and feelings of empowerment are all positively affected by playing sports. Active participation in sports also reduces depression and suicide risk over both the short and long term.⁸² In some circumstances, participation reduces the risk of women developing eating disorders and may have a role in recovery from eating disorders.

Despite these many benefits, sports can also increase the risk of certain mental health issues. For example, the structure and culture of some sports can increase the likelihood of eating disorders. This Section takes into account both potential negative consequences of sports participation for mental health and considers the factors that contribute to each. Some of these negative consequences, we argue, are actually the result of sex-segregated or gender-normed sports.

⁷⁸ Joanne P. Borg-Stein, David J. Fogelman & Kathryn E. Ackerman, *Exercise, Sports Participation, and Musculoskeletal Disorders of Pregnancy and Postpartum*, 31 SEMINARS NEUROLOGY 413, 416 (2011).

⁷⁹ Amanda J. Daley et al., *The Role of Exercise in Treating Postpartum Depression: A Review of the Literature*, 52 J. MIDWIFERY & WOMEN'S HEALTH 56 (2007).

⁸⁰ Staurowsky, *supra* note 35, at 1-3, 14.

⁸¹ *Id.* at 1-3, 16.

⁸² *Id.* at 4.

Improving Self-Esteem: Sports are a positive force for female athletes' self-esteem. The increase in self-esteem may not be due to female athletes' perception of their athleticism, because boys report higher confidence in their athletic abilities than girls do.⁸³ Rather, the increased self-esteem may be more attributable to the indirect psychosocial effects of sports participation. This effect is particularly noticeable in young women. Adolescent female athletes report that sports give them a "sense of appreciation" for their body and its athletic capabilities.⁸⁴ This appreciation contrasts to many of the images young women absorb from the media, which focus on how bodies look, not what they can do.⁸⁵

Other self-esteem-related benefits are myriad. In one study, adolescent female athletes suggested that sports participation increased their own empowerment and feelings of self-sufficiency.⁸⁶ Another study noted the impact sports have on female athletes' perceptions of harmful notions about gender: "[W]e suggest that girls discover through sports an empowering alternative to the conventional script of passive femininity. Increasingly, the messages of emerging athlete role models encourage them to redefine their own bodies as tools for their own use rather than as objects of others' desire."⁸⁷ In particular, team sports seem to improve the self-esteem of poor, urban adolescent girls more than individual sports.⁸⁸ The heightened self-esteem "may be due in part to the esteem-enhancing qualities of the team environment and are not entirely a function of sports' participants higher rates of physical activity."⁸⁹

When comparing the perspective of athletes and non-athletes on body image and dissatisfaction, the type of sport in which the athlete competes may matter more than their mere status as an athlete. One study compared body dissatisfaction between female non-athletes,

⁸³ Janis E. Jacobs et al., *Changes in Children's Self-Competence and Values: Gender and Domain Differences Across Grades One through Twelve*, 73 CHILD DEV. 509, 518 (2002).

⁸⁴ Lehman & Koerner, *supra* note 65, at 452.

⁸⁵ See, e.g., Christia S. Brown, *The Body "Issue": Why Skiers in Bikinis Shouldn't be the only Female Athletes We See*, PSYCHOL. TODAY (Jan. 28, 2014), <https://www.psychologytoday.com/blog/beyond-pink-and-blue/201401/the-body-issue> [<https://perma.cc/D2PC-C5S4>].

⁸⁶ Lehman & Koerner, *supra* note 65, at 451.

⁸⁷ Millet, *supra* note 69, at 439.

⁸⁸ See Sara Pedersen & Edward Seidman, *Team Sports Achievement and Self-esteem Development Among Urban Adolescent Girls*, 28 PSYCHOL. WOMEN Q. 412, 419 (2004).

⁸⁹ *Id.*

martial artists, and track athletes.⁹⁰ Martial artists and non-athletes showed comparable levels of body dissatisfaction.⁹¹ Track athletes, despite having a lower BMI on average than non-athletes and martial artists, showed a much higher level of body dissatisfaction and perceived themselves to be heavier than they actually were.⁹² Track's emphasis on leanness in competing athletes may explain this result.⁹³

For girls in the early stages of adolescence, one study found that when girls had a positive experience in team sports, they reported significantly less body dissatisfaction.⁹⁴ The study hypothesized that team sports participation might reduce "body dissatisfaction by enhancing athletic skills, improving overall fitness, fostering healthy eating habits, or helping youth to appreciate their strengths and capabilities—despite appearance concerns."⁹⁵

Mitigating Depression: Depression and suicide among women is another massive public health concern. An estimated 16.2 million adults in the United States had at least one major depressive episode during 2016, and depression is more common among women (8.5%) than among men (4.8%).⁹⁶ Depression is even more common among adolescent girls: 19.4% of girls experienced a major depressive episode in the previous year as compared to 6.4% of boys.⁹⁷ Sports participation, and physical activity generally, reduce rates of depressive symptoms, depression, and suicide among girls and women of all ages. For girls in the early stages of adolescence, playing team sports "mediated the effects of . . . risk factors on depressive symptoms . . . for girls."⁹⁸ Although younger adolescent girls are unfortunately less likely than boys to play

⁹⁰ Viren Swami et al., *A Comparison of Body Size Ideals, Body Dissatisfaction, and Media Influence Between Female Track Athletes, Martial Artists, and Non-Athletes*, 10 PSYCHOL. SPORT & EXERCISE 609 (2009).

⁹¹ *Id.* at 612.

⁹² *Id.* at 612–14.

⁹³ *Id.* at 612.

⁹⁴ Erin M. Boone & Bonnie J. Leadbeater, *Game On: Diminishing Risks for Depressive Symptoms in Early Adolescence Through Positive Involvement in Team Sports*, 16 J. RES. ON ADOLESCENCE 79, 88 (2006).

⁹⁵ *Id.*

⁹⁶ *Major Depression*, NAT'L INST. MENTAL HEALTH, <https://www.nimh.nih.gov/health/statistics/major-depression.shtml> [<https://perma.cc/SM5W-NPWP>] (last updated Nov. 2017).

⁹⁷ *Id.*

⁹⁸ Boone & Leadbeater, *supra* note 94.

team sports, when girls do, they are just as likely as boys to reap positive benefits from the activity.⁹⁹

When comparing female adolescent athletes to non-athletes, just 34% of female athletes experienced feelings of hopelessness in contrast to 41% of non-athletes.¹⁰⁰ For adolescent girls already classified as highly depressed, self-reported perceptions of participation rates were lower. For example, 9.2% of highly depressed female adolescent athletes felt they participated either “some” or “a lot,” while not highly depressed girls reported a 20% participation rate.¹⁰¹ Generally, however, adolescent women “in the top quintile of depressed mood” were significantly less likely than their peers to participate in sports at all.¹⁰² There is, of course, a chicken-and-egg question: are depressed people depressed because they don’t participate in sports, or do they not participate in sports because they are depressed? Still, the strong relationship between depression and sport participation highlights the importance of women participating in sports early and often.

Among college female athletes who participated in a wide range of sports including basketball, fencing, field hockey, gymnastics, soccer, lacrosse, swimming, track, and volleyball for at least a year (or lettered in them regardless of length of time they played the sport), a different study found a one-third reduction in medically diagnosed depression when compared to their non-athlete female peers.¹⁰³ Sports participation may also have long-term protective factors against depression. Early physical activity in women seems to significantly decrease “the risk of depression in later life.”¹⁰⁴ One study specifically examined female college athletes ten years after the end of their collegiate career.¹⁰⁵ The “former college athletes were at significantly lower risk of physician-diagnosed depression . . . compared with non-athletes.”¹⁰⁶

⁹⁹ *Id.*

¹⁰⁰ Lindsay Taliaferro et al., *High School Youth and Suicide Risk Exploring Protection Afforded Through Physical Activity and Sport Participation*, 78 J. SCH. HEALTH 545, 548 (2008).

¹⁰¹ Susan Gore et al., *Sports Involvement as Protection Against Depressed Mood*, 11 J. RES. ON ADOLESCENCE 119, 125 (2001).

¹⁰² *Id.*

¹⁰³ Grace Wyshak, *Women’s College Physical Activity and Self-Reports of Physician-Diagnosed Depression and of Current Symptoms if Psychiatric Distress*, 10 J. WOMEN’S HEALTH & GENDER-BASED MED. 363, 364–68 (2001).

¹⁰⁴ *Id.* at 370.

¹⁰⁵ *Id.* at 367.

¹⁰⁶ *Id.*

Sports and exercise also reduce the risk of suicide for high school aged women. One study found that “20% of female athletes and 23% of female nonathletes had seriously considered suicide (. . . , $p < 0.05$),” and “15% of athletes and 18% of nonathletes had created a suicide plan (. . . , $p < .01$).”¹⁰⁷ The study authors suggest that the disparity results because women who participate in sports are less likely to feel hopeless or suicidal than are non-athletes.¹⁰⁸ The authors hypothesize that one reason sports participation, outside of the benefits of physical activity, decreases suicide risk among girls is due to social network effects, such as having more positive friendships and feeling more connected to their school.¹⁰⁹

Preventing Eating Disorders: For female athletes, sports participation can guard against developing eating disorders and raise a female athlete’s self-esteem, body image, and feelings of empowerment. These positive effects are noteworthy in a culture that too frequently does little to foster these traits in women. However, some sports seem to increase the likelihood a woman will develop an eating disorder. The dual effects sports may have on female athletes are not mutually exclusive, and both warrant discussion and analysis in this Section.

Several elite CrossFit athletes, including Molly Eledge and Alexis Johnson, credit the sport of CrossFit in helping them recover from an eating disorder.¹¹⁰ Eledge was diagnosed with anorexia nervosa during her sophomore year of college.¹¹¹ Several years later, after treatment, Eledge got serious about competing in CrossFit. Competing allowed her to stop binge eating upon realizing that “when your body is fueled correctly, it has so much more potential to do great things!”¹¹² For Eledge, CrossFit also transformed working out from a punishment to a joy.¹¹³ CrossFit athlete Alexis Johnson began her CrossFit journey

¹⁰⁷ Taliaferro, *supra* note 100, at 548.

¹⁰⁸ *Id.* at 551.

¹⁰⁹ *Id.*

¹¹⁰ See Nina Bahadur, *How CrossFit Helped this Woman Heal from an Eating Disorder*, SELF (Jan. 12, 2016), <http://www.self.com/story/how-crossfit-helped-this-woman-heal-from-an-eating-disorder> [<https://perma.cc/BW9N-PDMG>]; Brian Pyfferoen, *Alexis Johnson and Emily Bridgers Share CrossFit Transformations*, BARBELL SPIN (June 8, 2017), <http://thebarbellspin.com/functional-fitness/alexis-johnson-and-emily-bridgers-share-crossfit-transformations> [<https://perma.cc/RD37-EAKE>].

¹¹¹ Bahadur, *supra* note 110.

¹¹² *Id.*

¹¹³ *Id.*

weighing only eighty-eight pounds as a fully grown woman.¹¹⁴ But she loved the CrossFit workouts and eventually realized that she needed to eat to improve at the sport. Although her recovery was not instantaneous, participation ultimately helped Johnson overcome her eating disorder after nearly two years in the sport.¹¹⁵ Similarly to Eledge, Johnson credits CrossFit for showing her that food is fuel and not an enemy.¹¹⁶

For women recovering from eating disorders like anorexia nervosa, supervised physical activity, which can include weight training, yoga, and other recreational sports, can have positive impacts on their health.¹¹⁷ A meta-analysis of patients being treated for anorexia nervosa showed that supervised exercise improved “before-after measurements of body weight, BMI, percentage body fat and lean body mass.”¹¹⁸ Supervised exercise also decreased patients’ concerns about their body type and weight and reduced the risk of depression.¹¹⁹ For women with binge eating disorder, exercise promotion frequently is a major part of their recovery.¹²⁰ One review found that exercise for binge eating disorder patients reduced weight, depressive symptoms, and binge episodes.¹²¹ Although clinicians tread carefully with exercise when treating patients who have eating disorders, for some women, incorporating physical activity in some manner may be a positive and influential step in recovery.

Studies comparing “leanness” and “nonleanness” sports show marked differences in disordered eating habits. Leanness sports include track, dance, gymnastics, figure skating, and cheerleading—sports where leanness, which is often a code for thinness, is emphasized or viewed as a positive attribute. Nonleanness sports include basketball, soccer, football, and CrossFit. Both nonleanness and leanness athletes

¹¹⁴ Pyfferoen, *supra* note 110.

¹¹⁵ *Id.*

¹¹⁶ *Id.*

¹¹⁷ L.W.C. Ng et al., *Is Supervised Exercise Training Safe in Patients with Anorexia Nervosa?: A Meta-Analysis*, 99 *PHYSIOTHERAPY* 1, 9–10 (2013).

¹¹⁸ *Id.*

¹¹⁹ *Id.*

¹²⁰ Elisabeth Sschucke et al., *Exercise and Physical Activity in Mental Disorders: Clinical and Experimental Evidence*, 46 *J. PREVENTATIVE & PUB. HEALTH* 12, 15 (2013).

¹²¹ *Id.*

recounted pressure from coaches to achieve a low body weight.¹²² However, “[a]thletes in sports without weight restrictions or physical appearance pressures were no more at risk for disordered eating than non-athletic peers.”¹²³

Leanness sports female athletes reported significantly higher disordered eating habits than nonleanness athletes did.¹²⁴ Female athletes in leanness-focused sports, like gymnastics and dance competing at an elite level, showed a nearly 49% risk of developing eating disorders.¹²⁵ Female collegiate athletes in sports where weight restrictions exist, such as lightweight rowing, also show a higher susceptibility to eating disorders when compared to athletes in sports without weight restrictions or non-athletes.¹²⁶ Across sports, “the lean-sport [female collegiate] athletes indicated all the signs and symptoms typical of eating disorder patients.”¹²⁷

Sports participation and eating disorder incidents have a complicated interplay. However, this highlights the importance of sex-segregated sports as a public health issue. Many of the sports that have higher eating disorder rates also are “women’s sports,” in the sense that the women’s version of the sport is different from the men’s in ways that emphasize the way women’s bodies look rather than merely how they perform. This alone should indicate the importance of sex segregation in sports as a public health issue for women. Moreover, sports participation can help women improve their self-esteem and body image and increase feelings of empowerment. Finally, sports participation protects against other major public health issues like depression and suicide.

C. Sex Segregation as a Public Health Issue

As the previous Section demonstrates, participation in sports has a broad range of health consequences. There is no question that sports

¹²² Peiling Kong & Lynne M. Harris, *The Sporting Body: Body Image and Eating Disorder Symptomatology Among Female Athletes from Leanness Focused and Nonleanness Focused Sports*, 149 J. PSYCHOLOGY 141, 156 (2015).

¹²³ Christy L. Picard, *The Level of Competition as a Factor for the Development of Eating Disorders in Female Collegiate Athletes*, 28 J. YOUTH & ADOLESCENCE 583, 591 (1999).

¹²⁴ Kong & Harris, *supra* note 122, at 153.

¹²⁵ *Id.*

¹²⁶ Picard, *supra* note 123, at 591.

¹²⁷ *Id.*

participation is a public health issue for women. But how does *sex segregation* in sports contribute to that public health issue? This Section explains how sex segregation in some sports contributes to negative health consequences for women, justifying a public health law-centered intervention. Again, we emphasize that this is an issue that should be examined with nuance: we are not advocating that all sports need to be sex-integrated, either as a matter of law or policy; we are simply arguing that in some instances, continued segregation has both physical and mental health consequences.¹²⁸

First, sex segregation in sports is a public health issue because it deprives some girls of the opportunity to participate in their first-choice sport. Deprivation of the opportunity to participate is an inherent injury, and one with clear public health implications. Girls and women who wish to participate in traditionally male sports like football and wrestling are often discouraged from even beginning in a sport that appeals to them. Such discouragement may occur either consciously or unconsciously, and may flow from the girl's family, other adults such as teachers, or simply from broader social messaging about what sports girls should and should not play. Girls simply do not see other women competing in sports like football or wrestling in the media.¹²⁹ And even when girls are allowed to begin in a sport like football, they are often prevented by school boards, athletic associations, or other institutions from continuing in the sport once they reach puberty.

Due to sex segregation, there are countless stories of women who did not participate in sports when they otherwise would have. Consider

¹²⁸ We acknowledge that some girls and women may *prefer* to participate in sex-segregated sports. In some instances, depending on the nature of the sport, the level of competition, and the purpose of the competition, sex segregation may well be both preferable and of greatest benefit to public health. Again, we emphasize that this question should be approached with nuance. An after-work women's ultimate frisbee league is not the same as a high school wrestling match, which is not the same as a soccer league for five-year-olds. We also emphasize that, in many situations, choice is the best choice. Perhaps, in some situations, there should be three leagues: one for boys, one for girls, and one co-ed. Parents and their children can pick the option that is right for them. This choice of environments works for primary, secondary, and post-secondary education; there is no obvious reason it would not also work well for some sports.

¹²⁹ This is beginning to change in wrestling, as eight percent of high school wrestlers are now girls, but wrestling is still considered a "male" sport and is relatively rarely depicted on television or in other media. *See infra* notes 137–45.

Caroline Pla, who began playing football at age five.¹³⁰ She was a talented athlete who eventually played offensive guard at age eleven for the local Catholic Youth Organization football league.¹³¹ However, halfway through her third season in the league, the Archdiocese of Philadelphia told her parents that she could no longer play because “football is for boys.”¹³² The Archdiocese cited the paternalistic fear of concern for her physical safety, ignoring “the fact that the young girl is considered an all-star junior varsity player,”¹³³ as well as the fact that much research has found that football is dangerous for all players, not just girls.¹³⁴ Pla received local support from community journalists and councilmen, with one journalist noting that she was banned from football not just because she was a girl, but because she was a girl who played well.¹³⁵ While we might have a separate discussion about whether football is so inherently dangerous that no one should play it without major modifications to the rules,¹³⁶ there is no reason that girls and boys should be treated differently when both are qualified to compete on a team. To treat girls differently results in their exclusion from a sport that many already love and at which they excel.

A similar situation affected the starting defensive tackle for the sixth grade football team at Strong Rock Christian School in Georgia—also a girl.¹³⁷ Her school informed her she could no longer play football since “the boys will have impure thoughts and urges.”¹³⁸ The school implemented a mandatory sex-segregated sports policy after the school’s

¹³⁰ Lisa Crivelli, *11-Year-Old Girl Football Player Tackles the Philadelphia Archdiocese*, MSNBC (Feb. 20, 2013, 7:11 PM), <http://www.msnbc.com/hardball/11-year-old-girl-football-player-tackles-the> [https://perma.cc/WL23-J8ZQ].

¹³¹ *Id.*

¹³² *Id.*

¹³³ *Id.*

¹³⁴ Kevin M. Guskiewicz et al., *Cumulative Effects Associated with Recurrent Concussion in Collegiate Football Players: The NCAA Concussion Study*, 290 J. AM. MED. ASS’N 2549 (2003).

¹³⁵ Crivelli, *supra* note 130.

¹³⁶ See, e.g., Rachel Martin, *Is Football Worth the Brain Injury Risk? For Some, the Answer Is No*, NPR (Aug. 9, 2015), <https://www.npr.org/2015/08/09/430877562/is-football-worth-the-brain-injury-risk-for-some-the-answer-is-no> [https://perma.cc/2TG4-U9G2].

¹³⁷ Laken Litman, *12-Year-Old Girl Barred from Football Team Due to Worries of ‘Impure Thoughts’*, FOR THE WIN (June 25, 2013, 5:00 PM), <http://ftw.usatoday.com/2013/06/12-year-old-girl-barred-from-football-team-due-to-worries-of-impure-thoughts> [https://perma.cc/4Q4T-QRK6]. We are not, of course, arguing that the Equal Protection Clause applies to a private school; rather, the argument is that the same concern with sex segregation arises regardless of whether a sport is public or private.

¹³⁸ *Id.*

chief executive officer “prayed about it” and felt “that there’s not supposed to be mixing of the genders.”¹³⁹ The girl expressed profound disappointment and a sense of lost camaraderie after the school’s decision.¹⁴⁰ She and her parents started the “Let Her Play” Facebook campaign to support “female athletes and gender equality.”¹⁴¹

Female wrestlers have also confronted sex segregation. Administrators at Kathleen Janis’s middle school in Utah told Janis she could not even try out for the boys wrestling team. Again, the school district cited concerns about “inappropriate or sexual touching” should a female compete against males. With no girls’ team to turn to, Janis was, at least for a while, unable to compete in her sport for her school.¹⁴² In perhaps a hopeful note for the end of automatically sex-segregated sports teams, Janis eventually filed a federal lawsuit and the judge ordered that Janis be allowed to compete for her school’s wrestling team. For Janis herself, however, the school’s position and the need to bring a lawsuit in the first place consumed precious time and energy that she could instead have used to focus on her sport—and on reaping the physical and mental health benefits associated with sports participation.

Sex segregation in sports occurs not only in stereotypically male sports like football and wrestling, but also in sports where there may be a female-only team, but the girl or woman wishes to play with and against the boys. A fifth-grade girl named Rikki Harris played basketball with boys since the age of three.¹⁴³ Harris was a talented young basketball player and played in tournaments against some of the best fifth-grade boy basketball players in the country. After some parents became upset that she was better than many of the boys, she was banned from playing on the boys’ team. Harris switched to girls’ basketball and remained a star, and credits her experience playing with boys for making her a “stronger” and “faster” athlete than she might have been

¹³⁹ *Id.*

¹⁴⁰ *Id.*

¹⁴¹ *Id.*

¹⁴² Tim Whelan Jr., *Amid Court Battle, Female Middle School Wrestlers Earn Victories in Utah*, USA TODAY: HIGH SCH. SPORTS (Feb. 15, 2017), <http://usatodayhss.com/2017/amid-court-battle-female-middle-school-wrestlers-earn-victories-in-utah> [https://perma.cc/2JLW-F784].

¹⁴³ Jordan J. Wilson, *Banned from Playing with Boys, Rikki Harris Leads North Central Girls*, INDYSTAR (Jan. 30, 2017, 5:26 PM), <http://www.indystar.com/story/sports/high-school/2017/01/30/banned-playing-boys-rikki-harris-leads-north-central-girls/97220834> [https://perma.cc/T4UA-MBZQ].

otherwise.¹⁴⁴ But since Harris was not allowed to play with the boys, it remains unclear whether she *could* have competed successfully with them, and she still suffers the harm of exclusion from their team. Moreover, we should ask how many “Rikki Harrises” are out there: girls who can successfully practice and play with boys, and who would benefit from participation on a team with more athletes who push them to their physical limits.

Sex segregation in sports runs so deep and is so engrained in American culture that sometimes girls who happen to look more androgynous than the other girls on their team are needlessly barred from sporting events. An eight-year-old female soccer athlete with very short hair in Nebraska, who was so talented that she was playing on the eleven-year-old girls’ team, was banned from a soccer match because someone complained that she was a boy, an assertion based solely on her appearance. Indeed, fear of girls and boys competing with and against one another is so rampant that even in cases where a team is actually sex-segregated, girls may be barred for not appearing feminine enough. The public health concerns that incidents like this raise are numerous. At least at the amateur level—for example in elementary through high school and in recreational leagues—sports ideally should promote higher confidence, self-esteem, and body image. Being barred, even temporarily, based solely on appearance likely has large negative effects.¹⁴⁵

The needless and harmful effects of preventing girls from participating in the sport where they wish to compete due to sex segregation has public health implications. Girls who cannot participate in their chosen sport suffer an inherent injury. They are less likely to reap the physical health benefits associated with the specific sport, and the damaging psychological experience of exclusion may discourage some from participating in sports altogether. As previously discussed, high-intensity sports like football have the potential to provide more protective factors against the development of CVD. Moreover, girls who choose not to compete at all after being prohibited from competing in their first-choice sport do not derive the positive mental health effects of increased body image and feelings of self-empowerment, as well as the

¹⁴⁴ *Id.*

¹⁴⁵ Christopher Mele, *‘They Thought I Was a Boy’: Short-Haired Girl Barred from Soccer Tournament*, N.Y. TIMES (June 6, 2017), <https://www.nytimes.com/2017/06/06/sports/girl-soccer-player.html> [<https://perma.cc/5BC3-MZKB>].

protective measures against depression and suicide. Especially because it is so often young girls who are barred, sex segregation in sports raises particular concerns for this demographic. And such concerns can extend into adulthood. If girls are discouraged or prevented from wrestling in their youth, they may give up on sports altogether, raising their risk for developing CVD or cancers later in their lifetime.

Sex segregation in sports also poses a public health issue by enabling separate tracks for sports—a stereotypically masculine track for men and a stereotypically feminine track for women. Both genders suffer from such stereotyping, but as we have already discussed in Section II.B, the feminized track in particular often mitigates some of the health benefits generally associated with sports participation. For example, sports that emphasize stereotypically feminine qualities often lead to intense dieting and preoccupation with physical appearance—counter to the benefits in self-esteem and reduction in eating disorders. Artistic gymnastics provides a prime example.¹⁴⁶ The sport evaluates both men and women on acrobatic ability, but also scores women on elegance and grace, while emphasizing strength and power for men. Both men and women perform a floor routine on a thirty-nine square foot mat. But beyond this basic parameter, the men’s and women’s versions of the floor exercise event feature major differences. Women’s floor routines last up to ninety seconds and are performed to music of the gymnast’s choice, contain acrobatic elements as well as several required dance elements, and are scored on factors including “artistry.” Men’s floor routines are only seventy seconds long, are not performed to music, are composed of “mostly acrobatic elements, combined with other gymnastic elements of strength and balance, flexibility, and handstands,” and include no dance elements or artistry component to the scoring. Men perform on the rings and women don’t; women perform on the balance beam and men don’t¹⁴⁷—the difference in events reinforces the stereotype that men are strong and women are graceful. Although both sports are called “gymnastics,” sex segregation facilitates two versions that look entirely different.

¹⁴⁶ For a related discussion, see Leong, *supra* note 1.

¹⁴⁷ Compare *Men’s Artistic Gymnastics Event Description*, USA GYMNASTICS, <https://usagym.org/pages/gymnastics101/men/events.html> [https://perma.cc/4ZSC-DAHJ] (last visited Dec. 29, 2018), with *Women’s Artistic Gymnastics Event Descriptions*, USA GYMNASTICS, <https://usagym.org/pages/gymnastics101/women/events.html> [https://perma.cc/DV6Q-HWEZ] (last visited Dec. 29, 2018).

Even the difference in gymnastics attire requirements are telling. Women must compete in leotards, whose appearance itself is heavily regulated, as is the styling of their hair, the type of jewelry they may wear, and their overall appearance.¹⁴⁸ Men wear long pants and tank tops. These requirements communicate that there is a correct way for men and women to look while engaging in an athletic endeavor that is functionally the same. Were men and women to compete directly against one another in gymnastics, these distinctions would be much more difficult to justify and enforce.

Moreover, in a society already hyper-focused on women's appearance, rules mandating or encouraging short skirts, tight leotards, highly styled hair, and heavy makeup reinforce the idea that even women whose bodies are highly trained to perform extraordinary feats must also present themselves for the visual consumption of the audience. Such rules undermine one important justification for women's sports in the first instance: to communicate that women should be valued for the things that they can do, not only for the way that they look.¹⁴⁹ "Women's sports" like gymnastics, competitive cheerleading, figure skating, and diving, with their emphasis on leanness, grace, beauty, and overall aesthetic, have a relatively high prevalence of eating disorders.¹⁵⁰ This is unsurprising given the

¹⁴⁸ USA GYMNASTICS, 2018–2019 WOMEN'S PROGRAM RULES AND POLICIES 19 (2018), https://usagym.org/PDFs/Women/Rules/Rules%20and%20Policies/2018_2019_w_rulespolicies_0912.pdf [<https://perma.cc/M2HL-TKCB>].

¹⁴⁹ This issue is particularly critical given the existence of publications such as the *Sports Illustrated Swimsuit Edition*, which present women—but not men—in sexually provocative poses. The women featured in the *Swimsuit Edition* are often mainstream models, whose bodies are not particularly athletic. Occasionally, the *Swimsuit Edition* also features athletes—for example, the 2017 issue featured Olympic gymnasts Simone Biles and Aly Raisman—yet the featured athletes are often posed provocatively in revealing outfits, rather than engaged in the athletic endeavors that made them famous in the first place. With this inequality as a backdrop, the harm of sex segregation that further undermines women's athletic achievements is thrown into sharp relief. See, e.g., *Aly Raisman 2017: Houston, Texas*, SPORTS ILLUSTRATED: SWIMSUIT EDITION, <https://www.si.com/swimsuit/model/aly-raisman/2017/photos#4> [<https://perma.cc/L5H6-UM66>] (last visited Dec. 29, 2018).

¹⁵⁰ See, e.g., Patrick O'Connor et al., *Eating Disorder Symptoms in Female College Gymnasts*, 27 MED. & SCI. IN SPORTS & EXERCISE 550 (1995); Mary B. Harris & Debbie Greco, *Weight Control and Weight Concern in Competitive Female Gymnasts*, 12 J. SPORT & EXERCISE PSYCH. 427 (1990); Merrell Noden, *Dying to Win*, SPORTS ILLUSTRATED (Aug. 8, 1994), <https://www.si.com/vault/1994/08/08/131742/dying-to-win-for-many-women-athletes-the-toughest-foe-is-anorexia-gymnist-christy-henrich-lost-her-battle> [<https://perma.cc/84B7-X6WK>].

emphasis on the female athletes' weight and BMI—factors that tend to be less emphasized in the men's version of the sport.

Sports like gymnastics and competitive cheerleading are notorious for their emphasis on aesthetics among women—far more than the men—in the sport. Female athletes feel the pressure to be small from the time they begin gymnastics or cheerleading all the way up to the elite levels of their respective sport. Both sports emphasize conforming to societal beauty norms and require female athletes to wear skimpy and skintight uniforms. These factors lead to the development of eating disorders, a previously established public health issue. For example, Jeanette Suros, a gymnast, began comparing her body to other girls in her class when she was five, and began dieting at the age of ten. She explained: “I started losing the enjoyment of the sport and began looking at it as a job; [I felt] that if I failed I would be punished.”¹⁵¹ Suros continued to compete in gymnastics and was diagnosed with anorexia nervosa during her freshman year of high school. Suros transitioned from gymnastics to competitive cheerleading, but her eating disorder continued. Weighing only sixty-four pounds, Suros had a heart attack at seventeen due to her eating disorder.¹⁵²

Shawn Johnson, a gold-medal Olympic gymnast, has also discussed her disordered eating habits. Although Johnson was never publicly diagnosed with an eating disorder, she recognized numerous disordered eating patterns in herself and struggled with her body image and self-esteem. In an interview with *People Magazine*, Johnson revealed how her parents would consistently make her favorite foods, pancakes and French toast, for her to ensure Johnson was getting at least a minimal number of calories. Even during the 2008 Olympics, Johnson estimated she was eating just 700 calories per day. Johnson also stated that “the [gymnastics] judges liked the look of a very lean and skinny gymnast that was artistic and graceful, rather than powerful like myself.”¹⁵³ Her comments demonstrate the way that sex segregation enables gender-stereotypical notions of what an athlete in a particular sport “should”

¹⁵¹ Jeanette Suros, *My Eating Disorder Gave Me a Heart Attack at 17*, TEEN VOGUE (Nov. 19, 2015, 5:57 PM), <http://www.teenvogue.com/story/anorexia-eating-disorder-essay> [https://perma.cc/65YS-KWKR].

¹⁵² *Id.*

¹⁵³ Julie Mazziotta, *Shawn Johnson Opens Up About Her Eating Disorder: 'I Would Eat 700 Calories a Day'*, PEOPLE (Nov. 23, 2015, 2:00 PM), <http://people.com/sports/shawn-johnson-talks-about-eating-disorder-would-eat-700-calories-a-day> [https://perma.cc/ZQ6Z-8FKF].

look like, and these stereotypes in turn have negative health consequences.

Much like gymnastics and competitive cheerleading, figure skating places a heavy emphasis on aesthetic ideals. Jenny Kirk, a highly successful figure skater, openly discussed not only her struggle with an eating disorder, but also the struggles of fellow elite figure skating athletes. Kirk “quit skating in 2006 in order to recover from [her] eating disorder.”¹⁵⁴ Kirk attributed the high rate of eating disorders amongst figure skaters—a rate she estimated to be eighty-five percent—to the expectations of “fans, judges, and coaches . . . that thinner is better.”¹⁵⁵ Kirk further emphasized that coaches and parents misunderstand the natural changes puberty causes in a skater’s timing for weight or size issues, thus causing coaches and parents to pressure young athletes to lose weight.¹⁵⁶ Kirk noted that the pressure to be thinner and more stereotypically beautiful intensifies as a skater reaches the upper echelons of figure skating.¹⁵⁷

Another elite competitive skater, Jamie Silverstein, was on track to go to the Olympics with her ice dancing partner, Justin Pekarek. Silverstein, however, was struggling intensely with anorexia nervosa and had to quit the sport for several years to recover. Silverstein said the suffocating pressure of the sport and the “skintight outfits that show every flaw” contributed to the development of anorexia nervosa.¹⁵⁸

Sex segregation enables versions of sports that emphasize weight and appearance. Such segregation is the root cause of the serious public health issues of eating disorders—which have serious physical consequences ranging from heart disease to skeletal compromise—and related mental health issues such as depression and low self-esteem. The standards associated with the female version of a segregated sport reinforces harmful gender stereotypes. The female athletes in gymnastics, cheerleading, and figure skating are supposed to be thin, beautiful, and graceful in their tiny uniforms, yet at the same time

¹⁵⁴ Lesleyann Coker, *Jenny Kirk on Figure Skating’s Eating Disorder Epidemic (Part II)*, HUFFPOST (Mar. 23, 2010), http://www.huffingtonpost.com/lesleyann-coker/jenny-kirk-on-figure-skat_b_431698.html [<https://perma.cc/A8GX-NSB6>].

¹⁵⁵ *Id.*

¹⁵⁶ *Id.*

¹⁵⁷ *Id.*

¹⁵⁸ Juliet Macur, *Ex-Rising Star Makes a Healthy Return to the Ice*, N.Y. TIMES (Feb. 18, 2006), <http://www.nytimes.com/2006/02/18/sports/olympics/exrising-star-makes-a-healthy-return-to-the-ice.html> [<https://perma.cc/75F6-TVQ6>].

exhibit the power, strength, and endurance that each of these sports unquestionably require. This leads to a concerning prevalence of eating disorders in the athletes. If women in these sports were judged like men, with an emphasis primarily on power, speed, endurance, and sheer strength, the public health crisis of eating disorders in female athletes would likely decrease. The crushing pressure not only to be a powerful athlete but also to perform a flawless version of femininity would decrease. Even allowing women the option of wearing outfits more like those of male athletes—pants and a tank top for example—would be a step in the right direction. The sex segregation in sports like gymnastics and figure skating harm women by forcing untenable and undesirable expectations on them.

Rowing also demonstrates the potential negative impact of sex-segregated sports participation on women. Unlike aesthetic sports such as gymnastics, the male and female versions of rowing do not feature different and gender stereotypical requirements. But weight is a factor in the sport itself. The pressure on high-level rowers to stay small and conform to the ideal female rower body type, particularly at more competitive levels of the sport, is high. Although rowing does not emphasize appearance in the way that that gymnastics, competitive cheerleading, and figure skating do, female rowing athletes often develop an obsession with weight since the athletes are literally pulling their own weight through water. For example, Kayleigh Drum rowed on her high school's lightweight rowing team. Drum's coaches would, "in a teasing and good-natured way," make comments about her eating habits at team dinners. During this time, Drum had an eating disorder and weighed only ninety-five pounds.¹⁵⁹

Though rowing more subtly connects with sex segregation than sports like gymnastics, a potential linkage remains. If, instead of by gender, rowers were separated solely by current weight levels, without incentivizing weight loss, the pressure on men and women alike might reduce. Competition could be based on weight ranges that include large numbers of both men and women (e.g., weights of 140–150 pounds, or 150–160 pounds), thereby integrating the sport. Importantly, such integration would lead to a much wider range of body types being viewed as acceptable at all weight classes, and the normative associations

¹⁵⁹ D'Arcy Maine, *The Pressure of Pulling Your Own Weight in Rowing*, ESPN, http://www.espn.com/espn/feature/story/_/id/19232937/espnw-body-image-confidential#!pressure [https://perma.cc/7H6E-2ST8] (last visited Nov. 27, 2017).

with thinner body types for women would be reduced. The goal would be to optimize weight for performance, not to diet ferociously to fit into a particular weight class for competition—or into a particular size of leotard or costume.

Gender stereotypes communicated through sports segregation are harmful to women. When the segregation occurs because of—or includes—rules that imply that women lack strength, stamina, coordination, or some other athletic ability, they reinforce notions of women's physical inferiority.¹⁶⁰ For women, sex segregation in sports can become a reminder of (supposed) physical inferiority rather than a source of empowerment.

Finally, defaulting to sex segregation in sports—even when there is no evidence that such segregation is necessary in a particular sport, and even when girls or women do not desire such segregation—communicates women's inherent athletic inferiority or, in some instances, that women are undesirable in some other way. This exclusion prompts a stigmatic harm: women come to see themselves as unequal to men, a self-perception that not only negates many of the benefits of sports participation that women experience, but also affects other areas of women's lives.¹⁶¹ Girls who see themselves as unfit to play sports with boys grow into women who may see themselves as unable to compete with boys in other areas: academically, professionally, politically. We cannot simply cordon off athletics from every other domain of life. The harm of exclusion is real, deep, and potentially long-lasting. Consider Justice Warren's words in *Brown v. Board of Education*, writing about Black children consigned to attend segregated schools:

Such considerations [of concern for inferiority] apply with added force to children in grade and high schools. To separate them from others of similar age and qualifications solely because of their race generates a feeling of inferiority as to their status in the community

¹⁶⁰ See also *supra* Section II.B.

¹⁶¹ See, e.g., Brian A. Nosek & Mahzarin R. Banaji, *Math = Male, Me = Female, Therefore Math ≠ Me*, 83 J. PERSONALITY & SOC. PSYCH. 44 (2002); Brian Nosek et al., *National Differences in Gender-Science Stereotypes Predict National Sex Differences in Science and Math Achievement*, 106 PROCEEDINGS NAT'L ACAD. SCI. 10593 (2009); Karla Hoff & James Sonam Walsh, *The Whys of Social Exclusion: Insights from Behavioral Economics*, WORLD BANK GROUP (2018). Cf. *Brown v. Bd. of Educ.*, 347 U.S. 483 (1954).

that may affect their hearts and minds in a way unlikely ever to be undone.¹⁶²

The situation of young girls prohibited from engaging in sports they love is, of course, different in key respects from the situation of Black children segregated from their White peers. We do not in any way mean to imply that a girl excluded from wrestling is similarly situated to a Black child forced to attend a segregated and shamefully under-resourced school. Still, the experience of exclusion and resulting self-perception of inferiority is one that causes trauma across many identity categories, and the idea of a limited parallel has some intuitive appeal.

In this vein, future research should investigate the idea that the public health effects of sex-segregated sports may, in some instances, operate somewhat like the public health effects of racial segregation. The scholarly community “widely accepts” that racial discrimination produces negative public health effects.¹⁶³ The occurrence of many public health problems is higher for many minority groups, due in part to barriers to accessible care,¹⁶⁴ but also, some research suggests in response to the experience of segregation itself.¹⁶⁵ In addition to the myriad other harms to public health resulting from mandatory sex segregation, the very act of sex segregation may in itself trigger negative public health consequences.

¹⁶² *Brown*, 347 U.S. at 494.

¹⁶³ Tené T. Lewis, Courtney D. Cogburn & David R. Williams, *Self-Reported Experiences of Discrimination and Health*, 11 ANN. REV. CLINICAL PSYCH. 407 (2015) (surveying research examining possible negative health outcomes relating to racial segregation and other forms of racial discrimination); Naomi Priest et al., *A Systematic Review of Studies Examining the Relationship Between Reported Racism and Health and Wellbeing for Children and Young People*, 95 SOC. SCI. MED. 115 (2013) (finding that negative mental health outcomes were associated with anxiety and depression in 76% of reported incidents of racial discrimination); David R. Williams & Chiquita Collins, *Racial Segregation: A Fundamental Cause of Racial Disparities in Health*, 116 PUB. HEALTH REP. 404, 405 (2001).

¹⁶⁴ *Racial and Ethnic Approaches to Community Health (REACH)*, CDC, <https://www.cdc.gov/chronicdisease/resources/publications/aag/reach.htm> [https://perma.cc/E6AL-H2FE] (last updated Nov. 13, 2017).

¹⁶⁵ See, e.g., Priest, *supra* note 163; Kevin Outterson, *Tragedy and Remedy: Reparations for Disparities in Black Health*, 9 DEPAUL J. HEALTH CARE L. 735 (2005); Jason Silverstein, *How Racism is Bad for Our Bodies*, ATLANTIC (Mar. 20, 2013), <https://www.theatlantic.com/health/archive/2013/03/how-racism-is-bad-for-our-bodies/273911> [https://perma.cc/3B9D-BSYG].

III. IMPLICATIONS

What are the implications of treating a social problem as a public health issue? This Part considers that question. As necessary background, Section III.A articulates the law related to sex segregation, with an emphasis on the Equal Protection Clause of the Fourteenth Amendment. Section III.B then considers how the public health consequences of sex segregation should be incorporated into legal analysis and discusses several possible interventions designed to ameliorate the negative health consequences of sex segregation in sports.

A. *The State of the Law*

This Section examines how courts evaluate sex segregation under the Equal Protection Clause. The Equal Protection Clause provides the primary basis for rejecting government discrimination on the basis of sex. Courts apply intermediate scrutiny to issues of sex-based classifications, meaning that “classifications by gender must serve important governmental objectives and must be substantially related to achievement of those objectives.”¹⁶⁶ Courts have used this standard to strike down arbitrary sex classifications in circumstances regarding monetary inheritance¹⁶⁷ and eligibility for financial support post-divorce.¹⁶⁸ However, not all sex-based classifications are struck down, and classifications based on sex continue to be subject to less demanding tests than racial or religious classifications.¹⁶⁹

The foundational case applying the intermediate scrutiny standard is *Mississippi University for Women v. Hogan*.¹⁷⁰ Joe Hogan, a male nurse holding an associate’s degree, sought admission to the exclusively female Mississippi University for Women School of Nursing (MUW) to pursue a four-year nursing degree and was denied admission based

¹⁶⁶ *Craig v. Boren*, 429 U.S. 190, 197 (1976).

¹⁶⁷ *Reed v. Reed*, 404 U.S. 71, 76 (1971).

¹⁶⁸ *Orr v. Orr*, 440 U.S. 268, 283 (1979).

¹⁶⁹ Racial and religious classifications are subject to strict scrutiny. Under a strict scrutiny standard, the government interest must be compelling and the regulation narrowly tailored. See, e.g., *Brown v. Bd. of Educ.*, 347 U.S. 483 (1954); *Gratz v. Bollinger*, 539 U.S. 244, 270 (2003).

¹⁷⁰ 458 U.S. 718, 724 (1982).

solely on his sex.¹⁷¹ The Court, applying intermediate scrutiny, found MUW's policy unconstitutional. In this finding, the Court emphasized MUW's admissions' policy "tends to perpetuate the stereotyped view of nursing as an exclusively woman's job,"¹⁷² thereby negating the asserted important governmental objective of making up for past discrimination against women. Further, even if an important governmental objective existed, MUW's policy was not substantially related to its achievement. MUW allowed Hogan to audit the course, undermining MUW's position that female students were "adversely affected by the presence of men."¹⁷³

One can readily see how a similar line of reasoning might extend to sex segregation in sports. As noted in Part I, the perpetuation of harmful gender stereotypes undermines reasons set forth for continued sex segregation in sports. Just as the Court in *Hogan* was concerned about the stereotype of nursing being a predominately women's profession,¹⁷⁴ so might a court find that the presumption that women cannot handle swimming a 200-meter race against men as equally problematic.

In *Craig v. Boren*, plaintiffs brought a challenge to Oklahoma's 3.2% beer law under the Equal Protection Clause. The law prohibited the sale of 3.2% beer to males younger than twenty-one and females under eighteen.¹⁷⁵ Oklahoma asserted the law's government interest was to enhance traffic safety; several studies indicated males between eighteen- and twenty-years-old were more likely to drive under the influence.¹⁷⁶ However, partly due to a stated lack of persuasive data, the Court found the law failed intermediate scrutiny. The sex-based differentiation present in the law simply was not closely tailored enough to enhance traffic safety and meet the government's asserted interest.¹⁷⁷ In the context of sex-segregated sports, courts should take a note from the Court in *Craig* and critically examine the lack of data supporting the need for the practice.

¹⁷¹ *Id.* at 720–21. For additional background on Mr. Hogan, see, for example, Reginald Stuart, *Mississippi College Enrolls First Man*, N.Y. TIMES (Aug. 30, 1981), <http://www.nytimes.com/1981/08/30/us/mississippi-college-enrolls-first-man.html> [<https://perma.cc/ZQ42-2GQK>].

¹⁷² *Hogan*, 458 U.S. at 729.

¹⁷³ *Id.* at 730.

¹⁷⁴ *Id.* at 729.

¹⁷⁵ *Craig v. Boren*, 429 U.S. 190, 192 (1976).

¹⁷⁶ *Id.* at 200–01.

¹⁷⁷ *Id.* at 204.

United States v. Virginia scrutinized the Virginia Military Institute's (VMI) males-only admission policy and the asserted important government interest of protecting supposed educational and leadership benefits of a males-only policy.¹⁷⁸ Virginia asserted that the "adversative method of training"¹⁷⁹ used at VMI was inappropriate for women and that women's admittance would destroy VMI's prestige.¹⁸⁰ The Court, harkening back to *Hogan*, found Virginia's argument unpersuasive on the basis that the policy disregarded a person's "individual merit" to become a citizen-soldier.¹⁸¹ VMI based their policy rationale on harmful and paternalistic gender stereotypes about what women can and cannot handle. Similarly, a blind adherence to the practice of sex-segregated sports completely disregards the possible value of affirming that a woman may be able to compete against, and to win against, a man.

These foundational Equal Protection Clause cases set the stage for a direct inquiry from courts into the practice of sex-segregated sports. Courts have historically taken divergent approaches in this area of law. *O'Conner v. Board of Education* exemplifies cases in which sex-segregated sports are upheld. In *O'Conner*, a young female athlete wished to play basketball with her school's boys' basketball team, as she had in the past.¹⁸² However, her school's rules required sex segregation in contact sports, including basketball.¹⁸³ The Court found that "without a gender-based classification in competitive contact sports, there would be a substantial risk that boys would dominate the girls' programs."¹⁸⁴ The Court remanded the case to the district court, where the sex-segregated basketball program was upheld.¹⁸⁵ Other courts follow a similar line of reasoning, finding that female soccer can be sex-segregated since schools have discretion in designing their sports

¹⁷⁸ *United States v. Virginia*, 518 U.S. 515, 535 (1996).

¹⁷⁹ *Id.* at 540.

¹⁸⁰ *Id.* at 542.

¹⁸¹ *Id.* at 546.

¹⁸² *O'Connor v. Board of Educ.*, 449 U.S. 1301, 1302-03 (1980).

¹⁸³ *Id.*

¹⁸⁴ *Id.* at 1307.

¹⁸⁵ *O'Connor v. Bd. of Educ.*, 545 F. Supp. 376, 384 (N.D. Ill. 1982).

programs,¹⁸⁶ and finding that physical differences justified another case of sex-segregated basketball.¹⁸⁷

Some courts perpetuate problematic gender stereotypes by emphasizing the supposedly universal advantage in athletic endeavors conferred on men by physical differences between men and women. In many instances, such stereotypes harm both women and men. In *Clark v. Arizona Interscholastic Association*, for instance, the Ninth Circuit examined an Arizona Interscholastic Association policy, which prohibited boys from playing on the girls' volleyball teams.¹⁸⁸ The Ninth Circuit found that the government's interest in redressing past discrimination in women's sports was an important government interest and that the law was substantially related to this interest since "due to average physiological differences, males would displace females . . . on the volleyball team."¹⁸⁹ Here, again, the false belief that male students innately possess athletic prowess that female students do not promotes unfounded stereotypes and harms people of all sexes and genders.

Other courts, though, have found that sex segregation of some sports is unconstitutional under the Equal Protection Clause. In *Brenden v. Independent School District 742*, an early case decided using the less demanding rational basis test rather than intermediate scrutiny, the Eighth Circuit held women were capable of competing against men "in non-contact sports."¹⁹⁰ This trend has generally continued, particularly in cases where there is no women's team equivalent.¹⁹¹ For example, in *Beattie v. Line Mountain School District*, the school district's attempt to prohibit girls from competing on its boys' wrestling team failed intermediate scrutiny.¹⁹² Line Mountain School District argued that excluding girls was an important government objective because there was a need to protect students and prevent "psychological and moral degradation."¹⁹³ The court disagreed, and suggested that

¹⁸⁶ See *Hoover v. Meiklejohn*, 430 F. Supp. 164, 172 (D. Colo. 1977) (explaining that school districts may decide to discontinue soccer as an interscholastic athletic activity, field separate teams for males and females, or permit both sexes to compete on the same team).

¹⁸⁷ *Cape v. Tenn. Secondary Sch. Athletic Ass'n*, 563 F.2d 793, 795 (6th Cir. 1977).

¹⁸⁸ *Clark v. Ariz. Interscholastic Assoc.*, 695 F.2d 1126, 1127–28 (9th Cir. 1982).

¹⁸⁹ *Id.* at 1131.

¹⁹⁰ *Brenden v. Indep. Sch. Dist.*, 477 F.2d 1292, 1300 (8th Cir. 1973).

¹⁹¹ See, e.g., *Force v. Pierce City R-VI Sch. Dist.*, 570 F. Supp. 1020 (W.D. Mo. 1983) (holding a female student could play on the male football team in the absence of a substantial justification to deny female students that opportunity).

¹⁹² *Beattie v. Line Mt. Sch. Dist.*, 992 F. Supp. 2d 384, 397 (M.D. Pa. 2014).

¹⁹³ *Id.* at 394.

preventing girls from competing was both under-inclusive, in that some “weaker” boys may be at more risk of injury than some girls, and over-inclusive, in that it prevented stronger girls from wrestling some boys.¹⁹⁴

Courts have also been skeptical when women’s sports are treated differently than men’s sports. In *Communities for Equity v. Michigan High School Athletic Association*, the Sixth Circuit struck down the Michigan High School Athletic Association’s policy of separating sports seasons solely on the basis of gender.¹⁹⁵ The court found this practice resulted in disparate treatment of women’s sports.¹⁹⁶ Courts have further found Equal Protection violations when sports create arbitrary rules based on gender. For example, in *Dodson v. Arkansas Activities Association*, the court held that the Arkansas Activities Association violated the Equal Protection Clause by limiting girls to half-court basketball, creating long-term disadvantages for the female players seeking to play at the collegiate level, while boys were allowed to play full-court games and were thus not disadvantaged when seeking collegiate opportunities.¹⁹⁷ The policy failed intermediate scrutiny because the only asserted justification for the policy was that girls had always played half-court basketball in Arkansas.¹⁹⁸

Although the intermediate scrutiny analysis of sex-segregated sports may at times lead to different conclusions, courts should look critically at this issue. Sex-based classifications, including divisions in sports, must be evaluated using a rigorous intermediate scrutiny analysis rather than simply assuming that sex segregation is proper.

B. *Considering Sex Integration*

Public health law is not cabined to one area of law. Constitutional law can be public health law, but as we noted in Part II, we focus here on the Equal Protection Clause as the provision most evenly applicable across jurisdictions. Moreover, sex segregation by the government deserves particular scrutiny, as a long tradition of Supreme Court jurisprudence demonstrates,¹⁹⁹ and as a result provides a useful forum

¹⁹⁴ *Id.* at 393.

¹⁹⁵ *Cmtys. for Equity v. Mich. High Sch. Athletic Ass’n*, 459 F.3d 676, 695 (6th Cir 2006).

¹⁹⁶ *Id.*

¹⁹⁷ *Dodson v. Ark. Activities Ass’n*, 468 F. Supp. 394, 396–97 (E.D. Ark. 1979).

¹⁹⁸ *Id.* at 398.

¹⁹⁹ *See supra* Section III.A.

for investigating the public health consequences of sex segregation. Where equal protection demands sex desegregation of sports, that intervention serves public health goals. These goals can be achieved through two pathways under intermediate scrutiny analysis. Public health issues related to sex segregation in sports can affect both the importance of the government interest and the sufficiently close tailoring to that interest.

Governmental interests for maintaining sex segregation in sports include paternalistic ideas like protecting women's safety and ensuring there is no inappropriate sexual contact, particularly at the youth level.²⁰⁰ However, women challenging sex-segregated sports can assert that both of these interests are misguided. Women's gymnastics, for example, may not truly be protecting women's physical health and safety given the prevalence of eating disorders in the sport. One can imagine a world in which women's gymnastics is desegregated and the sport is actually much healthier for women. What if men and women competed in a single, unified version of the sport? Perhaps each of the ten events (eight if the floor exercise and vault events were combined, since both men and women already compete in those) could be a separate competition with identical standards for men and women. Men might have an advantage, on average, in some events—for example, those, like rings, that require a lot of upper body strength—while women might have an advantage, on average, in events like balance beam, where agility and a lower center of gravity are helpful. The pressure on women to maintain physical beauty on top of athletic prowess would dissipate as women are judged more like men on strength and less on their appearance and grace—that is, it is less likely that women will be subject to enforced standards of femininity when not only women are competing in a particular gymnastics event.

Neither can a government interest in preventing inappropriate sexual contact justify sex segregation. None of the girls mentioned in this Article who played integrated football or wrestling mentioned inappropriate sexual contact. Yet sexual abuse is often rampant in sports that *are* sex-segregated—as an example, consider elite gymnastics doctor

²⁰⁰ See, e.g., Attorney Gen. v. Mass. Interscholastic Athletic Ass'n, 393 N.E.2d 284 (Mass. 1979) (government argues that safety interests justify sex segregation); Monica Charen, *Should Boys Wrestle Girls?*, NAT'L REV. (Mar. 1, 2011), <https://www.nationalreview.com/2011/03/should-boys-wrestle-girls-mona-charen> [<https://perma.cc/9F6Y-LS6J>] (“Are we really sure we want to obliterate the last traces of chivalry in young men—to stamp out every trace of protectiveness from the male psyche?”).

Larry Nassar, who was accused of sexual abuse in court by over 156 women and was ultimately sentenced to 40 to 175 years in prison.²⁰¹ Sex segregation did not protect the elite gymnasts that Nassar victimized for decades. As the #MeToo movement has taught us, sexual abuse is not limited to women. Even so, women experience high rates of inappropriate sexual contact just living and being in the world.

Women may also use the closely tailored aspect of the intermediate scrutiny analysis to challenge sex-segregated sports. Using women's gymnastics as an example again, the attempt to protect women's physical health and safety simply is not working. Eating disorders are highly prevalent arguably *because of* the sex-segregated nature of the sport. A more closely tailored solution might be to separate athletes by height, or to allow women to compete on rings and men to compete on beam. This type of intervention might more adequately promote women's physical health and safety by shedding the appearance expectations or by opening up other opportunities to receive the physical and mental health benefits of competing in different or more gymnastics events.

Treating sex segregation in sports as a public health issue also may implicate Title IX. By recognizing the harmful implications of public health in sex-segregated sports, Title IX goals and compliance efforts might be strengthened. After Title IX's passage, girls' and women's sports participation increased "by 560% at the college level and 990% in high schools."²⁰² Though these numbers are astounding by themselves, the potential for this increase to be even higher exists if sports like football and wrestling were more typically integrated. Moreover, women can benefit more from the visibility, funding, and status of sports like football. This can have positive impacts on women's mental health, body image, and self-esteem. In addition, women would be able to reap the positive physical health benefits that high intensity sports like football provide for cardiovascular health and cancer prevention. And, as football (perhaps) becomes less popular due to its well-documented

²⁰¹ Will Hobson, *Larry Nassar, Former USA Gymnastics Doctor, Sentenced to 40–175 Years for Sex Crimes*, WASH. POST (Jan. 24, 2018), https://www.washingtonpost.com/sports/olympics/larry-nassar-former-usa-gymnastics-doctor-due-to-be-sentenced-for-sex-crimes/2018/01/24/9acc22f8-0115-11e8-8acf-ad2991367d9d_story.html?utm_term=.938652de4490 [https://perma.cc/QSS7-ZNES].

²⁰² *Title IX Myths and Facts*, WOMEN'S SPORTS FOUND. (Mar. 18, 2013), <https://www.womenssportsfoundation.org/advocate/title-ix-issues/what-is-title-ix/title-ix-myths-facts> [https://perma.cc/U3RJ-EWH6].

health risks, perhaps other sports—less stereotypically masculine sports—will instead take the field.

In the field of education law, sex segregation in school physical education classes also has public health implications. Physical education in school “is the most cost-effective mechanism for delivering quality movement programs to the greatest number of children.”²⁰³ Girls should be assured of full opportunities for physical activity for all the aforementioned reasons—higher self-esteem, better body image, fewer incidences of depression, and lower risk of CVD, breast cancer, and colon cancer. Sex-segregated physical education classes prevent girls from receiving these benefits. This is particularly important because “research demonstrates that girls who participate in physical activity with boys at an early age grow up to be more resilient.”²⁰⁴

Finally, sex segregation in sports has potential implications in employment law settings, where anti-discrimination statutes, such as Title VII, among other provisions, may form the basis for lawsuits. Women often face bias and skepticism when they endeavor to coach “men’s sports” like football—even at non-elite levels—although this longstanding practice of exclusion is slowly beginning to change.²⁰⁵ The first female coach hired by a National Football League team, Jen Welter, gave a powerful interview discussing the importance of women entering the “final frontier for women in sports.”²⁰⁶ Welter discussed the positive effect of women coaches, explaining the importance of men learning from and listening to women as well as the potential for women coaches to inspire and create opportunities for other women.²⁰⁷ Welter also noted that her hiring garnered attention for other female football players, who told her that they “just got to do an interview with ESPN” because of Welter’s advancement.²⁰⁸ Both men and women receive

²⁰³ WOMEN’S SPORTS FOUND., SINGLE-SEX PHYSICAL EDUCATION CLASSES 1, <https://www.womenssportsfoundation.org/wp-content/uploads/2016/07/single-sex-physical-education-classes-the-foundation-position.pdf> [<https://perma.cc/6VML-UQXG>] (last visited Nov. 27, 2017).

²⁰⁴ *Id.* at 2.

²⁰⁵ Tim Struby, *The Glass Sideline*, SBINATION (Nov. 27, 2018), <https://www.sbnation.com/2018/11/27/18096989/women-coaching-men-professional-sports-nfl-glass-sideline> [<https://perma.cc/Y7LQ-SQYS>].

²⁰⁶ Jen Welter, *I’m Here as a Football Coach*, SPORTS ILLUSTRATED (Aug. 4, 2015), <https://www.si.com/mmqb/2015/08/04/jen-welter-first-woman-nfl-coach-arizona-cardinals> [<https://perma.cc/ZV8T-R9RU>].

²⁰⁷ *Id.*

²⁰⁸ *Id.*

positive health benefits, such as self-esteem boosts and improvement of gender relations, from integrated coaching opportunities.

The public health implications of sex-segregated sports cover many areas of law, from constitutional law to employment law. Sex segregation in sports deeply impacts women's health and should be considered a public health issue.

CONCLUSION

Sex segregation in sports has a profound impact on women's health. The ongoing practice of defaulting to sex segregation should be analyzed as a public health issue. Although not every sport at every level should be desegregated, the effect of sports participation on health—women's health in particular—weighs into the proper analysis of both law and policy. Ultimately, the vast majority of athletic pursuits, particularly at non-elite levels, are about the health of both mind and body, and the structure and content of those pursuits deserves careful consideration through the lens of health.