
**PLACING PHYSICIANS BETWEEN SCYLLA AND
CHARYBDIS: CHEMICAL DISCLOSURE LAW
REQUIRING HEALTH PROFESSIONALS TO SIGN
CONFIDENTIALITY AGREEMENT CREATES RISK OF
LIABILITY FOR PHYSICIANS AND IMPEDES
PROTECTION OF PUBLIC HEALTH**

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ABSTRACT

The Pennsylvania General Assembly enacted House Bill 1950 (Act 13) in February 2012, regulating hydraulic fracturing and the disclosure of chemicals used in the process. Part of this new legislation permits healthcare professionals to access proprietary information, otherwise subject to trade secret protection; however, Act 13 mandates that the requesting healthcare professionals first sign a private confidentiality agreement. There is an emerging debate extending across the states proposing similar legislation as to whether requiring a confidentiality agreement exposes physicians to potential liability or loss of license. On the one hand, if physicians abide by the terms of the private confidentiality agreements, they may violate their ethical code and state statutory laws protecting public health and safety, and such action may also expose them to potential common law negligence claims. On the other hand, if physicians share the information obtained under Act 13, they may be in breach of contract under the confidentiality agreement. This Note examines this dilemma and concludes that the vague language of Act 13 exposes health professionals to either breach of contract liability or potential tort liability and risk of losing their license. This Note recommends that the Pennsylvania Legislature should immediately pass an amendment clarifying the text of the statute, explaining whether physicians may share the information and with whom they can share it, taking into account the ethical obligations, common law doctrines, and public health concerns inherently intertwined with this issue. This Note also serves to guide other states considering similar chemical disclosure laws.

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*"To err is human, to delay is deadly."*¹

INTRODUCTION

In the rural city of Tunkhannock, located in the northeastern part of Pennsylvania, a thirty-acre tract of land may be home to only three or four neighbors.² Many residents obtain their tap water from private wells that share common aquifers.³ The neighbors in some locations, however, no longer speak to one another since the discovery of the valuable resource trapped in the shale formation beneath their land.⁴ Over the last ten years, some neighbors have sold their mineral rights for \$10 an acre while others have sold their mineral rights for \$1,000 an acre, yet still some refuse to sell because of fear of possible environmental degradation and invasion by the natural gas industry.⁵

In this setting, Dr. Paré has a small office that specializes in dermatology and skin conditions.⁶ A primary care physician referred Dr. Paré a new patient, Addison, who suffered from bleeding, oozing, and severely inflamed skin lesions.⁷ Unfortunately, after examining Addison, the source of the affliction bewildered Dr. Paré.

Over the course of a few weeks, Dr. Paré saw a number of other patients living in the same area as Addison who were suffering from similar symptoms.⁸ Finally, she discovered that a new hydraulic fracturing natural gas drill site had recently been erected in the area near where Addison lives.⁹ Dr. Paré continued to follow her patients' conditions and discovered that Addison, along with others,

1. Kevin Jewell & Lisa McGiffert, *To Err Is Human – to Delay Is Deadly: Ten Years Later, a Million Lives Lost, Billions of Dollars Wasted*, 2009 CONSUMERS UNION 1, available at http://safepatientproject.org/wordpress/wp-content/uploads/2011/07/safepatientproject-org-to_delay_is_deadly-2009_05.pdf.

2. Interview with Arthur F. Davis, III, resident of Tunkhannock, PA. (Sept. 30, 2012) (presenting a divided state of affairs, in which some residents praise the gas industry while others dislike and distrust it).

3. *Id.*

4. *Id.*

5. *Id.*

6. Dr. Paré is a physician practicing in northeast Pennsylvania and, while the medical facts are based on real events, the storyline is fictional. See Alicia Gallegos, *Doctors Fight "Gag Orders" Over Fracking Chemicals*, AM. MED. NEWS (Aug. 27, 2012), available at <http://www.ama-assn.org/amednews/2012/08/27/gv110827.htm>.

7. *Id.* Fact pattern taken from interview with physician treating patients exposed to chemicals in their drinking water.

8. *Id.*

9. *Id.* ("Dr. Paré's suspicions grew when she learned that the patients lived near the same natural gas drilling site.").

had high levels of phenol and hippuric acid in her urine.¹⁰ Upon instructing her patients to stop drinking their well water, the patients quickly improved.¹¹

One of the problems Dr. Paré faced was the inability to quickly determine what her patients had been exposed to after discovering the likely source of the symptoms.¹² If she had known what chemicals to test the patients for, she would have been able to identify the specific source of the symptoms faster.¹³ Thankfully, physicians, like Dr. Paré, may now obtain this information under House Bill 1950 (Act 13).¹⁴ However, because physicians must acquiesce to confidentiality agreements as a precondition to obtaining this chemical information from hydraulic fracturing drillers or operators, it is unclear whether physicians may share this valuable information with other physicians, insurance carriers, the patient's family members, neighbors, or the patient.¹⁵

Let us now assume that Dr. Paré discovered the potential cause of her patients' symptoms pursuant to Act 13 and she signed the required confidentiality agreement. Let us further assume that down the street a physician specializing in nephrology, Dr. Pocrates,¹⁶ has a small medical office. Similar to Dr. Paré's situation, assume a primary care physician refers a local resident, Evan, to Dr. Pocrates who diagnoses Evan as suffering from low platelets, anemia, rash, and acute renal failure.¹⁷

Dr. Pocrates treats Evan to the best of his ability, but the source of the illness escapes him. Evan slowly gets worse and the cause of his illness remains a mystery. Dr. Paré down the street is aware that her patients' well water had been contaminated to some degree, and pursuant to her Act 13 request, she knows the specific proprietary chemicals used by the natural gas drillers in the area. Because she signed the private confidentiality agreement, she fears that if she

10. *Id.* ("Tests later found that the patients had phenol and hippuric acid in their urine, two contact irritants rarely found in humans.") (emphasis added).

11. *Id.* ("The patients improved after they stopped drinking water from their underground wells.").

12. *Id.* ("Knowing what chemicals they had been exposed to would have sped up the process . . .").

13. *Id.*

14. 58 PA. CONS. STAT. ANN. § 3222.1(b)(10)-(11) (West 2012).

15. *See id.*

16. Dr. Pocrates is a fictional character, but his story has been taken from real events. *See* Erin McAuley, *State's 'Medical Gag Rule' Called an Illegal Gift to Gas Drillers*, COURTHOUSE NEWS SERVICE (July 31, 2012), <http://www.courthousenews.com/2012/07/31/48847.htm>.

17. *Id.* (using interview with physician to explain complicated diagnosis made after treating patient exposed to hydraulic fracturing fluid after a well blowout in Dallas, PA).

discloses the information to anyone, she may be sued. Fearful of potential liability, she chooses not to disclose the information to anyone. Moreover, because the residents on this tract of land no longer speak to one another, Evan never hears that his well water may be contaminated.

Despite Dr. Pocrates's valiant efforts, Evan slowly slips away as a result of renal failure. A few months later, Dr. Pocrates encounters multiple cases similar to Evan's, but still does not know the cause of the symptoms. Perhaps state agencies will investigate if an outbreak occurs or multiple people die from unknown sources. But how long will this take and why should we allow such a cost? Moreover, Dr. Paré may now lose her license;¹⁸ she may be liable for negligence¹⁹ and may be subject to criminal penalty for violating state public health disclosure statutes.²⁰

Time remains to address this issue by amending Pennsylvania's recently enacted Act 13. Under Act 13, healthcare professionals may obtain chemical names and concentrations used in hydraulic fracturing fluid.²¹ But the legislation provides that health professionals must sign a private confidentiality agreement.²² This is problematic because, on the one hand, physicians maintain ethical duties to not only fully disclose information to their patients, such as the cause of disease, but also to share such information with fellow physicians and the community at large.²³ Similarly, physicians may have a common law duty to warn identified third parties of a foreseeable risk known to the physician, even if the third party is not within the patient-physician relationship.²⁴ On the other hand, physicians may expose themselves to liability for sharing that information in contractual breach of a non-disclosure agreement that the statute explicitly authorizes drillers to force physicians to sign.²⁵

As a result of the statute's vague language and the uncertainty of the private drillers' confidentiality agreements, the Pennsylvania General Assembly has placed healthcare providers, especially physicians,

18. See *infra* Part II.A.

19. See *infra* Part II.B.

20. See *infra* Part II.C.

21. 58 PA. CONS. STAT. ANN. § 3222.1(b)(10)–(11) (West 2012).

22. *Id.*

23. See *infra* Part II.A (providing a discussion of ethical duties and enforcement measures applicable to physicians).

24. See *infra* Part II.B (discussing potential common law liability under negligence claim).

25. § 3222.1(b)(10)–(11).

between Scylla and Charybdis.²⁶ Either the physician adheres to ethical, statutory, and common law duties to share the information, thereby risking suit for breach of contract, or the physician complies with contractual obligations of the private confidentiality agreement, potentially risking loss of license, common law suit for negligence from injured third parties, and violation of public health statutes.

Part I of this Note will provide a general overview of the hydraulic fracturing process, its risks and potential problems arising from fracturing fluid, the chemicals used, and the recently adopted legislation addressing chemical disclosure in Pennsylvania. Part II will examine a physician's ethical, common law, and statutory duties to share and disclose the chemical information obtained by Act 13. Part III will provide an explanation of the restrictions on a physician's ability to share information, an overview of trade secret protection, an illustration of a physician's inability to obtain the information from public sources, and a review of the enforceability of such non-disclosure agreements. Part IV will present arguments and counter-arguments based on legislative intent. Part V will compare other disclosure laws to the language used in Act 13. Part VI will address anticipated consequences of not adopting the remedial measures. Part VII will present some recommendations to remedy this issue.

I. HYDRAULIC FRACTURING

A. *Hydraulic Fracturing 101*

Hydraulic fracturing (fracturing) involves the process of drilling perpendicular holes 4,000 to 10,000 feet into the earth to access the valuable natural gas (methane) trapped in the geological shale formations.²⁷ The process originated in 1949,²⁸ however, the contemporary application is much different.²⁹ Drillers now have the technology to maneuver the drill bit to effectively drill horizontally within the shale formations to reach greater area under the surface,³⁰

26. Between Scylla and Charybdis is an idiom derived from Greek mythology referring to a position "between two equally unpleasant alternatives." See, e.g., ENCYCLOPAEDIA BRITANNICA, <http://www.britannica.com/EBchecked/topic/530331/Scylla-and-Charybdis>.

27. See, e.g., David B. Spence, *Federalism, Regulatory Lags, and the Political Economy of Energy Production*, 161 U. PA. L. REV. 431, 438 (2013).

28. See, e.g., Kathleen Kerner, *Fracturing the Environment?: Exploring Potential Problems Posed by Horizontal Drilling Methods*, 1 U. BALT. J. LAND & DEV. 235, 237 (2012).

29. See Spence, *supra* note 27, at 438.

30. See, e.g., Sean Moulton & Sofia Plagakis, *The Right to Know, the Responsibility to Protect: State Actions Are Inadequate to Ensure Effective Disclosure of Chemicals Used in Natural Gas Fracking*, 2012

extending horizontal conduits from the well site by 1,000 to 6,000 feet.³¹

After operators drill the hole, they then secure the well and encase the walls in cement.³² Upon completing the well hole, the operators strategically set off small explosives under the surface within the well to create fractures in targeted geologic formations.³³ In order to fracture the shale further and increase access to the natural gas, the operators pump large amounts of fracturing fluid – two to four million gallons³⁴ – into the well at extremely high pressures.³⁵ The fluid contains various types of commercial additives marketed for the purpose of fracturing, secondary chemicals added at the site,³⁶ radioactive tracers, and sand or silicon particles.³⁷ The pressure from the fluid further fractures the shale creating tentacles extending out from the drill site, while the sand or silicon particles serve to lodge between the shale rock creating openings for the gas to then escape back up the well for harvest.³⁸

A portion – anywhere from 20% to more than 70%³⁹ – of the millions of gallons of fracturing fluid forced into the well later returns to the surface and must be addressed through a variety of waste management techniques.⁴⁰ This backwater carries with it both the initial chemicals mixed by the drillers and site operators, and the mineral salts and radioactive materials that are naturally present beneath the earth's surface.⁴¹ Operators either (1) reuse the flow-back

OMB WATCH 9, available at http://www.foreffectivegov.org/files/info/naturalgasfrackingdisclosure_med.pdf.

31. See, e.g., *id.* at 11.

32. See, e.g., Spence, *supra* note 27, at 455.

33. See, e.g., Moulton & Plagakis, *supra* note 30, at 11.

34. See, e.g., Spence, *supra* note 27, at 441.

35. See, e.g., U.S. DEP'T OF ENERGY, MODERN SHALE GAS DEVELOPMENT IN THE UNITED STATES: A PRIMER 56 (Apr. 2009), available at http://www.netl.doe.gov/technologies/oil-gas/publications/epreports/shale_gas_primer_2009.pdf.

36. See, e.g., Moulton & Plagakis, *supra* note 30, at 12 (“[T]ens of thousands of gallons of chemical additives may be used in each well[,]” including corrosion inhibitors, poisons, acids, and lubricants.)

37. See, e.g., *id.* at 11–12.

38. See, e.g., *id.*; see also Spence, *supra* note 27, at 442.

39. See, e.g., Moulton & Plagakis, *supra* note 30, at 23; Spence, *supra* note 27, at 441.

40. See, e.g., ROBERT B. JACKSON ET AL., RESEARCH AND POLICY RECOMMENDATIONS FOR HYDRAULIC FRACTURING AND SHALE GAS EXTRACTION 3 (2011) (explaining that a single well can produce more than a million gallons of wastewater in the first month of drilling and production).

41. See, e.g., David M. Kargbo et al., *Natural Gas Plays in the Marcellus Shale: Challenges and Potential Opportunities*, 44 ENVTL. SCI. & TECH. 5679, 5681 (2010), available at <http://pubs.acs.org/doi/pdf/10.1021/es903811p>; Kerner, *supra* note 28, at 242 (citation omitted) (“[F]racking wastewater contained radioactivity at unsafe levels that could not be diluted in rivers and other waterways and that was not being tested in most sewage treatment plants.”).

fluid, (2) store it in ponds near the drill site,⁴² (3) dispose of it in treatment sites, or (4) drill secondary drill sites to dispose of it.⁴³

B. Scope and Risk of Hydraulic Fracturing Fluid

Over one-half-million natural gas wells are spread across thirty states.⁴⁴ Nine in ten of those wells use fracturing as a means of extracting the natural gas.⁴⁵ The number of wells is rapidly expanding;⁴⁶ between 2000–2009, the number of wells in Pennsylvania has almost doubled, while Texas has added approximately forty-five thousand new wells.⁴⁷ The Marcellus Shale formation underlies at least eight different states, and it may be the largest natural gas reserve in the United States.⁴⁸ In addition to the Marcellus Shale, Arkansas has the Fayetteville Shale formation; Louisiana has the Haynesville Shale; Arizona and Colorado have the Lewis Shale; Michigan has the Antrim Shale; and Indiana and Kentucky have the New Albany Shale.⁴⁹ Hydraulic drilling is also prevalent, or is under consideration, in a number of different states throughout the country, such as Utah, Wyoming, Mississippi, North Dakota, California, New Mexico, New Jersey, Oklahoma, Illinois, Montana, and the New England region.⁵⁰

The impetus behind the aggressive spread of fracturing is the unyielding pressure to find alternative energy resources to remove the burden of relying on foreign oil.⁵¹ Though few think natural gas and fracturing are perfect solutions to this problem, most agree it can help relieve the mounting pressure on the industry and government to devise new energy resources.⁵²

42. See Kerner, *supra* note 28, at 242 (noting storms may cause overflowing of the ponds causing contamination of the surrounding land).

43. See, e.g., Moulton & Plagakis, *supra* note 30, at 15; see also Spence, *supra* note 27, at 443–44, 490 (discussing various waste water disposal procedures and seismic activity linked with disposing fracturing fluid in the ground).

44. See, e.g., Moulton & Plagakis, *supra* note 30, at 2.

45. See, e.g., *id.*

46. See, e.g., Spence, *supra* note 27, at 453–55.

47. See, e.g., *id.*

48. See, e.g., William J. Brady & James P. Crannell, *Hydraulic Fracturing Regulation in the United States: The Laissez-Faire Approach of the Federal Government and Varying State Regulations*, 14 VT. J. ENVTL. L. 39, 40 (2012) (citation omitted) (“New York, Pennsylvania, Ohio, West Virginia, Maryland, Kentucky, Tennessee, and Virginia”).

49. *Id.* at 41.

50. *Id.* at 41–42.

51. See, e.g., Kerner, *supra* note 28, at 235.

52. See, e.g., *id.*; see also Spence, *supra* note 27, at 441 (“[E]nergy planners see natural gas as a ‘bridge fuel’ in the process of moving from a fossil fuel economy.”).

Despite the recognized need for alternative energy, many criticize the inherent risks and long-term repercussions of fracturing, arguing that the potential negative effects may significantly outweigh the positive effects.⁵³ Over the last fifteen years, there have been multiple occurrences where fracturing allegedly contaminated local water sources.⁵⁴ Reports indicate that at least twelve states experienced environmental or health problems from the process.⁵⁵ However, the impact of fracturing is heavily disputed, and at present, the jury is still out on its ultimate effects on the health of local residents and the environment.⁵⁶ As of late 2012, litigants filed approximately fifty lawsuits alleging personal and economic injuries from fracturing operations in Pennsylvania, Texas, Arkansas, Colorado, Louisiana, New York, and West Virginia.⁵⁷ Some legal commentators believe that the litigation will primarily focus on the expert testimony of hydrologists, hydro-geologists, environmental engineers, statistical modelers, toxicologists, epidemiologists, and oncologists to determine the cause of any contamination and resulting injuries.⁵⁸

53. See generally Kerner, *supra* note 28, at 245 (analyzing the potential risks and costs versus the benefits of fracturing).

54. Compare EPA, DRAFT INVESTIGATION OF GROUND WATER CONTAMINATION NEAR PAVILLION, WYOMING 33–39 (2011) (concluding ground water polluted by hydraulic fracturing), available at http://www.epa.gov/region8/superfund/wy/pavillion/EPA_ReportOnPavillion_Dec-8-2011.pdf, Press Release, EPA, Statement on Pavillion, Wyoming Groundwater Investigation (Mar. 8, 2012) (responding to criticism of the study conclusions and reexamining it), available at <http://yosemite.epa.gov/opa/admpress.nsf/20ed1dfa1751192c8525735900400c30/17640d44f5be4cef852579bb006432de!OpenDocument>, Moulton & Plagakis, *supra* note 30, at 7, 15–16 (reviewing list of water pollution incidents attributed to hydraulic fracturing), and Heather Ash, *EPA Launches Hydraulic Fracturing Study to Investigate Health and Environmental Concerns While North Dakota Resists Regulation: Should Citizens Be Concerned?*, 87 N.D. L. REV. 717, 729–30 (2011), with John D. Furlow & John R. Hays, Jr., *Disclosure with Protection of Trade Secrets Comes to the Hydraulic Fracturing Revolution*, 7 TEX. J. OIL GAS & ENERGY L. 289, 320 (2012) (citation omitted) (arguing no scientific study yet to conclusively connect hydraulic fracturing to ground water pollution). The EPA has been conducting a comprehensive analysis of the potential impact on drinking water resources attributable to hydraulic fracturing and a draft report is expected for public comment in 2014. The EPA released a progress report explaining the study in late 2012. EPA, STUDY OF THE POTENTIAL IMPACT OF HYDRAULIC FRACTURING ON DRINKING WATER RESOURCES: PROGRESS REPORT (2012), available at <http://www2.epa.gov/sites/production/files/documents/hf-report20121214.pdf>.

55. See Kerner, *supra* note 28, at 241; see also *Exxon Mobil Unit Charged for Pennsylvania Fracking Waste Spill*, REUTERS, Sept. 11, 2013 [hereinafter *Pennsylvania Spill*], <http://www.reuters.com/article/2013/09/11/exxon-spill-charges-idUSL2N0H712F20130911>.

56. Spence, *supra* note 27, at 447 (“Thus, significant uncertainty remains regarding the magnitude and frequency of the negative effects of fracking.”); see also *id.* at 440, 446–47, 453–55, 490–91.

57. See Steven A. Luxton et al., Daubert, *Groundwater Contamination, and the Future of Fracking Litigation*, 61 THE ADVOC. 26, 26 (2012) (“The vast majority of fracking lawsuits involve claims of groundwater contamination . . . [by the] fracking fluid and pollutants.”).

58. See *id.* at 29.

One of the concerns of fracturing, if not the primary concern, involves the contamination of the groundwater from the toxic chemicals used in the fracturing fluid and the methods of disposal.⁵⁹ The fluid may leak out of inappropriately sealed wells, migrate into underground groundwater, or accidentally spill during waste removal.⁶⁰ Drillers must transport the fracturing fluid to the well site and then take wastewater away from the well site, creating additional risks of spillage and contamination.⁶¹ Moreover, workers may be exposed to harmful chemicals through vapors or skin contact, and healthcare teams treating exposed persons may come in contact with the fluid.⁶²

Some chemicals used in the process are known to cause cancers, as well as kidney, heart, blood, lung, and neurological damage in humans.⁶³ Studies show anywhere from 20% to more than 70% of the fracturing fluid pumped into the wells rises back to the surface and needs to be disposed of by waste management,⁶⁴ which further increases the likelihood of spills, accidents, and exposure.⁶⁵

Despite the controversy over the extent to which fracturing creates health risks to local residents, at the very least, if fracturing operations are improperly conducted or if accidents occur, exposure to fracturing chemicals can be very dangerous.⁶⁶ To the extent such improper fracturing or accidents happen during the operations, injured parties exposed to toxic chemicals in the fracturing fluid will need to seek healthcare professionals for aid.

C. Pennsylvania Disclosure Statute

New Pennsylvania legislation—Act 13—addresses the required disclosure of the chemicals used in the fracturing process.⁶⁷ The law requires well operators to file a report with the State Department of

59. See Kerner, *supra* note 28, at 241–44; see also Spence, *supra* note 27, at 442–47, 490.

60. Moulton & Plagakis, *supra* note 30, at 15–17; Spence, *supra* note 27, at 442–47, 490–91; *Pennsylvania Spill*, *supra* note 55.

61. See, e.g., Spence, *supra* note 27, at 444.

62. See Moulton & Plagakis, *supra* note 30, at 15–17 (explaining the harm that can be caused by exposure to fracturing fluid).

63. *Id.* at 14–15; see also Spence, *supra* note 27, at 442.

64. Moulton & Plagakis, *supra* note 30, at 23; see also Spence, *supra* note 27, at 441 (“less than 30% to more than 70%”).

65. Cf. Brady & Crannell, *supra* note 48, at 42 (identifying four exposure pathways that may affect human health and the environment, and noting that risk of exposure presumably increases as activity with the fracturing fluid increases).

66. See *supra* notes 55, 56, and accompanying text.

67. 58 PA. CONS. STAT. ANN. §§ 3222–3222.1 (West 2012).

Environmental Protection (DEP) within sixty days after both drilling and well completion to indicate the commercial chemical additives, trade names, vendors, secondary chemicals added at the well site, purpose for the chemicals, maximum concentrations of each chemical, fluid volumes, pump rates, source of water, and the volume of recycled water used.⁶⁸ Additionally, the operator must complete a chemical disclosure form within sixty days following the conclusion of fracturing for posting on the chemical disclosure registry, which will be open to the public.⁶⁹ If, however, the operator identifies parts of the record, such as additives, chemicals, or chemical concentrations, as trade secrets or confidential proprietary information, the information provided to the DEP and the public registry may only be disclosed to the extent permitted in the Pennsylvania Right-To-Know Law (RTKL).⁷⁰

Act 13 sets deadlines and reporting requirements upon the various parties involved in the industry, including vendors, service providers, and well operators.⁷¹ The commercial chemicals vendor and other service providers involved in providing fracturing fluid must all report to the well operator at the well site.⁷² Any of these parties may claim that the information provided is either a trade secret or is confidential, which would result in restricting the public's access to the information to the extent permitted under the RTKL.⁷³ In order to claim part of the reported information as a trade secret, the claimant must submit a written statement indicating such information is proprietary;⁷⁴ however, no statutory checks or oversights exist over what these parties claim as trade secrets, so long as the claimed information falls within the broad definition of "trade secret" or "proprietary confidential information."⁷⁵ Once commercial additives, individual chemicals, or chemical concentrations receive trade secret protection, the claimant must still report the family name or similar description of the chemical to the public chemical registry.⁷⁶

68. § 3222(b)-(b.1).

69. § 3222.1(b)(2).

70. See § 3222(b.2); § 3222.1(b)(3), (d), (e). For a discussion of Pennsylvania's Right-To-Know Law, see *infra* Section III.C.

71. § 3222.1(b)(1).

72. See *id.*

73. See § 3222(b.2); § 3222.1(b)(3), (d), (e). For a discussion of Pennsylvania's Right-To-Know Law, see *infra* Section III.C.

74. § 3222(b.2); § 3222.1(b)(3); see also discussion *infra* Section III.C.

75. See *infra* Sections III.B-C (discussing broad definition of trade secret).

76. § 3222.1(b)(2)-(3).

Act 13 provides an exception for health professionals by requiring service providers, vendors, and well operators to disclose any information otherwise entitled to trade secret protection, including chemical names and concentrations, to health providers under two circumstances: (1) upon written request for the information or (2) in the event of an emergency.⁷⁷ If there is not an emergency, the written request must indicate that (1) “[t]he information is needed for the purpose of diagnosis or treatment of an *individual*,” (2) “[t]he *individual* being diagnosed or treated may have been exposed to a hazardous chemical,” and (3) information requested “will assist in the diagnosis or treatment of an *individual*.”⁷⁸ If, however, a physician identifies a medical emergency, the service provider, vendor, or well operator must disclose concentrations and identities of chemicals that may be categorized as trade secrets.⁷⁹ The health professional, however, may only use that information for the “health needs asserted” and must “maintain the information as confidential.”⁸⁰

Act 13 authorizes the conditional release of the confidential information to health providers on the condition that health professionals enter into private nondisclosure contracts, verbally in the case of an emergency, or written in a non-emergency situation.⁸¹ There are no statutory specifications or restrictions on what the private confidentiality contract may contain.⁸² Similarly, there is no requirement that all of the private confidentiality agreements be the same.⁸³ Despite the unknown private restrictions placed on the use of the information provided to physicians, the statute’s text appears to limit the scope of a physician’s use to either the *individual* patient that created the need to request the information or the specific health emergency.⁸⁴ In the end, however, the requirements are ambiguous.⁸⁵

Since February 2012, when the Pennsylvania General Assembly enacted Act 13, there have been three attempts, which are relevant

77. § 3222.1(b)(10)–(11).

78. § 3222.1(10) (emphasis added).

79. § 3222.1(11) (presuming the health needs asserted refer to the medical emergency); see also discussion *infra* Section IV.B.

80. § 3222.1(11).

81. § 3222.1(10)–(11).

82. See *id.*

83. See *id.* However, Colorado mandates the use of a legislatively authored confidentiality agreement, which exempts health care professionals from liability. See COLO. OIL & GAS CONSERVATION COMM’N, CONFIDENTIALITY AGREEMENT: FORM 35, http://cogcc.state.co.us/forms/PDF_Forms/form35.pdf (last visited Nov. 1, 2013) [hereinafter FORM 35].

84. § 3222.1(10)–(11).

85. See discussion *infra* Section IV.B.

to this Note, to amend the legislation, two of which have died in committee and the third appears to have the same fate.⁸⁶ These amendments would alleviate the greatest concerns addressed, but as this Note was going to print, even these minor amendments have not made it out of committee.

II. PHYSICIANS' DUTY TO DISCLOSE INFORMATION

The following Sections will analyze physicians' duties and obligations to disclose information gained while treating a patient, as well as to whom a physician must disclose such information. More specifically, the Sections will examine: (A) ethical obligations to share information and potential consequences for failure to adhere to ethical duties, (B) potential common law duties and consequences for breach of those duties, and (C) statutory duties dictated by public health statutes and potential punishment for violations.

A. Physicians' Ethical Obligations

Physicians have an ethical duty to address the cause of a medical problem and prevent potential threats to the health and safety of patients.⁸⁷ Physicians maintain an ethical obligation to "make relevant information available to patients, colleagues, and the public."⁸⁸ A doctor should explain the cause of an illness to the patient and advise the patient to the best of his ability regarding how to avoid the health risks.⁸⁹ Physicians have a similar duty to share information pertaining to the causation of sickness or injury with a patient's family and to educate them on any specific risks in order to mitigate subsequent health concerns.⁹⁰

86. See S.B. 1514, 2012 Gen. Assemb., Reg. Sess. (Pa. 2012) (dying in Environmental Resources and Energy Committee); H.B. 2415, 2012 Gen. Assemb., Reg. Sess. (Pa. 2012) (dying in Committee on Environmental Resources and Energy); S.B. 544, 2013 Gen. Assemb. (Pa. 2013) (referred to and pending in Environmental Resources and Energy Committee).

87. See generally Gina M. Solomon & Steven R. Kirkhorn, *Physicians' Duty to Be Aware of and Report Environmental Toxins*, 11 VIRTUAL MENTOR 434, 434-42 (2009) (discussing clinical case analysis of physicians' duty to patients and their family regarding environmental toxins).

88. *Principles of Medical Ethics*, AM. MED. ASS'N, <http://www.ama-assn.org/ama/pub/physician-resources/medical-ethics/code-medical-ethics/principles-medical-ethics.page> (last visited Jan. 17, 2014) [hereinafter *Principle V*].

89. See Solomon & Kirkhorn, *supra* note 87, at 435; see also Mark Miller & Gina Solomon, *Environmental Risk Communication for the Clinician*, 112 PEDIATRICS 211, 211-12 (2003) (discussing importance of physicians being able to communicate risks in the environment to their patients).

90. See Solomon & Kirkhorn, *supra* note 87, at 435 ("Obviously it is of paramount importance to educate the family about the problem.").

Beyond an isolated health concern, physicians have an ethical duty to advance the study of medical science by providing relevant information to colleagues and researchers.⁹¹ It would be unethical for a physician to refrain from sharing valuable scientific information that would advance the understanding of potential health concerns or risks to patients, their families, or the community.⁹²

Moreover, physicians have a similar duty to share information with appropriate regulatory authorities and to advocate on behalf of the individuals that may be at risk.⁹³ If a regulatory agency does not exist—as in the case with private wells, which are not regulated by the federal government⁹⁴—physicians have an ethical obligation to bring attention and awareness to the problem.⁹⁵ In this context, the physician's ethical duty to participate in improving the community and public health "clearly extends beyond his or her own patient to the broader community."⁹⁶ This duty may involve publishing a specific warning in the newspaper, posting signs in clinics, or reaching out to health agencies to protect public health.⁹⁷

In Pennsylvania, the State Medical Board exercises the power to discipline and impose corrective measures for "unprofessional conduct,"⁹⁸ which includes the failure to conform to the "standard of the profession."⁹⁹ The statute's language clarifies that the "standard of the profession" refers to the ethical principles adopted by the professional community, including the measures of "unprofessional conduct" adopted by the American Medical Association (AMA).¹⁰⁰ The AMA, a professional association representing American physicians, embraces a number of ethical principles governing the medical profession. One such principle, as mentioned, is to share infor-

91. See *Principle V*, *supra* note 88.

92. Solomon & Kirkhorn, *supra* note 87, at 435-36 ("A physician shall recognize a responsibility to participate in activities contributing to the improvement of the community and the betterment of public health.") (citation omitted).

93. *Id.* ("[An] ethical responsibility not commonly discussed is physicians' duty to know the communities in which they practice. This obligation encompasses the need to understand . . . environmental hazards prevalent in the local community [A] physician's ethical obligation . . . extends to reporting to appropriate authorities . . . [or to] advocate for the families that might be affected.").

94. See *Private Drinking Water Wells*, U.S. ENVTL. PROT. AGENCY, <http://water.epa.gov/drink/info/well/> (last visited Jan. 17, 2014).

95. Solomon & Kirkhorn, *supra* note 87, at 435-36 (explaining how a physician would exercise ethical duties).

96. *Id.* at 436.

97. *Id.* at 435-36.

98. 63 PA. CONS. STAT. ANN. § 422.41(1)-(11) (West 2012).

99. § 422.41(8).

100. See § 422.41(8)(i).

mation among other physicians to better care for patients.¹⁰¹ Although breaching the AMA's principles may, under the AMA's power, result in expulsion from the association, the State Board of Medicine can impose harsher penalties, including the revocation of a medical license.¹⁰²

Courts have consistently upheld suspensions and revocations of medical licenses doled out by the State Board of Medicine, interpreting the language of "unprofessional conduct" broadly in similar statutes regulating nursing licenses.¹⁰³ The decision of the State Board of Medicine may be appealed to the courts; however, the decision of the Commonwealth Agency will be affirmed unless it is found unconstitutional, beyond the scope of the law, or that substantial evidence contradicts the Board's decision.¹⁰⁴ Generally, the State Board has the final authority to determine sanctions and punish physicians for breaching the ethical obligations adopted from professional associations like the AMA.¹⁰⁵

B. Potential Common Law Negligence Liability for Failure to Disclose Information

Physicians may also face common law negligence claims for failing to share information regarding a foreseeable risk to an identified third party.¹⁰⁶ The seminal case creating this duty to warn was

101. AM. MED. ASS'N., PRINCIPLES OF MEDICAL ETHICS § 2 (1958) ("Physicians should strive continually to improve medical knowledge and skill, and should make available to their patients and colleagues the benefits of their professional attainments."); see also Yūsuke Satō, *Patent Protection of Medical Methods – Focusing on Ethical Issues*, 20 PAC. RIM. L. & POL'Y J. 125, 135–36 (2011) (discussing ethical obstacles to possibly patenting medical methods, arguing patent system allowing people to exclude others from accessing information "runs afoul of the principle of medical ethics").

102. § 422.41 (listing reasons for refusal, revocation, suspension, or other corrective actions against a licensee).

103. Compare *Stephens v. Pa. State Bd. of Nursing*, 657 A.2d 71, 75–77 (Pa. Commw. Ct. 1995) (affirming penalty issued by State Board of Nursing for unprofessional conduct because "unprofessional conduct" may be interpreted through the understanding of members of the profession), with *Pa. State Bd. of Pharmacy v. Cohen*, 292 A.2d 277, 280–85 (Pa. 1972) (reversing lower court's holding that the board of Pharmacy could not suspend or revoke pharmacist's license under Pharmacy regulation because the regulation text specified thirteen different types of "grossly unprofessional conduct" and the list was interpreted to be exclusive).

104. See 2 PA. CONS. STAT. ANN. § 704 (West 1978); see also *DeMarco v. State Bd. of Med. Educ. & Licensure*, 408 A.2d 572, 574 (Pa. Commw. Ct. 1979).

105. See *Telang v. Commw. Bureau of Prof'l & Occupational Affairs*, 751 A.2d 1147, 1152 (Pa. 2000).

106. See *Tarasoff v. Regents of the Univ. of Cal.*, 551 P.2d 334, 343 (Cal. 1976), superseded by statute, CAL. CIV. CODE § 43.92 (West 2013); see also *Emerich v. Phila. Ctr. for Human Dev.*, 720 A.2d 1032, 1039–43 (Pa. 1998) (discussing *Tarasoff* under Pennsylvania common law and the

Tarasoff v. Regents of the University of California.¹⁰⁷ The *Tarasoff* court held a defendant-psychiatrist liable, under negligence principles, for breaching a duty owed to a third-party victim where he failed to warn of known risks posed by the defendant's patient.¹⁰⁸ Although not precedential in Pennsylvania, courts in a majority of the states, including Pennsylvania,¹⁰⁹ have applied the *Tarasoff* duty to mental health professionals and physicians in general.¹¹⁰

Most courts extend the duty to warn to situations in which the known risk is a contagious disease contracted by the patient, and the physician fails to warn identified third parties of the foreseeable risk stemming from the contagiousness of his patient.¹¹¹ Courts have found that physicians owe a duty to warn identified and at-risk third parties when a patient contracts hepatitis, staph infection, typhoid fever, tuberculosis, or smallpox.¹¹² The courts view the duty imposed on physicians as necessary to protect the community and at-risk third parties.¹¹³

Some courts have expanded this duty to warn one step further, holding that a physician has a duty to warn a foreseeable, non-patient third party even when the illness is not contagious or in any sense causally related to the physician's patient.¹¹⁴ In *Bradshaw v. Daniel*, the Tennessee Supreme Court disagreed with and reversed

State's adoption of *Tarasoff*-like liability in the contagious disease setting); *Bradshaw v. Daniel*, 854 S.W.2d 865, 870-71 (Tenn. 1993) (expanding the purview of *Tarasoff* line of cases).

107. 551 P.2d at 343.

108. *See id.*

109. *Emerich*, 720 A.2d at 1036.

110. *See* Michelle R. King, *Physician Duty to Warn a Patient's Offspring of Hereditary Genetic Defects: Balancing the Patient's Right to Confidentiality Against the Family Member's Right to Know—Can or Should Tarasoff Apply*, 4 QUINNIPIAC HEALTH L.J. 1, 11 (2000).

111. *See id.* at 14; *see also* Christine E. Stenger, Note, *Taking Tarasoff Where No One Has Gone Before: Looking at "Duty to Warn" Under the AIDS Crisis*, 15 ST. LOUIS U. PUB. L. REV. 471, 487-89 (1996).

112. King, *supra* note 110, at 14 n.87.

113. *Id.* at 14-15 (noting that the "rationale is to prevent the disease from spreading to family members or the community").

114. *See* *Bradshaw v. Daniel*, 854 S.W.2d 865, 870-73 (Tenn. 1993); *see also* King, *supra* note 110, at 15-16 (citing Roy F. Satterwhite III, *Warning Non-Patients Now Includes Non-Contagious Diseases*, TENN. B.J., Sept.-Oct. 1993, at 12, 15 ("[T]he ramifications [of *Bradshaw* and the duty to warn third parties of non-contagious diseases] are potentially far-reaching for physicians.")). Courts vary in how far they extend the duty to warn. *Compare* *Tenuto v. Lederle Labs.*, 687 N.E.2d 1300, 1302-04 (N.Y. 1997) (holding physician liable for failing to warn father of risk of contracting polio from infant patient's excrement after giving a polio vaccine, reasoning the court must consider "common concepts of morality, logic, and considerations of social consequences of imposing [or not imposing] the duty"), *with* *McNulty v. City of New York*, 792 N.E.2d 162, 167 (N.Y. 2003) (retracting scope of duty owed in New York, holding physician owed no duty to patient's friend to warn of the patient's contagious disease).

the appellate court on interlocutory appeal,¹¹⁵ holding that the physician owed a legal duty to an identified third party—the wife of the patient—when the physician knew or should have known of a foreseeable risk that was not causally linked to his patient but was present in the environment.¹¹⁶ The physician in *Bradshaw* breached his duty to warn, despite staying in communication with his patient's wife and informing her of the treatment of the patient, because the physician failed to warn of the cause of the risk—namely, infected ticks.¹¹⁷ The physician either knew, or should have known, that his patient suffered from Rocky Mountain Spotted Fever because it was common knowledge within the medical profession that infected ticks transmitted the disease in the area.¹¹⁸ The court considered expert witness affidavits that stated that the standard of care a physician owed to third parties known to be at risk included educating and informing the third parties of the types of risks, causes, and actions to take if symptoms develop.¹¹⁹

To no avail, the *Bradshaw* physician-defendant argued that physicians have no *legal* duty to treat or inform family members of risks to health, despite assenting to a clear *ethical* duty.¹²⁰ The court drew analogies to cases holding that physicians have a duty to warn foreseeable third parties of a contagious disease transmitted by the patient.¹²¹ The court looked to the physician-patient relationship as the source of the information ascertained by the physician.¹²² It further focused on the fact that the physician knew, or should have known, of the foreseeable risk posed to an identified third party.¹²³ The court explained that there is no legal reason to limit liability for the failure to warn only to those situations in which the risk is a contagious disease.¹²⁴ The known clustering phenomenon of the infected ticks created a known probable source of risk equivalent to the risk presented by a contagious disease.¹²⁵ The duty upon physicians to warn known third parties of such risks is consistent with contemporary societal expectations and policies emphasizing the ability to protect

115. *Bradshaw*, 854 S.W.2d. at 868.

116. *Id.* at 872.

117. *Id.*

118. *See id.* at 872–73.

119. *Id.* at 867.

120. *See id.* at 868.

121. *Id.* at 870–72.

122. *Id.* at 872.

123. *Id.* at 872–73.

124. *Id.*

125. *See id.*

individuals from harm when a special relationship makes the physician aware of the foreseeable risk to an identified third party.¹²⁶

C. Physicians' Statutory Obligation to Report Public Health Hazards

The control of communicable disease and public safety are constant concerns for federal and state governments.¹²⁷ Each state has specific public health reporting requirements for physicians,¹²⁸ clinical laboratories, healthcare facilities, and other health practitioners licensed in the state.¹²⁹ In addition, the federal government collects data on a number of diseases.¹³⁰

In Pennsylvania, healthcare practitioners licensed or certified by the Board of Medicine are under statutory and regulatory obligations to report certain diseases, infections, outbreaks, or conditions to the State Department of Health or other local offices.¹³¹ Certain diseases, infections, outbreaks, or conditions must be reported within twenty-four hours of discovery.¹³² Pennsylvania law requires health practitioners to report any unusual conditions or diseases capable of being spread to others through direct or indirect contact with a toxic product by way of, among other sources, the inanimate environment.¹³³

All reports must be made pursuant to state regulation and must include the appropriate case report format.¹³⁴ The case report may solicit information relating to the disease, infection, or condition creating the public danger.¹³⁵ Following a physician's report, it is likely that the state agency or department will contact the reporting physician to solicit more information to assess the extent of the

126. *See id.*

127. Holly A. Rosencranz & Warren G. Lavey, *Treating Patients with Communicable Diseases: Limiting Liability for Physicians and Safeguarding the Public Health*, 32 ST. LOUIS U. L.J. 75, 77 n.4 (1987).

128. *See* Joseph D. Piorkowski, Jr., *Between a Rock and a Hard Place: AIDS and the Conflicting Physician's Duties of Preventing Disease Transmission and Safeguarding Confidentiality*, 76 GEO. L.J. 169, 180 (1987); *see also* Rosencranz & Lavey, *supra* note 127.

129. *See, e.g.*, 28 PA. CODE §§ 27.3–4 (West 2013).

130. *See* *Mission Role and Pledge*, ABOUT CDC, CTRS. FOR DISEASE CONTROL & PREVENTION, <http://www.cdc.gov/about/organization/mission.htm> (last updated Jan. 29, 2013).

131. *See* Disease Prevention and Control Law of 1955, 35 PA. CONS. STAT. ANN. §§ 521.2–4 (West 1956); *see also* 28 PA. CODE §§ 27.1–4 (West 2002).

132. 28 PA. CODE § 27.3 (West 2002).

133. § 27.3(b); § 27.1.

134. § 27.4(e).

135. *See* §§ 27.2–4.

danger, assuming the report states a condition suspected of presenting a danger to the public.¹³⁶

If the required report is not filed, a healthcare practitioner may be subject to criminal penalties as well as disciplinary sanctions from the Pennsylvania State Board of Medicine.¹³⁷ Failure to comply with all obligations listed under the reporting statutes and regulations may result in loss of a practitioner's license.¹³⁸ In addition, failure to comply with responsibilities provided under the statutes and regulations may result in fines and imprisonment of up to thirty days.¹³⁹

III. RESTRICTIONS ON PHYSICIANS' ABILITY TO DISCLOSE OR SHARE

Physicians who obtain information under Act 13 may not be able to share the information with their patients, colleagues, public health agencies, or insurance carriers. Section (A) will examine how Act 13 places an explicit condition upon physicians receiving information pursuant to the Act. Sections (B) and (C) will discuss the inability of physicians to obtain, through other means, information entitled to trade secret protection under the RTKL. Section (D) will examine the enforceability of nondisclosure agreements that implicate the public good.

A. Pennsylvania Statutory Conditions

Act 13 requires that if a healthcare professional requests information deemed by the drillers to be trade secrets or otherwise confidential, the information shall be provided *so long as* the requesting healthcare professional "executes a confidentiality agreement and provides a written statement of need for the information" specifying that the purpose is for the diagnosis or treatment of an individual patient.¹⁴⁰ If the health professional identifies a medical emergency requiring the protected information from the drillers, then the information must be provided *so long as* the requesting professional verbally acknowledges that "the information may not be used for purposes other than the health needs asserted and that the health professional shall maintain the information as confidential."¹⁴¹ The

136. See §§ 27.1-.8, .21-.35.

137. § 27.8; see also § 27.6.

138. See § 27.6(c); see also discussion *supra* Part II.A.

139. § 27.8(a).

140. 58 PA. CONS. STAT. ANN. § 3222.1(b)(10) (West 2012).

141. § 3222.1(b)(11).

drillers may subsequently require the health professional to sign a written confidentiality agreement "as soon as circumstances permit."¹⁴²

B. Certain Information Carrying Trade Secret Protection

Manufacturers, vendors, operators, and service providers obtain competitive advantages by maintaining the secrecy of their specific chemical formula used in the proprietary fracturing fluid.¹⁴³ Similar to the recipe of Coca-Cola, this information is understandably guarded by its respective owners.¹⁴⁴ If this information were not protected, then competitors would be able to reverse engineer competing fracturing fluid formulas and directly compete against opponents who invested in costly research and development.¹⁴⁵ This would obviously serve as a disincentive to further invest in expensive, time-intensive research and development, which may produce safer and more efficient chemical formulas.¹⁴⁶

For example, FTS International, a leader in the supply of chemical mixtures, manufactures a proprietary blend of chemicals and sells its products to drill site operators.¹⁴⁷ Like Coca-Cola, FTS maintains an advantage over competitors by keeping its formula secret. If the law protects the proprietary rights of Coca-Cola, it should protect the rights of FTS for the same reasons.¹⁴⁸

State law originally protected trade secrets under common law property doctrines; now, however, states have expanded or superseded the common law protections with regulations.¹⁴⁹ Most states

142. *Id.*

143. *See, e.g.,* Furlow & Hays, *supra* note 54, at 306.

144. David Goldman, *Coca-Cola Guards Their Secret Recipe*, USA TODAY, <http://www.usatoday.com/picture-gallery/money/2013/08/26/coca-cola-guards-their-secret-recipe/2699743/> (last visited Jan. 19, 2014).

145. *See, e.g., id.* at 333.

146. *See, e.g., id.* at 306 (discussing fracturing fluid designed and used in environmentally sensitive areas); *see also* Spence, *supra* note 27, at 442 n.50 (discussing attempts to devise safer, non-toxic fracturing fluid).

147. *See* Furlow & Hays, *supra* note 54, at 306 ("[This] product is a unique formula developed by FTS and used specifically for slickwater frac treatments in environmentally sensitive areas.").

148. *Cf. id.* An argument could be made that products regulated by the FDA, such as Coca-Cola, can be distinguished from unregulated fracturing fluid. *See also* Spence, *supra* note 27, at 448-52 (explaining how environmental, health, and safety risks associated with fracking are not always regulated in the same way as other industries); Brady & Crannell, *supra* note 48, at 43-52 (explaining exemptions in hydraulic fracturing regulations).

149. *See, e.g.,* Michael A. Greene, *Spilling Secrets: Trade Secret Disclosure and Takings in Offshore Drilling Regulation*, 17 RICH. J.L. & TECH. 15, *4-6 (2011), <http://jolt.richmond.edu/v17i4/article15.pdf>.

follow the Uniform Trade Secret Act (UTSA) when defining trade secrets,¹⁵⁰ while others have adopted the Restatement definition.¹⁵¹ Whether under the UTSA or Restatement definition, the law bestows trade secret protection upon information that the owner treats as confidential for the purpose of preserving its competitive value within its industry.¹⁵²

By definition, trade secret protection does not extend to requests from the government, and the holder of otherwise protected information must therefore share it with the government upon request.¹⁵³ The government must ensure confidentiality consistent with the purpose of protecting trade secrets; namely, to protect against competitors obtaining the secrets.¹⁵⁴

The appropriate balance in the fracturing context between protecting legitimate property rights via trade secret protection from competitors and disclosing information to protect public health and safety is a debate not directly addressed here, but it merits further analysis.

C. Inability to Use Pennsylvania Right-To-Know Law to Obtain Information

The RTKL permits and creates a procedure for the disclosure of government-held information requested by citizens.¹⁵⁵ The government agency possessing the information must grant a request to receive access to specific information if (1) the information is a “public record, legislative record or financial record” as defined in the

150. See, e.g., *id.* at *6.

151. See, e.g., *id.*

152. Compare UNIF. TRADE SECRETS ACT § 1(4)(i) (1985) (defining a trade secret as “information, including a formula, pattern, compilation, program, device, method, technique, or process that: (i) derives independent economic value, actual or potential, from not being generally known to, and not being readily ascertainable by proper means by, other persons who can obtain economic value from its disclosure or use, and (ii) is the subject of efforts that are reasonable under the circumstances to maintain its secrecy”), with RESTATEMENT (FIRST) OF TORTS § 757 cmt. b (1939) (defining a trade secret as “any formula, pattern, device or compilation of information which is used in one’s business, and which gives him an opportunity to obtain an advantage over competitors who do not know or use it”).

153. See Greene, *supra* note 149, at *14–15 (“Because a trade secret’s only legally cognizable value is the advantage it affords over competitors, sharing trade secret information confidentially with the government—a non-competitor—does not impinge upon the trade secret holder’s competitive advantage and thus does not reduce the property’s value.”).

154. *Id.* at *14 (citing UNIF. TRADE SECRETS ACT § 1(4)(i) (1985) and RESTATEMENT (FIRST) OF TORTS § 757 cmt. b (1939)). “The Restatement of Torts, widely accepted before the enactment of the UTSA, defines trade secret as ‘any formula . . . which is used in one’s business, and which gives him an opportunity to obtain an advantage over competitors who do not know or use it’” *Id.* at *14 n.69.

155. See 65 PA. CONS. STAT. ANN. §§ 67.101–.1102 (West 2012).

statute,¹⁵⁶ and (2) the information is within the government agency's control or possession.¹⁵⁷ The government agency is not required to create a record if no record exists or if the agency does not keep the type of record requested.¹⁵⁸

Certain privileged information, however, is exempt from the statutory disclosure requirement because the law does not consider that information public.¹⁵⁹ One such exception to the general rule of disclosure is information reported to the agency as a "trade secret" or "confidential proprietary information."¹⁶⁰ In addition, if a requester is entitled to some information but requests information containing exempt information, the government agency must redact the exempt information.¹⁶¹ Therefore, certain information reported to a state agency, such as the DEP,¹⁶² is inaccessible by the general public under the RTKL.¹⁶³

The RTKL defines "trade secret" as:

Information . . . that: (1) derives independent economic value, actual or potential, from not being generally known to and not being readily ascertainable by proper means by other persons who can obtain economic value from its disclosure or use; and (2) is the subject of efforts that are reasonable under the circumstances to maintain its secrecy.¹⁶⁴

The Act defines "confidential proprietary information" as "[c]ommercial or financial information received by an agency: (1) which is privileged or confidential; and (2) the disclosure of which would cause substantial harm to the competitive position of the person that submitted the information."¹⁶⁵

If the agency denies a request for information because the source of the requested information submitted that information as a trade

156. § 67.701(a).

157. See § 67.705.

158. *Id.*

159. See § 67.708(b).

160. § 67.708(b)(11).

161. See § 67.706.

162. 58 PA. CONS. STAT. ANN. § 3222.1 (West 2012) (providing Act 13 requirements to report information to DEP).

163. See § 67.707(b) ("Requests for trade secrets. — An agency shall notify a third party of a request for a record if the third party provided the record and included a written statement signed by a representative of the third party that the record contains a trade secret or confidential proprietary information."); § 67.506(c) (stating the circumstances under which an agency has discretion to make otherwise exempt records accessible).

164. § 67.102.

165. *Id.*

secret or confidential proprietary information, the requester may appeal the decision.¹⁶⁶ The question on appeal would be whether the requested information falls under the definition of trade secrets or confidential proprietary information under the Act.¹⁶⁷ As such, the public, including healthcare professionals, would not be able to obtain the identity of chemicals from the fracturing process that the drillers report to DEP pursuant to Act 13 and submit as trade secrets or as confidential and proprietary information.¹⁶⁸

During the final vote in the Pennsylvania House of Representatives, Representative Ellis supported the legislation by stating, in response to an interrogation from Representative Gerber, that all chemicals would be available to the public.¹⁶⁹ Although Representative Gerber attempted to point Representative Ellis to textual language in Act 13 that contradicts that interpretation, Representative Ellis responded by distinguishing public disclosure of *chemicals*—not restricted—versus the *concentration* of those chemicals, which may be restricted under trade secret protection.¹⁷⁰ Because of this exchange, there is an argument that the legislative intent was to disclose all chemicals publicly and only limit disclosure of the *concentrations* of those chemicals. The statutory text, however, unambiguously and explicitly refutes this interpretation in multiple places and otherwise lends it no support.¹⁷¹ Moreover, making an exception for healthcare professionals to acquire the names of chemicals and re-

166. See §§ 67.1101, 67.1301.

167. See, e.g., *Dynamic Student Servs. v. State Sys. of Higher Educ.*, 697 A.2d 239, 242–43 (Pa. 1997) (holding “Right-To-Know Act did not require university to produce information neither solicited by it nor in its possession”); *Office of the Governor v. Bari*, 20 A.3d 634, 646–50 (Pa. Commw. Ct. 2011) (examining requirements of judicial review of “confidential proprietary information” and “trade secrets” exception denials under the RTKL); *Weaver v. Dep’t of Corr.*, 702 A.2d 370, 371 n.1 (Pa. Commw. Ct. 1997) (holding commonwealth court’s scope of review for decision under the RTKL is limited to determination of whether grant or denial of request for information was for just and proper cause); cf. § 67.1301.

168. The information requested would have to fall outside the scope of the broad definitions of trade secrets or confidential proprietary information, which in all likelihood would not occur given the purpose of the RTKL, which was not to disclose private secrets to the public, and the fact that Act 13 explicitly authorizes chemical names and concentrations to have trade secret protection. See *Bowling v. Office of Open Records*, 990 A.2d 813, 824 (Pa. Commw. Ct. 2010) (“As the [RTKL] is remedial legislation designed to promote access to official government information in order to prohibit secrets, scrutinize the actions of public officials, and make public officials accountable for their actions, the exemptions from disclosure must be narrowly construed.”).

169. H.R. JOURNAL 196-1950, 9th Sess., at 204 (Pa. 2012) (featuring Rep. Gerber interrogating Rep. Ellis relating to Act 13 and the public’s ability to obtain all chemicals used in fracking process).

170. *Id.*

171. See 58 PA. CONS. STAT. ANN. § 3222.1(b)(3)–(4), (d)–(e) (West 2012).

quiring a signed confidentiality agreement would be superfluous if the chemical list were available to the public.

D. Non-Disclosure Agreements and Their Enforceability

Non-disclosure agreements are common in the employee-employer setting as well as during business dealings where parties share information that competitors would deem valuable.¹⁷² The agreements protect the interests of companies when they disclose valuable information to employees and others.¹⁷³ The enforceability of these agreements becomes questionable, however, when the agreements prevent sharing information about threats to the public well-being.¹⁷⁴

It is unclear whether a nondisclosure agreement signed by a physician to keep chemical identity, concentration, and trade name confidential would be enforceable when the physician breaches the agreement by sharing information to warn of dangers with residents, insurance providers, other physicians, or public health and safety agencies.¹⁷⁵ The analysis would be highly fact-specific and depend on multiple factors, including: (1) the language in the specific agreement, (2) what the physician disclosed, (3) to whom and for what purpose it was disclosed, and (4) whether any legislation has explicitly addressed the issue.

Courts occasionally consider public policy reasons for voiding a nondisclosure agreement, but they often uphold the private contracts, leaving public policy to the legislature.¹⁷⁶ In at least one case considered an example of an appropriate judicial analysis of public policy concerns when deciding whether to enforce a confidentiality

172. Jodi L. Short, *Killing the Messenger: The Use of Nondisclosure Agreements to Silence Whistleblowers*, 60 U. PITT. L. REV. 1207, 1207 (1999).

173. *See id.*

174. *Id.* at 1212 (“[T]here is a difference between disclosures of confidential, competitive business information and disclosures concerning the public health and safety.”).

175. Ryan M. Philp, *Silence at Our Expense: Balancing Safety and Secrecy in Non-Disclosure Agreements*, 33 SETON HALL L. REV. 845, 857 (2003).

176. *Compare* *Giannecchini v. Hosp. of St. Raphael*, 780 A.2d 1006, 1011–12 (Conn. Super. Ct. 2000) (upholding nondisclosure agreement between former employer-hospital and terminated nurse where hospital sought to warn prospective employer about the reasons for nurse’s termination), *with* *Bowman v. Parma Bd. of Educ.*, 542 N.E.2d 663, 663 (Ohio Ct. App. 1988) (voiding nondisclosure agreement where it would prohibit a school board from disclosing pedophilia on the part of a terminated teacher); *see also* Philp, *supra* note 174, at 854 (noting that judicial application of public policy in nondisclosure agreement enforcement is an “amorphous, ever-changing concept, characterized by uncertainty and unpredictability”).

agreement,¹⁷⁷ the court found a defendant-hospital in breach of a nondisclosure agreement when it shared confidential information to protect the safety of third parties.¹⁷⁸ In *Giannecchini v. Hospital of St. Raphael*, the plaintiff was a registered nurse who formerly worked for the defendant-hospital.¹⁷⁹ The hospital terminated the employee for making multiple medication errors and included the mistakes in the employee's employment record.¹⁸⁰ After termination, the former employee and the defendant-hospital entered into an agreement, in which the former employee agreed not to sue the employer for wrongful termination and the hospital agreed to keep the mistakes of the employee confidential.¹⁸¹ The former employee subsequently applied to work at another hospital—Veterans Affairs Hospital (VA Hospital).¹⁸² During the interviewing and vetting process, the former hospital sent the "confidential" information to VA Hospital.¹⁸³ VA Hospital did not hire the plaintiff, and the plaintiff claimed breach of the confidentiality agreement.¹⁸⁴

The *Giannecchini* court only reluctantly considered the public policy issue, noting that "[p]ublic policy . . . is a very unruly horse, and once you get astride it you never know where it will carry you."¹⁸⁵ The court acknowledged that the confidentiality agreement was beneficial for both the former hospital and the former employee; however, the third-party patients that the plaintiff would impact in the future were not at the bargaining table.¹⁸⁶ Patients rely on nurses for care at their most vulnerable times and mistakes committed by nurses may be the difference between life and death. The court ultimately concluded that the employee confidentiality agreements—which conflict with public policy protecting patients, or any third party for that matter—had been addressed by the legislature in statutes governing the sharing of employee personnel files, which enforced the confidentiality agreements.¹⁸⁷

177. See Philp, *supra* note 175, at 848, 853 (suggesting that courts should question nondisclosures when implicating public health and safety, despite courts' reluctance to do so, citing *Giannecchini* as a more progressive approach to questioning nondisclosure agreements).

178. *Giannecchini*, 780 A.2d at 1014.

179. *Id.* at 1008.

180. *Id.*

181. *Id.*

182. *Id.*

183. *Id.* at 1009.

184. *Id.* at 1009–10.

185. *Id.* at 1010 (quoting *Richardson v. Mellish*, (1824) 130 Eng. Rep. 294, 303).

186. *Id.* at 1010.

187. *Id.* at 1010–12.

Although some courts, similar to *Giannecchini*, attempt to consider public policy when determining the enforceability of confidentiality agreements, most courts “choose to mechanically apply statutes, ignoring the reality that the legislature is often unaware of the effects such proclamations can have on contract law.”¹⁸⁸ The courts have taken a back seat to the legislature when confidentiality agreements implicate public policy concerns.¹⁸⁹ The majority of courts addressing the issue find that the legislature has the duty to pass adequate legislation informing the courts on public policy.¹⁹⁰ Thus, to the extent that liability arises from the failure to effectively pass such legislation, courts may interpret such liability as either intentional or considered appropriate by the legislature.¹⁹¹ Nonetheless, some authors note frameworks that courts can use to consider public policy when enforcing breaches of nondisclosure agreements.¹⁹² The current practice of courts and the normative question of whether to enforce nondisclosure agreements that implicate public policy, however, remain unpredictable at best.¹⁹³

IV. PHYSICIANS MAY DISCLOSE FREELY: THE FICTION OF LEGISLATIVE PERMISSIVENESS

As the concern over forcing physicians to sign nondisclosure agreements to obtain information gained publicly, a number of counterarguments emerged defending Act 13 in its current form.

188. See Philp, *supra* note 175, at 855.

189. *Id.* at 854 (noting that the legislature replaced courts in invalidating contracts based on public policy).

190. *Id.* at 856–57, 860.

191. *Cf., e.g., id.* at 856–60, 868–874 (explaining various authors’ arguments for judicial restraint when enforcing contracts that may create risk to the public safety, yet recognizing that even when the legislature is completely silent, courts still enforce these contracts; and, when the legislature has explicitly addressed an issue, courts tend to shy away from contradicting or creating exceptions to statutory text lest the court be accused of judicial activism).

192. See Terry Morehead Dworkin & Elletta Sangrey Callahan, *Buying Silence*, 36 AM. BUS. L.J. 151, 171–90 (1998) (setting forth and applying factors supporting and factors contravening the enforcement of contract terms according to the Restatement (Second) of Contracts); Carol M. Bast, *At What Price Silence: Are Confidentiality Agreements Enforceable?*, 25 WM. MITCHELL L. REV. 627, 672 (1999) (noting that courts implementing the public policy exception can either choose to always incorporate public policy or simply ignore it); Stewart J. Schwab, *Wrongful Discharge Law and the Search for Third-Party Effects*, 74 TEX. L. REV. 1943, 1957–58 (1996) (describing court decisions that avoid broad public policy exceptions by grounding them in unconstitutional or statutory provisions).

193. Dworkin & Callahan, *supra* note 192, at 153 (“At present, it is unclear under what circumstances, and to what extent, such [confidentiality] provisions will be enforced.”).

Patrick Henderson, Governor Corbett's energy executive, opined against the need for statutory clarification, stating that physicians should not worry because silencing physicians "was never the intent."¹⁹⁴ Along the same lines, former Pennsylvania Secretary of Health, Eli N. Avila, MD, opined that physicians may use the confidential information provided by the drillers to share the information with patients, other physicians, specialists, and the Department of Health.¹⁹⁵ Avila reasoned that "the information can be utilized in whatever manner is necessary to respond to the 'medical needs asserted' by the health care professional," because the legislature could not have possibly intended to silence physicians.¹⁹⁶ Avila supported his opinion by citing all of the "progressive disclosure requirements" in other sections of the statute, and emphasized that the DEP will receive all of the information, including the trade secret information.¹⁹⁷

First, although the drilling industry must, under Act 13, disclose all information—even confidential information—to the DEP,¹⁹⁸ this requirement is irrelevant to whether health professionals, statutorily required to sign confidentiality agreements with private drillers, may share the information gained.¹⁹⁹ As noted in Section III.C, this information would not be public information.²⁰⁰ Second, other state statutory constructions are more progressive than Act 13, so it is debatable whether the legislature intended to take the side of healthcare professionals, as opposed to protecting trade secrets of private companies.²⁰¹ Third, the plain textual reading of Act 13 tends to favor a very strict use of the confidential information.²⁰² The text specifies purposes for which a physician may use the information in vague terms, and it does not explicitly state an ability to share the information with anyone.²⁰³ Fourth, the legislative committee reports and hearings are devoid of any mention of this section of the Act, and

194. Gallegos, *supra* note 6.

195. Letter from Eli N. Avila, Sec'y of Health, Pa. Dep't of Health, to Marilyn J. Heine, President, Pa. Med. Soc'y (Apr. 17, 2012) (on file with author) [hereinafter Letter].

196. *Id.*

197. *Id.*

198. See 58 PA. CONS. STAT. ANN. § 3222.1(b) (West 2012).

199. See discussion *supra* Sections III.C.-D.

200. See discussion *supra* Section III.C.

201. See discussion *infra* Section IV.A.

202. See discussion *infra* Section IV.B.

203. See discussion *infra* Section IV.B.

the Health Committee never reviewed Act 13.²⁰⁴ Fifth, even if we assume that the Pennsylvania General Assembly did not intend to hold physicians liable for breaching a private, contractual confidentiality agreement, it is still impossible to assure a party to that contract that courts will correctly interpret the legislative intent given the aforementioned reasons to doubt this interpretation.²⁰⁵

A. Lack of Clarity Regarding Legislature's Preference for Either Trade Secret Protection or Disclosure Rights

Of the states permitting hydraulic fracturing, thirteen have provided chemical disclosure regulations for operators, and Pennsylvania is not the most progressive.²⁰⁶ In Arkansas, drillers must provide disclosure of chemicals to health professionals upon request, and the statute does not indicate whether a physician must first sign a confidentiality agreement.²⁰⁷

In Colorado, the language requiring disclosure to health professionals is very similar to Act 13 in Pennsylvania.²⁰⁸ However, the Colorado regulation provides for standardized confidentiality forms indicating, "Nothing in this Agreement shall prohibit Health Professional from disclosing Trade Secret Information obtained from Custodian if Health Professional can document that . . . Health Professional is required by law to disclose such information pursuant to a court order or government agency order."²⁰⁹

Texas also adopted clarifying language in its disclosure regulations, explicitly specifying exceptions to the general rule that a health professional must hold information confidential.²¹⁰ The Texas regulations indicate that health professionals may use the otherwise confidential information for "diagnostic or treatment purposes" and to "disclose information . . . to another health professional, emergency responder, or accredited laboratory."²¹¹ In addition, Texas's

204. See *supra* note 170 (describing the final vote in the House of Representatives and the specific committees that reviewed the Act).

205. See discussion *supra* Section III.D.

206. See Moulton & Plagakis, *supra* note 30, at 4, 54-55.

207. 178 ARK. CODE R. § 001 (LexisNexis 2013) (listing Rule B-19(l)(9), (m)(5)), available at <http://www.aogc.state.ar.us/onlinedata/forms/rules%20and%20regulations.pdf>.

208. Compare 58 PA. CONS. STAT. ANN. § 3222.1(b)(11) (West 2012), with COLO. CODE REGS. § 404-1:205A(b)(5) (2012).

209. COLO. OIL & GAS CONSERVATION COMM'N, Order No. 1-174 (Mar. 5, 2012), available at <http://cogcc.state.co.us/orders/orders/1/174.html>.

210. Hydraulic Fracturing Chemical Disclosure Requirements, 16 TEX. ADMIN. CODE § 3.29(g) (2012).

211. *Id.*

disclosure regulation explicitly references the legislative intent to permit healthcare professionals to access otherwise protected information to the extent permissible under Occupational Safety and Health Act of 1970 (OSHA) regulations.²¹² Under the specific OSHA regulations referenced in the Texas regulation, health professionals are permitted “to access trade secrets to assess the hazards of the chemicals to which employees will be exposed,” “conduct . . . sampling of workplace atmosphere” to assess employee exposure levels, conduct “periodic medical surveillance of exposed employees,” and “conduct studies to determine the health effects of exposure,” among other permitted purposes.²¹³

In contrast, unlike Arkansas’s requirements, Act 13 requires health professionals to sign a confidentiality agreement.²¹⁴ Unlike Texas’s regulations, Act 13 does not reference OSHA regulations or any clear language explaining the intent behind this portion of the Act.²¹⁵ Moreover, the text of Act 13 is explicitly more limiting than OSHA and the Texas regulation.²¹⁶ Although the text is similar to the Colorado regulation, unlike that regulation, Act 13’s text does not provide for a legislatively crafted confidentiality agreement, but instead, permits private drillers and operators to craft a contract that physicians must sign to receive the necessary information.²¹⁷

B. Plain Textual Reading of Act 13 Leads to Ambiguity

A plain textual reading of Act 13 fails to unambiguously support the assertion that physicians may share information received pursuant to Act 13 disclosure requirements with their patients, other physicians, insurance companies, or public health agencies.²¹⁸ Not only is the text vague, but a plain reading of the text indicates that the legislature intended a health professional to only use the information to diagnose and treat a specific individual exposed to the chemicals.²¹⁹

212. *See id.* § 3.29(c)(4) (citing OSHA Hazard Communication Rule, 29 C.F.R. § 1910.1200(i) (2013)).

213. 29 C.F.R. § 1910.1200(i)(3).

214. 58 PA. CONS. STAT. ANN. § 3222.1(b)(10) (West 2012).

215. *See generally* § 3222.1.

216. *See generally id.* (failing to list any explicit circumstances under which confidential chemical information obtained by health professionals may be shared).

217. *See* § 3222.1(b)(10)–(11).

218. *See id.*

219. *See id.* § 3222.1(b)(10)(i)–(iii).

The text of Act 13 explicitly imposes conditions on the release of information to health professionals.²²⁰ First, if there is no emergency, the health professional must:

[provide] a written statement of need for the information indicating all of the following: (i) The information is needed for the purpose of diagnosis or treatment of an *individual*. (ii) The *individual* being diagnosed or treated may have been exposed to a hazardous chemical. [and] (iii) Knowledge of information will assist in the diagnosis or treatment of an *individual*.²²¹

Reading the text together, the permitted purpose or use of the information is for the diagnosis or treatment of the specific individual who may have been exposed to hazardous chemicals. The text does not explicitly allow the health professional to share the information with insurance companies, patients, or other physicians who may need the information for “the purpose of diagnosis or treatment” of unknown or future third-party patients.²²²

In an emergency situation, Act 13 provides an alternative procedure for requesting information.²²³ The emergency situation request is similar to the non-emergency; however, under a plain reading, it allows disclosure to health professionals before receiving a written statement of need.²²⁴ Instead, if a health professional determines that

a *medical emergency* exists and the specific identity and amount of any chemicals claimed to be a trade secret or confidential proprietary information are *necessary* for the *emergency treatment*, the vendor, service provider or operator shall immediately disclose the information . . . upon a verbal acknowledgement by the health professional that the information *may not be used* for purposes other than the *health needs asserted* and that the health professional *shall maintain* the information as confidential.²²⁵

Adopting a plain textual reading of this provision, it would appear that if there is a medical emergency, and if disclosure is necessary for that emergency treatment, then the information must be disclosed for the health needs asserted, referring to the specific

220. *See id.*

221. *See id.* (emphasis added).

222. *Id.* § 3222.1(b)(10)(i).

223. *See* § 3222.1(b)(11).

224. *Id.*

225. § 3222.1(b)(11) (emphasis added).

emergency. This emergency provision does not appear to allow for the sharing of any disclosed information outside the scope of the specific medical emergency for which the information was requested.

In both situations—emergency and non-emergency—the scope of the permitted use of the otherwise confidential information is limited to either the diagnosis or treatment of an individual or, in the emergency context, the “health needs asserted” in that emergency situation.²²⁶ The text, though somewhat vague, does not appear to support the proposition that physicians can share information gained pursuant to Act 13 with anyone outside the scope of either emergency treatment or the diagnosis and treatment of a specific patient.

C. The Ambiguous Nature of Act 13 Will Lead to Unintended Consequences

Despite claims that Act 13 is clear and leaves physicians unrestricted, history shows one of the greatest predictors of a piece of legislation’s unintended consequences is the vagueness with which it is written, combined with legislators’ hubris of refusing to admit to this vagueness.²²⁷ Without a clear indication of legislative intent, the courts and future generations of litigants must divine a meaning.²²⁸ In many instances, whether legislatures intended to assign a specific meaning to vague language is debatable.²²⁹ This notion is especially true in circumstances of divided government, special interests, lobbyists, fractured politics, and various bargaining agreements throughout the negotiation process.²³⁰ If the legislation does not address the specific ambiguity in the statute, any unintended consequences may become engrained in the law or in practice, in which case the legislators will be even more unlikely to admit the vagueness as a mistake.²³¹

A familiar example of vague statutory language that resulted in unintended consequences is the Comprehensive Environmental Response, Compensation, and Liability Act²³² (commonly known as

226. § 3222.1(b)(10)–(11).

227. See generally Rena I. Steinzor, *The Legislation of Unintended Consequences*, 9 DUKE ENVTL. L. & POL’Y F. 95 (1998) (arguing that ambiguity in legislation may undermine goals of the legislature, and that the legislature should admit mistakes that may result in unintended consequences prior to the realization of those consequences).

228. See *id.* at 102.

229. See *id.* at 100.

230. See *id.* at 96.

231. See *id.*

232. 42 U.S.C. §§ 9601–9675 (1980) [hereinafter Superfund Act or CERCLA].

Superfund Act or CERCLA) and its resulting litigation.²³³ In an attempt to address externalities and force internalization of pollution costs, Congress enacted the Superfund Act to target the largest and worst polluters.²³⁴ The unintended consequences of the legislation may be analyzed under three approaches: (1) the "reverse *Chevron*";²³⁵ (2) the subjective test;²³⁶ and (3) a combination of the two tests.²³⁷ These tests can be used to determine whether the consequences of the legislation were clearly unintended.²³⁸

What resulted from the CERCLA legislation may best be understood as partially intended and partially unintended.²³⁹ The Environmental Protection Agency (EPA) predictably filed claims against large corporations accused of violating CERCLA.²⁴⁰ The unpredicted consequence, however, was that large corporate defendants then filed claims against small businesses, individuals, and municipalities.²⁴¹ For example, the EPA sued landfill owners who then, in turn, filed suit against everyone who disposed of trash in the landfill, including schools, small businesses, and town residents.²⁴² Under the vague language of CERCLA, someone who spills a cleansing product in the driveway or disposes of insecticide products in household trash could potentially be held liable under CERCLA.²⁴³ Although statistics show household trash contains 0.5% of toxic wastes, CERCLA never specified how much waste would incur liability.²⁴⁴

The claims filed by targets of the EPA against third parties ranged from one thousand dollars to multiple thousands.²⁴⁵ Most claims set-

233. See Steinzor, *supra* note 227, at 100.

234. See *id.*

235. *Id.* at 97 (extrapolating a reverse statutory interpretation analysis from *Chevron U.S.A., Inc. v. Natural Res. Def. Council*, 467 U.S. 837, 859-65 (1984) "by analyzing the plain meaning of the statute, its legislative history, and its overall purpose to determine whether the consequence is inconsistent with what Congress obviously intended").

236. *Id.* at 97-98 ("[I]f the results are really out of line, to the point where one suspects that had Congress foreseen them, the legislation never would have passed, the results of the provision represent an unintended consequence.").

237. *Id.* at 98 (suggesting a *Chevron* test targeting certain parts of legislation and measuring those parts by whether it is likely Congress would still have passed the provision had Congress known of the problematic consequence).

238. *Id.* at 97-100.

239. *Id.* at 98-100.

240. *Id.* at 104.

241. *Id.* at 106.

242. Robert Tomsho, *Pollution Ploy: Big Corporations Hit by Superfund Cases Find Way to Share Bill*, WALL ST. J., Apr. 2, 1991, at A1.

243. *Id.*; Steinzor, *supra* note 227, at 99-100.

244. Tomsho, *supra* note 242, at A1 ("[V]ague legislation doesn't discriminate between a drumful of toxic chemicals and an empty bottle of drain cleaner.").

245. *Id.*

tled because third-party liability was minimal compared to the legal fees necessary to litigate the case.²⁴⁶ One such suit contained over six hundred defendants, including a gym, doughnut shop, nursing home, and dog kennel, most of whom settled out of court.²⁴⁷ In *United States v. Wade*, the interpretation of the Superfund Act came down to one judge defining the scope of liability based on the plain textual meaning of its language, holding that the statute's text did not provide any reason to exclude small amounts of toxic waste.²⁴⁸ The legislature knew how to make exceptions and, because it did not, it must have intended to impose liability.²⁴⁹

Congress eventually amended the Superfund Act; however, the initial unintended consequences attest to (1) attempts by the largest polluters to get rid of Superfund liability by purposely creating unintended consequences to force the EPA or legislature into reining in enforcement and (2) the success of such attempts when legislation has ambiguous language.²⁵⁰ The intent of the Superfund Act was to hold large toxic polluters liable, but the result was liability transferred to unintended parties, such as small businesses and individuals, because of ambiguous language.²⁵¹ The intended targets of the legislation—large polluters—clearly had an incentive to undermine the legislation.²⁵²

Here, Act 13 was allegedly intended to force drillers to disclose chemicals to healthcare professionals; however, the statute's vague language may expose healthcare professionals to liability. The drillers' incentives here may be similar to the incentives held by the targets of Superfund Act liability—to limit the effectiveness of the legislation or get rid of its purpose altogether by exposing health professionals to potential liability for sharing information with colleagues, state agencies, patients, or insurance carriers.

V. DIFFERENCE BETWEEN ACT 13 AND OSHA REGULATIONS

Some proponents of Act 13 argue that because its language is similar to federal statutes and regulations that address the same concerns, such as OSHA and corresponding regulations, Act 13 should

246. *Id.*

247. *Id.*

248. See Steinzor, *supra* note 227, at 105-06 (citing *United States v. Wade*, 577 F. Supp. 1326, 1340-41 (E.D. Pa. 1983)).

249. See *id.* at 103.

250. See *id.* at 108-09.

251. See *id.* at 100-02.

252. See *id.* at 104.

be an acceptable protection for health professionals.²⁵³ First, the intent of OSHA regulations are to address concerns in the occupational setting where employees may be exposed to harmful chemicals;²⁵⁴ however, under Act 13, health professionals may treat workers as well as the general public, thereby implicating a broader spectrum of protected individuals.²⁵⁵ Act 13 must take into account not only environmental and public safety concerns, but also the context of drilling because fracturing fluid is evolving and operators and drillers are using new chemicals and mixtures.²⁵⁶ Second, the language in OSHA regulations is much clearer than in Act 13, and OSHA regulations explicitly articulate the purpose for which a physician can use the information, which is substantially broader than the limited purpose under Act 13.²⁵⁷

A. Contextual Differences Between Act 13 and OSHA Regulations

Some argue that the language in Act 13 does not impact physicians differently than do other similar disclosure regulations.²⁵⁸ The Texas Medical Association supports similar language in a Texas disclosure regulation because the language parallels that in the OSHA standards.²⁵⁹ Under the OSHA regulations, a chemical supplier must disclose confidential chemical information (1) if there is a medical emergency and the physician requires the information for treatment²⁶⁰ or (2) in a non-emergency situation, if a health professional requires the information for one or more *health needs listed in the regulation*.²⁶¹ Additionally, the physician may be required to sign a written confidentiality agreement.²⁶²

The application of OSHA regulations “to potential environmental medical risks from [fracturing] is dangerous” because there is a cog-

253. See Occupational Safety and Health Act of 1970, 29 U.S.C. §§ 651–700 (2006); 29 C.F.R. § 1910.1200 (2013); Letter, *supra* note 195.

254. 29 C.F.R. § 1910.1200(a)(2) (2013) (stating that the standard’s intent is “to address comprehensively the issue of classifying the potential hazards of chemicals, and communicating information concerning hazards and appropriate protective measures to employees”).

255. 58 PA. CONS. STAT. ANN. § 3222.1(b)(10)–(11) (West 2012).

256. See Gallegos, *supra* note 6 (quoting Bernard Goldstein, MD).

257. See discussion *infra* Section V.B.

258. See, e.g., Letter, *supra* note 195.

259. See Gallegos, *supra* note 6 (“The Texas Medical [Association] supported a state law with drilling disclosure language that follows the Occupational Safety & Health Administration’s regulations”); see also *supra* Section IV.A (distinguishing Texas regulation from Act 13).

260. 29 C.F.R. § 1910.1200(i)(2) (2013).

261. *Id.* at § 1910.1200(i)(3).

262. *Id.* at § 1910.1200(i)(2)–(i)(4).

nizable difference between worker safety regulated by OSHA and environmental and public safety regulated by Act 13.²⁶³ The OSHA regulations protect workers; in contrast, Act 13 is broader in scope, not only protecting workers, but also the public at large who may be unaware of exposure to any chemicals.²⁶⁴ In the work environment, physicians and health professionals may be more accustomed to dealing with work-related chemicals, and employees seeking the advice of the health professional may be more aware of the chemicals to which they are exposed. In addition, federal authorities usually regulate the environmental concerns in any given work setting; in contrast, Act 13 addresses hydraulic fracturing primarily because it is largely exempt from federal regulations.²⁶⁵

Outside of the work setting, under Act 13, hydraulic fracturing chemicals may implicate the public safety, and physicians should have the clear ability to share information at least to the same extent granted under the OSHA regulations to protect the general public.²⁶⁶ Moreover, the context of the potential harm is different. Fracturing involves constantly evolving chemical mixtures that combine with natural chemicals deep in the earth; it is unclear whether, or to what extent, these chemicals remain in the earth.²⁶⁷ The exposure rates and pathways, whether by inhalation, ingestion, or dermal absorption, are unknown, as are the long-term health effects of these chemicals.²⁶⁸

B. Medical Needs Asserted in Act 13 Are Not Like Those Asserted in OSHA Regulations

Under OSHA regulations, a health professional may receive confidential trade secret information in a *non-emergency situation* pursuant to a written request indicating “one or more of the following occupational health needs for the information”:

- (A) To assess the hazards of the chemicals to which employees will be exposed;
- (B) To conduct or assess sampling of the workplace atmosphere to determine employee exposure levels;
- (C) To conduct pre-assignment or periodic medical

263. See Gallegos, *supra* note 6.

264. Occupational Safety and Health Act of 1970, 29 U.S.C. §§ 651-700 (2006); see 58 PA. CONS. STAT. ANN. § 3222.1(b)(10)-(11) (West 2012).

265. See Spence, *supra* note 27, at 447-52; see also Brady & Crannell, *supra* note 48, at 43-52.

266. See discussion *infra* Section V.B.

267. See Gallegos, *supra* note 6.

268. *Id.* See also Brady & Crannell, *supra* note 48, at 42 (discussing the four potential pathways through which fracking chemicals are feared to enter drinking water).

surveillance of exposed employees; (D) To provide medical treatment to exposed employees; (E) To select or assess appropriate personal protective equipment for exposed employees; (F) To design or assess engineering controls or other protective measures for exposed employees; and (G) To conduct studies to determine the health effects of exposure.²⁶⁹

However, Act 13's language, allegedly adopted from Colorado's similar legislation,²⁷⁰ indicates that in a *non-emergency situation*, a health professional may access the otherwise confidential information pursuant to a written request to diagnose and treat an individual patient.²⁷¹ Here, the asserted health needs, unlike those in the OSHA regulation, indicate only that "[t]he information is needed for the purpose of *diagnosis or treatment of an individual*," "[t]he individual being diagnosed or treated may have been exposed," and "[k]nowledge of information will assist in the diagnosis or treatment of an individual."²⁷² Although the language here is vague as to what exactly a physician can use the information for when making the request, it appears relatively certain that the "individual" must be known to the physician (most likely a patient), the "individual" must have possibly been exposed to the chemicals, and the information is "needed" to diagnose or treat that possibly exposed person. Despite its ambiguity, it is clear that the text does not parallel OSHA regulations.

Additionally, Act 13 allows for a separate provision in the event of a *medical emergency*, similar to OSHA standards. However, under Act 13, the text merely indicates that if a health professional determines an emergency exists, then the health professional can gain access to the confidential information immediately and file, upon request, the appropriate paperwork under the aforementioned non-emergency provision after the emergency subsides.²⁷³ OSHA regulations, by contrast, refer back to the acceptable medical needs listed in the non-emergency section.²⁷⁴ Under Act 13, the language just says "health needs asserted" in its emergency section,²⁷⁵ which, under a plain reading, either (1) refers to the emergency situation giving rise to the need to request the information without filing the appropriate paperwork; or (2) refers to the non-emergency provision.

269. 29 C.F.R. § 1910.1200(i)(3)(i)-(ii) (2013).

270. See Letter, *supra* note 195.

271. 58 PA. CONS. STAT. ANN. § 3222.1(b)(10) (West 2012).

272. *Id.* (emphasis added).

273. *Id.* § 3222.1(b)(11).

274. 29 C.F.R. § 1910.1200(i)(2)-(3).

275. § 3222.1(b)(11).

However, under the latter meaning, this section indicates a much narrower, albeit ambiguous, use for the confidential information received, unlike OSHA regulations.

VI. POTENTIAL CHILLING EFFECTS ON PHYSICIANS

Act 13 will most likely cause a chilling effect upon healthcare professionals regarding potential dangers posed by hydraulic fracturing. Under Act 13, the DEP will have a list of the confidential chemicals and concentrations used by the hydraulic drilling process.²⁷⁶ Certain physicians may also know the chemicals and concentrations used, as well as the impact on their patients. But because the physicians fail to communicate with each other or the DEP for fear of liability for breach of contract, the general public may never learn about the dangers. This scenario is similar to a “divide and conquer” strategy because it allows some people to have access to the information, but creates a risk of liability if those people share that information with others.

The unintended consequence of scaring physicians with potential liability and leaving confidentiality agreement drafting to the private industry may expose the general public to harm. The potential effect of this statutory construction will be to silence physicians. Individual physicians may acquire confidential information and not share it. Proper diagnosis and treatment may be delayed. Many people may die as a result of delayed or inappropriate treatment because physicians are understandably and rightly fearful to share information.

The question posed by many commentators asks whether the statute does, in fact, create liability. Act 13 exposes physicians to liability regardless of whether they disclose or do not disclose the information pursuant to Act 13. The greater question, however, is what will the ultimate consequences of this legislation be on patients, the environment, the community, and physicians themselves if it is not amended? How many diagnoses or treatments will be delayed and how many people will suffer the consequences of this vague legislation?

276. 58 PA. CONS. STAT. ANN. § 3222.1(a)-(b.2) (West 2012).

VII. RECOMMENDATIONS

A chemical disclosure law within the context of fracturing fluid should take into account three separate goals: (1) protection of individual patients; (2) protection of physicians; and (3) protection of the general public.

A. Individual Patient Protection

As a first priority, any legislation addressing chemical disclosure and allowing health professionals to obtain otherwise confidential information should not, under any circumstances, impair the health professionals' ability to properly treat the patient. At a minimum, the law should explicitly permit health professionals to store information relating to the specific patient in that individual patient's medical records. Because the long-term health effects of exposure to fracturing chemicals are unknown, the patient may develop medical problems years into the future. To the extent medical problems arise in the future, the treating health professionals should have the ability to view the patient's medical record in full, without redactions based on trade secret protection or confidentiality agreements between prior physicians and third-party drilling companies.

Second, any legislation should explicitly permit the sharing of information between specialists and other healthcare providers for the benefit of the individual patient. Health professionals often consult one another, especially regarding cases that exceed the scope of mundane diseases. Any chemical exposure causing illness as a result of fracturing would probably be outside the scope of the mundane. Thus, primary care physicians may have to consult toxicologists to ascertain the risks and treatment methods to counteract any potential chemical exposures. The specialists consulted would likely need to know the chemical identity and concentrations of any potential chemicals a primary care physician believes are causing illness in a patient. It may be argued that a specialist could sign a confidentiality agreement before obtaining the information; this process, however, would be cumbersome and contrary to the best interests of the patient. There should be absolutely no impairment or restriction on the ability to treat a patient, which includes sharing information with specialists and openly sharing information with health professionals.

Third, the health professional should be able to use the confidential information to file a claim form on behalf of the patient to cover the medical services provided. If this information could not be

shared, the patient may be denied coverage, depending on the type of insurance contract.

B. Protection of Health Professionals

In order to protect the health professionals from potential liability, the legislation should explicitly grant civil immunity for health professionals obtaining confidential information. The legislation should remove all risks of liability from health professionals whose primary focus is protecting and treating patients from illness.

Additionally, the confidentiality form health professionals must sign, under Act 13, should be uniform and legislatively drafted. This would minimize health professionals' worries and costs of obtaining legal counsel to interpret the various confidentiality agreements. An example of this protection is the legislatively crafted form used in Colorado.²⁷⁷

Similar to protecting the individual, in order to protect the health professional, any legislation should explicitly permit physicians to share information received with any necessary persons pursuant to statutory obligations, common law duties, ethical standards adopted by the medical community, or best interests of the patient or any foreseeable patients.²⁷⁸ Ohio has adopted a similar amendment to its respective chemical disclosure legislation after an outcry from the Ohio State Medical Association.²⁷⁹ The Ohio Legislature amended Senate Bill 315 by adding that "[n]othing in [this section] precludes a medical professional from making any reports required by law or professional ethical standards."²⁸⁰ In the alternative, the Pennsylvania General Assembly may want to adopt the specific text from

277. FORM 35, *supra* note 83.

278. The Pennsylvania General Assembly, for example, appears to be attempting to adopt this recommendation; however, two bills have failed, and the third is pending. *See* S.B. 1514, 2012 Gen. Assemb., Reg. Sess. (Pa. 2012) (failing in Environmental Resources and Energy Committee); H.B. 2415, 2012 Gen. Assemb., Reg. Sess. (Pa. 2012) (failing in Committee on Environmental Resources and Energy); S.B. 544, 2012 Gen. Assemb., Reg. Sess. (Pa. 2013) (pending in Environmental Resources and Energy Committee).

279. OHIO REV. CODE ANN. § 1509.10(H)(2) (West 2012) (stemming from S.B. 315, 129th Gen. Assemb., Reg. Sess. (Ohio 2012)); *Statehouse Update: OSMA Advocacy Leads to Change in the "Fracking" Bill*, OHIO STATE MED. ASS'N, <http://www.osma.org/news/release.dT/statehouse-update-osma-advocacy-leads-to-change-in-the-fracking-bill/1884> (last visited Jan. 19, 2014) [hereinafter *OSMA Advocacy Leads to Change*].

280. *OSMA Advocacy Leads to Change*, *supra* note 280; *see also Statehouse Update: "Fracking" Law Clarification*, OHIO STATE MED. ASS'N, <http://www.osma.org/news/release.dT/statehouse-update-fracking-law-clarification/2008> (last visited Jan. 19, 2014).

OSHA regulations, as did Texas regulators.²⁸¹ Adopting the explicit OSHA language would be better than the current version of the statute, but because the context of OSHA is different from Act 13, it may be prudent to adopt something more akin to the Ohio measure to explicitly protect physicians when acting in accordance with any legal or ethical obligation rather than to define how physicians can use the information.

C. Protection of the General Public

One area where other states addressing this issue are falling short is the protection of the general public. Some states are using band-aid types of legislation to fix the flaws.²⁸² This tactic exposes physicians to risks of liability and fails to adequately protect the general public.²⁸³ The legislature should go further and empower physicians, or even better to impose a duty upon physicians and healthcare providers, to report incidents of illness stemming from fracturing fluid to a national registry. As mentioned, physicians would have a duty in Pennsylvania to report a potential hazardous outbreak or contagion to state agencies; however, this may not address low frequency events that are occurring across multiple states. Because reporting laws differ among states, a national collection hub or database would permit uniform reporting requirements and allow for consistent analysis and epidemiological research aimed at identifying trends and causes.

The federal government implemented a similar tactic in 2004, after litigation surrounding the pharmaceutical drug Vioxx, requiring the FDA to monitor the national drug effects for the protection of the general public.²⁸⁴ Similarly, vaccines and cancers are reported on a national basis for constant research and analysis to search for trends in exposure or disease clustering.²⁸⁵ The federal government should assign new powers to the Centers for Disease Control and Prevention (CDC) to monitor the incidents of fracturing-caused injuries for the protection of the general public.

281. 29 C.F.R. § 1910.1200(i) (2013).

282. See FORM 35, *supra* note 83; § 1509.10(H)(2); 16 TEX. ADMIN. CODE § 3.29(g) (2012).

283. See discussion *supra* Part VI.

284. See generally Margaret Gilhooley, *Addressing Potential Drug Risks: The Limits of Testing, Risk Signals, Preemption, and the Drug Reform Legislation*, 59 S.C. L. REV. 347 (2008) (discussing the Food and Drug Administration Amendments Act of 2007, which was enacted in response to litigation surrounding dangers posed by the drug Vioxx).

285. See *Immunization Information Systems*, CTRS. FOR DISEASE CONTROL & PREVENTION, <http://www.cdc.gov/vaccines/programs/iis/about.html> (last visited Jan. 19, 2014).

Beyond the inconsistency in state disclosure laws and the advantage of aggregating national data in search for trends, this would eliminate problems with trade secret or confidentiality concerns because the health professionals would be duty-bound to report to a noncompetitor government agency.²⁸⁶ This recommendation would serve to bridge the current gap between health professionals and the government agency responsible for keeping track of chemical identities or concentrations, ensuring that physicians are serving on the front lines to protect the general public while the government agency assesses the information for potential risks to the public. Moreover, the hydraulic fracturing process has been exempt from most federal regulatory oversight,²⁸⁷ so this would serve to justify the exemption by allowing federal officials to oversee the use of the dangerous chemicals indirectly by performing research on the data received from health professionals and the drilling industry.

CONCLUSION

The current form of Act 13 exposes health professionals, especially physicians, to risks of unavoidable liability, should the health professional encounter a patient exposed to hydraulic fracturing fluid. The only question at that point is what kind of liability will be imposed—either the physician shares the information pursuant to statutory, ethical, and common law requirements, and faces liability for breaching a confidentiality agreement, or the physician does not disclose the information and faces the risk of loss of licensure and potential common law negligence liability.

The Pennsylvania Legislature should amend Act 13 and adopt the recommendations listed above to protect (1) the individual patients, (2) the health professionals, and (3) the general public. At a minimum, the amendment should explicitly permit health professionals to use information gained under the legislation to fulfill their statutory, ethical, and common law duties. Ideally, state legislation should explicitly grant health professionals civil immunity for sharing such information and should impose a duty on health professionals to report to a national registry overseen by the CDC, which would also require federal legislation. Beyond Pennsylvania, these recommendations should serve to guide other states, and the federal

286. See discussion *supra* Section III.B.

287. See Spence, *supra* note 27, at 447–52; see also Brady & Crannell, *supra* note 48, at 43–52.

government, in implementing chemical disclosure laws that fully protect patients, health professionals, and the general public.