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COMPENSATING THE VICTIMS OF FAILURE TO VACCINATE: WHAT ARE THE OPTIONS?

*Dorit Rubinstein Reiss**

“If you know the dangers of measles or for that matter whooping cough or mumps, and you still choose to put others at risk should you be exempt from the consequences of that choice? I can choose to drink but if I run you over it is my responsibility. I can choose not to shovel the snow from my walk but if you fall I pay. Why should failing to vaccinate your children or yourself be any different?”¹

This Article asks whether parents who choose not to vaccinate their child should be liable if that child, at higher risk of infectious disease than vaccinated children, transmits a vaccine-preventable disease to another. The Article argues that a tort remedy in this situation is both desirable and appropriate. It is desirable to assure compensation to the injured child and the family, who should not have to face the insult of financial ruin on top of the injury from the disease. It is appropriate to require that a family that chooses not to vaccinate a child fully internalizes the costs of that decision, and does not pass it on to others.

This Article argues there should be a duty to act in the aforementioned situation, since the non-vaccinating parents create a risk. Even if not vaccinating is seen as nonfeasance, there are policy reasons to create an exception to the default rule that there is no duty to act. As an alternative, the Article suggests creating a statutory duty to act.

This Article suggests that legal exemptions from school immunization requirements are not a barrier to liability, since the considerations behind those exemptions are separate from tort liability. It addresses the

* Professor of Law, UC Hastings College of the Law. I am grateful to Arthur Caplan, whose blog post on the topic made me think seriously about this issue, and to Mary Holland, whose detailed response to Prof. Caplan spurred me to write about it. I am also grateful to Carolyn Bursle, Marsha Cohen, John Diamond, Allison Hagood, Stacy Hillenburg, Maggie Howell, David Jung, David Levine, Larry Levine, Charlotte Moser, Rene Najera, Paul Offit, the blogger known as Skeptical Lawyer, Will Robertson, Michael Simpson and Rob Schwartz for very helpful comments, and to Jessie Cassella and Rob Taobada for their excellent research assistance. All errors are, of course, my own.

¹ Art Caplan, *Liability for Failure to Vaccinate*, HARV. L. PETRIE-FLOM CTR. BILL OF HEALTH BLOG (May 23, 2013), <https://blogs.law.harvard.edu/billofhealth/2013/05/23/liability-for-failure-to-vaccinate>.

problem of demonstrating causation, and suggests in which types of cases showing causation would be possible, and when proximate cause is capable of extending from an index case to subsequent cases. The Article concludes by addressing potential counter arguments.

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In 2000, an unvaccinated eleven year old with a fever was taken to a pediatrics practice in Germany.² The boy infected six other patients with measles, including three infants who were too young to vaccinate. After a long, painful, and heartbreaking deterioration, two of them died from a rare³ but fatal complication of measles called subacute sclerosing panencephalitis (SSPE).⁴ SSPE occurs when the measles virus remains dormant in the body, and then years after the initial bout of measles the

² Catherina, *Medical Care for Unvaccinated Children*, JUST THE VAX BLOG (Apr. 23, 2009), <http://justthevax.blogspot.co.il/2009/04/medical-care-for-unvaccinated-children.html>; see also, e.g., David E. Sugerman, et al., *Measles Outbreak in a Highly Vaccinated Population, San Diego, 2008: Role of the Intentionally Undervaccinated*, 125 PEDIATRICS 747 (2010) (highlighting, but not comparing, a similar situation which occurred in San Diego, but with a different disease), <http://pediatrics.aappublications.org/content/125/4/747.full.pdf+html?sid=4c015cee-60c4-4d92-befd-f68b0eb62eb9>.

³ Though more common in children under five. See generally J. Gutierrez, et al., *Subacute Sclerosing Panencephalitis: An Update*, 52 DEV. MED. & CHILD NEUROLOGY 901, 901-02 (2010).

⁴ *Subacute Sclerosing Leukoencephalitis*, PUBMED HEALTH (Aug. 1, 2012), <http://www.ncbi.nlm.nih.gov/pubmedhealth/PMH0002392>.

virus resurfaces and destroys the brain. SSPE is incurable: While SSPE's progress can be slowed, people with SSPE eventually die after months, even years, of deterioration. This deterioration happened to both children who were too young to vaccinate when the boy exposed them to the measles virus. Natalie, one of the infected babies, was eleven months old when she was exposed to measles in 2000. She recovered from the initial bout, but developed SSPE in 2007. She lost her ability to walk, talk, and eat unassisted. Natalie eventually died in 2011, after a long period of "wake coma."⁵ Micha, the other child, was even younger. Micha's initial exposure to the measles virus was at five months old, and his SSPE manifested in 2005.⁶ On June 13, 2013, he too died from SSPE.⁷

During the years of slow deterioration the lives of both families were centered on the dying child. The families incurred expenses related to the child's care and to losing work time. They suffered indescribable mental anguish. If they had lived in the United States, where health insurance coverage is not as extensive as in Germany,⁸ they would likely have had substantial health care costs. Nothing can fully compensate these families for the suffering they went through; however, monetary compensation can help the families rebuild their lives and prevent additional suffering from the financial, on top of the human, losses they suffered. The natural source of such compensation is the parents whose choice to not vaccinate their children led to the infection that killed the victims. SSPE is rare, but other harms can derive from vaccine-preventable infectious diseases, including severe physical disability, brain damage, and death. When one family's choice to not vaccinate imposes those harms on another, compensation should follow.

This Article argues that the tort system in the United States should allow individuals who contract an infectious disease from a child whose parents chose to not vaccinate for non-medical reasons to recover damages from the parents of the unvaccinated child. Our tort system is predicated on the idea that when an actor takes an unreasonable risk, and that risk harms another, those harmed should be compensated for their losses.⁹ There are legal (and moral) challenges in applying this philoso-

⁵ Catherina, *So Predictable – So Sad, Natalie Dies of SSPE*, JUST THE VAX BLOG (Oct. 20, 2011), <http://justthevax.blogspot.co.uk/2011/10/so-predictable-so-sad-natalie-dies-of.html>. The video in the post shows the suffering Natalie and her family went through with the SSPE (the video is in German).

⁶ Catherina, *supra* note 2.

⁷ Catherina, *Micha Is Dead*, JUST THE VAX BLOG (June 13, 2013), <http://justthevax.blogspot.co.uk/2013/06/micha-is-dead.html>.

⁸ See G. F. Anderson, *In Search of Value: An International Comparison of Cost, Access, and Outcomes*, 16 HEALTH AFFAIRS 163, 165–69 (1997). *Contra* Barbara Starfield, *Is US Health Really the Best in the World?*, 284 JAMA 483, 483 (2000).

⁹ See JOHN L. DIAMOND ET AL., UNDERSTANDING TORTS 47 (4th ed. 2010).

phy to the situation of an unvaccinated child infecting another, but there are answers and solutions to those challenges, and the policy reasons for allowing compensation are powerful. The Article addresses both a negligence-based common law remedy and a legislative remedy for the injured family.

Three caveats: the Article focuses (1) on compensation, and not retribution; (2) on compensation, over deterrence; and (3) on suits between individuals, over suits directed at a community of non-vaccinating parents.¹⁰

First, this Article focuses on compensation, not retribution. Retribution is not a goal that comfortably fits within the tort system.¹¹ Furthermore, it is unclear that it is appropriate in this situation: I have no reason to think that those families who choose not to vaccinate are intentionally trying to risk harm to others. But that is not what the tort of negligence is about. Negligence holds people to a community standard, and if people deviate from that standard, they are liable for the harm they caused another and are required to compensate the injured. Sincere belief that the conduct is reasonable is immaterial. The applicable standard is objective: what would a reasonable member of the community do?¹² This proposal does not force people to vaccinate. Nobody will go to jail for not vaccinating or be forced to vaccinate under this Article's scheme. But if someone chooses not to vaccinate, they must internalize the costs of that choice and not roll the costs onto others.¹³

Second, this Article focuses on corrective justice, or compensation, over deterrence.¹⁴ It will briefly address deterrence as part of the analysis of duty, concluding that if a tort remedy in this situation does deter non-vaccination then that is a clear societal gain. But potential deterrence is secondary here to doing justice to the family injured by the deci-

¹⁰ There are many additional potential questions that can come up beyond the subject of this Article. Can you sue the parents for harm caused for not vaccinating a child if the disease is transmitted when the child is an adult? What about the unvaccinated child herself—can she sue her parents? Are there circumstances in which we do want to allow some form of group liability? Can you sue a daycare center or school that allows unvaccinated children to attend? All these topics deserve their own discussion, and that discussion is probably too extensive for this paper.

¹¹ Ronen Perry, *The Role of Retributive Justice in the Common Law of Torts: A Descriptive Theory*, 73 TENN. L. REV. 177, 184–86 (2006).

¹² *Vaughan v. Menlove*, [1837] 132 Eng. Rep. 490 (C.P.) (“[W]hether the Defendant had acted honestly and bona fide to the best of his own judgment . . . would leave so vague a line as to afford no rule at all . . . [Because the judgments of individuals are . . .] as variable as the length of the foot of each . . . we ought rather to adhere to the rule which requires in all cases a regard to caution such as a man of ordinary prudence would observe”).

¹³ See Part II.E for a discussion of insurance.

¹⁴ See generally Gary T. Schwartz, *Mixed Theories of Tort Law: Affirming Both Deterrence and Corrective Justice*, 75 TEX. L. REV. 1801(1996–1997) (explaining the deterrence theory of tort).

sion of another family to not vaccinate by making the victim family whole.

Finally, the Article focuses on disputes between individuals. Families that choose not to vaccinate might not have the resources to cover the care, let alone pain and suffering (an issue addressed more in detail in Part II.E), of an injured victim. This could create a temptation to sue either organizations promoting anti-vaccination misinformation or a broad community of non-vaccinating parents. Both those potential claims are beyond the scope of this Article, and the latter has almost incurable problems. In the case of anti-vaccination organizations distributing information, there may be a tort of misrepresentation, but that presents issues of freedom of speech that warrants discussion not included here. Briefly, a First Amendment defense would argue vaccination policies are matters of public concern, the most protected form of free speech.¹⁵ While some anti-vaccination statements can be subject to actual verification and demonstrated to be false,¹⁶ which would potentially permit a tort of misrepresentation, other statements cannot be demonstrated as false or true, although they are still misleading. This dispute between tort and freedom of speech deserves its own independent treatment.

The suit against a community of non-vaccinating parents seems in tension with the way the tort system operates. Our system focuses on individual, not collective responsibility.¹⁷ Imposing a collective responsibility mechanism is probably beyond what common law courts should do.¹⁸

¹⁵ See *Snyder v. Phelps*, 580 F.3d 206, 219–20 (4th Cir. 2009). And see Amanda Z. Naprawa, *Don't Give Your Kid That Shot!: The Public Health Threat Posed by Anti-Vaccine Speech and Why Such Speech Is Not Guaranteed Full Protection Under the First Amendment*, 11 *CARD. PUB. L., POL'Y & ETHICS J.* 473, 500-526 (2013) (discussing means of limiting anti-vaccine speech, including tort liability).

¹⁶ See *id.* at 219 (citing *Milkovich v. Lorain Journal Co.*, 497 U.S. 1, 21 (1990)).

¹⁷ The closest the courts came to imposing collective responsibility is probably the market share liability doctrine which held manufacturers of DES liable for their share in the market, regardless of which of them actually caused the plaintiff's harm. See generally *Hymowitz v. Eli Lilly*, 493 U.S. 944 (1989). Courts were very reluctant to extend this doctrine beyond that context, although a recent Wisconsin decision may signal a change. See, e.g., DONALD G. GIFFORD, *SUING THE TOBACCO AND LEAD PIGMENT INDUSTRIES: GOVERNMENT LITIGATION AS PUBLIC HEALTH PRESCRIPTION* 63–65 (2010). At any rate, the doctrine had never been applied to a group of private individuals.

¹⁸ For an opposing view see Alexandra M. Stewart, Commentary, *Challenging Personal Belief Immunization Exemptions: Considering Legal Responses*, 107 *MICH. L. REV. FIRST IMPRESSIONS* 105 (2009), <http://www.michiganlawreview.org/assets/fi/107/stewart.pdf>. Another potential candidate is the “*Ybarra* doctrine,” which used *res ipsa loquitur* to impose liability on all of the personnel involved in treating the plaintiff, who was injured in his shoulder while rendered unconscious for an appendectomy. See *Ybarra v. Spangard*, 154 P.2d 687 (Cal. 1944). *Ybarra* is a controversial doctrine and does not really fit this situation since, unlike in this scenario, *Ybarra* had a limited group of defendants all of whom had the potential to be a

A personal tort suit, however, against one individual (or a small number of individuals) that chose to behave in an unreasonable manner, and brought by another individual harmed as a result of that choice fits squarely into principles of negligence.

This Article proceeds in four parts. The first part sets the background by shortly reminding the reader of the reasons why we vaccinate and the dangers of not vaccinating. It also addresses the risks of vaccination.

The second part addresses the potential common law negligence suit against parents whose child, unvaccinated for non-medical reasons, infects another child. There are several challenges to such a suit, and this part of the Article takes them in the order of the elements of negligence. The first is that generally there is no duty to act in common law. This Article suggests two reasons that this should not bar such a suit: First, the decision not to vaccinate is different than the usual situation of nonfeasance, since it is usually a carefully deliberated decision and requires some actions to maintain. Second, the policy grounds for deviating from the usual principle are compelling, and an exception can be narrowly framed. This removes the risk of extensive intrusion into personal freedom that is the most powerful justification for the no duty to act rule.

In relation to both breach and duty there is a question as to whether statutes that allow parents exemptions from school vaccination requirements also protect against liability. This Article says no, addressing the different reasons behind school exemptions and tort liability. This Article reminds the reader that statutes set a minimum standard of care, but that acting legally is not always acting reasonably, and makes the argument for finding a breach.

The second part also addresses the limits of the ability to demonstrate causation. Causation will be a problem in some cases but not in others, given modern tools for establishing it.¹⁹ In that regard, these suits are no different than any other negligence suit: the plaintiff always needs to demonstrate causation.

In relation to proximate cause, this Article addresses the possibility of suing the original unvaccinated individual who caused an outbreak (the index case) for any later case, in cases where the specific infecting individual is unidentifiable. When the specific infecting individual is identifiable, proximate cause is not a problem: if not vaccinating is indeed a breach, infecting another is the direct and foreseeable result, as

cause. See, e.g., Saul Levmore, *Gomorrh to Ybarra and More: Overextraction and the Puzzle of Immoderate Group Liability*, 81 VA. L. REV. 1561, 1562–70 (1995).

¹⁹ See Arthur L. Caplan et al., *Free to Choose But Liable for the Consequences: Should Non-Vaccinators Be Penalized for the Harm They Do?*, 40 J.L. MED. & ETHICS 606, 606–08 (2012) [hereinafter Caplan et al., *Free to Choose*].

will be discussed in my analysis of duty. Finally, in relation to damages, this Article will discuss the problem of coverage and insolvency.

The third part suggests a statutory remedy as an alternative to a common law negligence suit. If courts are hesitant about creating a duty in this situation, the legislature can step in. This section offers a draft of a no-fault statute, explaining the choices behind it. The fourth part addresses potential counter arguments, including religious considerations and comparisons to other scenarios.

I. BACKGROUND: WHY NOT VACCINATING IS UNREASONABLE AND HOW NON-VACCINATING PARENTS PUT OTHERS AT RISK

The United States immunization schedule for the first two years of life includes vaccination against fourteen diseases.²⁰ Each of these vaccine-preventable diseases can kill; each of them can maim and disable; each can, and usually does, cause substantial suffering.²¹ Vaccines have decreased the incidence of these diseases dramatically. Prior to the widespread availability of vaccines, millions of children in the United States suffered from vaccine-preventable diseases and thousands died; now they are relatively rare.²² We are lucky in that most of us will not have to watch our children choke to death from diphtheria or Hib,²³ die or be disfigured from smallpox, gasp for air between coughs, break ribs or bleed from their eyes from whooping cough,²⁴ be paralyzed from polio, or suffer brain damage from measles, to give just a few examples. That, some say, is part of the problem: the decline vaccines caused in the inci-

²⁰ Hepatitis B; diphtheria; tetanus; pertussis; Hib (haemophilus influenza type B); polio; rotavirus; pneumococcal disease; measles; mumps; rubella; chicken pox (varicella vaccine); hepatitis A; and influenza. CENTERS FOR DISEASE CONTROL & PREVENTION (CDC), U.S. DEPT. OF HEALTH AND HUMAN SERVICES (DHHS), CS245366-A, 2014 RECOMMENDED IMMUNIZATIONS FOR CHILDREN FROM BIRTH THROUGH 6 YEARS OLD (2014), available at <http://www.cdc.gov/vaccines/parents/downloads/parent-ver-sch-0-6yrs.pdf>. At eleven years add two more, meningococcal disease and HPV. CDC, DHHS, CS237827-A, 2014 RECOMMENDED IMMUNIZATIONS FOR CHILDREN FROM 7 THROUGH 18 YEARS OLD (2014), available at <http://www.cdc.gov/vaccines/who/teens/downloads/parent-version-schedule-7-18yrs.pdf>.

²¹ For a thorough description of each disease, see STACY MINTZER HERLIHY & E. AL-LISON HAGOOD, YOUR BABY'S BEST SHOT: WHY VACCINES ARE SAFE AND SAVE LIVES 55–66 (2012); PAUL A. OFFIT & CHARLOTTE A. MOSER, VACCINES AND YOUR CHILD: SEPARATING FACT FROM FICTION 105–12 (2011); Steve P. Calandrillo, *Vanishing Vaccinations: Why Are So Many Americans Opting Out of Vaccinating Their Children?*, 37 U. MICH. J.L. REFORM 353, 369–79 (2004).

²² See Sandra W. Roush & Trudy V. Murphy, *Historical Comparisons of Morbidity and Mortality for Vaccine-Preventable Diseases in the United States*, 298 JAMA 2155, 2155–60 (2007).

²³ See PAUL A. OFFIT, DEADLY CHOICES: HOW THE ANTI-VACCINE MOVEMENT THREATENS US ALL 63–67 (2011).

²⁴ Though whooping cough has been making a comeback. See *Pertussis (Whooping Cough): Surveillance and Reporting*, CTNS. FOR DISEASE CONTROL AND PREVENTION (Aug. 28, 2013), <http://www.cdc.gov/pertussis/surv-reporting.html>.

dence of diseases has led many to underestimate their danger. That is what is meant by the famous saying that vaccines are “victims of their own success.”²⁵

Anti-vaccination movements have been around since the advent of vaccines, and their arguments have been surprisingly consistent.²⁶ The phenomenon is not going anywhere. But the claims that vaccines carry high levels of risk,²⁷ or that those risks cannot be estimated,²⁸ are not supported by the evidence. Vaccines are carefully tested for safety and effectiveness before they arrive on the market and are carefully monitored after they do.²⁹ Vaccine safety is monitored and studied by governments and researchers all around the world, and even rare problems are generally quickly discovered and addressed.³⁰ Serious adverse events can and certainly do happen. And for a family whose child was seriously harmed by a vaccine, the tragedy is very real. But the number of serious adverse events from vaccines is extremely small³¹—it is a very

²⁵ *Bruesewitz v. Wyeth L.L.C.*, 131 S. Ct. 1068, 1072 (2011); Daniel B. Rubin & Sophie Kasimow, Comment, *The Problem of Vaccination Noncompliance: Public Health Goals and the Limitations of Tort Law*, 107 MICH. L. REV. FIRST IMPRESSIONS 114, 118 (2009), <http://www.michiganlawreview.org/assets/fi/107/rubinkasimow.pdf>.

²⁶ See Robert M. Wolfe & Lisa K. Sharp, *Anti-Vaccinationists Past and Present*, 325 BR. MED. J. 430 (2002), available at <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1123944/pdf/430.pdf>.

²⁷ Markus Heinze, *Vaccination—A Very Personal Decision. Are You Informed?*, VACCINABLE INJURIES? (Aug. 6, 2013), <http://www.vaccineinjuries.com/2013/01/vaccination-very-personal-decision-are.html> (“Every year, tens of thousands of children in America and around the world are severely injured or killed by vaccines.”).

²⁸ Jay Gordon, Commentary, *Parents Should Not Be Legally Liable for Refusing to Vaccinate Their Children*, 107 MICH. L. REV. FIRST IMPRESSIONS 95, 98 (2009), <http://www.michiganlawreview.org/assets/fi/107/gordon.pdf>.

²⁹ The following website includes the CDC’s explanation on how vaccine safety is handled: *Vaccine Safety: History of Vaccine Safety*, CTRS. FOR DISEASE CONTROL AND PREVENTION, http://www.cdc.gov/vaccinesafety/Vaccine_Monitoring/history.html (last updated Feb. 8, 2011). This website contains links to the major components of post-market vaccine safety monitoring: *Vaccine Safety: Vaccine Safety Monitoring at CDC*, CTRS. FOR DISEASE CONTROL AND PREVENTION, http://www.cdc.gov/vaccinesafety/Vaccine_Monitoring/Index.html (last updated Sept. 25, 2013). In addition, there are thousands of peer reviewed articles from around the world examining various questions related to vaccine safety, written by researchers from institutions—academic and otherwise—from across the globe, using various sources of funding. The CDC’s resource library lists those studies by year, and is available at: *Vaccine Safety: Resource Library*, CTRS. FOR DISEASE CONTROL AND PREVENTION, <http://www.cdc.gov/vaccinesafety/library/index.html> (last updated June 26, 2012).

³⁰ See PAUL A. OFFIT, *AUTISM’S FALSE PROPHETS: BAD SCIENCE, RISKY MEDICINE, AND THE SEARCH FOR A CURE* 110–11 (2008). This book gives the example of the first rotavirus vaccine discovered to cause a serious intestinal problem—intussusception—in one out of 10,000 babies. In spite of the rarity of the problem, it was discovered within months of the vaccine’s release and the vaccine was withdrawn.

³¹ Calandrillo, *supra* note 21, at 392–93. Many of the conditions anti-vaccination activists claim are caused by vaccines, such as SIDS or autism, were examined in large scale studies, and no connection to vaccines was found. *E.g.*, for SIDS, M. M. T. Vennemann et al., *Do Immunisations Reduce the Risk for SIDS? A Meta-analysis*, 25 VACCINE 4875 (2007). See also M. M. T. Vennemann et al., *Sudden Infant Death Syndrome: No Increased Risk After*

rare occurrence.³² The risk is substantially smaller than the risk of vaccine-preventable diseases, as acknowledged by multiple governments across the globe.³³ A recent report by an independent committee of the Institute of Medicine found no serious safety concerns in the United States schedule.³⁴

Although articles on anti-vaccination websites like to claim that vaccination sacrifices the few for the greater good,³⁵ children are vaccinated first and foremost to protect the vaccinee. Unvaccinated children are at higher risk of vaccine-preventable diseases.³⁶ No vaccine is 100% effective, but most offer reasonably high levels of protection for the child.³⁷ However, in addition to this personal protection, vaccines protect others. Since most of these diseases are transmitted from one person

Immunisation, 25 VACCINE 336 (2007). Note also that, while the number of available vaccines has increased since the 1940s, infant mortality has decreased. See Jiaquan Xu et al., *Deaths: Final Data for 2007*, 58 NATIONAL VITAL STATISTICS REPORTS 19 Figure 7 (May 20, 2010), http://www.cdc.gov/nchs/data/nvsr/nvsr58/nvsr58_19.pdf. For autism, the American Academy of Pediatrics compiled a list of the studies made: Vaccine Safety: Examine the Evidence, AAP.ORG (Apr. 2013), <http://www2.aap.org/immunization/families/faq/vaccinestudies.pdf>.

³² Using another method to calculate the damages, Professor Allison Hagood, author of a book explaining vaccine safety to parents (HERLIHY & HAGOOD, *supra* note 21), examined the number of cases compensated by the National Vaccine Injury Compensation Program since its creation in 1988, concluding that the rate of cases compensated—presumably reflecting serious events—was less than 0.03% of vaccine doses and much smaller than the chances of being injured in a car accident, at home, or generally any other way. Allison Hagood, *A Look at the Numbers in Vaccine Reactions*, RED WINE AND APPLESAUCE: HEALTH AND SCIENCE NEWS FOR MOMS (Mar. 5, 2013), <http://www.redwineandapplesauce.com/2013/03/05/a-look-at-the-numbers-in-vaccine-reactions>.

³³ Comparisons of the risks of diseases to the risks of vaccines can be found here for Australia: *Comparison of the Effects of Diseases and the Side Effects of Vaccines*, AUSTRALIAN GOVERNMENT DEPARTMENT OF HEALTH, [http://www.health.gov.au/internet/immunise/publishing.nsf/Content/D35CD18A3985212ECA2574E2000F9A4F/\\$File/quick_sideeffects.pdf](http://www.health.gov.au/internet/immunise/publishing.nsf/Content/D35CD18A3985212ECA2574E2000F9A4F/$File/quick_sideeffects.pdf) (last visited Feb. 12, 2014); here for Canada: *Comparison of Effects of Diseases and Vaccines*, PUBLIC HEALTH AGENCY OF CANADA, <http://www.phac-aspc.gc.ca/publicat/cig-gci/cedv-cemv-tab-eng.php> (last modified July 17, 2012); here for the United States: *Facts for Parents: Diseases & the Vaccines that Prevent Them*, CTRS. FOR DISEASE CONTROL AND PREVENTION, <http://www.cdc.gov/vaccines/vpd-vac/fact-sheet-parents.html> (last updated Mar. 8, 2012). The risk of serious harm from vaccines, as these show, is extremely small.

³⁴ See INSTITUTE OF MEDICINE, *THE CHILDHOOD IMMUNIZATION SCHEDULE AND SAFETY: STAKEHOLDER CONCERNS, SCIENTIFIC EVIDENCE, AND FUTURE STUDIES* (Jan. 16, 2013), <http://www.iom.edu/Reports/2013/The-Childhood-Immunization-Schedule-and-Safety.aspx>.

³⁵ See Anna Kata, *A Postmodern Pandora's Box: Anti-vaccination Misinformation on the Internet*, 28 VACCINE 1709, 1709–10 (2010).

³⁶ See Jason M. Glanz et al., *Parental Refusal of Pertussis Vaccination Is Associated With an Increased Risk of Pertussis Infection in Children*, 123 PEDIATRICS 1446 (2009); Daniel R. Feikin et al., *Individual and Community Risks of Measles and Pertussis Associated with Personal Exemptions to Immunization*, 284 JAMA 3145 (2000); Aamer Imdad et al., *Religious Exemptions for Immunization and Risk of Pertussis in New York State, 2000–2011*, 132 PEDIATRICS 24 (2013).

³⁷ See Douglas S. Diekema, *Choices Should Have Consequences: Failure to Vaccinate, Harm to Others, and Civil Liability*, 107 MICH. L. REV. FIRST IMPRESSIONS 90, 91 (2009).

to another,³⁸ an unvaccinated child, more at risk of catching the disease, is also more likely to transmit the disease to an infant too young to vaccinate (like Micha or Natalie), to someone who cannot be vaccinated for medical reasons, or to someone who is in the small percentage the vaccine fails to protect.³⁹ Communities with lower vaccination rates are also more vulnerable to outbreaks, since high vaccination rates prevent a disease from catching hold, protecting everyone.⁴⁰

The decision not to vaccinate a child is often based on reading articles on anti-vaccination websites, which may promote inaccurate or misleading information.⁴¹ Unfortunately, it does not fit with what we know about the risk-benefit ratio—vaccination is the less risky option for the child since it protects the child against dangerous diseases at very low risk. It is also the safer option for others since an unvaccinated child is more likely to transmit diseases, and clusters of unvaccinated children are more vulnerable to outbreaks.

In spite of these facts, a small but dedicated minority in the United States population refuses to vaccinate their children.⁴² Regardless of the sincerity of their belief that they are making the better choice for their child, their choice is unreasonable from a risk-benefit point of view.

The modern-day approach to deal with this minority by the states is primarily through requiring children attending public school to be immunized.⁴³ However, all states offer a medical exemption, while most offer either a religious exemption, a personal belief exemption, or both.⁴⁴

³⁸ Except tetanus. See *Vaccines and Immunizations: Tetanus – Fact Sheet for Parents*, CTRS. FOR DISEASE CONTROL AND PREVENTION (July 8, 2013), <http://www.cdc.gov/vaccines/vpd-vac/tetanus/fs-parents.html>.

³⁹ Diekema, *supra* note 37, at 91–92.

⁴⁰ Saad B. Omer et al., *Geographic Clustering of Nonmedical Exemptions to School Immunization Requirements and Associations with Geographic Clustering of Pertussis*, 168 AM. J. OF EPIDEMIOLOGY 1389, 1394–95 (2008); Daniel A. Salmon et al., *Health Consequences of Religious and Philosophical Exemptions from Immunization Laws: Individual and Societal Risk of Measles*, 282 JAMA 47, 51 (1999); Imdad, *supra* note 36, at 27.

⁴¹ Kata, *supra* note 35, at 1709; Anna Kata, *Anti-Vaccine Activists, Web 2.0, and the Postmodern Paradigm: An Overview of Tactics and Tropes Used Online by the Anti-vaccination Movement*, 30 VACCINE 3778 (2012); Robert M. Wolfe & Lisa K. Sharp, *Vaccination or Immunization? The Impact of Search Terms on the Internet*, 10 J. OF HEALTH COMM.: INT'L PERSPECTIVES 537 (2005).

⁴² The number of completely unvaccinated children seem to hover around 1%. See Allison Kennedy et al., *Vaccine Attitudes, Concerns, and Information Sources Reported by Parents of Young Children: Results from the 2009 HealthStyles Survey*, 127 PEDIATRICS S92, S95 (2011). An additional number of up to 10% of parents choose to delay or partially vaccinate. Jason M. Glanz et al., *A Population-Based Cohort Study of Undervaccination in 8 Managed Care Organizations Across the United States*, 167 JAMA PEDIATRICS 274, 274 (2013).

⁴³ Historically other methods were used, including mandatory vaccination laws. See, e.g., *Jacobson v. Massachusetts*, 197 U.S. 11, 11 (1905).

⁴⁴ Calandrillo, *supra* note 21, at 413, 416; Jason L. Schwartz, *Unintended Consequences: the Primacy of Public Trust in Vaccination*, 107 MICH. L. REV. FIRST IMPRESSIONS 100, 100 (2009); Stewart, *supra* note 18, at 106.

School immunization laws help increase vaccination rates.⁴⁵ Such laws, including education, offer better incentives for immunization than does tort liability, and aiming at increasing vaccination rates should come first and foremost rather than restricting or eliminating exemptions.⁴⁶ But these requirements do not offer any compensation to families whose children have been injured through infection by an unvaccinated child. It is true that there is no law sanctioning a universal system for compensating ill children, but a child injured by the unreasonable choice of another family is in a very different situation than a child who contracted an illness through bad luck. While bad luck can happen to anyone, the tort of negligence exists for exactly those situations where another person's unreasonable behavior inflicts harm to an individual.

II. A COMMON LAW NEGLIGENCE CLAIM FOR FAILURE TO VACCINATE: CHALLENGES AND SOLUTIONS

To establish a case for negligence, the plaintiff must prove, with a preponderance of evidence, that: (1) the defendant had a duty of care, (2) that duty was breached, (3) the breach caused the harm, (4) the harm was proximately caused by the breach (in the traditional formulation) or within the scope of liability (in the language used by the Third Restatement), and (5) there were legally cognizable damages.⁴⁷ This section addresses each of these elements, explaining where they might be problematic for a suit against non-vaccinating parents whose child infected another child, and why, in spite of these problems, there is still a potential case for negligence.

A. *The Problem of the No-Duty-to-Act Rule*

There is no problem in suing a non-vaccinating parent for putting others at risk through their affirmative conduct. For example, taking a child to a "chicken pox party"⁴⁸ and then sending that child to school, aware of the infection, can be tortious. Courts have long acknowledged negligent infection as a cause of action, so a parent who knew their child had a communicable disease could be liable for unreasonably exposing others.⁴⁹ But alleging failure to vaccinate as itself the unreasonable con-

⁴⁵ See Rubin & Kasimow, *supra* note 25, at 118; Schwartz, *supra* note 44, at 103.

⁴⁶ Nina R. Blank et al., *Exempting Schoolchildren from Immunizations: States with Few Barriers Had Highest Rates of Nonmedical Exemptions*, 32 HEALTH AFF. 1280, 1288 (2013).

⁴⁷ Caplan et al., *Free to Choose*, *supra* note 19, at 608.

⁴⁸ Parties where a parent intentionally exposes a child to chicken pox. See, e.g., Alice G. Walton, *The Chicken Pox Party: Parents Caught Infecting Kids with Virus*, THE ATLANTIC (Nov. 25, 2011), <http://www.theatlantic.com/health/archive/2011/11/the-chicken-pox-party-parents-caught-infecting-kids-with-virus/248768>.

⁴⁹ See, e.g., *Smith v. Baker*, 20 F. 709, 709–10 (C.C.S.D.N.Y. 1884); *Minor v. Sharon*, 112 Mass. 477, 487 (1873). This specific example might even constitute battery if the parent

duct runs against the traditional rule in tort law that there is no liability for failure to act.

The distinction between misfeasance and nonfeasance—action and omission—is an old one and long established in common law,⁵⁰ if not always the easiest to identify in practice.⁵¹ It focuses on whether the defendant created the risk (e.g., by driving—a situation of misfeasance) or whether the risk exists independent of the defendant's conduct.⁵² In a classic example of nonfeasance, the defendant saw someone drowning and did nothing to help, although she could have done so at negligible risk to herself.⁵³

The most powerful rationale supporting the no duty to act rule is the concern about individual freedom; requiring an affirmative duty is considered a greater interference with an actor's autonomy than requiring a precaution, and a liberal, individualistic tradition hesitates to interfere with personal conduct to such an extent.⁵⁴ Other reasons include the argument that making altruistic behavior legally required cheapens its value,⁵⁵ or that there will be difficulties in determining causation.⁵⁶ There are also concerns about where the line is to be drawn.⁵⁷ If there is a duty to rescue, might a plaintiff be liable for not rescuing even when rescuing might involve a risk or a substantial burden? Even if a plaintiff is not liable, might she be sued in that situation and incur the costs of defending herself for not taking on a burden or a risk?

Many commentators have criticized the no duty to act rule,⁵⁸ but it is still prominent in our tort system. The Restatement (Third) of Torts sets clearly the principle that an actor whose conduct has not created a

actually knew the child had chicken pox and would infect others. See, e.g., Walton, *supra* note 48.

⁵⁰ Francis H. Bohlen, *The Moral Duty to Aid Others as a Basis for Tort Liability*, 56 U. PA. L. REV. 217, 219–20 (1908).

⁵¹ DIAMOND ET AL., *supra* note 9, at 107.

⁵² DIAMOND ET AL., *supra* note 9, at 108; RESTATEMENT (THIRD) OF TORTS: LIABILITY FOR PHYSICAL AND EMOTIONAL HARM § 37 (2013) (“An actor whose conduct has not created a risk of physical or emotional harm to another has no duty of care to the other . . .”).

⁵³ DIAMOND ET AL., *supra* note 51, at 108; see RESTATEMENT (THIRD) OF TORTS, *supra* note 52 at §37.

⁵⁴ RESTATEMENT (THIRD) OF TORTS, *supra* note 52, § 37 cmt. e; SMITH, J.C., LIABILITY IN NEGLIGENCE 33–34 (1984).

⁵⁵ RESTATEMENT (THIRD) OF TORTS, *supra* note 52, § 37 cmt. e; DIAMOND ET AL., *supra* note 9, at 109; SMITH, *supra* note 54, at 40.

⁵⁶ RESTATEMENT (THIRD) OF TORTS, *supra* note 52, § 37 cmt. e; DIAMOND ET AL., *supra* note 9, at 109; SMITH, *supra* note 54, at 40.

⁵⁷ RESTATEMENT (THIRD) OF TORTS, *supra* note 52, § 37 cmt. e. See DIAMOND ET AL., *supra* note 9, at 109 & n.12.

⁵⁸ See e.g., Ernest J. Weinrib, *The Case for a Duty to Rescue*, 90 YALE L.J. 247, 291–92 (1980).

risk of harm is usually not liable in tort.⁵⁹ It acknowledges, however, that the rule has important exceptions, such as for special relationships, and that “courts may identify additional areas for affirmative duties in the future” based on policy considerations.⁶⁰

Although this is a barrier to a “failure to vaccinate” suit, it should not be an insurmountable one for two reasons. First, although this is not one of the classic special relationship situations, this is not the usual duty to act situation, wherein a stranger is required to stop her normal conduct and go to the aid of another. Indeed, one can make an argument that non-vaccinating parents make a deliberate and conscious choice that at least exacerbates the risk to the plaintiff, if not actually creating it. Second, as important as the defendant’s liberty interest is, in this case there are compelling policy reasons to create a duty in spite of it, and a duty can be created narrowly and a line drawn in a way that does not create a slippery slope risk.

The risk of infectious disease exists independent of the defendant’s conduct. But that is not the end of the discussion. In a community with high immunization rates in which a disease is no longer prevalent but is brought in by an unvaccinated individual who picked it up elsewhere, as is true of many of the measles outbreaks in the United States,⁶¹ the decision to not vaccinate creates the risk, or at least increases it substantially.⁶² Even with respect to diseases that are still prevalent, like whooping cough, an unvaccinated child has a higher risk of infection, as already mentioned, and hence is more likely to transmit the disease. The parents’ decision to not vaccinate directly exposes others to a higher level of risk. It either creates a risk or exacerbates it. Thus, the scenario is different than the stranger seeing someone drown,⁶³ or the person who watches a blind man about to step in front of a moving car.⁶⁴ The decision to not vaccinate also requires active refusal of vaccines routinely offered in well-baby visits and, if a child is sent to school, efforts to obtain an exemption. It is not a passive omission of the sort envisioned

⁵⁹ RESTATEMENT (THIRD) OF TORTS, *supra* note 52, § 37. See DIAMOND ET AL., *supra* note 9, at 108–09.

⁶⁰ RESTATEMENT (THIRD) OF TORTS, *supra* note 52, § 37 cmt. b.

⁶¹ Caplan et al., *Free to Choose*, *supra* note 19, at 607–08; Amy A. Parker et al., *Implications of a 2005 Measles Outbreak in Indiana for Sustained Elimination of Measles in the United States*, 355 NEW ENG. J. MED. 447, 447 (2006).

⁶² CTR. FOR DISEASE CONTROL AND PREVENTION, EPIDEMIOLOGY AND PREVENTION OF VACCINE-PREVENTABLE DISEASES 180–81 (William Atkinson et al. eds., 12th ed. 2012), available at <http://www.cdc.gov/vaccines/pubs/pinkbook/downloads/meas.pdf>. While no vaccine is perfect, the recommended two doses of MMR offer very effective protection: “[S]tudies indicate that more than 99% of persons who receive two doses of measles vaccine (with the first dose administered no earlier than the first birthday) develop serologic evidence of measles immunity.” *Id.* at 182.

⁶³ DIAMOND ET AL., *supra* note 9, at 108–09.

⁶⁴ RESTATEMENT (SECOND) OF TORTS § 314 cmt. c, illus. 1 (1965).

when a bystander sees someone drowning. A choice is being made after an action is taken; in that sense, it might be closer to a negligent omission than to nonfeasance. In that, too, it is different from the usual situation where we apply the no duty to act rule. If this active decision causes harm to others and the parents do not have to compensate the victims, they have, in effect, externalized the costs of their decision onto the victim.

Potentially, this situation resembles the situation described in one of the acknowledged exceptions to the no duty to act rule: Where a defendant's prior conduct creates a risk for a plaintiff. In those situations the courts acknowledge a duty to act.⁶⁵ Here, too, by choosing to not vaccinate and actively avoiding the vaccine, the parents' conduct creates the situation in which another person is put at risk. Therefore, they have a duty toward that other person.

Even if we reject these arguments and treat this as a classic nonfeasance situation, the discussion does not end. Duty is not a natural phenomenon, but a legal determination by the courts that a plaintiff, for reasons of policy, may or may not bring forth a negligence case.⁶⁶ The policy considerations behind the no duty to act rule are powerful, but there are other factors to consider.

The courts have the authority to create exceptions to the rule for policy reasons, and they have used that authority in the past. Some situations in which the courts have acknowledged a duty to act include a special relationship, an undertaking or promise, and a role in creating the risk.⁶⁷ For example, courts have created a duty for a psychiatrist to warn a potential victim of a patient;⁶⁸ for friends in certain circumstances to aid an injured friend;⁶⁹ to adhere to a promise to keep a cat under observation;⁷⁰ or to keep a promise to send aid to someone who called 911.⁷¹ None of these examples are equivalent to the situation at hand. The closest parallel, as I already mentioned, is a situation where the defendant's prior conduct created the risk, but this Article is not suggesting that this

⁶⁵ RESTATEMENT (THIRD) OF TORTS, *supra* note 52, § 39 (2012).

⁶⁶ *Dillon v. Legg*, 68 Cal. 2d 728, 734 (1968) (“[D]uty’ is not sacrosanct in itself, but only an expression of the sum total of those considerations of policy which lead the law to say that the particular plaintiff is entitled to protection” (quoting WILLIAM PROSSER, *LAW OF TORTS* 332–33 (3d ed. 1964))).

⁶⁷ *DIAMOND ET AL.*, *supra* note 9, at 108. See RESTATEMENT (THIRD) OF TORTS §§ 38–44 (2012).

⁶⁸ *Tarasoff v. Regents of University of California*, 17 Cal. 3d 425, 435 (1976).

⁶⁹ *Farwell v. Keaton*, 396 Mich. 281, 291–92 (1976) (ruling individual liable for not helping friend injured in altercation). To some extent, this is an extension of the traditional rule, but it is a good example of how a court can creatively create an exception to the no duty to act rule when it believes justice or policy calls for it.

⁷⁰ See *Marsalis v. La Salle*, 94 So. 2d 120 (La. Ct. App. 1957).

⁷¹ *DeLong v. County of Erie*, 89 A.D.2d 376 (1982) *aff’d sub nom.* *DeLong v. County of Erie*, 60 N.Y.2d 296 (1983).

is a direct extension. However, in the same way that policy considerations led the courts to acknowledge a duty to act in the preceding situations, they should lead to such a duty here. The arguments for creating a duty to act are especially strong in this context. Generally, a moral argument raised in support of a duty to act is that members of a community inevitably depend on each other, are responsible for each other, and that to treat their interests as unconnected is simply wrong.⁷² Harm caused to one member of the community is harm to the community as a whole, since it incurs costs, financial and otherwise.⁷³ This is doubly true here: infectious diseases are a danger to everyone in the community, and in a sense, we are all dependent on each other for their prevention.

The policy factors behind the decision to impose a duty to act have different formulations in different states, though the heart of the analysis—the policy focus—is similar. Using a classic, respected formulation, in *Rowland v. Christian*, Justice Peters referred to the following factors when considering where it is appropriate to deviate from the general rule that a person is liable for failure to exercise reasonable care in the circumstances:

[T]he foreseeability of harm to the plaintiff, the degree of certainty that the plaintiff suffered injury, the closeness of the connection between the defendant's conduct and the injury suffered, the moral blame attached to the defendant's conduct, the policy of preventing future harm, the extent of the burden to the defendant and consequences to the community of imposing a duty to exercise care with resulting liability for breach, and the availability, cost, and prevalence of insurance for the risk involved.⁷⁴

The Restatement Third disagrees with the use of foreseeability in determining whether to impose a duty.⁷⁵ That said, foreseeability is still used by most courts⁷⁶ and can be easily addressed. Since an unvaccinated individual is at higher risk of an infectious disease than a vaccinated one, it is foreseeable that he or she will contract and transmit such

⁷² S. Heyman, *Foundations of the Duty to Rescue*, 47 VAND. L. REV. 673 (1994); L. Bender, *A Lawyer's Primer on Feminist Theory and Tort*, 38 J. LEGAL EDUC. 3 (1988).

⁷³ Heyman, *supra* note 72, at 681.

⁷⁴ *Rowland v. Christian*, 69 Cal. 2d 108, 113 (1968). Similar formulations are found elsewhere (See, e.g., Caplan et al., *Free to Choose*, *supra* note 19, at 608 (citing *Doe v. Johnson*, 817 F. Supp. 1382, 1386 (W.D. Mich. 1993)), and *Morgan v. Pennsylvania General Ins. Co.*, 87 Wis. 2d 723, 737 (1979)).

⁷⁵ RESTATEMENT (THIRD) OF TORTS, *supra* note 52, § 37 cmt. f.

⁷⁶ See, e.g., *John B. v. Superior Court*, 137 P.3d 153, 160 (Cal. 2006).

a disease to others.⁷⁷ Furthermore, most parents would have the risk of catching a disease—if they do not vaccinate a child—explained to them by a doctor addressing the issue, and whether or not the doctor took the next step and informed them not vaccinating is a risk to others, many parents would either have heard that their unvaccinated child can put others at risk or can deduce it, knowing that diseases can pass from one person to another. The other factors are not as easy.

We think of burden as what the defendant would have to do to avoid liability. The burden to the defendant in this situation is not trivial: we are placing liability on a parent who chose to forego medical procedures that he or she thought might be harmful to his or her children. We are imposing liability for foregoing a procedure that can, in extremely rare cases, result in serious harm. The burden is therefore the imposition on parental autonomy and the parent's choice of harms. The whole body of jurisprudence that addresses informed consent focuses on supporting and promoting patient autonomy, the right of patients to make medical decisions about their own body, regardless of reasonableness.⁷⁸ A duty to vaccinate can be seen as problematic in two ways: it penalizes parents for not exposing their children to a risk they deem unreasonable; and it violates autonomy—more specifically the parents' autonomy to make medical decisions for their children. Each of these concerns deserves its own treatment.

1. The Pitfalls of Requiring Parents to Take a Risk

The concern here is that tort liability for failure to vaccinate places parents in a hard position by forcing them to choose between liability and a procedure that carries a risk for their child.⁷⁹ Anti-vaccination activists may greatly overestimate the risks of vaccines, but there is some risk. And a parent who chooses to forego vaccines probably believes the risk is considerable. Is it fair to place a parent in such a position? What kind of risk can society demand a person take?

The law does impose liability for failure to take medical risks in some circumstances. Epilepsy medicine carries risk,⁸⁰ but driving with-

⁷⁷ Foreseeability is not probability; while vaccine-preventable diseases are rare in the United States, thanks to high vaccination rates, they still exist, and their risks are high. See *Smith v. Finch*, 681 S.E.2d 147, 149 (Ga. 2009) (stating that foreseeability does not require high probability, and unlikely but serious complications should be considered).

⁷⁸ Jaime Staples King & Benjamin Moulton, *Rethinking Informed Consent: The Case for Shared Medical Decision-Making*, 32 AM. J.L. & MED. 429, 430–32 (2006).

⁷⁹ Gordon, *supra* note 28.

⁸⁰ Including kidney stones, psychiatric side effects, and others. Steven C. Schachter, *Serious Side Effects of Topamax*, EPILEPSY.COM/PROFESSIONALS (July 2008), http://professionals.epilepsy.com/medications/p_topamax_seriousside.html.

out it can be negligent—both under statutory law⁸¹ and under common law.⁸² There is a difference because a driver is actually acting. But the point remains: in appropriate circumstances, you can be liable for not taking a medical risk—when the risk is relatively small and the risks on the other side are large enough. The determinative factor for imposing requirements on the physically disabled in these circumstances is the foreseeability of risk if precautions are not taken—so drivers who had an unforeseeable episode of unconsciousness will be treated differently than those who had forewarning of a seizure.⁸³

Here, the risks of not vaccinating are foreseeable, as has been explained. The magnitude of the risk posed by vaccinating is also very small, as explained above, and offset by the benefits to the vaccine recipient from the protection offered against dangerous diseases.⁸⁴ The non-vaccinating parents may not believe in that benefit,⁸⁵ but their belief is not the determining factor. This protection against dangerous diseases at least outweighs the small risks of vaccines; in other words, risks exist from not vaccinating too, and they are larger. The tort of negligence does not cater to unreasonable choices and beliefs.⁸⁶ As explained, the standard a parent's action or inaction is held to is the "reasonable person" standard. Oliver Wendell Holmes explained in detail the reasons behind the choice of the reasonable person standard over a "best judgment" standard. Among others, these reasons were to protect others from mistakes and accidents caused by someone who cannot meet the expected standard of care.⁸⁷ In the context of not vaccinating, the costs of the fact that a parent wrongly believes that the risks of vaccinating are higher than the

⁸¹ *Driving Laws by State*, THE EPILEPSY FOUNDATION OF AMERICA, <http://www.epilepsyfoundation.org/resources/Driving-Laws-by-State.cfm> (last visited Feb. 13, 2014).

⁸² *McCall v. Wilder*, 913 S.W.2d 150, 154–55 (Tenn. 1995); *Hammtree v. Jenner*, 20 Cal. App. 3d 528 (1971); *Derdarian v. Felix Contracting Corp.*, 51 N.Y.2d 308, 313–14 (1980); *Auto-Owners Ins. Co. v. Selisker*, 435 N.W.2d 866 (Minn. Ct. App. 1989); PROSSER & KEETON ON THE LAW OF TORTS 175–76 (W. Page Keeton ed., 5th ed. 1984).

⁸³ See *McCall*, 913 S.W.2d at 155.

⁸⁴ The magnitude of risk of vaccinating may be greater for children with specific medical conditions, and the duty should be framed to exclude parents of such children. See *Diekema*, *supra* note 37, at 93.

⁸⁵ Katrina F. Brown et al., *Factors Underlying Parental Decisions About Combination Childhood Vaccinations Including MMR: A Systematic Review*, 28 VACCINE 4235, 4243 (2010), available at <http://www.sciencedirect.com/science/article/pii/S0264410X10005761>.

⁸⁶ Kenneth W. Simons, *Dimensions of Negligence in Criminal and Tort Law*, 3 THEORETICAL INQUIRIES IN LAW 1, 10–11 (2002). Even good faith mistakes may not be a defense. See *Ranson v. Kitner*, 31 Ill. App. 241 (1888).

⁸⁷ OLIVER WENDELL HOLMES, JR., THE COMMON LAW 108–13 (Little, Brown & Company 1881) (“[W]hen men live in society, a certain average of conduct, a sacrifice of individual peculiarities going beyond a certain point, is necessary to the general welfare. If, for instance, a man is born hasty and awkward, is always having accidents and hurting himself or his neighbors . . . His neighbors accordingly require him, at his proper peril, to come up to their standard, and the courts which they establish decline to take his personal equation into account.”).

risks of not vaccinating should not be borne by his neighbors.⁸⁸ As said by others, choices have consequences.⁸⁹ If a parent decides to reject expert opinion and take the risk involved in not vaccinating a child, the parent will naturally bear the costs of harm that befalls her own child from her decision (though society will absorb some of those costs through available insurance programs and other means). But not vaccinating a child can also cause harm to others, and it is unfair to require them to pay for the parent's unreasonable choice.⁹⁰

Note that the risk benefit calculation is different for children with specific medical conditions that make vaccination dangerous, and the duty should be framed to exclude parents of such children.⁹¹ The tort system, as it exists, could also absolve those in such a circumstance from liability, because in those circumstances the decision not to vaccinate, and rely instead on herd immunity, would be reasonable.⁹²

2. Violation of Parental Autonomy

The American system values autonomy, and a medical patient generally may refuse treatment, even life-saving treatment.⁹³ But that freedom is not absolute, and when the exercise of a person's freedom may harm others, that person may be subject to liability.⁹⁴ As previously mentioned, driving without taking seizure-preventing medication can be negligent, even though people are not required to take such medication for just their own protection.⁹⁵ Similarly, in *Nieuwendorp v. American Family Insurance Co.* (1995), a family that took their child off ADHD medication was found liable for the child's behavior.⁹⁶ The court's basis was the parents' duty to control their children, and part of the discussion was the parents' failure to notify the school that the child stopped taking the medication, but the parents' negligence also included the fact that they "failed to inform themselves either about the consequences of discontinuing Dexedrine or about alternative forms of treatment."⁹⁷ *Nieuwendorp* clearly demonstrates that a parent may not have to provide medical treatment to a child, but can be liable for the consequences of

⁸⁸ See Diekema, *supra* note 37, at 94.

⁸⁹ Caplan, et al., *Free to Choose*, *supra* note 19, at 609; see Diekema, *supra* note 37, at 94.

⁹⁰ See Diekema, *supra* note 37, at 92.

⁹¹ See *id.* at 91.

⁹² See *id.*

⁹³ See *Thor v. Superior Court*, 855 P.2d 375, 381–82 (Cal. 1993).

⁹⁴ Caplan et al., *Free to Choose*, *supra* note 19, at 608.

⁹⁵ See *McCall v. Wilder*, 913 S.W.2d 150, 154–55 (Tenn. 1995); *Hammtree v. Jenner*, 97 Cal. Rptr. 739, 741 (1971); PROSSER AND KEETON ON THE LAW OF TORTS 176 (W. Page Keeton ed., 5th ed. 1984).

⁹⁶ 529 N.W.2d 594, 599 (Wis. 1995).

⁹⁷ *Id.*

not doing so, especially if the decision was based on faulty information, unless they took reasonable additional steps to protect others. In a different context, a TB patient has the right to refuse treatment, but such refusal may justify continuing involuntary commitment to protect others.⁹⁸ These cases suggest that despite the importance of patient autonomy, if refusal of treatment leads to or may lead to harming others, such refusal may carry consequences.

Finally, parental autonomy comes with obligations: parents do have a well-established duty to control their children and prevent them from harming others, and if they fail to control them, they can be liable in tort.⁹⁹ While this is a different situation, the special relationship of the parent to the child can be grounds for requiring that the parent take reasonable precautions that no harm come to others through the child.¹⁰⁰

Furthermore, parents make the decision not to vaccinate on behalf of their children. In a sense, they are choosing for the child to leave that child exposed to vaccine-preventable diseases. Parents do not have complete freedom to do as they will with the child: they are responsible for that child's health and well-being, and need to make decisions that will be in the best interest of the child. It is primarily the parent's responsibility to decide what is in the child's best interests, and non-vaccinating parents probably believe they are doing what is best for that child; but the decision not to vaccinate is a problematic one even for that child, and it certainly has public health implications to others. Parents do not have full autonomy to make problematic decisions regarding a child's medical treatment. The problematic nature of this decision is part of the reason school immunization requirements were found constitutional by the Supreme Court.¹⁰¹

In *Prince v. Massachusetts*,¹⁰² the Supreme Court said about this issue:

Acting to guard the general interest in youth's well being [sic], the state, as *parens patriae*, may restrict the parent's control by requiring school attendance, regulating or prohibiting the child's labor and in many other ways. . . . [H]e cannot claim freedom from compulsory vaccination for the child more than for himself on religious grounds. The right to practice religion freely does

⁹⁸ See *City of Newark v. J.S.*, 652 A.2d 265, 278–89 (N.J. Super. Ct. L. Div. 1993).

⁹⁹ See *Nieuwendorp*, 529 N.W.2d at 599; *Ellis v. D'Angelo*, 253 P.3d 675, 676, 679 (Cal. App. 1953) (parents did not warn baby sitter of the violent tendencies of their four year old son and were found liable in torts).

¹⁰⁰ *Ellis*, 253 P.3d at 679.

¹⁰¹ See, e.g., *Zucht v. King*, 260 U.S. 174 (1922) (permitting an ordinance requiring school immunization).

¹⁰² 321 U.S. 158 (1944).

not include liberty to expose the community or the child to communicable disease or the latter to ill health or death.¹⁰³

Parental autonomy in this area, therefore, is already potentially limited by the state for the benefit of others, even to the extent of allowing states to choose direct coercion, and even to the extent of trumping constitutionally protected freedom of religion. Tort liability is a lower level of intrusion: it does not force the parents to vaccinate, only to pay for potential resulting harms. It is justified to take that less intrusive step to protect the interests of those injured by the unreasonable decision not to vaccinate.

3. The Other *Rowland* Factors

The other *Rowland* factors also emphasize the desire to prevent social harm, to deter problematic conduct, and to increase the benefits to society from imposing liability. The economic analysis of torts has long emphasized deterrence as a goal, perhaps the main goal, of modern tort law.¹⁰⁴ Given the risks non-vaccination poses to society,¹⁰⁵ deterring people from not vaccinating—or to get away from this excess of negatives, incentivizing people to vaccinate their children—is a clear gain. It should be mentioned, however, that it is unclear how effective the tort system is at deterring conduct, and in particular, it is unclear how effective it is in deterring the conduct of individuals who may be unfamiliar with existing tort doctrines.¹⁰⁶

More specifically, in the context of parents who do not vaccinate, some scholars have suggested that deterrence will be ineffective because it will not respond to parental concerns about vaccination and will not correct their misconceptions,¹⁰⁷ or that deterrence may backfire by creating an adversarial atmosphere, exacerbating social tensions and making non-vaccinating parents feel more alienated.¹⁰⁸

Both these articles suggest education as the better alternative to increasing vaccination rates.¹⁰⁹ I think they are correct that tort liability will not affect parents committed in their opposition to vaccination—but

¹⁰³ *Id.* at 166–67 (citations omitted). This case will be reexamined when I discuss the effect of freedom of religious on this suit in Part IV.A, *infra*.

¹⁰⁴ See Gary T. Schwartz, *Reality in the Economic Analysis of Tort Law: Does Tort Law Really Deter?*, 42 UCLA L. REV. 377, 378 (1994).

¹⁰⁵ See Stewart, *supra* note 18, at 105.

¹⁰⁶ Schwartz, *supra* note 105, at 381–83.

¹⁰⁷ See Rubin & Kasimow, *supra* note 25, at 116–17.

¹⁰⁸ *Id.* at 117; see Schwartz, *supra* note 45, at 100.

¹⁰⁹ Rubin & Kasimow, *supra* note 25, at 116; Schwartz, *supra* note 44, at 104.

then, education is unlikely to affect those parents either.¹¹⁰ But these committed parents are not the only ones who do not vaccinate: there are different types of parents who may hesitate to vaccinate,¹¹¹ and other parents may be more amenable to the incentive. After all, school immunization requirements are effective: when exemptions are harder to get, vaccination rates go up, when exemptions are easier, rates of exemptions rise.¹¹²

The concern about the impact on community relations from channeling the problem into an adversarial court case is plausible, but even without a case, the situation itself has the potential to exacerbate tensions and lead to social consequences for non-vaccinating parents. If a child dies or is severely injured from a disease contracted from an unvaccinated child, it is also unlikely to improve relationships between vaccinating and non-vaccinating parents. While the adversarial nature of a court case can exacerbate tensions, without it the lack of closure may also cause deep, long-lasting harm to the community. Nor do we let the potential of a tort suit to alienate people deter us from holding members of a community liable in other contexts in which their unreasonable choices harm others, for example, when their behavior starts a fire or they run someone over.

From a community point of view, aside from the potential for deterrence and potential rise in vaccination rates due to the danger of liability, if any, the community will benefit from having the cost of the disease spread beyond the injured family. By infecting another individual, the non-vaccinating parents impose costs on the community, first and foremost on the injured family, but also on others that may be called to help and, if provided, on community resources in the form of government assistance. The community would benefit from forcing non-vaccinating parents to internalize at least some of those costs.

Finally, natural justice calls for providing a remedy here.¹¹³ Imposing a duty here may or may not improve deterrence. However, it is just.

¹¹⁰ E. Allison Hagood & Stacy Mintzer Herlihy, *Addressing Heterogeneous Parental Concerns About Vaccination with a Multiple-Source Model: A Parent and Educator Perspective*, 9 HUM. VACCINES & IMMUNOTHERAPEUTICS 1790, 1790–91 (2013).

¹¹¹ *Id.* at 1791.

¹¹² See Calandrillo, *supra* note 21, at 434–35; see Saad B. Omer et al., *Nonmedical Exemptions to School Immunization Requirements: Secular Trends and Association of State Policies with Pertussis Incidence*, 296 JAMA 1757, 1760 (2006); see Daniel A. Salmon et al., *Compulsory Vaccination and Conscientious or Philosophical Exemptions: Past, Present, and Future*, 367 LANCET 436, 440 (2006); see Blank et al., *supra* note 46; see also Michael S. Bimbaum et al., *Correlates of High Vaccination Exemption Rates Among Kindergartens*, 31 VACCINE 750 (2013) (offering the suggestion that a physician visit requirement for exemption will lower the rate of exemptions).

¹¹³ Compare *Dillon v. Legg*, 68 Cal. 2d 728, 729–30 (1968), where the court explained that justice supports compensating a mother for emotional harms from seeing her child injured or killed in front of her. The court there said: “All ordinary human feelings are in favor of her

The injury to the plaintiff is real, and was caused by the problematic choice of another. Without a tort remedy, the plaintiff may face dramatic financial burdens on top of emotional and other burdens that accompany the death of or severe harm to a child.

The last three factors are the closeness of the connection, the moral blame attached to defendant's conduct, and the availability of insurance. The insurance issue will be discussed under damages, but currently, there probably is not insurance available; nonetheless, as Part II.E will discuss, there may be solutions to that problem, and in spite of the *Rowland* decision, I do not believe the lack of insurance should be fatal to creating a duty where other factors support it. Insurance, too, is a human endeavor and determined at least in part by supply and demand. Creating a duty can create a demand for insurance.

The closeness of the connection will also be addressed under the discussion of cause-in-fact and proximate cause, but as demonstrated already, the unvaccinated child is at greater risk of disease, and communities with higher rates of non-vaccinating parents are at higher risks of outbreaks; this suggests a pretty direct connection between the decision not to vaccinate and transmission of a vaccine-preventable disease from an unvaccinated child to another.¹¹⁴

As to moral blame, while many non-vaccinating parents may sincerely believe that the harms of vaccines are larger than the harms of diseases, many independent sources of reliable information exist today that allow a parent who wants to seek out reliable vaccine information to do so. This list of resources includes professionally-run sources,¹¹⁵ government-run sources from state, national, and international bodies,¹¹⁶ and

[the mother's] action against the negligent defendant." *Id.* at 730 (alteration in the original) (quoting WILLIAM L. PROSSER, *LAW OF TORTS* 353 (3d ed. 1964)).

¹¹⁴ Interesting questions of the effect if the second child is also unvaccinated may arise, but for the purposes of suggesting such a suit, I do not need to resolve them.

¹¹⁵ *See, e.g., Vaccine Education Center*, THE CHILDREN'S HOSPITAL OF PHILADELPHIA (Mar. 2013) <http://www.chop.edu/service/vaccine-education-center/home.html>; THE HISTORY OF VACCINES <http://www.historyofvaccines.org>; *Vaccine-Preventable Diseases*, AM. ACAD. OF PEDIATRICS, <http://www2.aap.org/immunization/illnesses/illnesses.html> (last updated Dec. 1, 2009); VAXFAX, <http://vaxfax.me> (last visited Feb. 12, 2014); POGOFROG, <http://pogofrog.com> (last visited Feb. 12, 2014).

¹¹⁶ *See, e.g., Vaccines and Immunizations*, CTNS. FOR DISEASE CONTROL AND PREVENTION, <http://www.cdc.gov/vaccines/pubs/pinkbook/index.html> (last updated Jan. 8, 2014); *Vaccine Safety*, CTNS. FOR DISEASE CONTROL AND PREVENTION, <http://www.cdc.gov/vaccine-safety/index.html> (last updated Feb. 3, 2014); *Global Vaccine Safety*, WORLD HEALTH ORG., http://www.who.int/vaccine_safety/initiative/communication/network/approved_vaccine_safety_website/en/index.html (last updated Sept. 25, 2013); *Comparison of Effects of Diseases and Vaccines*, PUB. HEALTH AGENCY OF CAN, <http://www.phac-aspc.gc.ca/publicat/cig-gci/cedv-cemv-tab-eng.php> (last modified July 17, 2012); *It's OK to ask*, VT. DEP'T OF HEALTH, <http://oktoaskvt.org> (last visited Nov. 2, 2013).

grassroots sources.¹¹⁷ By setting standards requiring that expert testimony meet scientific standards, the courts acknowledge that not all sources of information are equal.¹¹⁸ The majority of doctors and government health authorities recommend vaccinating at all levels. A parent who chooses to reject expert opinion and to ignore the many aforementioned sources of information, and instead prefers conspiracy websites is acting in a problematic manner—especially when many reliable sources present the argument that such parents are putting others at risk. They are aware that the expectation is that they vaccinate their children, and knowingly, they deviate from that expectation, trusting instead problematic sources of information.

Besides these general arguments, the concern about extensive limitation of personal liberty is not as applicable here as when a general duty to act is created. A general duty can be phrased in narrow, limiting terms: if a parent chooses not to vaccinate a child that does not have a medical contraindication, the parent has a duty of care towards others to whom that child transmits a vaccine-preventable disease.

B. Duty and Breach: Is Acting Legally Acting Reasonably?

In relation to duty, a final question is the effect of statutory non-medical exemptions on the potential tort case: Does a state's choice to provide a legal exemption from school immunization requirements mean that the legislature has decided not to impose a duty in torts for parents using such an exemption?¹¹⁹ Does acting pursuant to a legal exemption mean a defendant is acting reasonably?

On the duty issue, I believe that Caplan et al. are correct to point out that the legislature, in allowing parents to send children to public school without immunization, may not have intended to shield them from liability if another is harmed by the parents' choice.¹²⁰ The considerations are different. In allowing religious or philosophical exemptions, the state is deciding which reasons justify allowing a child to attend school, even at the risk of exposing others. The child's right to an education and the interest of the state in having educated citizens are important considera-

¹¹⁷ See, e.g., VOICES FOR VACCINES, <http://www.voicesforvaccines.org> (last visited Oct. 28, 2013); IMMUNIZATION ACTION COAL., <http://www.immunize.org> (last visited Oct. 28, 2013); *Immunizations*, PKIDS ONLINE, <http://www.pkids.org/immunizations.html> (last visited Oct. 28, 2013).

¹¹⁸ See *Daubert v. Merrel Dow Pharm.*, 509 U.S. 579, 582, 588–598 (1993), requiring that courts examine expert opinions and make sure that those opinions are grounded in reliable scientific knowledge. See Scott Brewer, *Scientific Expert Testimony and Intellectual Due Process*, 107 YALE L.J. 1535, 1542–50 (1988) (providing an analysis of how courts assess scientific data).

¹¹⁹ Caplan et al., *supra* note 19, at 608–09.

¹²⁰ *Id.*

tions, and states may be willing to incur a broader risk to protect them. Those rights are not at stake when deciding whether to compensate those hurt by a failure to vaccinate. There is no reason to think that the state's choice to allow unvaccinated children to attend school in certain circumstances included an intention to deprive a child injured by another's choice not to vaccinate from compensation. The state may be willing to take the risk of higher rates of vaccine-preventable diseases on itself due to exemptions, but it is not clear it is willing to impose the financial costs caused by the failure of others to vaccinate on otherwise blameless individual families.

Statutes play a role in determining breach. Most commonly, statutes serve to demonstrate that the defendant acted unreasonably in violating a protective statute.¹²¹ In some jurisdictions, statutes can replace the reasonable person standard as the standard of care and violations can make proving breach easier for the plaintiff.¹²² In contrast, compliance with a safety statute can only serve as evidence of reasonableness. In this case, however, compliance with an exemption statute may not even be that: exemption statutes are not safety statutes and therefore they do not set a standard of conduct aimed at increasing safety. Instead, exemption statutes provide an exception to a statute that requires immunization before attending public school, whereby allowing individuals to act in contrast to it for an external reason (religious or personal beliefs). And as already discussed, there is no reason to think the exemptions change the standard of care: they address something else, and they do not serve to determine what type of behavior creates acceptable safety.¹²³

At any rate, acting legally is not necessarily acting reasonably. It is legal to have a pile of hay on your property, but it might be unreasonable.¹²⁴ It was legal to use non-tempered glass in shower enclosures in New York before 1973, but that did not make it reasonable.¹²⁵ And so forth. As explained in section I, vaccinating is supported by a balance of the risks that would easily meet the test of the Hand formula:¹²⁶ the burden of vaccinating—unpleasant with a very small risk—is easily smaller than the potential loss from not vaccinating—to the unvaccinated child and to others—times the probability of harm. For both those reasons, it should not be difficult to find that not vaccinating is a breach of duty.

¹²¹ See *DIAMOND ET AL.*, *supra* note 9, at 47; see also, e.g., *Urhausen v. Longs Drug Stores California, Inc.*, 65 Cal. Rptr. 3d 838, 840, 843–47 (Cal. App. 1st Dist. 2007).

¹²² See *Ferrell v. Baxter*, 484 P.2d 250, 258–59 (Alaska 1971)?; see also John Earl Frazer, *Ferrell v. Baxter: Negligence Per Se in Alaska*, 2 UCLA ALASKA L. REV. 54 *passim* (1972–1973).

¹²³ See Caplan et al., *supra* note 19 at 608–09.

¹²⁴ See *Vaughan v. Menlove*, (1837) 132 Eng. Rep. 490 *passim* (C.P.).

¹²⁵ See *Trimarco v. Klein*, 436 N.E.2d 502, 504–07 (N.Y. 1982).

¹²⁶ See *United States v. Carroll Towing Co.*, 159 F.2d 169 (2d Cir. 1947).

The non-vaccinating parent no doubt estimates the risks to be higher than described here. But the question is not how they estimate the risk, but how would a reasonable person in the community estimate it. The risk analysis is clear. Furthermore, vaccination rates currently stand at over 90%.¹²⁷ This suggests that the community standard, and the expectation, is that parents will vaccinate their children.

In contrast, the reason the parent did not vaccinate will affect reasonableness. A parent who did not vaccinate because of a vaccine shortage or because of lack of access to healthcare or similar external arguments can raise those arguments to claim reasonableness of conduct. Similarly, a parent whose child has a medical condition that makes vaccinating inappropriate would also be treated as different from a parent not vaccinating based on personal choice alone.

C. Causation: Identifying the Source

To win a negligence case, a plaintiff has to demonstrate that more likely than not the defendant's tortious conduct caused her harm. The causation problem in this case is that it is not always possible to identify from where someone contracted an infectious disease.¹²⁸

Caplan et al. address causation in detail.¹²⁹ They suggest that with modern tools, in at least some cases it will be possible to identify who the source of an infection was.¹³⁰ These tools include drawing a timeline and tracking the contacts of the infected child as well as laboratory analysis.¹³¹ For example, in the hypothetical they use to frame their article, an unvaccinated child traveling in Europe contracted measles. The United States has had low levels of measles since the early 1990s, and most recent outbreaks are traced to unvaccinated individuals traveling abroad and returning with the disease.¹³² In that case, therefore, detailing the contacts of the two children and checking the virus strain can create a reasonably compelling case that the infection was contracted

¹²⁷ *Vaccination Coverage Among Children in Kindergarten – United States, 2011-2012 School Year*, CTRS. FOR DISEASE CONTROL AND PREVENTION (Aug. 24, 2012), http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6133a2.htm?s_cid=mm6133a2_w.

¹²⁸ See Gordon, *supra* note 28.

¹²⁹ Caplan et al., *Free to Choose*, *supra* note 19.

¹³⁰ *Id.* at 606.

¹³¹ *Id.* at 607–08.

¹³² *Measles Outbreaks*, CTRS. FOR DISEASE CONTROL AND PREVENTION, <http://www.cdc.gov/measles/outbreaks.html> (last updated Jan. 24, 2014) (“Measles was declared eliminated from the United States in 2000. So, the disease no longer spreads year round in this country. But it is still common throughout the world, including some countries in Europe, Asia, the Pacific, and Africa. Anyone who is not protected against measles is at risk of getting infected when they travel internationally. They can bring measles to the United States and infect others. Unvaccinated people put themselves and others at risk for measles and its serious complications.”).

from the unvaccinated child—certainly with a high enough level of certainty to meet the preponderance of evidence standard. It may be impossible to rule out other sources completely but that is not the standard; the plaintiff must demonstrate that other causes are less likely to have caused the infection. As a court explained in a different context:

Where the facts proven show that there are several possible causes of an injury, for one or more of which the defendant was not responsible, and it is just as reasonable and probable that the injury was the result of one cause as the other, plaintiff cannot have a recovery, since he has failed to prove that the negligence of the defendant caused the injury. This does not mean that the plaintiff must eliminate every other possible cause. “The plaintiff was not required to offer evidence which positively excluded every other possible cause of the accident.” The existence of remote possibilities that factors other than the negligence of the defendant may have caused the accident does not require a holding that plaintiff has failed to make out a *prima facie* case. It is enough that he shows facts and conditions from which the negligence of the defendant and the causation of the accident by that negligence may be reasonably inferred (citations omitted).¹³³

In a case that also involved an infectious disease, Mr. Stubbs contracted typhoid, and claimed that he contracted the disease by drinking water contaminated by sewage due to the defendant city’s negligence.¹³⁴ Although the court found other potential causes for typhoid, the court upheld the verdict for Mr. Stubbs explaining that the plaintiff does not

¹³³ *Ingersoll v. Liberty Bank of Buffalo*, 14 N.E.2d 828, 829–830 (N.Y. 1938). *See also* *Skinner v. Square D. Co.*, 516 N.W.2d 475, 487 (Mich. 1994) (“A plaintiff in a product liability action need not offer evidence which positively excludes every other possible cause. It is enough that the plaintiff establishes a logical sequence of cause and effect, notwithstanding the existence of other plausible theories, although other plausible theories may also have evidentiary support.”); *Marcum v. Adventist Health System/West*, 193 P.3d 1, 6 (Or. 2008) (“Even if the expert is not able to eliminate all alternative causes, the testimony nevertheless may be reliable and admissible if sufficient potential causes are eliminated for the expert to identify one particular cause as the likely cause of the condition.”); *Westberry v. Gislaved Gummi AB*, 178 F.3d 257, 265 (4th Cir. 1999) (“A differential diagnosis that fails to take serious account of other potential causes may be so lacking that it cannot provide a reliable basis for an opinion on causation. However, [a] medical expert’s causation conclusion should not be excluded because he or she has failed to rule out every possible alternative cause of a plaintiff’s illness.”).

¹³⁴ *Stubbs v. City of Rochester*, 124 N.E. 137, 138 (N.Y. 1919).

need to eliminate all other causes as long as he brought sufficient evidence to support the cause he is basing his case on.¹³⁵

Generally, the CDC tracks the disease to an index case. In one instance, the CDC reported:

The index patient was an unvaccinated U.S. resident aged 24 years who noted a rash on June 3 during a return flight from Indonesia, where measles is endemic. The patient was admitted to an Indiana hospital during June 7–9 and treated for presumed dengue fever. Measles was not considered, and the patient was not isolated. The outbreak was unrecognized until June 20, when five family members visited an ED after experiencing onset of measles symptoms at various times over the previous few days. Subsequently, measles genotype D9, a strain endemic in Indonesia, was isolated from nasopharyngeal swabs from two of these patients.¹³⁶

Courts in other contexts accepted as relevant causation evidence a combination of a temporal relationship and an attempt to rule out other causes.¹³⁷

That will not be true in every case: sometimes causation is not easy (or even possible) to prove even at the level of preponderance of evidence. But proving causation is a challenge in many tort cases, and is a part of the burden the plaintiff faces. The fact that, in some cases, the plaintiff will not be able to meet that burden is not a reason to bar suits where the plaintiff will be able to do so. In a sense, this limit—the need to show causation—also prevents liability from extending too far and widely.

D. *Proximate Cause: Who Can You Sue?*

In some cases, it is impossible to trace who specifically infected the plaintiff, but possible to trace an outbreak to an index case. The question is: can a plaintiff sue an index patient even if it's unlikely that the index patient directly infected the plaintiff's child? If an index patient started

¹³⁵ *Id.* at 140.

¹³⁶ CTRS. FOR DISEASE CONTROL AND PREVENTION, *Notes from the Field, Measles Outbreak—Indiana, June–July 2011*, 60 MORBIDITY AND MORTALITY WEEKLY REPORT 1153 (Sept. 2, 2011) (footnote omitted), available at <http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6034a5.htm>.

¹³⁷ *Gresser v. Dow Chemical Co.*, 989 N.E.2d 339, 348 (Ind. Ct. App. 2013) (temporal connection and attempt to rule out other causes is enough to allow expert testimony on causation to be submitted to the jury). In some cases where there is a small number of unvaccinated children that might be the source of infection, the doctrine of alternative liability may allow the plaintiff to collect from multiple defendants. *See Summers v. Tice*, 199 P.2d 1, 3–4 (Cal. 1948).

an outbreak, there is no causation problem: without the initial failure to vaccinate the index case, the outbreak would not have happened and the plaintiff would not be hurt. However, it may be unfair to hold the index patient liable for policy reasons, and the courts have a tool for such situations.

Proximate cause—renamed “scope of liability”¹³⁸—is a liability-limiting device used to prevent liability for negligent actions from being too extensive.¹³⁹ The test used today for proximate cause is foreseeability of harm given the breach.¹⁴⁰ It involves examining foreseeability of the plaintiff, foreseeability of the harm, and intervening causes. Considerations of remoteness in time and space are relevant but not determinative.¹⁴¹ We have come a long way since the courts rejected Mrs. Palsgraf’s claim.¹⁴² The concept is still exceedingly vague and the lines drawn are arbitrary to some degree. The courts have handled proximate cause cases in a case-by-case, often confusing manner.¹⁴³

The concern in allowing liability to reach back to an index case is that the liability of that person may be too extensive if the illness travels afar. This is similar to cases where the courts faced extensive liability from, for example, oil spill or fire.¹⁴⁴ Here too, the determination will have to be on a case-by-case basis. It must balance the desire to limit the negligent defendant’s liability, since the level of culpability in negligence is not as high as in an intentional tort and a parent may well be in sincere error here, with the desire to appropriately compensate the innocent plaintiff. The time passage from the initial infection, the number of peo-

¹³⁸ RESTATEMENT (THIRD) OF TORTS, *supra* note 52, § 29.

¹³⁹ Charles E. Carpenter, *Workable Rules for Determining Proximate Cause – Part I*, 20 CALIF. L. REV. 229 (1932).

¹⁴⁰ DIAMOND ET AL., *supra* note 47. Though the Third Restatement suggests a test based on the risk standard, i.e., which risks are foreseeable, given the breach. That test has not, to the best of my knowledge, been adopted by any court as of this point, and it’s unclear whether there will be any differences between it and the foreseeability test.

¹⁴¹ See Peter C. Haley, *Paradigms of Proximate Cause*, 36 TORT & INS. L.J. 147, 151–59 (2000). For example, there is a complex jurisdiction governing the extent to which a defendant whose negligence started a fire is liable for damages beyond the immediate surroundings. In *Ryan v. N. Y. Cent. R.R.*, 35 N.Y. 210 (1866), the court found a building 130 feet away not to be covered, because there were other buildings in between. And in *Hoffman v. King*, 55 N.E. 401 (N.Y. 1899), a fire that spread beyond abutting land was not covered. But see Charles E. Carpenter, *Workable Rules for Determining Proximate Cause – Part III*, 20 CALIF. L. REV. 471, 474–75 (1932), for a different approach. Courts have to draw line or the defendant’s liability will be very, very broad indeed—but there is no objectively correct way to do it.

¹⁴² *Palsgraf v. Long Island R.R. Co.*, 162 N.E. 99 (N.Y. 1928)?.

¹⁴³ *PPG Indus. v. Transamerica Ins. Co.*, 975 P.2d 652, 656 (Cal. 1999).

¹⁴⁴ *E.g.*, In re *Kinsman Transit Co.*, 338 F.2d 708 (2d Cir. 1964); *Kinsman Transit Co. v. City of Buffalo*, 388 F.2d 821 (2d Cir. 1968) (A boat that was improperly moored crashed into another boat, which crashed into a bridge that collapsed and blocked the river. The wreckage flooded the land next to the river, and prevented any traffic from traversing the river until it was cleared).

ple in the community, and any connections between the index case and the plaintiff will affect the result.

This, too, is a way to prevent liability from getting out of hand.

E. Damages: Is there Compensation?

Strong as the reasons to compensate a family harmed by the decision of another family not to vaccinate a child are, there is a practical concern here. If there will be no ability to pay at the end of a suit, the suit will either remain a theoretical possibility or be nothing but a waste of time and money on behalf of both plaintiffs and courts. Most private individuals do not have handy the kind of money required to cover expensive medical treatments or to pay substantial amounts in compensation for a death. The way this is usually handled is through liability insurance. But many liability insurance policies do not currently cover infectious diseases caused by the individual insured, it seems. As a response to claims when an insured individual infected another with a sexually transmitted disease, many insurance companies adopted a “Communicable Diseases Exclusion”; for example, ISO’s policy says there is no liability for bodily injury that “arises out of the transmission of a communicable disease by an insured.”¹⁴⁵

Should the claim therefore be abandoned? No. There are three potential solutions to the compensation issue. First, in some cases the non-vaccinating parents may be wealthy enough to cover the costs. Those cases alone justify having the option. The other options draw on the fact that anti-vaccination organizations have shown their ability to mobilize in order to achieve their goals before. If the courts accept a tort remedy, anti-vaccination organizations could help their members in one of two ways: by fundraising to help cover a case and a damages award or by organizing and negotiating with insurance companies for liability insurance to cover these situations, or by mobilizing to change state law to prohibit the infectious diseases exclusion. After all, insurance is not set in stone, and the exclusion that was added in can be removed (and the insurance company is well-placed to calculate the appropriate pricing of the policy in this situation).

At any rate, the danger of insolvent defendants arises in other contexts, and we still allow plaintiffs to sue.

¹⁴⁵ Daniel C. Eidsmoe & Pamela K. Edwards, *Sex, Lies, and Insurance Coverage? Insurance Carrier Coverage Defenses for Sexually Transmitted Disease Claims*, 34 TORTS & INS. L. J. 921, 927 (1999) (citing the policy).

III. STATUTORY LIABILITY FOR FAILURE TO VACCINATE: A PROPOSAL

Another way to offer a remedy to children and families harmed by another's decision to vaccinate is through a legislative remedy. Legislatures have created duties to act in the past. For example, legislatures created duties to report accidents and assist after them,¹⁴⁶ to report child abuse,¹⁴⁷ and so on.¹⁴⁸ As an alternative to creating a common law duty—whether because the legislature wants to anticipate such suits and offer a uniform solution, or because proponents believe a common law suit is unlikely to succeed and want to promote a political solution—a statute can create a duty in these cases. Enacting such a statute can help ease the financial burden on families harmed by another family's unreasonable choice not to vaccinate. The same policy reasons that have supported creating a duty apply here, too.

Here is a proposed statute, followed by explanation of the choices made:

Bill Text:

Title of Bill: Liability for Failure to Vaccinate

SECTION 1: It is a breach of the duty of a care for a parent to not vaccinate his or her minor child with the vaccines included in the State's childcare and school immunizations requirements. Such a parent or guardian shall be liable for damages to any person injured by such failure.

SECTION 2: *Exception:* Advisory Committee on Immunization Practices' (ACIP) recommendations

SECTION 1 will not apply when the child was not vaccinated in accordance with ACIP's recommendation because of the child's age, medical condition or other circumstances ACIP determined.

SECTION 3: *Defense:* A person may not be liable under this statute if that person proves by a preponderance of the evidence that reasonable efforts were made to vaccinate the child, but the vaccination was prevented by a vaccine shortage, lack of access to a medical facility or by any other cause beyond the control of a person who otherwise would be liable.

¹⁴⁶ WIS. STAT. § 346.70 (2011); CAL. VEH. CODE § 20008 (West 2008).

¹⁴⁷ U.S. DEP'T OF HEALTH AND HUMAN SERVICES, CHILDREN'S BUREAU, MANDATORY REPORTERS OF CHILD ABUSE AND NEGLECT 2 (2012), available at https://www.childwelfare.gov/systemwide/laws_policies/statutes/manda.pdf.

¹⁴⁸ Vermont also has a general statute imposing a duty of easy rescue. VT. STAT. ANN. tit. 12, § 519 (2002).

SECTION 4: Qualifying for a religious or personal belief exemption under state law is not a defense against liability.

The goal of the statute is to balance the rights of parents to decide whether or not to vaccinate their child with the rights of those that may be harmed by a choice to not vaccinate. As drafted, the statute determines that not vaccinating a child is an unreasonable choice and in most circumstances a breach of duty. That determination is based on a balancing of the risks of vaccinating versus the risks of not vaccinating, as described above. In essence, this is a rebuttable presumption, but the circumstances in which it can be rebutted are narrow. Usually parents will not be allowed to claim, under this statute, that it was reasonable not to vaccinate the child (which means appropriate cases in which not vaccinating is reasonable need to be set out as carefully defined exceptions). Since the standard uses the vaccines required for school attendance, the parents can be liable if they chose to forego only one of the vaccines required for school attendance and the child transmits that specific disease to another. The rationale, again, is that absent a compelling reason, no one should bear the costs of the decision not to vaccinate beyond the deciding parent (and the child for whom they are making the decision).

The statute preserves the common law requirements of cause-in-fact and proximate cause, along with their attendant problems. The parents of the injured child will still have to show causation, and non-vaccinating parents cannot be held liable unless their decision is shown to have caused the harm. Therefore, the statute balances the need to compensate the parents of the injured child with the need to prevent liability from being imposed on non-vaccinating parents just because they did not vaccinate. Liability is imposed because their choice caused harm, not as a penalty.

The statute does not address burden of proof, leaving in place the common law rule that the plaintiff carries the burden of proof for the prima facie case. It leaves it to the courts to decide whether and to what extent to apply the defenses to negligence because the factual situations may support different results.

The statute uses the state's school immunization requirements as the standard both to respect the choices state authorities made in relation to the CDC's recommended immunization schedules and to ensure consistency with other legal requirements. Parents are constructively expected to know their own state's law; the CDC's schedule is not law. Holding parents to the standard set by their state's immunization requirements fits with the already existing expectations from them as citizens of their state. Requiring them to know the CDC's schedule would pose a higher, possibly unrealistic burden.

The statute does not cover children who should not be vaccinated under Advisory Committee on Immunization Practices (ACIP)¹⁴⁹ recommendations. This could be because they are too young, because of specific medical conditions, or for other reasons. If a child should not be vaccinated under the careful determination of the medical and public health experts on the committee, it is therefore reasonable not to vaccinate that child, and the parents should not be liable. The statute also defines that the presumption of negligence may be rebutted if reasons outside a parent's control—for example, vaccine shortages or lack of access to medical care—prevented vaccination. It is not unreasonable to not vaccinate when a parent is unable to vaccinate.

Finally, since, as explained above, the reasons for religious or personal belief exemptions from immunization requirements are different than the reasons to provide compensation, exemptions from school immunization requirements would not be enough to avoid liability.

IV. ADDITIONAL CONCERNS

A. *Religious Reasons to Not Vaccinate*

One type of exemption from immunization requirement is an exemption based on religious beliefs. In a guest post responding to Art Caplan's suggestion to impose liability on non-vaccinating parents, Mary Holland suggests that holding non-vaccinating parents liable in tort when their decision not to vaccinate is based on religious grounds is a violation of their religious freedom.¹⁵⁰ Holland's argument focuses on New York, but applies to the United States generally:

New York State law permits people to refuse vaccines for "genuine and sincere religious beliefs." The rationale behind this is that some people have deeply held religious and ethical convictions that conflict with vaccination. Freedom of religion is the first civil right in the First Amendment to the U.S. Constitution; it is the bedrock of U.S. law and culture. Similarly, religious tolerance is a cornerstone of New York State's historic peace and prosperity. The right to affirm a religious objection to vaccination is part of New York's heritage. To repeal that, or to subvert it through civil liability, would be to

¹⁴⁹ *Advisory Comm. on Immunization Practices (ACIP)*, CTRS. FOR DISEASE CONTROL AND PREVENTION, <http://www.cdc.gov/vaccines/acip/about.html> (last updated Aug. 16, 2012) .

¹⁵⁰ Mary Holland, *Guest Post: Crack Down on Those Who Don't Vaccinate?: A Response to Art Caplan*, HARV. L. PETRIE-FLOM CTR. BILL OF HEALTH BLOG (June 21, 2013), <http://blogs.law.harvard.edu/billofhealth/2013/06/21/guest-post-crack-down-on-those-who-dont-vaccinate-a-response-to-art-caplan/>.

unravel some of the bonds that hold together New York's extraordinarily diverse society.¹⁵¹

Religious freedom is indeed a fundamental value in the United States. Religious freedom, however, is not absolute. In *Employment Division v. Smith*, the Court upheld a statute making possession and use of peyote a felony, even when peyote is used for religious purposes, as in some Native American rituals.¹⁵² The Court said:

We have never held that an individual's religious beliefs excuse him from compliance with an otherwise valid law prohibiting conduct that the State is free to regulate. On the contrary, the record of more than a century of our free exercise jurisprudence contradicts that proposition.

. . . .

Subsequent decisions have consistently held that the right of free exercise does not relieve an individual of the obligation to comply with a "valid and neutral law of general applicability on the ground that the law proscribes (or prescribes) conduct that his religion prescribes (or proscribes)."¹⁵³

Smith has been criticized,¹⁵⁴ but it is the law and reflects at least to some degree a disinclination to allow religious beliefs to serve as a barrier to state regulation. If religious beliefs do not prevent States from imposing criminal liability for practices that are an inherent part of a religion, they do not prevent application of civil liability for harms resulting from religious practices.¹⁵⁵ Religious freedom does not give a believer the right to impose costs on others.

Most courts have explicitly ruled that way. In *Munn v. Southern Health Plan*, the plaintiff's wife, a Jehovah's Witness, refused, for religious reasons, a blood transfusion that the defendants asserted would have

¹⁵¹ *Id.* (citation omitted).

¹⁵² *Emp't Div., Dep't of Human Res. of Or. v. Smith*, 494 U.S. 872, 874 (1990).

¹⁵³ *Id.* at 878–79 (citations omitted).

¹⁵⁴ See Jesse H. Choper, *In Favor of Restoring the Sherbert Rule—With Qualifications*, 44 TEX. TECH L. REV. 221 (2011) (arguing *Smith* contains numerous ambiguities, making it difficult for lower courts to apply its holding); Frank S. Ravitch, *The Unbearable Lightness of Free Exercise Under Smith: Exemptions, Dasein, and the More Nuanced Approach of the Japanese Supreme Court*, 44 TEX. TECH L. REV. 259 (2011) (asserting *Smith* was a predictable and unreflexive decision that should have directly addressed problematic beliefs about "general applicability" and "religious practices").

¹⁵⁵ As pointed out, in *Smith*, there was no evidence that the plaintiffs used peyote outside of religious ceremonies, and indeed their religion prohibited it. *Smith*, 494 U.S. at 913–14 (Blackmun, J., dissenting). Peyote was also an ingrained, essential part of the religious ceremony. Ravitch, *supra* note 151, at 261. None of this was considered a defense. *Smith*, 494 U.S. at 890.

saved her life.¹⁵⁶ Addressing whether religious freedom prevented such an argument, the court said:

There is a clear distinction, however, between the overt attempt by a state actor to force an individual to take some action which her religion forbids her to take and the application of a universally applied tort doctrine which leaves the person “free to make [her] choice between the practice of [her] religion and the acceptance of treatment that may be contrary thereto.” *Martin v. Industrial Accident Commission*, 147 Cal. App. 2d 137, 304 P.2d 828, 831 (1956) (upholding denial of worker’s comp. death benefits where death was found to be result of refusal of transfusion on religious grounds). An individual has a right under the first amendment [sic] to hold religious beliefs and live by them, but that does not mean that anyone who commits a tort against that individual must suffer the consequences of decisions made by the victim based upon those religious beliefs.

. . . To adopt an absolute rule which required one citizen to pay damages for the consequences of another’s exercising her religious freedom would favor an establishment of religion in a way which seems constitutionally unsupportable.¹⁵⁷

Similarly, in *Williams v. Bright*, the New York Court of Appeals said:

No one suggests that the State, or, for that matter, anyone else, has the right to interfere with that religious belief. But the real issue here is whether the consequences of that belief must be fully paid for here on earth by someone other than the injured believer. . . .

Of course, the State does not have any interest in the question of who wins this lawsuit, or the extent to which one party prevails over the other. But the State *does* have a compelling interest in assuring that the proceedings before its civil tribunals are fair, and that any litigant is not improperly advantaged or disadvantaged by adherence to a particular set of religious principles.¹⁵⁸

In the context of vaccination, religious freedom is even less protected, and the Supreme Court has acknowledged a compelling state in-

¹⁵⁶ *Munn v. S. Health Plan, Inc.*, 719 F. Supp. 525, 526 (N.D. Miss. 1989).

¹⁵⁷ *Id.* at 529–30.

¹⁵⁸ *Williams v. Bright*, 230 A.D.2d 548, 552–53 (N.Y. 1997).

terest in limiting it. In the context of protection offered children, the Supreme Court spoke directly to this point in *Prince v. Massachusetts*.¹⁵⁹ There, the question was whether a Jehovah's Witness had violated child labor laws while exercising her religious freedom.¹⁶⁰ The Court unequivocally said yes: neither religious freedom nor parental rights were absolute.¹⁶¹

The Court went on to address directly the issue of vaccination: "Thus, he cannot claim freedom from compulsory vaccination for the child more than for himself on religious grounds. The right to practice religion freely does not include liberty to expose the community or the child to communicable disease or the latter to ill health or death."¹⁶²

The Court is very clear: Freedom of religion is not a bar against requiring immunization. A state may offer an individual a religious exemption, but it need not do so. As a state is not required to offer any religious exemption, limiting the protection such an exemption provides in non-discriminatory ways—such as imposing liability if harm results from its use—is also legitimate. There are no grounds for claiming religious freedom as a bar against tort liability.

Finally, the religion argument is suspect in many cases. Research into reasons provided by parents for not vaccinating does not focus on religion—the main arguments regard safety concerns and mistrust of government and doctors.¹⁶³ Notwithstanding pockets of opposition, no major religion opposes vaccination. The Vatican, while expressing concern over the use of cell lines to grow certain viruses used in vaccines, supports vaccine use and warns parents who do not vaccinate their children that the parents will be responsible before God if their child infects a pregnant mother with rubella and her fetus is harmed.¹⁶⁴

There are small religious communities that sincerely oppose vaccination on religious grounds. Those communities often pay a price. For example, a Jewish orthodox community in New York known for its opposition to vaccines had an outbreak of mumps in 2010¹⁶⁵ and is cur-

¹⁵⁹ *Prince v. Massachusetts*, 321 U.S. 158 (1944).

¹⁶⁰ *Id.* at 159.

¹⁶¹ *Id.* at 166.

¹⁶² *Id.* at 166–67 (citations omitted).

¹⁶³ Brown, *supra* note 85; Calandrillo, *supra* note 21; Kennedy, *supra* note 42; Richard K. Zimmerman et al., *Vaccine Criticism on the World Wide Web*, 7 J. MED. INTERNET RES. e17 (2005).

¹⁶⁴ Vatican Statement on Vaccines Derived from Aborted Human Fetuses n.15 (June 9, 2005), <http://www.immunize.org/concerns/vaticandocument.htm>.

¹⁶⁵ Anemona Hartocollis, *Jewish Youths Are at Center of Outbreak of Mumps*, N.Y. TIMES, Feb. 11, 2010, at A25, available at <http://www.nytimes.com/2010/02/12/nyregion/12mumps.html>.

rently suffering through an outbreak of measles.¹⁶⁶ In the so-called “Bible Belt” in the Netherlands, protestant communities that oppose vaccination, also paid a price for their choice not to vaccinate. In 2004 and 2005, a rubella epidemic there led to two fetal deaths and fourteen congenital infections.¹⁶⁷ Recently, the community had faced a measles outbreak¹⁶⁸ that directly demonstrated the tension between parental religious freedom and the protection against disease of the child. There are no doubt individuals with sincere religious concerns as well. However, those cases are rare.

B. *Comparison to Other Situations*

In her blog post on the topic, Mary Holland suggests that it is unfair to impose tort liability on parents for their choice not to vaccinate, because it burdens and holds liable those who do not vaccinate, while those who vaccinate may similarly be responsible for the spread of disease.¹⁶⁹ Specifically, she suggests three situations that should be considered in comparison: a vaccinated individual infecting another, presumably as a result of vaccine shedding; a person who suffers a vaccine injury; and an outbreak in a vaccinated population. However, none of these situations actually undermines the proposal that non-vaccinating parents should pay for the cost of harms caused by their decision, though the reasons may vary.

The first situation Holland addresses is a situation in which a vaccinated individual sheds a live virus vaccine onto an unvaccinated individual. A few of the vaccines on the childhood immunization schedule use live viruses. Currently these include the MMR (which includes the live measles, mumps and rubella viruses), varicella (chicken pox), and rotavirus. For MMR, the only known instances of transmission were a few cases of the live rubella virus passing from a nursing mother to infant. Even then, “the infection remains asymptomatic.”¹⁷⁰ There have

¹⁶⁶ Press Release, New York City Dep’t of Health and Mental Hygiene, Alert #12: Update on Measles in New York City, (May 21, 2013), available at https://a816-health29ssl.nyc.gov/sites/NYCHAN/Lists/AlertUpdateAdvisoryDocuments/HAN_Measles%20Update_5%2021%2013_FINAL.pdf; Letter from Jennifer Rosen, Dir., Epidemiology and Surveillance, Bureau of Immunization, to the New York City Dept. of Health and Mental Hygiene (May 21, 2013).

¹⁶⁷ Susan Hahné et al., *Rubella Outbreak in the Netherlands, 2004-2005: High Burden of Congenital Infection and Spread to Canada.*, 28 PEDIATRIC INFECTIOUS DISEASE J. 795, 795 (2009).

¹⁶⁸ Catherina, *Meanwhile, Measles Break Out in the Dutch Bible Belt.* . . , JUST THE VAX BLOG (June 15, 2013), <http://justthevax.blogspot.co.uk/2013/06/meanwhile-measles-break-out-in-dutch.html>.

¹⁶⁹ Holland, *supra* note 152.

¹⁷⁰ CTRS. FOR DISEASE CONTROL AND PREVENTION, MEASLES, MUMPS, AND RUBELLA—VACCINE USE AND STRATEGIES FOR ELIMINATION OF MEASLES, RUBELLA, AND CONGENITAL RUBELLA SYNDROME AND CONTROL OF MUMPS: RECOMMENDATIONS OF THE ADVISORY COM-

been rare cases of shedding with both the varicella (chicken pox) vaccine and the rotavirus vaccines,¹⁷¹ so this situation is currently rare but possible.

Holland's example is more dramatic. She uses as an example the contraction of polio by Mr. Tenuto,¹⁷² when Mr. Tenuto's infant daughter was vaccinated with the Oral Polio Vaccine (OPV), a vaccine no longer in use in the United States. The court explains:

[O]n a rare but statistically predictable basis, the live viruses lodging in the infant recipient's gastrointestinal tract may grow and revert to virulent form. When those wild viruses are later discharged from the infant's bowel in excretion or from the mouth in saliva, contact with the feces or saliva by the child's adult caretakers may result in infection and, in the case of vulnerable adults (i.e., unvaccinated or where immunization has weakened over time), may result in paralytic polio.¹⁷³

Holland highlights the fact that it took over thirty years for Mr. Tenuto to be compensated. But this case, and more generally Holland's first two examples, an unvaccinated person infected through vaccine shedding and a vaccine injury, highlight exactly why tort liability should be allowed when an unvaccinated child infects another. Yes, the industry delayed the litigation—unfortunately delaying tactics are often used by defendants—but there was a tort remedy available to Mr. Tenuto. Today, someone in Mr. Tenuto's situation, the rare person harmed by a live virus vaccine shedding or the rare person seriously injured by a vaccine, has a no-fault compensation scheme available: The National Vaccine Injury Compensation Program (NVICP).¹⁷⁴ Mr. Tenuto, who was injured before the act was passed, did not have to go through the program, though he did have a right to use it.¹⁷⁵ Similar plaintiffs today would now go through the program. The NVICP applies a no-fault stan-

MITTEE ON IMMUNIZATION PRACTICES (ACIP) 202–07 (May 22, 1998), <http://www.cdc.gov/mmwr/preview/mmwrhtml/00053391.htm> (“Breast feeding is not a contraindication to vaccination. Although a woman can excrete rubella vaccine virus in breast milk and transmit the virus to her infant, the infection remains asymptomatic. Otherwise, persons who receive MMR or its component vaccines do not transmit measles, rubella, or mumps vaccine viruses”).

¹⁷¹ CTR. FOR DISEASE CONTROL AND PREVENTION, EPIDEMIOLOGY AND PREVENTION OF VACCINE-PREVENTABLE DISEASES 9–10 (William Atkinson et al. eds., 12th ed. 2012), available at <http://www.cdc.gov/vaccines/pubs/pinkbook/downloads/genrec.pdf>.

¹⁷² *Tenuto v. Lederle Labs.*, 26 Misc. 3d 1225(A), 2010 N.Y. Misc. LEXIS 309 (N.Y. Sup. Ct. Feb. 17, 2010) (unpublished opinion).

¹⁷³ *Id.* at *1.

¹⁷⁴ *Tenuto v. Lederle Labs.*, 907 NYS.2d 441, 444 (2010). (“The Act provides for a federal no fault system for compensating vaccine associated injuries and deaths.”)

¹⁷⁵ *Tenuto*, 2010 N.Y. Misc. LEXIS 309, at *8.

dard and provides attorney fees even to those who lose their case.¹⁷⁶ Hence, there is a tort remedy available in these situations. A remedy should also be available to the parent whose child was harmed by unreasonable failure to vaccinate.

The final situation raised by Holland is a situation in which there is an outbreak in a vaccinated community.¹⁷⁷ This can also be extended to a situation where a specific vaccinated child catches the disease in spite of being vaccinated, and then transmits it to another. This too, is not a good reason to deny compensation to a family harmed by a decision not to vaccinate. The United States torts system operates overall on a fault basis; compensation is given for harm caused by human action, usually, though not exclusively, through negligence or a higher level of culpability.¹⁷⁸ For example:

If an accident happens because brakes fail, it will matter whether the brakes failed without anyone being at fault and without being defective—no liability—or if the brakes were defective (in which case you can sue the manufacturer) or the driver did not maintain them well (in which case you can sue the driver).¹⁷⁹

If a child was vaccinated according to a schedule and still contracted a disease, the parents have acted reasonably. The child's parents took the reasonable precaution available, and the disease is an act of God, something beyond their control. An infant infected with measles or whooping cough because another family chose not to vaccinate their child is another matter entirely.

CONCLUSION

A tort action for failure to vaccinate addresses the scenario in which a child was killed or severely injured by another family's choice to not vaccinate their child. It means the results (or consequences) of a legal choice¹⁸⁰ spilled over and harmed others, and the question for the tort system is who should bear the costs of the harm. This article suggests that the family making the choice not to vaccinate, the choice that led to

¹⁷⁶ *Bruesewitz v. Wyeth L.L.C.*, 131 S. Ct. 1068, 1072 (2011).

¹⁷⁷ Holland, *supra* note 152.

¹⁷⁸ HOLMES, *supra* note 87, at 107–09.

¹⁷⁹ Dorit R. Reiss, *Guest Post: No Liability for Failure to Vaccinate? The Case Has Not Been Made: A Response to Mary Holland*, HARVARD LAW PETRIE-FLOM CTR. BILL OF HEALTH BLOG (June 24, 2013), <http://blogs.law.harvard.edu/billofhealth/2013/06/24/guest-post-no-liability-for-failure-to-vaccinate-the-case-has-not-been-made-a-response-to-mary-holland>.

¹⁸⁰ Currently no state in the United States makes not vaccinating a criminal offense or imposes direct sanctions on such a choice; school immunization requirements may place pressures on families to vaccinate, but the families have the choice of at least homeschooling and occasionally sending the child to a private school that allows unvaccinated children in.

the harm should bear the cost. It demonstrates how legal doctrine can support such a suit. It does not seek to penalize the non-vaccinating parents. But while the tort system can never really fix what happens to families like Micha's and Natalie's, it can in some cases, prevent the insult of financial ruin added to the injured child.

