A Duty to Kiss and Tell? Examining the Uncomfortable Relationship Between Negligence and the Transmission of HPV

Timothy J. Hasken*

ABSTRACT: Tort law has long held individuals liable for negligently spreading certain communicable diseases. Over time, courts have extended the cause of action to include various sexually transmitted infections. Currently, HPV is the most common sexually transmitted infection in the United States. Surprisingly, however, there is a dearth of case law examining HPV's transmission in a negligence context. HPV has many unique characteristics that make the virus's transmission difficult to reconcile within the negligence framework. At the core of all negligence claims resides a defendant's duty; however, HPV's characteristics make it difficult to determine when a duty should exist and raises questions as to whether courts should impose a duty to prevent transmission of the infection at all. Furthermore, HPV's unique characteristics impose factual constraints upon causation, creating a serious impediment—not present in other infection cases—to plaintiffs' attempts to prove causation.

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^{*} J.D. Candidate, The University of Iowa College of Law, 2010; B.S., Truman State University, 2007. I would like to thank my parents, Dan and Janet, and my wife, Kellie, for their loving support of my educational endeavors.

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I. Introduction

On August 1, 2008, a jury in Muscatine County, Iowa, held Alan Evans liable for negligently transmitting the human papillomavirus ("HPV") to Karly Rossiter. The jury awarded Rossiter \$1.5 million, including \$700,000 in compensatory damages and an additional \$800,000 in punitive damages. Evans and Rossiter had a sexual encounter on January 1, 2005. Before the encounter, Evans volunteered to Rossiter that he did not have any sexually transmitted infections ("STIs"). Shortly after their sexual encounter, Evans encouraged Rossiter to get tested for HPV, and in April 2005, Rossiter discovered she had some cell abnormalities that are often associated with HPV. Subsequently, Rossiter developed genital warts, and in January 2006, she was diagnosed with severe cell abnormality caused by certain high-risk HPV strains. It was later discovered that within six months prior to Rossiter's sexual encounter with Evans, Evans had a sexual encounter with another woman who experienced symptoms similar to Rossiter's.

A brief description of the background of Evans and Rossiter's relationship provides a basic factual situation to guide this Note. However, the specific details concerning Evans and Rossiter's relationship is superfluous to this Note because the question of whether an individual should be liable for negligently transmitting HPV must be analyzed in a far broader framework than one specific factual situation. Nonetheless, Evans and Rossiter's basic story reoccurs throughout the country: approximately twenty million Americans are currently infected with an active strain of HPV,⁸ and each recurrence embraces a different twist on similar facts.⁹

Adding to the importance of this issue is that the negligent transmission of HPV would be a matter of first impression in all but one state. ¹⁰ For

^{1.} Jennifer Meyer, *Muscatine Jury Awards Damages to Woman in Case Against Former Lover*, QUAD-CITY TIMES (Davenport, Iowa), Aug. 5, 2008, *available at* http://www.qctimes.com/news/local/article_86d36b6c-fde2-56e6-959d-dee28aad7541.html.

^{2.} Trisha Mehaffey, \$1.5 Million Awarded in HPV Lawsuit, GAZETTE (Cedar Rapids, Iowa), Aug. 11, 2008, available at 2008 WLNR 14997680 (reporting that the jury awarded punitive damages because it believed that Evans "'willfully and wantonly' disregarded Rossiter's safety" when he transmitted HPV to her).

^{3.} Id.

^{4.} Meyer, supra note 1.

^{5.} *Id*

^{6.} Mehaffey, supra note 2.

^{7.} Meyer, *supra* note 1.

^{8.} American Social Health Association, Learn About HPV > Fast Facts, http://www.ashastd.org/hpv/hpv_learn_fastfacts.cfm (last visited Mar. 1, 2010). All statistics are current as of October 2008.

^{9.} *Id*.

^{10.} The Supreme Court of Maine is the only appellate court that has specifically considered the negligent transmission of HPV. See infra notes 37–38 and accompanying text (discussing how courts have only considered negligent transmission with regard to other STIs

example, Iowa appellate courts have never considered a case involving the negligent transmission of STIs. In fact, Iowa appellate courts have not even considered issues surrounding the negligent transmission of communicable diseases since the turn of the nineteenth century.¹¹

This Note argues that courts must be cautious in applying negligence principles to HPV transmission because unlike other infections and STIs, HPV has characteristics that are difficult to reconcile with fundamental negligence principles. Part II traces the common-law evolution of the cause of action for the negligent transmission of STIs. This background provides a historical context that illustrates the principle elements of negligence—duty, reasonable care, and causation—as applied to the transmission of diseases. Part III details the characteristics of HPV and demonstrates how these characteristics differ from other common STIs.

Part IV argues that HPV's unique characteristics make its transmission difficult to reconcile with notions of duty and causation. Part IV analyzes an individual's duty to prevent the spread of HPV in the context of actual knowledge and constructive knowledge, and how the development of the HPV vaccine affects an individual's duty into the future. The Note then examines the factual obstacles plaintiffs face when attempting to establish causation for the negligent transmission of HPV. Finally, the Note briefly addresses damages resulting from the negligent transmission of HPV.

II. EVOLUTION OF THE CAUSE OF ACTION

A. THE COMMON-LAW DEVELOPMENT OF THE CAUSE OF ACTION

While it is unsettled when or if a cause of action exists for negligently transmitting HPV, courts have long recognized a cause of action for negligently transmitting contagious diseases.¹² In 1873, the Massachusetts Supreme Court, in one of the earliest reported cases on this issue, held a landlord liable to his tenants under a failure-to-warn theory for their contraction of smallpox.¹³ Shortly after this case, other courts began

like herpes and AIDS). However, many state appellate courts have considered the tortious transmission of STIs generally. *See infra* text accompanying notes 19–25 (discussing the development of case law with regard to the cause of action for negligently transmitting STIs).

^{11.} Gilbert v. Hoffman, 23 N.W. 632 (Iowa 1885). Hoffman is the only Iowa case that addresses liability for the transmission of diseases.

^{12.} Berner v. Caldwell, 543 So. 2d 686, 688 (Ala. 1989) ("For over a century, liability has been imposed on individuals who have transmitted communicable diseases that have harmed others.").

^{13.} Minor v. Sharon, 112 Mass. 477 (Mass. 1873). When he rented the property to his tenants, the property owner was aware that previous inhabitants had contracted smallpox. *Id.* at 479.

recognizing a cause of action for the negligent transmission of smallpox and other highly contagious diseases. ¹⁴

In 1885, the Iowa Supreme Court established a cause of action for the negligent transmission of smallpox.¹⁵ In *Gilbert v. Hoffman*, a hotel operator was aware that a current guest had been removed from the hotel's premises because he was actively infected with smallpox.¹⁶ The operator then assured the plaintiff that none of the hotel's guests had smallpox and that the hotel was sanitary and posed no risk of contracting the disease.¹⁷ When the plaintiff subsequently contracted smallpox, the court held the hotel operator liable under a failure-to-warn theory.¹⁸

Over time, courts broadened the scope of the cause of action for negligently transmitting diseases to include those transmitted sexually. Decided in 1920, *Crowell v. Crowell*²⁰ was one of the earliest cases to establish a cause of action for the negligent transmission of a venereal disease. In *Crowell*, a husband who had admitted infidelity was held liable for infecting his wife with a vile and loathsome disease. While *Crowell* helped establish the cause of action, it took courts several more decades to clarify when a person owes a duty to a sexual partner and what level of care that duty requires.

- 16. Id.
- 17. Id. at 633-34.

^{14.} See, e.g., Smith v. Baker, 20 F. 709, 710 (C.C.S.D.N.Y. 1884) (applying the cause of action for tortious transmission to include whooping cough); Edwards v. Lamb, 45 A. 480, 481 (N.H. 1899) (extending the cause of action for negligent transmission of diseases to include sepsis); Kliegel v. Aitken, 69 N.W. 67, 69 (Wis. 1896) (finding the defendant liable for tortiously transmitting typhoid fever).

^{15.} Hoffman, 23 N.W. at 633.

^{18.} *Id.* Additionally, the court refused to hold the plaintiff liable for contributory negligence despite her knowledge of rumors that a guest at the hotel had smallpox. *Id.* Similarly, alleging contributory negligence as a defense to the negligent transmission of an STI has not proven to be successful and will not be addressed in this Note. *See* Thomas G. Eschweiler, *Educational Malpractice in Sex Education*, 49 SMU L. REV. 101, 120–21 (1995) (noting that contraction of an STI does not necessarily result from contributory negligence, and that California courts have been reluctant to impose contributory-negligence liability upon young people who have contracted STIs); Jeanmarie Papelian, Note, *Assessing Liability for Negligent Sexual Transmission of AIDS*, 24 SUFFOLK U. L. REV. 649, 662 (1990) (concluding that contributory-negligence defenses have been unsuccessful in avoiding liability where an individual has contracted an STI).

^{19.} See Berner v. Caldwell, 543 So. 2d 686, 688 (Ala. 1989) (concluding that the plaintiff made an actionable tort claim based on the transmission of an STI).

^{20.} Crowell v. Crowell, 105 S.E. 206 (N.C. 1920).

^{21.} *Id.* at 208 ("[T]he defendant would be liable in the present case whether guilty of an assault or not, and independent of the fraud or concealment.").

^{22.} Id. at 206.

^{23.} Negligence is conduct which falls below a required standard of care. RESTATEMENT (SECOND) OF TORTS \S 282 (1965). Two essential elements of negligence are a duty and a breach of that duty. *Id.*

In 1989, the Alabama Supreme Court, in *Berner v. Caldwell*, annunciated that "a cause of action for the tortious transmittal of herpes . . . exists under the law of Alabama." Additionally, the court stated that a person has "a duty to either abstain from sexual contact . . . or at least, to warn" his or her sexual partner when the person "knows, or should know that he or she is infected." Most courts considering the issue agree with *Berner* that a person's knowledge of an STI imposes a duty of care on that person. However, many state courts, such as the Iowa appellate courts, have not yet considered this issue. While states are developing a consensus that a person who "knows, or should know" of his STI has a duty of care to his partners, case law is still developing the level of knowledge required to trigger this duty, the level of care required by such knowledge, and the scope of STIs to which this duty applies.

B. MODERN COURTS' DEVELOPMENT OF KNOWLEDGE AND REASONABLE CARE

Determining what level of knowledge is required to trigger a duty of reasonable care is a complex question. Certainly, diagnosis from medical professionals and medical treatment or prescription of drugs creates sufficient knowledge.²⁷ The presence of open genital sores or other overt physical characteristics, such as drippage or rashes, also trigger a duty of reasonable care.²⁸ One court has held that a person has a duty of reasonable care if he or she has actual knowledge that a prior sexual partner has been diagnosed with AIDS.²⁹ However, some courts have declined to impose a duty on a person merely because of that person's infidelity or promiscuity, reasoning that such activity does not ensure adequate knowledge.³⁰

^{24.} Berner, 543 So. 2d at 689.

^{25.} Id.

^{26.} See McPherson v. McPherson, 712 A.2d 1043, 1046 (Me. 1998) (referring to Berner as "perhaps the most frequently cited recent case to deal with the issue"); Deuschle v. Jobe, 30 S.W.3d 215, 219 (Mo. Ct. App. 2000) (acquiescing to Berner's "knew or should have known" standard); Mary G. Leary, Tort Liability for Sexually Transmitted Disease, in 88 AM. Jur. TRIALS 153, 180 (2008) (stating that the "core of a claim for the negligent transmission of a sexual disease" is Berner's requirement that a defendant "knew or should have known" that he possessed the contagious disease).

^{27.} See Michele L. Mekel, Note, Kiss and Tell: Making the Case for the Tortious Transmission of Herpes and Human Papillomavirus, 66 MO. L. REV. 929, 953 (2001) ("The most logical way to prove knowledge, it would seem, is by obtaining the defendant's medical records").

^{28.} See M.M.D. v. B.L.G., 467 N.W.2d 645, 647 (Minn. Ct. App. 1991) (holding that knowledge of "body acne" was sufficient to trigger a duty of reasonable care); Hamblen v. Davidson, 50 S.W.3d 433, 439 (Tenn. Ct. App. 2000) (concluding that the defendant's knowledge of a "'scratch' and a rash on his genitals" gave him sufficient knowledge to trigger a duty).

^{29.} Doe v. Johnson, 817 F. Supp. 1382, 1391, 1395–96 (W.D. Mich. 1993) (concluding that a person who engages in "high risk" activity plus more, such as knowledge that a previous partner has AIDS, is subject to a duty of reasonable care to prevent the spread of the disease).

^{30.} See McPherson, 712 A.2d at 1044 (holding that a husband does not have a duty toward his wife merely because of infidelity).

Ultimately, "[t]he level of knowledge required to trigger the duty to avoid exposing others to the disease is dependent upon the particular facts involved in each case."³¹

Once courts determine an individual owes a duty of reasonable care, the courts must then determine what type of conduct breaches that duty. *Berner* suggests that persons must abstain from sexual encounters or "at least . . . warn" their partners about their condition. ³² Many courts have adopted similar definitions of reasonable care. ³³ In addition, some courts have suggested that using appropriate protection, such as condoms, also constitutes reasonable care. ³⁴ Furthermore, a person's requisite standard of care does not decrease merely because his infection is not currently active. ³⁵

The final question concerning the negligent transmission of an STI is how broad a scope this cause of action should have—does it extend to all STIs or just some? Most courts have used broad language holding that the cause of action extends to "sexually transmitted" or "venereal" infections.³⁶ However, most modern appellate courts considering the negligent transmission of STIs have dealt exclusively with herpes or AIDS,³⁷ and no appellate court has held a person infected with HPV liable for negligently transmitting the infection to another.³⁸

- 31. Hamblen, 50 S.W.3d at 439.
- 32. Berner v. Caldwell, 543 So. 2d 686, 689 (Ala. 1989).
- 33. See, e.g., Meany v. Meany, 639 So. 2d 229, 236 (La. 1994) (holding that a husband had a duty to "either refrain from sexual contact with his wife or warn her of his symptoms"); McPherson, 712 A.2d at 1046 (holding that people with knowledge of their STI must, at a minimum, warn their sexual partners); Mussivand v. David, 544 N.E.2d 265, 269–70 (Ohio 1989) ("[P]eople suffering from genital herpes generally have a duty either to avoid sexual contact with uninfected persons or, at least to warn potential sex partners ").
- 34. See Doe v. Roe, 267 Cal. Rptr. 564, 566 (Cal. Ct. App. 1990) (implying that if the defendant had taken some steps to prevent the spread of his herpes, he may not have been negligent); Doe v. Roe, 598 N.Y.S.2d 678, 680 (N.Y. J. Ct. 1993) ("[O]ne . . . can be held negligent . . . by failing to take precautions, such as the use of a condom, to prevent transmission of the disease.").
- 35. *Doe*, 267 Cal. Rptr. at 567 ("Our conclusion is not altered by the fact that defendant did not have an active outbreak of the disease [herpes] during the relationship.").
- 36. See, e.g., McPherson, 712 A.2d at 1046 ("[W]e hold that one who knows or should know that he or she is infected with a sexually transmitted disease is under a duty to protect sexual partners from infection."); Deuschle v. Jobe, 30 S.W.3d 215, 218–19 (Mo. Ct. App. 2000) ("[W]e hold that one has a legal duty to exercise reasonable care by disclosing a contagious venereal disease before entering into sexual relations with another."); Hamblen, 50 S.W.3d at 439 ("[T]here is, at the very least, a genuine issue of material fact as to whether the Defendant knew or should have known he had herpes or any other sexually transmitted disease.").
- 37. See, e.g., Berner, 543 So. 2d at 688 (finding of facts stating that the defendant was infected with genital herpes and transmitted the disease to the plaintiff); R.A.P. v. B.J.P., 428 N.W.2d 103, 106 (Minn. Ct. App. 1988) (same); Deuschle, 30 S.W.3d at 219 (same); Hamblen, 50 S.W.3d at 439 (same).
- 38. See infra notes 39–43 (summarizing the only state-appellate-court case to examine the negligent transmission of HPV).

McPherson v. McPherson is the only appellate case to consider the negligent transmission of HPV.³⁹ In *McPherson*, the Maine Supreme Court held that a husband who infected his wife with HPV was not liable for negligently transmitting the infection.⁴⁰ The court first considered whether a cause of action for the wife's injuries existed, concluding:

We can conceive of no principled reason to distinguish the consequence suffered here by Nancy [the plaintiff–wife], infection with a disease, from any other physical harm that could befall a person because of the negligence of another, and for which we would recognize a cause of action in negligence.⁴¹

After establishing the cause of action, the court held that the husband had no duty to his wife, relying on the trial court's fact-finding that the husband "did not know or have reason to know" he had HPV at the time he infected his wife. ⁴² The *McPherson* court treated HPV as it would any other disease, and it is unclear if the court considered the substantial differences between HPV and other communicable diseases when making its decision. ⁴³

III. INTRODUCTION TO HPV

A. THE PREVALENCE AND SEVERITY OF HPV

HPV is the most prevalent sexually transmitted infection in the world.⁴⁴ An estimated twenty million Americans, approximately fifteen percent of the age-fifteen-to-age-forty-nine population, are currently infected with some strain of HPV.⁴⁵ Research suggests that eighty percent of all sexually active women who reach the age of fifty will have been infected with HPV at some

^{39.} See McPherson, 712 A.2d at 1045 (listing prior courts' actions concerning STIs—none of which deal with HPV).

^{40.} Id. at 1046.

^{41.} Id. at 1045. See Part IV for reasons why the harm suffered by the plaintiff—wife can be distinguished from "other physical harm."

^{42.} *Id.* at 1046. Like in *McPherson*, the vast majority of persons infected with HPV will not be aware of their infection when they infect another. CTRS. FOR DISEASE CONTROL & PREVENTION, GENITAL HPV: THE FACTS 2 (2007), http://www.cdc.gov/STD/hpv/the-facts/hpv-the-facts-2007.pdf [hereinafter HPV: THE FACTS].

^{43.} *McPherson*, 712 A.2d at 1045. The court relied on *Berner* (a herpes case) when creating the cause of action. *Id.* However, nowhere in the court's opinion does it discuss, or evidence any consideration of, the differences between HPV and herpes and how such differences might affect liability. The court reached the appropriate result; however, courts should be cognizant that HPV has unique traits (frequency, temporary symptoms, and normally mild consequences) and should contemplate how these traits affect liability. *See infra* Part III.

^{44.} Gail Javitt et al., Assessing Mandatory HPV Vaccination: Who Should Call the Shots?, 36 J.L. MED. & ETHICS 384, 384 (2008).

^{45.} Id. at 385.

point in their lives. 46 Many physicians believe HPV is as prevalent as the common cold. 47

HPV is a name for a group of over 100 different strains of viruses.⁴⁸ Over thirty of the strains are transmitted through sexual contact,⁴⁹ and each strain is classified as either high-risk or low-risk.⁵⁰ Low-risk strains may cause genital warts, whereas high-risk strains may cause cervical cancer or other more rare types of cancer.⁵¹ However, in the vast majority of HPV cases, the infected persons are unaware of their infections.⁵² With most HPV infections, the infected person experiences no symptoms and there is no commercially available way to test for HPV.⁵³ Therefore, HPV is very often unknowingly passed between sexual partners.⁵⁴

While HPV is very common, overt symptoms and severe problems are far less frequent. Two high-risk HPV strains, strains 16 and 18, cause seventy percent of cervical cancers in America.⁵⁵ The American Cancer Society projects that approximately 11,070 women were diagnosed with cervical cancer in 2008.⁵⁶ And while HPV will be the cause for ninety-nine percent of these diagnoses,⁵⁷ a female who contracts a high-risk strain of HPV is still highly unlikely to develop cervical cancer.⁵⁸ First, ninety percent of the time the human immune system naturally clears itself of both high-risk and low-risk HPV infections within two years.⁵⁹ Second, even if a female is infected with a high-risk HPV strain, and her body is unable to clear itself of the virus, cervical cancer is preventable.⁶⁰ HPV will first cause precancerous cells to

- 49. Id.
- 50. HPV: THE FACTS, supra note 42.
- 51. *Id*.

- 53. *Id*.
- 54. Lane Wood, A Young Vaccine for Young Girls: Should the Human Papillomavirus Vaccination Be Mandatory for Public School Attendance?, 20 HEALTH LAW 30, 30 (2008).
 - 55. Am. Cancer Soc'y, HPV Vaccines FAQ, supra note 47.
- 56. AM. CANCER SOC'Y, ESTIMATED NEW CANCER CASES AND DEATHS BY SEX, US, 2008 (2008), http://www.cancer.org/downloads/stt/CFF2008Table_pg4.pdf.
 - 57. Am. Cancer Soc'y, HPV Vaccines FAQ, supra note 47.
 - 58. Id
 - 59. CDC, HPV Fact Sheet, supra note 52.
 - 60. Am. Cancer Soc'y, HPV Vaccines FAQ. supra note 47.

^{46.} Id. The statistic was estimated through computer-generated modeling. Id.

^{47.} Am. Cancer Soc'y, Human Papilloma Virus (HPV), Cancer, and HPV Vaccines—Frequently Asked Questions, http://www.cancer.org/docroot/CRI/content/CRI_2_6x_FAQ_HPV_Vaccines.asp (last visited Mar. 1, 2010) [hereinafter Am. Cancer Soc'y, HPV Vaccines FAQ].

^{48.} Ctrs. for Disease Control & Prevention & Nat. Prevention Info. Network, Common STDs and the Organisms that Cause Them: Genital HPV Infection, http://www.cdcnpin.org/scripts/std/std.asp (last visited Mar. 1, 2010).

^{52.} Ctrs. for Disease Control & Prevention, Genital HPV Infection—CDC Fact Sheet, http://www.cdc.gov/std/HPV/STDFact-HPV.htm (last visited Mar. 1, 2010) [hereinafter CDC, HPV Fact Sheet] (stating HPV may also cause cancer of the vulva, vagina, anus, and penis).

develop that doctors can detect through regular pap smears, allowing doctors to treat the cells before cancer develops. 61 These precancerous cells likely only develop into cancer if left untreated for approximately ten years. 62

Similar to high-risk strains, low-risk strains infrequently cause genital warts. While about fifteen percent of Americans currently have an active strain of HPV, less than one percent have genital warts.⁶³ Furthermore, since the human immune system usually kills HPV without symptoms, many people were at one time infected with HPV without developing genital warts.⁶⁴ According to the Centers for Disease Control and Prevention ("CDC"), "[w]arts can appear within weeks or months after sexual contact with an infected partner."⁶⁵ Or, they may not appear at all. "If left untreated, genital warts might go away, remain unchanged, or increase in size or number. They will not turn into cancer."⁶⁶

B. THE DEVELOPMENT OF THE HPV VACCINE

The Food and Drug Administration ("FDA") approved a vaccine, Gardasil, for the HPV strains that are most likely to cause cervical cancer or genital warts.⁶⁷ Gardasil is a virus-like particle vaccine, similar to the hepatitis B vaccine, and is administered in a series of three shots.⁶⁸ Studies have shown the vaccine to be nearly one hundred percent effective,⁶⁹ although the long-term safety and effectiveness of the vaccine is still being determined.⁷⁰ Currently, the vaccine is expensive (\$375 for the entire series); however, insurance companies are beginning to cover the vaccine.⁷¹ The FDA approved the vaccine for females ages nine through twenty-six,⁷²

- 61. Id.
- 62. *Id*.
- 63. CDC, HPV Fact Sheet, supra note 52.
- 64. See Javitt et al., supra note 44, at 385 (drawing the inference that if eighty percent of women have had HPV, but only one percent of Americans have genital warts, then genital warts are a rare symptom of HPV).
 - 65. CDC, HPV Fact Sheet, supra note 52.
 - 66. *Id*.
 - 67. Am. Cancer Soc'y, HPV Vaccines FAQ, supra note 47.
 - 68. Javitt et al., *supra* note 44, at 386.
- 69. *Id.* at 385 ("The results demonstrated that in women without prior HPV infection, Gardasil was nearly 100% effective in preventing precancerous cervical lesions, precancerous vaginal and vulvar lesions, and genital warts caused by vaccine-type HPV.").
- 70. See id. at 387 ("Bills requiring insurance companies to cover HPV vaccination or allocating state funds for this purpose were enacted in eight states.").
- 71. Ctrs. for Disease Control & Prevention, HPV Vaccine Information for Young Women, http://www.cdc.gov/std/hpv/STDFact-HPV-vaccine-young-women.htm (last visited Mar. 1, 2010).
 - 72. Am. Cancer Soc'y, HPV Vaccines FAQ, supra note 47.

though some medical professionals do not believe the vaccine has substantial benefits for women over the age of eighteen.⁷³

The HPV research allows for several conclusions: (1) HPV is very common and often transmitted unknowingly; (2) HPV does not frequently cause health problems, but certain strains, if undetected, may cause cervical cancer; and (3) HPV's symptoms are normally curable or often go away on their own. These characteristics distinguish HPV from other STIs such as herpes and AIDS. For example, there are about 1.1 million Americans infected with HIV (less than one-half of one percent of the population), and approximately twenty percent of infected persons are unaware of their infection.⁷⁴ Approximately twenty percent of Americans carry herpes, and its most common symptom is visible genital sores.⁷⁵ Currently, there is no cure for either AIDS or herpes.⁷⁶ Because of HPV's unique characteristics, courts must seriously consider when, and in what limited circumstances, they should recognize a cause of action for the negligent transmission of HPV.

IV. EXAMINING THE COMPATIBILITY OF NEGLIGENCE AND THE TRANSMISSION OF HPV

This Part argues that HPV's unique characteristics—specifically its frequency, diagnosis difficulty, and its unpredictability with regard to the severity of symptoms⁷⁷—make the transmission of HPV difficult to reconcile with the common-law duty requirement that courts apply to the negligent transmission of STIs. Part IV.A examines duty under three different scenarios: (1) when an individual has actual knowledge they are infected with HPV; (2) when an individual may have constructive knowledge they carry HPV; and (3) how the development of the HPV vaccine affects an individual's future duty. Part IV.B addresses the element of causation, and Part IV.C examines appropriate damages.

A. HPV AND ESTABLISHING DUTY

Courts generally have said that an individual has a duty of reasonable care to prevent the spread of his or her disease when the individual "knows"

^{73.} See id. ("Some authorities recommend vaccination of women ages 19 to 26, but the American Cancer Society experts believed that there was not enough evidence of benefit to recommend vaccinating all women in this age group.").

^{74.} CTRS. FOR DISEASE CONTROL & PREVENTION, NEW ESTIMATES OF U.S. HIV PREVALENCE, 2006, at 4 (2008), available at http://www.cdc.gov/hiv/topics/surveillance/resources/factsheets/pdf/prevalence.pdf [hereinafter HIV PREVALENCE].

^{75.} CTRS. FOR DISEASE CONTROL & PREVENTION, CDC FACT SHEET: GENITAL HERPES (2007), available at http://www.cdc.gov/std/herpes/Herpes-Fact-Sheet.pdf [hereinafter FACT SHEET: GENITAL HERPES].

^{76.} HIV PREVALENCE, *supra* note 74; FACT SHEET: GENITAL HERPES, *supra* note 75.

^{77.} See supra Part III.A (discussing the prevalence and severity of HPV).

or "should have known" of his or her condition. Register the duty associated with transmitting diseases in terms of "knowledge," courts are applying principles consistent with common-law negligence, which has long associated negligence with foreseeability. For example, Oliver Wendell Holmes wrote, "[I]t is only when he fails to exercise the foresight of which he is capable . . . that he is answerable for the consequences. Conversely, if an individual is not capable of this foresight—and thus neither "knows" nor "should have known" of his or her condition, according to Holmes—it would follow that the individual cannot be negligent.

Herein lies the conflict with placing a duty upon individuals to take precautions from infecting others with HPV: generally, individuals are "not capable of foresight" because they neither know of their condition (have actual knowledge they carry HPV) nor can they be expected to know of their condition (have constructive knowledge of their condition). The following Parts examine duty in the context of actual knowledge of HPV, constructive knowledge of HPV, and the impacts that HPV vaccination will have on duty in the future.

1. Duty and Actual Knowledge

Rarely would an individual have actual knowledge that he or she has contracted HPV.⁸¹ In fact, the CDC explicitly states that "[m]ost people never even know they have HPV or that they are passing it to their partner."⁸² This is because, as discussed above, absent genital warts (which are very rare), ⁸³ HPV causes no symptoms in men, and there are no available methods to test for the virus.⁸⁴ A woman, absent genital warts, will only learn

^{78.} See supra notes 25–26 and accompanying text (discussing Berner's "know or should have known" standard and cases that have adopted this standard).

^{79.} See Borel v. Fireboard Paper Prods. Corp., 493 F.2d 1076, 1103 (5th Cir. 1973) (in justifying its application of RESTATEMENT (SECOND) OF TORTS § 402A to asbestos manufacturers, the court stated: "But though the application is novel, the underlying principle is ancient. Under the law of torts, a person has long been liable for the foreseeable harm caused by his own negligence.... It implies a duty to warn of foreseeable dangers"); Leon Green, Foreseeability in Negligence Law, 61 COLUM. L. REV. 1401, 1422 (1961) ("When the common law courts, in the latter half of the nineteenth century, became willing to expand liability for unintended hurts, there is not the slightest doubt that they did so by permitting juries to determine the issue of negligence under the foreseeability formula.").

^{80.} OLIVER WENDELL HOLMES, JR., THE COMMON LAW 73 (Am. Bar Ass'n ed., 2009) (1881).

^{81.} See supra notes 52–54, infra notes 84–87 and accompanying text (discussing the difficulty of diagnosing HPV, especially for males who generally present no symptoms of the disease).

^{82.} CTRS. FOR DISEASE CONTROL & PREVENTION, COMMON QUESTIONS ABOUT HPV AND CERVICAL CANCER 2 (2007), http://www.cdc.gov/std/HPV/common-questions/common-questions.pdf [hereinafter CDC, COMMON QUESTIONS ABOUT HPV AND CERVICAL CANCER].

^{83.} *See supra* notes 62–64 and accompanying text (noting how HPV strains rarely result in the infected individual developing genital warts).

^{84.} CDC, HPV Fact Sheet, supra note 52.

of her HPV if a pap smear detects irregular cell changes.⁸⁵ However, in the vast majority of cases, women with HPV will never experience precancerous cell changes,⁸⁶ and women that do develop cell changes will have unknowingly carried HPV for an indeterminate amount of time.⁸⁷

The unique characteristics of HPV significantly inhibit individuals from obtaining actual knowledge of their condition. In fact, actual knowledge is only present under one of two rare circumstances: (1) when the individual possesses genital warts or (2) when a women's pap smear reveals precancerous cellular irregularities.⁸⁸ If actual knowledge is present, an individual most certainly should have a duty of reasonable care to prevent the spread of HPV. However, absent either of these symptoms, actual knowledge is unobtainable and an individual would not have a duty imposed upon him, unless he "should have known" of his condition.⁸⁹

2. Duty and Constructive Knowledge

For lack of a better term, the "should have known" standard can be equated with constructive knowledge. Put another way, a court might ask at what point is there enough circumstantial evidence present for an individual to be aware he may have HPV and for a court to impose a duty upon him. This is a difficult question and courts are less uniform in answering it. Courts have analyzed constructive knowledge under two different thresholds. First, courts have considered whether a person has constructive knowledge under a high-risk threshold by asking if that person has engaged in high-risk activities. ⁹⁰ Second, courts have considered whether a person has constructive knowledge under a high-risk "plus" threshold by asking if that person has engaged in high-risk activity and has some additional evidence of disease. ⁹¹

a. The High-Risk Test

Does an individual have sufficient constructive knowledge merely because he has engaged in high-risk activities, such as having numerous sexual partners or failing to use protection?⁹² As the court in *Doe v. Johnson*

^{85.} Am. Cancer Soc'y, HPV Vaccines FAQ, supra note 47.

^{86.} See supra notes 55–62 and accompanying text (discussing how females will rarely experience cervical cancer as a result of HPV strains).

^{87.} Id.

^{88.} See supra note 85 and accompanying text (discussing the circumstances in which actual knowledge is possible).

^{89.} See cases cited *supra* notes 25–26 and accompanying text (detailing the generally accepted standard that an individual has a duty of care when he knows or should have known of his infection).

^{90.} See infra notes 92–97 (analyzing the high-risk threshold).

^{91.} See infra notes 98–113 (analyzing the high-risk "plus" threshold).

^{92.} At least one commentator has argued that the mere act of engaging in high-risk activity is sufficient to trigger a duty of reasonable care, at least when concerning HIV. Richard

correctly observed, "[T]his would open a door better left closed." Similarly, the court in *McPherson* concluded that a husband does not have a duty to disclose his infidelity (a high-risk activity) to his wife. 94

Imposing a duty upon individuals to disclose all high-risk activities would create a bewildering amount of legal issues and questions. ⁹⁵ Courts would be confronted with a serious line-drawing problem in defining "high-risk activity" and in determining the equal-protection and privacy implications such a duty would impose upon a certain class of people. ⁹⁷ Policy considerations strongly suggest that merely engaging in "high risk" activity does not satisfy the should-have-known standard and does not, nor should it, impose a duty upon individuals to disclose previous high-risk behavior.

b. The High-Risk-Plus Test

Recall Evans and Rossiter's situation, where Evans not only recently had a sexual encounter with another woman but also had knowledge that the woman later developed symptoms associated with HPV.⁹⁸ Should this

Carl Schoenstein, Note, Standards of Conduct, Multiple Defendants, and Full Recovery of Damages in Tort Liability for the Transmission of Human Immunodeficiency Virus, 18 HOFSTRA L. REV. 37, 58–63 (1989) (arguing that the utilitarian benefit derived from an aggressive duty to disclose outweighs individuals' privacy concerns).

- 93. Doe v. Johnson, 817 F. Supp. 1382, 1393 (W.D. Mich. 1993) (holding that basketball star Earvin "Magic" Johnson had no duty to disclose his sexual history merely because he engaged in "high risk" activities).
- 94. McPherson v. McPherson, 712 A.2d 1043, 1046 (Me. 1998). It seems plausible that engaging in extramarital affairs would be a high-risk activity.
 - 95. Johnson, 817 F. Supp. at 1394. The court stated:

Certainly, imposition of a duty to disclose one's "high risk" status raises a number of questions: as a matter of law, what is "high risk" activity? Who is in this "high risk" group? How should "high risk" be defined? Even if a workable definition of "high risk" were discovered, would a duty be imposed on non-high risk group members to disclose to every potential sex partner all prior sexual contacts with partners who were so-called "high risk" group members? Would the duty of disclosure encompass prior sexual contacts with others known to be "promiscuous" or "sexually active?" What are the equal protection implications of imposing such a standard on a class of people? What are the privacy implications of imposing such a standard on a class of people?

Id.

- 96. At what point do sexual encounters become high-risk? Are four sexual encounters acceptable, but five high-risk? What about one unprotected encounter as opposed to numerous protected encounters? Courts are ill-equipped to make such a distinction in a nonarbitrary manner. "Normally, in our system we leave the inevitable process of arbitrary line drawing to the Legislative Branch, which is far better equipped to make ad hoc compromises." Colgrove v. Battin, 413 U.S. 149, 182 (1973) (Marshall, J., dissenting).
- 97. See supra note 95 and accompanying text (noting that defining "high risk" behaviors would be burdensome and would create additional legal issues and questions).
- 98. See supra text accompanying note 7 (discussing how Evans had knowledge that a woman he slept with prior to Rossiter developed symptoms of HPV).

additional knowledge impose a duty upon Evans and others with similar knowledge? The answer likely depends on the balance between two competing interests: (1) an individual's constitutionally protected privacy rights in his prior sexual practices and marital relationship and (2) society's interest in preventing the spread of HPV.⁹⁹

The Supreme Court, acknowledging a constitutional right to privacy in *Stanley v. Georgia*, held, "For also fundamental is the right to be free . . . from unwanted governmental intrusion into one's privacy." Courts have relied on a constitutional right to privacy in sexual behavior when invalidating a state law forbidding birth control, 101 overturning a state statute that prohibited abortions, 102 and denying an action for fraud where the plaintiff accused the defendant of misrepresenting that she used birth control. 103

The *Doe v. Johnson* court balanced an individual's right to sexual privacy and society's interest in preventing the spread of AIDS when determining whether an individual could be held liable for the negligent transmission of HIV.¹⁰⁴ Ultimately, the court held that an individual who engages in highrisk behavior and has knowledge that a previous sexual partner had contracted HIV has a duty to disclose this information to a sexual partner.¹⁰⁵ While such knowledge may create a duty in the context of HIV, it should not impose a similar duty for HPV because HPV has unique characteristics not present with HIV (extreme prevalence, minimal occurrence of severe symptoms, and frequently undetectable).

Drawing an analogy to another widespread virus, the common cold, ¹⁰⁶ few would argue that society's interest in preventing the spread of the cold requires individuals to disclose one's previous intimate contacts with persons displaying cold-like symptoms. Similarly, in products-liability law, a

99. Johnson, 817 F. Supp. at 1391. The court stated:

There are two competing societal interests here. First, as defendant points out, recognition of a duty to warn in certain contexts necessarily invades the constitutionally protected privacy rights of individuals in their sexual practices and in marriage, by requiring people to disclose prior sexual history to every potential sex partner.

Id.

- 100. Stanley v. Georgia, 394 U.S. 557, 564 (1969).
- 101. Griswold v. Connecticut, 381 U.S. 479, 485-86 (1965).
- 102. People v. Belous, 458 P.2d 194, 199 (Cal. 1969).
- 103. Stephen K. v. Roni L., 164 Cal. Rptr. 618, 621 (Cal. Ct. App. 1980).
- 104. Johnson, 817 F. Supp. at 1391.
- 105. *Id.* More specifically, the court adapted a high-risk "plus" test where the plaintiff could avoid summary judgment by showing the defendant both engaged in high-risk activity and knew of another aggravating factor, such as overt symptoms or knowledge of a prior sexual partner's symptoms. *Id.*

106. This is not the first time an analogy has been drawn between the common cold and HPV, as some physicians have analogized them before. *See supra* text accompanying note 47 (discussing how some physicians believe HPV is as prevalent as the common cold).

manufacturer does not have a duty to warn customers of risks that are "common knowledge." "Common knowledge" helps explain why society does not expect individuals to warn others about the common cold. However, despite exhaustive medical research concluding that there is a substantial chance that an individual will contract HPV when an individual has sex with a new partner, ¹⁰⁸ this likely is not "common knowledge." Thus, society (because of a lack of information) has some misinformed expectation that individuals warn and inform potential sex partners about risks associated with HPV and sexual conduct.

However, using the tort system to impose a duty upon individuals to warn sexual partners in the moments before intimacy, on a case-by-case ad hoc basis, would be costly (in terms of individual privacy), would inefficiently compensate victims, 110 and would do little to prevent the spread of HPV. 111 Like the common cold, society's interest in preventing the spread of HPV is best served not through the tort system, but through increasing society's knowledge about the prevalence of the virus, the manner by which it is transmitted, and its symptoms and consequences.

In addition, the law's stance concerning the cold may be derived not only because of the cold's frequency, but also because of a perceived lack of severity of its symptoms. Like the cold, society's interest in preventing the spread of HPV through the tort system is mitigated because HPV's symptoms are relatively not severe. Unlike the cold, HPV can cause cervical cancer and

^{107.} See Andrea Y. Loh, Note, Are Artificial Tans the New Cigarette? How Plaintiffs Can Use the Lessons of Tobacco Litigation in Bringing Claims Against the Indoor Tanning Industry, 107 MICH. L. REV. 365, 377 (2008) ("Implicit in these factors [of a failure-to-warn claim] is the requirement that the plaintiff prove the ordinary consumer would not have known of the risks [and] defendants should have included on a warning.").

^{108.} *See supra* note 46 and accompanying text (noting how eighty percent of women will have been infected with some form of the HPV virus by the time they are fifty years old).

^{109.} ORC MACRO, STD COMMUNICATIONS DATABASE: GENERAL PUBLIC FOCUS GROUP FINDINGS executive summary (2004), available at http://www.cdc.gov/std/HealthComm/HPV GenPub2004.pdf. The CDC used several focus groups to ascertain the public's knowledge about HPV. The study concluded: "HPV awareness was low among participants In general, participants were concerned that most of them had never heard of the disease." *Id.*

^{110.} See Stephen D. Sugarman, Doing Away with Tort Law, 73 CAL. L. REV. 555, 591–96 (1985) (arguing that tort law fails to efficiently compensate plaintiffs because of exorbitant administrative costs and arbitrariness in plaintiff remedies).

^{111.} See id. at 564–73, 586–90 (explaining why tort law does not adequately fulfill any social-engineering function and fails to deter conduct).

^{112.} While colds normally have mild symptoms, colds can lead to complications such as bronchitis and sinusitis and, for people with chronic medical conditions, a cold can cause more severe health conditions. WebMD, Complications of the Common Cold, http://www.webmd.com/cold-and-flu/cold-guide/commno-cold-complications (last visited Mar. 1, 2010). Similarly, HPV symptoms are often mild (or nonexistent) except in rare cases. See supra notes 50–62 and accompanying text (discussing the low likelihood that women have symptoms of HPV after contracting it). For example, recall that the human body eliminates HPV within two years ninety percent of the time. Supra note 59 and accompanying text.

impose the serious consequences associated with cancer; however, cervical cancer is both rare and entirely preventable through early detection. 113 Similarly, HPV may cause noncancerous genital warts which are often temporary. 114 And finally, a majority of persons who contract HPV never experience symptoms, and their body rids itself of the HPV virus in a short period of time. 115

Assuming Evans had knowledge that a recent sexual partner had both HPV-like symptoms and a severe cold, why should tort law require Evans to disclose to Rossiter his knowledge about his previous partner's HPV-like symptoms and not about her cold? With either the cold or HPV, it is quite possible Evans does not carry the virus, and it is unlikely Rossiter will develop harmful symptoms as a result of the sexual encounter with Evans. While HPV is capable of causing more severe symptoms than the common cold, the two viruses are certainly analogous.

A strong argument can be made that tort law should not require an individual to abrogate his constitutional right to sexual privacy despite the individual engaging in high-risk behavior and having additional knowledge. Because HPV is less severe and more prevalent than other infections (e.g., HIV), society has less interest in using the tort system to prevent the spread of HPV. This argument does not mean to diminish the severe consequences resulting from cervical cancer; however, in considering whether the law should impose an affirmative duty upon individuals to abrogate their sexual privacy, the severe, but rare and preventable, consequences of cervical cancer are only one factor in the analysis. Furthermore, society's interest in preventing the spread of HPV is better served outside of the tort system through education or vaccination.

3. HPV Vaccination and Its Impact on Duty

Determining when and whether courts should impose a duty on individuals who transmit HPV is already a difficult question. This question will become increasingly more complex with the implementation of the HPV vaccine. The HPV vaccine is still in its infancy, ¹¹⁶ but if proven safe and effective, it will likely become more prevalent in the future. ¹¹⁷ Many

^{113.} See supra notes 56–62 and accompanying text (discussing what measures can be taken to prevent cervical cancer).

^{114.} See supra note 66 and accompanying text (discussing how genital warts, if left untreated, will not turn into cancer).

^{115.} See supra note 59 and accompanying text (noting how the human immune system naturally clears itself of HPV infections in roughly two years).

^{116.} The HPV vaccine was approved by the Food and Drug Administration on June 8, 2006. Press Release, U.S. Food & Drug Admin., FDA Licenses New Vaccine for Prevention of Cervical Cancer and Other Diseases in Females Caused by Human Papillomavirus (June 8, 2006), available at www.fda.gov/NewsEvents/Newsroom/PressAnnouncements/2006/ucm108666.htm.

^{117.} Javitt et al., *supra* note 44, at 393 (concluding that the vaccine "appears to provide significant protection against cervical cancer" while conceding that "[t]he vaccine is relatively

commentators disagree about whether the HPV vaccine should be or ever will become mandatory. ¹¹⁸ If the HPV vaccination becomes mandatory, not only will the negative outcomes resulting from the spread of HPV decrease even further, ¹¹⁹ but any arguable need to use the tort system to discourage the spread of HPV will also become nonexistent. ¹²⁰ However, if the HPV vaccine does not become mandatory, but only affordable and available for the public to elect, a discussion about the proper role of the tort system arises again.

One of the prominent theories of tort law is that liability should be assigned to the party that can avoid the harm at the lowest cost. ¹²¹ The prevalence of a safe, effective, and affordable HPV vaccine ¹²² would seemingly make the vaccination the most efficient and effective medium for society to avoid the harm caused by HPV. ¹²³ According to this postulate, the

new, and long-term safety and effectiveness in the general population is unknown"); Wood, *supra* note 54, at 32 ("[L]egislators in at least 41 states and Washington D.C. have considered legislation to require, pay for or educate the public about the HPV vaccine.").

- 118. See Javitt et al., supra note 44, at 393 (concluding that the HPV vaccine "exceed[s] the original justifications" for mandatory vaccines); Sylvia Law, Human Papillomavirus Vaccination, Private Choice, and Public Health, 41 U.C. DAVIS L. REV. 1731, 1754, 1764–65 (2008) (concluding that there are no constitutional hurdles to mandatory HPV vaccinations for school-aged children, and that mandatory vaccinations are necessary to ensure all people, underprivileged and racial minorities included, are adequately protected); Wood, supra note 54, at 38 (arguing that a "mandatory HPV vaccination program may not withstand constitutional scrutiny" and raises many ethical and moral concerns); Note, Toward a Twenty-First-Century Jacobson v. Massachusetts, 121 HARV. L. REV. 1820, 1820–21 (2008) (acknowledging that there are many strong arguments for a compulsory HPV vaccination).
- 119. See supra note 69 and accompanying text (noting that the Gardasil HPV vaccination is thought to be one hundred percent effective).
- 120. Since the inception of mandatory vaccinations for hepatitis B, no court in a published opinion has held, or even considered, the issue of the negligent transmission of hepatitis B through sexual contact. In 1991, the CDC suggested mandatory vaccination for hepatitis B, a disease that can be transmitted through both blood and sexual contact, and states unanimously required mandatory hepatitis B vaccinations for school-aged children. Note, *supra* note 118, at 1829.
- 121. See also United States v. Carroll Towing Co., 159 F.2d 169, 173 (2d Cir. 1947) (articulating the popular "Hand Formula," named for Judge Learned Hand, where courts determine negligence by weighing the probability and severity of an injury against the burden of precaution); RICHARD A. POSNER, TORT LAW: CASES AND ECONOMIC ANALYSIS 4 (1982) (articulating that when applying the Hand Formula, "the injurer is liable only for those accidents that he could have avoided at a lower cost than the expected accident cost"). See generally GUIDO CALABRESI, THE COSTS OF ACCIDENTS: A LEGAL AND ECONOMIC ANALYSIS 135–73 (1970) (arguing that to further general deterrence, tort law should place the liability associated with an accident on the party who can most cheaply avoid the accident).
- 122. The HPV vaccination currently costs \$375 for the series of three shots. *See supra* text accompanying note 71. The HPV vaccine has negligible short-term side effects; however, any long-term effects are still unknown. *See supra* note 117 and accompanying text.
- 123. Alternatives to the vaccination include educating the public about HPV or imposing liability on individuals through the tort system on a case-by-case negligence analysis; however each option has severe inefficiencies or drawbacks. If the tort system is the desired medium to prevent the spread of HPV, imposing strict liability would more efficiently and effectively deter

cost associated with HPV should be absorbed by women,¹²⁴ who have access to the vaccine and are therefore the lowest-cost avoiders. However, it is always difficult to measure the "cost" of human conduct,¹²⁵ especially something personal like the HPV vaccination.

Assuming an affordable, safe, and effective vaccination is available and cost is measured in purely economic terms, the vaccination would carry the lowest avoidance cost. However, "cost" may be measured to also include religious and moral objections to the vaccine, 126 as well as any slight risk of side effects the vaccination may carry. 127 If these social costs are included, it is more difficult to ascertain the precise "cost" of the vaccine and it is arguably more contentious to assume that women are the lowest-cost avoiders. However, considering there is no other medium that is one hundred percent effective at preventing the spread of HPV (with the exception of abstinence), it is reasonable to conclude—even when including moral factors—that the vaccination carries the lowest avoidance cost.

Another theory requires women who elect not to receive the vaccination to bear the burdens of HPV and can be justified on utilitarian grounds. An Arkansas court held a young girl could not waive the state's requirement that all school-aged children receive the hepatitis B vaccine because the vaccine was the most efficient and effective way to ensure public health. 128 This utilitarian argument extends to elective HPV vaccinations as

this conduct. See generally Vladimir W. Sentome, Comment, Attacking the Hidden Epidemic: Why a Strict Liability Standard Should Govern the Transmission of Sexually Transmitted Diseases, 2006 U. CHI. LEGAL F. 409 (arguing that sexual activity falls under the strict-liability doctrine of abnormally dangerous activity in the Restatement (Second) of Torts).

124. Shortly before publication of this Note, the FDA approved a male HPV vaccine. Bob Roehr, *Confusion Surrounds HPV Vaccine for Men*, BAY AREA REP. (S.F., Cal.), Oct. 29, 2009, *available at* http://ebar.com/news/article.php?sec=news&article=4295. Information concerning the vaccine is currently scarce. However, if the vaccine becomes accessible and reliable for males, the following analysis would merely apply in a gender-neutral manner. A person who elects not to receive the vaccine—thus not electing the cost-efficient mechanism to prevent HPV's imposing harms—and subsequently contracts HPV symptoms should bear the burdens associated with his or her decision.

125. Roy E. Cordato, *Time Passage and the Economics of Coming to the Nuisance: Reassessing the Coasean Perspective*, 20 CAMPBELL L. REV. 273, 279 (1998) ("Strictly speaking, costs and benefits are *intra*personally perceived. There is no *inter*personal scale upon which they can be unified and ranked and therefore they cannot be interpersonally aggregated.").

126. Renee Gerber, Mandatory Cervical Cancer Vaccinations, 35 J.L. MED. & ETHICS 495, 496 (2007) ("With the HPV vaccine in particular, moral or religious objections arise from the sexually transmitted nature of the infection. Some people believe that families should make the decisions about how best to protect their children against the risks of sexual activity, including the risk of HPV.").

127. See supra note 117 and accompanying text.

128. Boone v. Boozman, 217 F. Supp. 2d 938, 954 (E.D. Ark. 2002). The court stated:

Because the groups at highest risk for Hepatitis B are unlikely to self-identify and pursue the vaccine, immunizing those individuals as children is the recommended strategy to stern the spread of Hepatitis B. Immunization of school children against

well.¹²⁹ Under this theory, a family would have the right not to vaccinate its young girl; however, if the girl subsequently contracts HPV, she must bear the burden imposed by the disease because she elected not to participate in the most efficient, effective, and low-cost medium by which to protect the public from the spread of HPV. Thus, strong cost-based and utilitarian arguments suggest the individuals electing not to receive the HPV vaccination should bear their own burdens imposed by the virus.

B. HPV AND ESTABLISHING CAUSATION

The previous Section analyzed the difficulties in determining when and whether an individual should have a duty to take reasonable care to prevent the spread of HPV. Duty, however, is not the only negligence element to establish when dealing with HPV. In any negligence action, the plaintiff must establish causation between the defendant's action and the harm incurred. To establish causation in an action for the negligent transmission of a disease, the plaintiff must prove that she contracted the disease from the defendant. However, when dealing with HPV, the plaintiff may have difficulty proving causation.

The CDC succinctly summarizes the primary obstacles plaintiffs face in establishing causation for the negligent transmission of HPV:

Hepatitis B has a real and substantial relation to the protection of the public health and the public safety. The Court therefore finds that requiring schoolchildren to be immunized against Hepatitis B is a reasonable exercise of the State's police power and is constitutionally permissible even though it affects plaintiff's religious practice.

Id.

- 129. In *Boone*, the court was particularly concerned about the public's health because the groups of people at the highest risk of hepatitis B were not likely to self-identify themselves or pursue the vaccine. *Id.* These same concerns apply to HPV, further supporting the extension of the *Boone* court's reasoning to HPV.
- 130. Palsgraf v. Long Island R.R. Co., 162 N.E. 99, 101 (N.Y. 1928) (holding that a plaintiff cannot recover in an action for negligence without establishing proximate cause—which occurs when the defendants could have reasonably perceived the occurring harm resulting from their actions).
- 131. In cases dealing with the negligent transmission of HPV when "but for" cause is established, so too is proximate cause. See Katherine A. Kelly, Comment, The Assumption of Risk Defense and the Transmission of AIDS: A Proposal for the Application of Comparative Knowledge, 143 U. PA. L. REV. 1121, 1147 (1995) ("In the context of HIV transmission, a proximate relationship between the negligent transmission of the virus and the harms attributable to HIV will almost inevitably exist.").
- 132. Berner v. Caldwell, 543 So. 2d 686, 688 (Ala. 1989). The court concluded that the plaintiff had established causation for transmission of herpes by stating the following:
 - [S]he contracted a disease that can be transmitted only by intimate sexual contact; that the defendant was the only person with whom she had sexual contact; that she did not have the disease prior to their relationship; and that near the end of their relationship she discovered that she had the disease.

Most people never even know they have HPV or that they are passing it to their partner. For this reason, it may not be possible to know who gave you HPV or when you got it. HPV is so common that most people get it soon after they start having sex. In cases when HPV does not go away on its own, it may only be found years later.¹³³

In factual situations similar to *McPherson*, where a wife sued her unfaithful husband for infecting her with HPV, causation can be established assuming the wife had been monogamous.¹³⁴ Also, in cases like *Berner*, where the plaintiff had never had a prior sexual encounter, the plaintiff can establish that her only sexual partner gave her HPV.¹³⁵ But in cases where the plaintiff has had multiple sexual encounters, it is virtually impossible for the plaintiff to prove she contracted HPV from a specific sexual partner because HPV is so prevalent, transmitted unknowingly, and its symptoms may not appear for years after the plaintiff contracted the disease.¹³⁶

Furthermore, evidence suggests that individuals who contract HPV are likely to have had multiple sexual partners, making it difficult to prove causation. HPV is most likely to be contracted soon after having sexual intercourse, ¹³⁷ and a recent study suggests that since 1940, approximately nine out of ten Americans have sex before marriage. ¹³⁸ So while HPV may be transmitted between married couples (like in *McPherson*¹³⁹), a great majority of HPV transmissions occur outside of marriage. Other studies allow for the inference that the majority of persons who contract HPV have not had just one sexual partner (the scenario in *Berner*¹⁴⁰). The average man has seven sexual partners, while the average woman has four sexual partners. ¹⁴¹ In addition, seventy-five percent of women reported having sex

^{133.} CDC, COMMON QUESTIONS ABOUT HPV AND CERVICAL CANCER, supra note 82, at 2.

^{134.} McPherson v. McPherson, 712 A.2d 1043, 1044 (Me. 1998). The plaintiff also alleged that her husband was the only sexual partner she had ever had. Id .

^{135.} *Berner*, 543 So. 2d at 688 (concluding that the plaintiff put forth "credible evidence" that she had never had sexual relations with a person other than the defendant).

^{136.} See supra note 133 and accompanying text (noting that symptoms of HPV may not be discovered until years after an individual has contracted the disease). Recall that some studies estimate that as many as eighty percent of women contract HPV at some point in their life. See supra note 46 and accompanying text (noting the prevalence of HPV).

^{137.} See supra note 133 and accompanying text (finding a person is likely to contract HPV as soon as he or she becomes sexually active).

^{138.} Even Grandma Had Premarital Sex, Survey Finds, MSNBC, Dec. 28, 2006, http://www.msnbc.msn.com/id/16287113/.

^{139.} McPherson, 712 A.2d at 1044.

^{140.} Berner, 543 So. 2d at 688.

^{141.} New Survey Tells How Much Sex We're Having, MSNBC, June 22, 2007, http://www.msnbc.msn.com/id/19374216/. The survey also found that twenty-nine percent of men and nine percent of women have had sex with more than fifteen partners. Id. Additionally, eighty-five percent of Americans have had sex by the age of twenty-one. Id.

with more than one partner.¹⁴² In fact, the CDC explicitly states the surest way to decrease the chance of contracting HPV is by "limiting their number of sex partners; and choosing a partner who has had no or few prior sex partners."¹⁴³

Empirical evidence suggests that in many cases where the plaintiff has contracted HPV, the plaintiff's ability to prove she contracted HPV from a specific partner will be attenuated at best. Hand commentators advocate that discovery concerning a plaintiff's past sexual history should be limited, especially in rape and sexual harassment suits, to protect the plaintiff from a "second assault." However, when dealing with the negligent transmission of HPV, the plaintiff's prior sexual history is an essential adjudicatory fact necessary to resolve the claim. The plaintiff's sexual history may very well blur any causal link between the contraction of HPV and the defendant, thus rendering the causal link unreliable and inhibiting the plaintiff's cause of action.

C. HPV AND APPROPRIATE DAMAGES

If a plaintiff can establish the duty and causation elements, then the issue of appropriate damages arises. To get a perspective on possible damages, recall that the jury awarded Rossiter \$700,000 in compensatory damages and an additional \$800,000 in punitive damages. This Section will examine both compensatory and punitive damages as they relate to the negligent transmission of HPV and will argue that courts should only award compensatory damages.

^{142.} Id.

^{143.} CDC, HPV Fact Sheet, *supra* note 52. Additionally, "HPV can infect areas that are not covered by a condom—so condoms may not *fully* protect against HPV... [so] the only sure way to prevent HPV is to avoid all sexual activity." *Id*.

^{144.} See supra notes 133–42 and accompanying text (discussing how it is difficult to prove who may have infected an individual with HPV because of the frequency and variety of sexual partners people have in today's times).

^{145.} See, e.g., Andrea A. Curcio, Rule 412 Laid Bare: A Procedural Rule That Cannot Adequately Protect Sexual Harassment Plaintiffs from Embarrassing Exposure, 67 U. CIN. L. REV. 125, 126 (1998) ("Judicial use of a woman's consensual sexual activities to defeat her sexual harassment claim raised the ire of feminist scholars and activists."); Katie M. Patton, Note, Unfolding Discovery Issues That Plague Sexual Harassment Suits, 57 HASTINGS L.J. 991, 995 (2006) ("Like a rape victim, a sexual harassment victim should not have her reputation attacked in the courtroom, and consequently have to risk losing credibility ... merely because she has a sexual history."); Rebekah Smith, Comment, Protecting the Victim: Rape and Sexual Harassment Shields Under Maine and Federal Law, 49 ME. L. REV. 443, 500 (1997) ("Courts should presumptively issue protective orders barring discovery unless the party seeking discovery makes a showing that the evidence sought to be discovered would be relevant'" (quoting FED. R. EVID. 412 advisory committee's note)).

^{146.} Verdict Form at 2, Rossiter v. Evans, No. LACV017304 (Iowa Dist. Ct. Aug. 1, 2008), available at http://www.onpointnews.com/docs/HPV1.pdf.

1. Compensatory Damages

"'Compensatory damages' are the damages awarded to a person as compensation, indemnity or restitution for harm sustained by him." Compensatory damages seek to place the plaintiff in a "substantially equivalent" position to which the plaintiff would have been had the tort not been committed. Compensatory damages include compensation for pecuniary (financial) loss, physical pain and suffering, and any humiliation or emotional damage. 149

In the context of the negligent transmission of HPV, compensatory damages would likely include both pecuniary loss and emotional damages. Persons infected with HPV will likely incur medical expenses creating a financial burden. Also, overt symptoms associated with STIs (such as genital warts or precancerous cell changes) are often stigmatized in our society, ¹⁵⁰ thus warranting compensation for emotional damages. While the jury has little discretion in awarding pecuniary damages, the jury has broad discretion in determining the monetary compensation that is "roughly equivalent" to the emotional and physical suffering. ¹⁵¹ However, HPV's prevalence and often transient condition should mitigate the emotional and physical damages awarded as compared to other STIs which are permanent. ¹⁵²

2. Punitive Damages

"Punitive damages are . . . awarded against a person to punish him for his outrageous conduct and to deter him and others like him from similar conduct in the future." Punitive damages are typically awarded when the defendant's conduct is grossly negligent or, as sometimes termed, "outrageous." An "evil motive" or a "reckless indifference to the rights of

^{147.} RESTATEMENT (SECOND) OF TORTS § 903 (1979).

^{148.} Id. § 903 cmt. a.

^{149.} *Id.* (noting that physical and emotional suffering cannot truly be monetarily compensated, and thus there is "only a very rough correspondence between the amount awarded as damages and the extent of the suffering").

^{150.} Inst. of Med., The Hidden Epidemic: Confronting Sexually Transmitted Diseases 86–88 (Thomas R. Eng & William T. Butler eds., 1997) (arguing that society's stigmatizing of STIs results because our culture treats sexuality as a private and secret matter).

^{151.} RESTATEMENT (SECOND) OF TORTS § 903 cmt. a (1979) ("There is no scale by which the detriment caused by [physical and emotional] suffering can be measured and hence there can be only a very rough correspondence between the amount awarded as damages and the extent of the suffering.").

^{152.} Whether a jury properly utilizes its discretion in awarding emotional and physical suffering damages is debatable. The jury awarded Rossiter \$700,000 in compensatory damages, including \$200,000 for past mental and physical pain and suffering and \$500,000 for future mental and physical pain and suffering. Verdict Form, *supra* note 146, at 2. None of the compensatory damages were for pecuniary loss. *Id.*

^{153.} RESTATEMENT (SECOND) OF TORTS § 908(1) (1979).

others" evidences gross negligence. ¹⁵⁴ Punitive damages are not awarded because of "inadvertence, mistake, errors of judgment, and the like." ¹⁵⁵

The jury in the Evans and Rossiter trial awarded Rossiter punitive damages, believing Evans was grossly negligent and finding his conduct "constituted willful and wanton disregard" for Rossiter's safety. 156 However, in the context of the transmission of HPV, punitive damages serve neither their deterrent nor retributive purpose 157—and thus should not be awarded—because HPV is generally not transmitted in a grossly negligent manner.

Part IV.A.1 concludes that an individual who has actual knowledge that he possesses HPV has a duty to prevent the spread of HPV.¹⁵⁸ But when a person has actual knowledge he or she has HPV and fails to warn his or her partner, is this conduct "reckless indifference" (gross negligence) or an "error of judgment" (negligence)? When answering this question courts must consider that the human immune system kills ninety percent of HPV infections, ¹⁵⁹ placing the probability of symptoms at less than ten percent. The answer is probably best reached by a jury based upon the specific facts of the given case; however, because the HPV transmitter seldom has actual knowledge of his or her HPV at the time he or she transmits the virus, this question will rarely arise.

Part IV.A.2 argues that absent actual knowledge, an individual should not have a duty to prevent the spread of HPV.¹⁶⁰ Part IV.A.2 carries even more persuasion in the context of gross negligence. Because of HPV's prevalence, lack of overt symptoms, and infrequency of complications,¹⁶¹ a transmitter who lacks actual knowledge he or she possesses HPV should not be classified as having an "evil motive" or being "recklessly indifferent to the rights of others." If any duty and a breach of duty exist, which Part IV.A.2 argues do not, it must result from an "error in judgment."¹⁶²

^{154.} Id. § 908(2).

^{155.} Id.

^{156.} See Verdict Form, supra note 146, at 2 (indicating that none of the compensatory damages were from pecuniary loss).

^{157.} State Farm Mut. Auto. Ins. Co. v. Campbell, 538 U.S. 408, 408–09 (2003) ("Compensatory damages are intended to redress a plaintiff's concrete loss, while punitive damages are aimed at the different purposes of deterrence and retribution.").

^{158.} See supra Part IV.A.1 (describing the connection between possessing actual knowledge and having a duty to warn sexual partners).

^{159.} See supra notes 56–61 and accompanying text (describing the probability of symptoms).

 $^{160.\ \ \}textit{See supra}\ \text{Part IV.A.2}$ (discussing how constructive knowledge is not sufficient to provide a duty to warn).

^{161.} See supra notes 112–15 (comparing the prevalence of HPV, its relative lack of severe symptoms, and its infrequency of complications with the common cold).

^{162.} *See supra* notes 154–55 and accompanying text (noting that gross negligence requires "inadvertence, mistake, [or] errors of judgment").

V. CONCLUSION

HPV is the most prevalent STI in America, and because of cervical cancer, the virus has created immense suffering and hardship for many women and their families. However, the transmission of HPV and the legal framework of negligence, specifically duty and causation, are difficult to reconcile. While Evans and Rossiter's story (and the stories of countless others) is certainly unfortunate, perhaps society should seek to curtail the spread of HPV and cervical cancer not through inefficient, ad hoc case-bycase determinations, but through other alternatives, such as education and vaccination.