

NOTE

ONE STOP, NO STOP, TWO STOP, *TERRY STOP*: REASONABLE SUSPICION AND PSEUDOEPHEDRINE PURCHASES BY SUSPECTED METHAMPHETAMINE MANUFACTURERS

Andrew C. Goetz*

TABLE OF CONTENTS

INTRODUCTION	1573
I. THE DOMESTIC MANUFACTURE OF METHAMPHETAMINE.....	1575
II. THE INTERPLAY BETWEEN OUTWARD INNOCENCE AND REASONABLE SUSPICION	1580
III. A FRAMEWORK FOR ANALYZING REASONABLE SUSPICION OF PSEUDOEPHEDRINE PURCHASES.....	1583
A. <i>The Multiple-Purchasers Strategy</i>	1586
B. <i>The Multiple-Stores Strategy</i>	1592
C. <i>Hybrid Scenarios and Additional Precursors</i>	1594
CONCLUSION	1596

*"I can go to Wal-Mart and get everything I need to cook a batch of meth."*¹

INTRODUCTION

Cold medicine is not just for colds anymore. In the last decade, cold medicine has become the central ingredient in the domestic manufacture of methamphetamine, an extraordinarily dangerous drug that has exploded in popularity across the United States.² From its origins on the West Coast, methamphetamine has spread to the rest of the country, where users have

* University of Michigan Law School, J.D. expected May 2007. I would like to thank my Note Editors, Christie Hammerle and Joel Flaxman, and the entire staff at the *Michigan Law Review*. I would also like to thank Professors Kimberly Thomas and Samuel Gross at the University of Michigan Law School, and former Assistant United States Attorney Ron DeWard, now with Varnum, Riddering, Schmidt & Howlett LLP. Finally, I would like to thank my wife, Karla, and my dog, Lily, neither of whom allowed me to concentrate for unnecessarily long periods of time.

1. Sheila McNulty, *Needles and Haystacks*, FIN. TIMES, Aug. 20, 2005, at 16 (Magazine) (quoting Aaron Tippet, a narcotics lieutenant in Jasper County, Texas).

2. David J. Jefferson, *America's Most Dangerous Drug*, NEWSWEEK, Aug. 8, 2005, at 41; Mark Gillispie, *Meth Epidemic Strikes Ohio*, CLEVELAND PLAIN DEALER, Aug. 7, 2005, at A1.

started manufacturing the drug for themselves in makeshift laboratories.³ The manufacturing process utilizes a variety of ingredients, all of which are readily available at any local drug store or supermarket.⁴ Chief among these ingredients is pseudoephedrine, the active ingredient in many cold medicines.⁵ In response, retailers, state legislatures, and the federal government have imposed purchasing restrictions on cold medicines containing pseudoephedrine.⁶

Law enforcement has also worked to combat the domestic manufacture of methamphetamine. Recognizing the central role of pseudoephedrine in the manufacturing process, law enforcement officials have begun monitoring drug stores and supermarkets for suspicious purchases of cold medicine.⁷ Upon observing such a purchase, law enforcement officials often conduct an investigatory stop, also known as a *Terry* stop, of the purchaser or purchasers.⁸ As a result, state and federal courts have been forced to address the central question in such encounters: when is a purchase of cold medicine suspicious enough to permit law enforcement to conduct an investigatory stop? Unsurprisingly, courts have reached a wide range of inconsistent results in analyzing such a fact-specific wrinkle in their search-and-seizure jurisprudence.⁹

This Note attempts to inject some clarity into courts' reasonable suspicion calculus for cold medicine purchases. It argues that the key factor in analyzing such purchases is whether the purchaser or purchasers appear to be circumventing pseudoephedrine purchasing restrictions in order to obtain inordinately large quantities of pseudoephedrine. Part I provides a general background on the domestic manufacture of methamphetamine in small, clandestine laboratories. Part II then examines the interplay between outward innocence and reasonable suspicion under the Supreme Court's Fourth Amendment jurisprudence. Finally, Part III establishes a framework for identifying purchasing strategies that methamphetamine manufacturers commonly use to circumvent pseudoephedrine purchasing restrictions. These types of pseudoephedrine purchases meet the threshold for reasonable suspicion, despite some courts' decisions to the contrary.

3. Jefferson, *supra* note 2. For a state-by-state comparison of the increase in methamphetamine laboratory seizures between 1999 and 2004, see U.S. Drug Enforcement Administration, Maps of Methamphetamine Lab Incidents, http://www.dea.gov/concern/map_lab_seizures.html (last visited Mar. 1, 2007).

4. See McNulty, *supra* note 1.

5. See *infra* Part I; see also Note, *Cooking Up Solutions to a Cooked Up Menace: Responses to Methamphetamine in a Federal System*, 119 HARV. L. REV. 2508, 2511–12 (2006).

6. See *infra* Part I.

7. See *infra* Part III.

8. See *infra* Part III.

9. Compare *State v. Bulington*, 802 N.E.2d 435 (Ind. 2004) (refusing to find reasonable suspicion from two companions each purchasing three boxes of pseudoephedrine at a Meijer while pretending not to know each other), with *Barrett v. State*, 837 N.E.2d 1022 (Ind. Ct. App. 2005) (finding reasonable suspicion under very similar circumstances as in *Bulington*, with the only difference being that the car's "passenger-side tires were on the fog line for thirty to fifty yards").

I. THE DOMESTIC MANUFACTURE OF METHAMPHETAMINE

Although at least one-half of methamphetamine in the United States is smuggled into the country,¹⁰ the remainder is produced domestically in small, clandestine laboratories, where users have discovered that they can manufacture their own methamphetamine simply and cheaply.¹¹ Manufacturers easily obtain all chemicals and equipment from retail stores,¹² and recipes are widely available on the internet. These laboratories currently use two methods to manufacture methamphetamine:¹³ (1) the “Birch reduction method,” also known as the “Nazi method,”¹⁴ and (2) the “red phosphorus method,” or “red-P method.”¹⁵

10. Jefferson, *supra* note 2. Most of this smuggled methamphetamine is produced in “super labs” in Mexico. *Id.* Thus, even if domestic pseudoephedrine regulations and sophisticated enforcement efforts curb methamphetamine manufacturing, the flow of methamphetamine from Mexico may increase to fulfill the U.S. demand for it. As one Oklahoma official acknowledged, “[Mexican drug cartels] have always supplied marijuana, cocaine, and heroin. When we took away the local meth lab, they simply added methamphetamine to the truck.” Kate Zernike, *Potent Mexican Meth Floods in as States Curb Domestic Variety*, N.Y. TIMES, Jan. 23, 2006, at A1. On the plus side, limiting the domestic manufacture of methamphetamine helps control the multitude of problems accompanying the laboratories. *See infra* note 13. To the extent methamphetamine is smuggled from Mexico using the same channels as other illegal drugs, enforcement initiatives are already in place, and law enforcement agencies are experienced at fighting this smuggling effort. Also, since the cost of crystal methamphetamine from Mexico far exceeds the cost of domestically produced methamphetamine, *see Zernike, supra*, the inflated price will likely deter some people from becoming addicted in the first place.

11. *Facing the Methamphetamine Problem in America: Hearing Before the Subcomm. on Criminal Justice, Drug Policy and Human Resources of the H. Comm. on Gov’t Reform*, 108th Cong. (2003) [hereinafter *Hearings*] (statement of Rogelio Guevara, Chief of Operations, Drug Enforcement Administration), available at <http://www.dea.gov/pubs/cngrtest/ct071803.htm>.

12. McNulty, *supra* note 1. Methamphetamine manufacturers typically use many of the following chemicals and equipment: sodium hydroxide (lye, commercially available as drain cleaner), water, ether (starter fluid), denatured ethanol (commercially available in hardware stores), methanol (“HEET,” a gas line antifreeze), isopropyl alcohol (rubbing alcohol), sulfuric acid (battery acid), rock salt, tin foil, muriatic acid (concrete cleaner), coffee filters, and glass jars and flasks. Kurt Short, *Red Phosphorus Methamphetamine Labs*, <http://www.okienarc.org/RedPlabs.htm> (last visited Mar. 1, 2007); *see also* Roger A. Ely & Diane C. McGrath, *Lithium-Ammonia Reduction of Ephedrine to Methamphetamine: An Unusual Clandestine Synthesis*, 35 J. FORENSIC SCI. 720, 721 (1990); Harry F. Skinner, *Methamphetamine Synthesis Via Hydriodic Acid/Red Phosphorus Reduction of Ephedrine*, 48 FORENSIC SCI. INT’L 123, 123–24 (1990).

13. Regardless of the method, many of the reagents, catalysts, and solvents required to produce methamphetamine are themselves toxic, and the reaction process releases toxic byproducts. Moreover, the high risk of explosion at small, clandestine laboratories increases the risk that these toxic chemicals will be released into the surrounding environment. *See* Lisa Scanga, *Drug Problem: Environmental Solution*, 22 PACE ENVTL. L. REV. 151, 152–58 (2005); Anna S. Vogt, Comment, *The Mess Left Behind: Regulating the Cleanup of Former Methamphetamine Laboratories*, 38 IDAHO L. REV. 251, 257–65 (2001).

14. This method involves a lithium-ammonia reduction of ephedrine or pseudoephedrine to methamphetamine. *See* Ely & McGrath, *supra* note 12, at 720–23. Manufacturers obtain the lithium from lithium batteries, and anhydrous ammonia, a liquid fertilizer, is readily available in agricultural communities. *See* Illinois Attorney General, Basic Understanding of Meth, <http://www.illinoisattorneygeneral.gov/methnet/understandingmeth/basics.html> (last visited Mar. 1, 2007).

15. This method involves a reduction of ephedrine or pseudoephedrine to methamphetamine via red phosphorus and hydroiodic acid. *See* Skinner, *supra* note 12, at 123–25. Iodine crystals are readily available through some local co-ops and horse-shoeing suppliers, or manufacturers can make

Both the Birch reduction method and the red phosphorus method require either ephedrine or pseudoephedrine as an essential precursor: “Ephedrine and pseudoephedrine are to methamphetamine what flour is to bread—THE essential ingredient.”¹⁶ Until recently, ephedrine served as a decongestant and a weight-control product.¹⁷ Because of ephedrine’s adverse side effects, however, pseudoephedrine and phenylephrine have mostly replaced it as a decongestant, and the FDA has severely restricted its use as a weight-control product.¹⁸ With the increasingly limited availability of ephedrine, methamphetamine manufacturers have turned to pseudoephedrine, the active ingredient in many common cold medicines.¹⁹ Pseudoephedrine has become “methamphetamine’s most important precursor,”²⁰ with methamphetamine recipes sometimes calling for between 1000 and 1200 sixty-milligram tablets of cold medicine containing pseudoephedrine.²¹ Smaller batches, obviously, require less pseudoephedrine.²²

The overwhelming majority of states have responded to pseudoephedrine’s central role in manufacturing methamphetamine by passing laws that restrict the sale of pseudoephedrine products.²³ Oklahoma was the first state to restrict access to pseudoephedrine, and the results were dramatic: the first month the law was in force, Oklahoma experienced a forty-five percent reduction in the number of methamphetamine laboratories seized by law

them by combining tincture of iodine with hydrogen peroxide. See Short, *supra* note 12. Manufacturers can obtain red phosphorus from the striker plates of match books or from road flares. *Id.*

16. Illinois Attorney General, *supra* note 14. For both the Birch reduction method and the red phosphorus method, manufacturers must isolate the ephedrine or pseudoephedrine from the tablets in which it is obtained, so both methods begin with an extraction step. Both methods also have similar steps at the end of the reaction process, when the product is converted to a base, extracted, and finally precipitated to its hydrochloride salt. See Short, *supra* note 12; see also Ely & McGrath, *supra* note 12, at 721; Skinner, *supra* note 12, at 123–24.

17. See Iliana Limon, *A Lid on Cooks*, ALBUQUERQUE TRIB., June 23, 2003, at A4.

18. See *id.*; see also Press Release, FDA, FDA Acts to Remove Ephedra-Containing Dietary Supplements From Market (Nov. 23, 2004), <http://www.fda.gov/bbs/topics/news/2004/NEW01140.html>.

19. Michael Johnsen, *Chains move pseudoephedrine behind the counter—but at what cost?*, DRUG STORE NEWS, June 6, 2005, at 39 (noting that Claritin D, Theraflu, Sudafed, Tylenol Sinus, Tylenol Cold, and Alka Seltzer Plus all contain pseudoephedrine). Children’s remedies, gel-caps, and liquid formulas containing pseudoephedrine, though, are not generally used in methamphetamine synthesis. See Matthew Hathaway, *Meth market change is expected*, ST. LOUIS POST-DISPATCH, July 14, 2005, at D1. Also, phenylephrine has begun to replace pseudoephedrine as a decongestant, since decongestants containing phenylephrine do not face any of the purchasing restrictions described *infra*.

20. *Hearings*, *supra* note 11 (statement of Rogelio Guevara).

21. *State v. Truesdell*, 679 N.W.2d 611, 614–15 (Iowa 2004) (“The most common recipe for manufacturing meth calls for 1000 to 1200 60-milligram tablets of cold medication containing pseudoephedrine. This amount of pseudoephedrine generally produces between one to two ounces of meth.”).

22. See Hathaway, *supra* note 19; cf. *State v. Morgan*, No. 33568-9-II, 2006 Wash. App. LEXIS 1326, at *5 (Ct. App. June 27, 2006) (“[T]he baggie contained approximately 420 pills, and . . . there was enough pseudoephedrine to manufacture 12 grams of methamphetamine.”).

23. Ryan Lenz, *Anti-Meth Laws Pose Dilemma for States*, <http://www.officer.com/article/article.jsp?siteSection=6&id=26363> (last visited Mar. 1, 2007).

enforcement.²⁴ Oklahoma's law requires that pseudoephedrine products "be dispensed, sold, or distributed only by, or under the supervision of, a licensed pharmacist or a registered pharmacy technician."²⁵ Any person attempting to purchase pseudoephedrine products must produce photo identification and sign a log.²⁶ Recently, the Oklahoma legislature amended the law to implement a real-time electronic logbook to help retailers coordinate the monitoring of pseudoephedrine sales.²⁷ The law prohibits a person without a valid prescription from acquiring more than nine grams of pseudoephedrine—approximately three boxes of cold medicine containing ninety-six thirty-milligram tablets per box—within a thirty-day period.²⁸ Finally, Oklahoma makes "possession of a drug product containing more than nine (9) grams of . . . pseudoephedrine . . . a rebuttable presumption of the intent to use the product as a precursor to methamphetamine"²⁹

Other states' restrictions vary considerably.³⁰ They usually contain a combination of the following: setting a limit on the quantity of pseudoephedrine that a retailer may sell to a customer within a specified time period;³¹ requiring retailers to move pseudoephedrine products behind the pharmacy counter or within a locked case;³² requiring retailers to monitor pseudoephedrine products visually or with electronic surveillance;³³ requiring pseudoephedrine purchasers to produce identification;³⁴ requiring retailers or purchasers to record pseudoephedrine purchases on a written or

24. *ABC World News Tonight with Peter Jennings: A Closer Look, Medicine or Meth?* (ABC television broadcast Apr. 28, 2005).

25. OKLA. STAT. tit. 63, § 2-212(A)(2)(a) (Supp. 2007).

26. *Id.* § 2-212(A)(2)(b) (requiring each entry on the log to show: (1) the date of the transaction; (2) the name of the purchaser; (3) the driver's license number and state of residence of the purchaser; (4) the name of the pharmacist or pharmacy technician conducting the transaction; (5) the product being sold; and (6) the total quantity of pseudoephedrine purchased).

27. *Id.* § 2-309C.

28. *Id.* § 2-212(A)(2). Assuming thirty milligrams of pseudoephedrine per tablet and ninety-six tablets per box, each box contains roughly 2.9 grams of pseudoephedrine. One adult dose is typically sixty milligrams.

29. *Id.* § 2-332(B). The statute exempts retailers, other entities, and people typically and legitimately in possession of greater than nine grams of pseudoephedrine. *Id.*

30. *See* Johnsen, *supra* note 19. Some states have amended previously enacted restrictions to adjust to the growing methamphetamine epidemic. *See, e.g.*, S.B. 10, 93rd Gen. Assem., 1st Reg. Sess. (Mo. 2005) (signed into law on June 15, 2005).

31. *See, e.g.*, IND. CODE § 35-48-4-14.7(c)(2) (Supp. 2006); MICH. COMP. LAWS § 333.17766f (Supp. 2006); WASH. REV. CODE § 69.43.110 (Supp. 2007). Most states set the limit at either two or three boxes of cold medicine containing pseudoephedrine, assuming slightly under three grams of pseudoephedrine per box.

32. *See, e.g.*, IND. CODE § 35-48-4-14.7(c)(4)(A); MICH. COMP. LAWS § 333.17766e(1)(a)–(b). This requirement simultaneously serves the purpose of monitoring pseudoephedrine purchases and preventing theft of pseudoephedrine by methamphetamine manufacturers looking for a relatively easy evasion of the new laws.

33. *See, e.g.*, IND. CODE § 35-48-4-14.7(c)(4)(B); MICH. COMP. LAWS § 333.17766e(1)(c); WASH. REV. CODE § 69.43.160(1)(a).

34. *See, e.g.*, IND. CODE § 35-48-4-14.7(c)(3)(A); MICH. COMP. LAWS § 333.17766e(3)(a).

electronic log;³⁵ requiring retailers to report suspicious purchases to law enforcement;³⁶ and requiring retailers to report unusual thefts to law enforcement.³⁷ In addition, state and federal laws prohibit possession of pseudoephedrine with intent to manufacture methamphetamine.³⁸ Some states have even criminalized possession of more than a specified limit of pseudoephedrine,³⁹ and other states have made possession of more than a specified amount of pseudoephedrine prima facie evidence of intent to manufacture methamphetamine.⁴⁰ These restrictions sometimes exempt pseudoephedrine products not readily convertible to methamphetamine.⁴¹ Finally, some states have responded to privacy concerns by explicitly prohibiting retailers from disclosing purchase logs to anyone except law enforcement.⁴²

Retailers have played a major role in monitoring pseudoephedrine purchases. In many communities, retailers coordinate with law enforcement and report suspicious purchases to law enforcement officials.⁴³ Recently, many retailers, including Walgreens, Target, and CVS, moved beyond voluntary

35. See, e.g., IND. CODE § 35-48-4-14.7(c)(3)(B)–(C); MICH. COMP. LAWS § 333.17766e(3)(b).

36. See, e.g., IND. CODE § 35-48-4-14.7(f).

37. See, e.g., *id.* § 35-48-4-14.7(g).

38. See, e.g., 21 U.S.C. § 841(c)(1) (2000) (assigning criminal penalties to “[a]ny person who knowingly or intentionally . . . possesses a listed chemical with intent to manufacture a controlled substance”). Pseudoephedrine is a “listed chemical” as defined by 21 U.S.C. § 802(34). At the state level, see IOWA CODE § 124.401(4) (Supp. 2006); MICH. COMP. LAWS § 333.7401c(b); MO. REV. STAT. §§ 195.246, 195.235 (Supp. 2005); WASH. REV. CODE § 69.50.440. In response to the Iowa Supreme Court’s decision in *State v. Truesdell*, 679 N.W.2d 611 (Iowa 2004), the Iowa legislature recently altered language in § 124.401(4) from “intent to use the product to manufacture any controlled substance” to “intent that the product be used to manufacture any controlled substance.” 2004 Iowa Legis. Serv. 218–19 (West). This distinction is crucial because the former statute, as interpreted in *Truesdell*, 679 N.W.2d at 618, provided a loophole to methamphetamine manufacturers who hired other people to obtain pseudoephedrine (often in exchange for a portion of the final product). The former statute exempted the hired purchasers from criminal liability. *Id.* At least one state requires possession of two chemical precursors for criminal liability to arise. See IND. CODE § 35-48-4-14.5(e)(2).

39. See, e.g., IND. CODE § 35-48-4-04.5(b) (criminalizing possession of more than ten grams of pseudoephedrine); MICH. COMP. LAWS § 333.17766c (criminalizing the possession of more than twelve grams of pseudoephedrine); WASH. REV. CODE § 69.43.120 (criminalizing possession of more than fifteen grams of pseudoephedrine); 2005 Or. Laws 1992 (criminalizing possession of more than nine grams of pseudoephedrine, while providing for a household exception of twenty-four grams if not purchased within a period of seven consecutive days).

40. See, e.g., MISS. CODE ANN. § 41-29-313(2)(c)(ii) (West 2006); MO. REV. STAT. §§ 195.246, 195.235.

41. See, e.g., MICH. COMP. LAWS § 333.17766e(4)(b)–(c).

42. See, e.g., MICH. COMP. LAWS § 333.17766e(3)(b).

43. See Heather Donahoe, *Meth law slowing ‘cooks,’ police say*, LEAF-CHRON. (Clarksville, Tenn.), Mar. 15, 2006, at A1. One example of a retailer coordination effort is Meth Watch, a program that began in Kansas and has recently been introduced in other states to counter the spread of small, clandestine laboratories. Meth Watch, The Meth Watch Program, http://www.methwatch.com/Meth_Watch_Program/what_is_meth_watch_index.aspx (last visited Mar. 1, 2007). The Meth Watch program combines community education with retailer coordination. See *Law Enforcement and the Fight Against Methamphetamine: Hearing Before the Subcomm. on Criminal Justice, Drug Policy and Human Resources of the H. Comm. on Gov’t Reform*, 108th Cong. 65–66 (2004) (statement of Steve Bundy, Sheriff, Rice County, Kansas).

restrictions on pseudoephedrine sales and placed pseudoephedrine products behind pharmacy counters—even in states where retailers were not required to do so.⁴⁴ Target is also developing an electronic log to help track purchases of pseudoephedrine.⁴⁵

In response to the success of the myriad state laws and retailer policies, the federal government has also begun to regulate pseudoephedrine sales nationwide. In early 2006, the President signed the Combat Methamphetamine Epidemic Act of 2005 (“CMEA”) into law at the federal level.⁴⁶ Notably, the CMEA does not preempt state regulation of pseudoephedrine sales, leaving states free to maintain or enact more stringent restrictions.⁴⁷ As of September 30, 2006, the CMEA requires retailers to place pseudoephedrine products “such that customers do not have direct access to the product before the sale is made.”⁴⁸ To purchase pseudoephedrine, a customer must provide photo identification and sign a written or electronic log.⁴⁹ Law enforcement officials have access to these logs, but the CMEA requires the attorney general to establish regulations protecting the privacy of individuals who sign them.⁵⁰ A store may only sell up to 3.6 grams of pseudoephedrine—slightly more than one ninety-six-pill box of cold medicine—per day to a given purchaser, regardless of the number of transactions.⁵¹ The CMEA also prohibits customers from purchasing more than nine grams of pseudoephedrine within a thirty-day period.⁵²

Methamphetamine manufacturers thus face a number of restrictions on their ability to purchase pseudoephedrine. As a result, they have developed purchasing strategies to obtain the requisite amount of pseudoephedrine for manufacturing methamphetamine. Part III addresses these strategies in detail, but first, Part II briefly examines the Fourth Amendment’s reasonable suspicion standard and its interplay with outward innocence.

44. See Martiga Lohn, *Target to Restrict Medicines Used to Make Meth*, http://www.kare11.com/news/news_article.aspx?storyid=90392 (last visited Mar. 1, 2007); *Walgreen Puts Pseudoephedrine Behind Counters*, REUTERS, Aug. 5, 2005, available at <http://www.foxnews.com/story/0,2933,164894,00.html>. For instance, in 1997, Wal-Mart implemented a voluntary sales limitation policy for pseudoephedrine products, and its cash registers now prompt cashiers and print out a small information slip when a customer attempts to exceed a purchase limit. See Wal-Mart Facts, Key Topics: Merchandising, <http://www.walmartfacts.com/articles/2364.aspx> (last visited Mar. 1, 2007).

45. See Lohn, *supra* note 44.

46. Combat Methamphetamine Epidemic Act of 2005, Pub. L. No. 109-177, §§ 701–56, 120 Stat. 256 (2006).

47. *Id.* § 711(g) (codified as amended at 21 U.S.C. § 802); see also Note, *supra* note 5, at 2519.

48. Combat Methamphetamine Epidemic Act § 711(b) (codified as amended at 21 U.S.C. § 830(e)(1)(A)(i)).

49. *Id.* (codified as amended at 21 U.S.C. § 830(e)(1)(A)(iv)(I)).

50. *Id.* (codified as amended at 21 U.S.C. § 830(e)(1)(C)).

51. *Id.* (codified as amended at 21 U.S.C. § 830(d)(1)).

52. *Id.* § 711(e) (codified as amended at 21 U.S.C. 844(a)).

II. THE INTERPLAY BETWEEN OUTWARD INNOCENCE AND REASONABLE SUSPICION

In *Terry v. Ohio*, the Supreme Court relied upon the Fourth Amendment's prohibition on unreasonable searches and seizures⁵³ to develop the standard of reasonable suspicion for police officers making a limited investigatory stop short of an arrest.⁵⁴ These investigatory stops, also known as *Terry* stops, differ "from full-fledged arrests requiring probable cause on the one hand and no-seizure police encounters requiring no justification whatsoever on the other."⁵⁵ At one end of the spectrum, arrests require probable cause; at the other end, no-seizure police encounters require no justification.⁵⁶ In the middle are investigatory stops, more limited intrusions requiring reasonable suspicion—a lesser degree of suspicion than the probable cause that arrests require.⁵⁷ As the Court announced in *Terry*, "in justifying [this] particular intrusion the police officer must be able to point to specific and articulable facts which, taken together with rational inferences from those facts, reasonably warrant that intrusion."⁵⁸

The concept of outward innocence arises in two distinct ways in applying the reasonable suspicion standard. First, for a given fact pattern, although each specific event, in isolation, often appears outwardly innocent, the fact pattern as a whole may still meet the threshold for reasonable suspicion. The facts in *Terry* fit this description:

[Officer McFadden] observed Terry, Chilton, and Katz go through a series of acts, *each of them perhaps innocent in itself, but which taken together warranted further investigation*. There is nothing unusual in two men standing together on a street corner, perhaps waiting for someone. Nor is there anything suspicious about people in such circumstances strolling up and down the street, singly or in pairs. Store windows, moreover, are made to be looked in. But the story is quite different where, as here, two men hover about a street corner for an extended period of time, at the end of which it becomes apparent that they are not waiting for anyone or anything; where these men pace alternately along an identical route, pausing to stare in the same store window roughly 24 times; where each comple-

53. U.S. CONST. amend. IV. The Fourth Amendment provides:

The right of the people to be secure in their persons, houses, papers, and effects, against unreasonable searches and seizures, shall not be violated, and no Warrants shall issue, but upon probable cause, supported by Oath or affirmation, and particularly describing the place to be searched, and the persons or things to be seized.

Id.

54. *Terry v. Ohio*, 392 U.S. 1, 19–22 (1968).

55. JEROLD H. ISRAEL, YALE KAMISAR, WAYNE R. LAFAVE, & NANCY J. KING, *CRIMINAL PROCEDURE AND THE CONSTITUTION* 214 (2005 ed.).

56. *See id.* at 214–23.

57. *See id.*

58. *Terry*, 392 U.S. at 21. In justifying the stop, "an officer's reliance on a mere 'hunch' is insufficient." *United States v. Arvizu*, 534 U.S. 266, 274 (2002) (citing *Terry*, 392 U.S. at 27). Nevertheless, "the concept of reasonable suspicion is somewhat abstract." *Id.*

tion of this route is followed immediately by a conference between the two men on the corner; where they are joined in one of these conferences by a third man who leaves swiftly; and where the two men finally follow the third and rejoin him a couple of blocks away.⁵⁹

In subsequent cases, the Court has repeatedly emphasized the importance of the “totality of the circumstances”⁶⁰ and rejected a “divide-and-conquer”⁶¹ analysis. For instance, in *United States v. Sokolow*,⁶² the Court recognized that “[a]ny one of the[] factors [observed by the police] is not by itself proof of any illegal conduct and is quite consistent with innocent [conduct]. But . . . taken together they amount to reasonable suspicion.”⁶³ Even more pointedly, in *United States v. Arvizu*, the Court held:

The [lower] court’s evaluation and rejection of seven of the listed factors in isolation from each other does not take into account the “totality of the circumstances,” as our cases have understood that phrase. The court appeared to believe that each observation by [the law enforcement agent] that was by itself readily susceptible to an innocent explanation was entitled to “no weight.” *Terry*, however, precludes this sort of divide-and-conquer analysis Although each of the series of acts [in *Terry*] was “perhaps innocent in itself,” we held that, taken together, they “warranted further investigation.”⁶⁴

As the Ninth Circuit later summarized, “[w]hile some of the factors . . . may, when viewed in isolation, be innocently explainable, when viewed in their totality, they create reasonable suspicion of criminal activity.”⁶⁵

The second interplay of outward innocence with reasonable suspicion deals with the central question in any reasonable suspicion calculus: whether the totality of the circumstances meets the reasonable suspicion threshold. Even if a sequence of events as a whole is susceptible to a potentially innocent explanation, reasonable suspicion may still result: “A determination that reasonable suspicion exists . . . need not rule out the possibility of innocent conduct.”⁶⁶ The sequence of events does not have to be per se illegal. “The process does not deal with hard certainties, but with probabilities,”⁶⁷ and because investigatory stops are a limited intrusion, reasonable suspicion is a relatively low standard to meet—a law enforcement

59. *Terry*, 392 U.S. at 22–23 (emphasis added).

60. *United States v. Cortez*, 449 U.S. 411, 417–18 (1981) (“[T]he essence . . . is that the totality of the circumstances—the whole picture—must be taken into account. Based upon that whole picture the detaining officers must have a particularized and objective basis for suspecting the particular person stopped of criminal activity.”).

61. *Arvizu*, 534 U.S. at 274.

62. 490 U.S. 1 (1989).

63. *Sokolow*, 490 U.S. at 9 (emphasis added).

64. *Arvizu*, 534 U.S. at 274 (citations omitted).

65. *United States v. Diaz-Juarez*, 299 F.3d 1138, 1141–42 (9th Cir. 2002).

66. *Arvizu*, 534 U.S. at 277.

67. *United States v. Cortez*, 449 U.S. 411, 418 (1981).

official does not have to be certain beyond a reasonable doubt, or even certain enough to meet the standard for probable cause, that criminal activity is occurring.⁶⁸ As the Court recognized in *Sokolow*, “there could, of course, be circumstances in which wholly lawful conduct might justify the suspicion that criminal activity was afoot [T]he relevant inquiry is not whether particular conduct is ‘innocent’ or ‘guilty,’ but the degree of suspicion that attaches to particular types of noncriminal acts.”⁶⁹

In determining whether the totality of the circumstances merits reasonable suspicion, “officers . . . draw on their own experience and specialized training to make inferences from and deductions about the cumulative information available to them that might well elude an untrained person.”⁷⁰ Experience and specialized training are not a blank check, though. As the Eighth Circuit has explained, “[t]he Fourth Amendment . . . requires police to explain *why* the officer’s knowledge of particular criminal practices gives special significance to the apparently innocent facts observed.”⁷¹ If law enforcement officials determine that the totality of the circumstances meets the threshold for reasonable suspicion, then they must be able to explain *why*, and they must be able to advance “specific and articulable facts” supporting such an explanation.⁷²

The facts leading up to the 1995 bombing of the Alfred P. Murrah Federal Building in Oklahoma City, Oklahoma, illustrate the interplay between suspicion—whether reasonable suspicion or probable cause—and outward innocence. The bombers, Timothy McVeigh and Terry Nichols, began by purchasing 4000 pounds of ammonium nitrate, a common agricultural fertilizer, from a cooperative in Kansas.⁷³ Then, they obtained blasting caps and seven cases of Tovex explosives from a local rock quarry.⁷⁴ Finally, they purchased three drums of nitromethane from a race track near Dallas and rented several storage lockers in Kansas in which to store the collected materials.⁷⁵ In isolation, each of these facts—purchasing ammonium nitrate,

68. *Sokolow*, 490 U.S. at 7 (“[T]he level of suspicion required for a *Terry* stop is obviously less demanding than that for probable cause.” (citing *United States v. Montoya de Hernandez*, 473 U.S. 531, 541, 544 (1985))).

69. *Id.* at 9–10 (citations omitted). One problem with the reasonable suspicion standard is that law enforcement officials maintain considerable discretion and sometimes use this discretion to engage in racial profiling or other unsavory behavior. *See, e.g.*, Samuel R. Gross & Katherine Y. Barnes, *Road Work: Racial Profiling and Drug Interdiction on the Highway*, 101 MICH. L. REV. 651 (2002) (examining racial profiling by the Maryland State Police during their drug interdiction efforts). This is always a concern, however, where law enforcement officials have some amount of discretion.

70. *Arvizu*, 534 U.S. at 273 (citation omitted).

71. *United States v. Logan*, 362 F.3d 530, 533 (8th Cir. 2004) (citation omitted).

72. *See Terry v. Ohio*, 392 U.S. 1, 21 (1968).

73. *United States v. McVeigh*, 153 F.3d 1166, 1177 (10th Cir. 1998).

74. *Id.* In actuality, McVeigh and Nichols stole the blasting caps and explosives. Admittedly, stealing these materials from the rock quarry would, by itself, exceed the threshold for reasonable suspicion and even probable cause. Nevertheless, for the purposes of illustrating the interplay between suspicion and outward innocence, this Note omits these facts from the textual discussion.

75. *Id.*

obtaining explosives from a quarry, purchasing nitromethane, and renting several storage lockers—might have an innocent explanation, or at the very least would not lead immediately to the conclusion that McVeigh and Nichols were planning a horrific act of domestic terrorism. Upon considering the totality of the circumstances, however, a complete picture emerges, and the whole becomes many times greater than the sum of its parts.⁷⁶ The ammonium nitrate, the explosives from the quarry, and the nitromethane, each innocently explainable as a separate item, together form the constituent elements of a powerful explosive device. By collecting these materials and storing them together, McVeigh and Nichols betrayed that they were acting in concert to build a bomb. If any trained law enforcement officials had been aware of these efforts, they could have explained exactly why the totality of McVeigh's and Nichols' actions justified a high level of suspicion.

The interplay of suspicion and outward innocence is not confined to such obvious examples as the Oklahoma City bombing.⁷⁷ Most investigatory stops involve situations that are far less obvious and have far less potential for widespread harm than a terrorist bombing.⁷⁸ In these situations, a finding of reasonable suspicion continues to depend upon whether the given fact pattern, *considered in totality*, creates the degree of suspicion that warrants the limited intrusion of an investigatory stop. In Part III, this Note analyzes one such situation: the purchase of cold medicine containing pseudoephedrine by potential methamphetamine manufacturers.

III. A FRAMEWORK FOR ANALYZING REASONABLE SUSPICION OF PSEUDOEPHEDRINE PURCHASES

The vast majority of pseudoephedrine purchases do not—and should not—justify an investigatory stop. State legislatures, retailers, and, recently,

76. See *United States v. Sokolow*, 490 U.S. 1, 9–10 (1989); *United States v. Cortez*, 449 U.S. 411, 418 (1981).

77. Indeed, the facts of the Oklahoma City bombing were so probative of criminal conduct that if law enforcement officials had been aware of them, they would almost certainly have had probable cause to arrest McVeigh and Nichols. This Note deals with reasonable suspicion, a lower level of suspicion justifying a more limited intrusion than an outright arrest. A determination of probable cause, like reasonable suspicion, also requires a review of the totality of the circumstances, see *Illinois v. Gates*, 462 U.S. 213, 230–32 (1983), but probable cause requires a higher level of suspicion because an arrest is a more invasive intrusion.

78. The potential degree of harm affects the reasonable suspicion calculus, as the Seventh Circuit has concisely stated:

To begin with, the amount of permissible intrusion is a function not only of the likelihood of turning up contraband or evidence of crime but also of the gravity of the crime being investigated. In *City of Indianapolis v. Edmond*, the Supreme Court remarked that “the Fourth Amendment would almost certainly permit an appropriately tailored roadblock set up to thwart an imminent terrorist attack.” And in *Florida v. J.L.*, it said that “we do not say, for example, that a report of a person carrying a bomb need bear the indicia of reliability we demand for a report of a person carrying a firearm before the police can constitutionally conduct a frisk.” In other words, if the crime being investigated is grave enough, the police can stop and frisk without as much suspicion as would be required in a less serious criminal case.

United States v. Goodwin, 449 F.3d 766, 769 (7th Cir. 2006) (citations omitted).

the federal government, have established a maximum amount of pseudoephedrine that a consumer can purchase within the law. In doing so, these restrictions imply that the purchase of this amount, without more, is consistent with legitimate consumer activity. Therefore, one person's purchase, by himself or herself, of the maximum amount of pseudoephedrine permitted at one store, should not, by itself, give rise to reasonable suspicion.

Some purchases of pseudoephedrine, however, justify reasonable suspicion. A typical batch of methamphetamine calls for approximately sixty grams of pseudoephedrine—or roughly twenty boxes of cold medicine.⁷⁹ Prior to the enactment of restrictions on the sale of pseudoephedrine, methamphetamine manufacturers were able to purchase or steal the required amount of pseudoephedrine at just one or two stores.⁸⁰ In response to retailer policies, state laws, and federal law,⁸¹ many methamphetamine manufacturers have been forced to adopt creative purchasing strategies to circumvent the new restrictions.⁸²

Methamphetamine manufacturers' pseudoephedrine purchasing strategies arise in an almost infinite number of fact-specific contexts, but the conduct at issue usually falls into one or both of two specific purchasing strategies. In the first purchasing strategy, which this Note has designated the Multiple-Purchasers Strategy, two or more people go to a store, split up, pretend not to know each other, each purchase the maximum permissible amount of pseudoephedrine, and meet up outside the store to combine their purchases. The second purchasing strategy, which this Note has designated the Multiple-Stores Strategy, describes situations in which at least one person purchases the maximum amount of pseudoephedrine permitted at one store, then drives to another store or stores and again purchases the maximum amount of pseudoephedrine. These two strategies are so common that law enforcement officials colloquially describe them as “smurfing.”⁸³

79. See *State v. Truesdell*, 679 N.W.2d 611, 614–15 (Iowa 2004). This assumes that each box contains ninety-six thirty-milligram pills, or approximately three grams of pseudoephedrine per box. Moreover, methamphetamine manufacturers have recently begun making smaller batches. See *supra* note 22 and accompanying text.

80. See *Truesdell*, 679 N.W.2d at 614–15. In *Truesdell*, the defendant stole seventy boxes of pseudoephedrine from one store. *Id.* At that time, Iowa did not restrict pseudoephedrine sales.

81. See *supra* Part I.

82. Part III's analysis only covers the strategies that methamphetamine manufacturers have utilized when purchasing pseudoephedrine from retail stores. Some domestic methamphetamine manufacturers have bypassed retail stores altogether, and in such instances, Part III's reasonable suspicion framework is largely moot. For instance, until eBay prohibited the sale of pseudoephedrine in late September 2005, many methamphetamine manufacturers could purchase pseudoephedrine on eBay. See Boaz Herzog, *EBay prohibits sales of meth ingredients on its web site*, OREGONIAN, Sept. 30, 2005, at A1.

83. One court's definition of “smurfing” is the situation in which “several people separately purchases [sic] precursor chemicals in order to avoid arousing suspicion.” *State v. Lillico*, No. A03-961, 2004 Minn. App. LEXIS 852, at *6 (Ct. App. July 20, 2004). The United States Court of Appeals for the District of Columbia has provided the other common definition of “smurfing”: the practice by which, “[i]n order to obtain large quantities of [pseudoephedrine], criminals shoplift the tablets from retail stores or, individually and in groups, make multiple purchases of the tablets from different stores.” *PDK Labs., Inc. v. U.S. DEA*, 362 F.3d 786, 789 (D.C. Cir. 2004).

Under the Supreme Court's Fourth Amendment jurisprudence,⁸⁴ these purchasing strategies should meet the reasonable suspicion threshold to justify an investigatory stop. Each purchasing strategy consists of constituent facts that appear outwardly innocent when separated and viewed in isolation. These facts vary depending on the purchasing strategy, but they include the following: purchasing cold medicine; purchasing the maximum amount of pseudoephedrine permitted by law; traveling to multiple stores one after the other; shopping with a companion; pretending not to know a companion while in the store; meeting in the parking lot; and combining purchases. By itself, each fact seems innocuous.

Upon considering the totality of the circumstances,⁸⁵ though, a new picture emerges. For either the Multiple-Purchasers Strategy or the Multiple-Stores Strategy, the constituent facts—while outwardly innocent in isolation—combine to form a totality of the circumstances that meets the threshold for reasonable suspicion. Moreover, an experienced law enforcement official could articulate exactly *why*: pseudoephedrine is an essential ingredient for methamphetamine manufacturers; each batch of methamphetamine requires a relatively large quantity of pseudoephedrine; retailers, state legislatures, and the federal government regulate pseudoephedrine sales to prevent methamphetamine manufacturers from stockpiling pseudoephedrine; and, most importantly, methamphetamine manufacturers use these purchasing strategies to circumvent pseudoephedrine restrictions and obtain inordinately large quantities of pseudoephedrine. The Washington Court of Appeals provides an excellent illustration in *State v. Morgan*:

At the suppression hearing, [the detective] explained . . . that when two men, shopping separately, purchase cold medicine, without buying anything else, and then get into the same vehicle, it made [the investigation unit] suspicious. This method of purchasing separately allows them to get more pills than one person could because state law limits a buyer to three packages a day and some stores, like Target, allow only two packages per person per day.

. . . .

When Dugan next went to Walgreens and there Morgan bought more cold medicine, the officers suspected that Dugan and Morgan were on a "pill run," which is a way of obtaining large quantities of pseudoephedrine by stopping at multiple stores to avoid the three package limit.⁸⁶

Unfortunately, some courts have refused to hold that the identification of one of these purchasing strategies provides law enforcement officials with reasonable suspicion for an investigatory stop. Section III.A addresses the more controversial of the two purchasing strategies, the Multiple-Purchasers Strategy. It argues, in the face of conflicting authority, that a properly identi-

84. See *supra* Part II.

85. See *United States v. Cortez*, 449 U.S. 411, 417–18 (1981).

86. *State v. Morgan*, No. 33568-9-II, 2006 Wash. App. LEXIS 1326, at *5–6 (Ct. App. June 27, 2006).

fied Multiple-Purchasers Strategy, by itself, justifies an investigatory stop under the Supreme Court's reasonable suspicion standard. Section III.B then argues that a Multiple-Stores Strategy, by itself, also meets the reasonable suspicion threshold. Finally, Section III.C explains that, most of the time, methamphetamine manufacturers will utilize the two purchasing strategies in conjunction with each other—as a hybrid strategy—or alongside the purchase of other methamphetamine precursors. These factors strengthen the case for reasonable suspicion, but as Sections III.A and III.B argue, a bare-bones Multiple-Purchasers Strategy or Multiple-Stores Strategy is still enough to merit reasonable suspicion.

A. *The Multiple-Purchasers Strategy*

Several courts have correctly recognized that a Multiple-Purchasers Strategy is reasonably suspicious. These cases provide considerable support for the proposition that a properly identified Multiple-Purchasers Strategy meets the reasonable suspicion threshold for an investigatory stop. The leading federal case on reasonable suspicion of pseudoephedrine purchases is the Eighth Circuit's decision in *United States v. Ameling*,⁸⁷ which found reasonable suspicion in the face of a predominant Multiple-Purchasers Strategy. In *Ameling*, the two defendants entered a Target store in Fort Dodge, Iowa.⁸⁸ As Mike Van Pelt, the store's lead security officer, monitored them via video surveillance, the defendants walked together to the pseudoephedrine products, and each of them selected two boxes of pseudoephedrine.⁸⁹ The defendants then walked toward the checkout lanes, split up, and went to different cashiers.⁹⁰ After paying for their pseudoephedrine, they reunited in the parking lot, where they placed their Target bags in a tool box in the back of a truck.⁹¹ Van Pelt next observed the defendants drive across the street to a Hy-Vee store.⁹² Van Pelt knew that "people involved in [methamphetamine] manufacturing often split purchases of pseudoephedrine or other necessary supplies among themselves and different stores to avoid attracting suspicion," so he called the police.⁹³ When the police called the Hy-Vee store, a Hy-Vee employee informed them that the defendants had purchased a lithium battery, which is another methampheta-

87. 328 F.3d 443 (8th Cir. 2003).

88. *Ameling*, 328 F.3d at 445.

89. *Id.*

90. *Id.*

91. *Id.*

92. *Id.* The defendants' conduct is also somewhat consistent with a Multiple-Stores Strategy, but the Multiple-Purchasers Strategy predominates. Section III.C, *infra*, discusses such hybrid strategies.

93. *Id.* Van Pelt had previously "completed a training course given by the Fort Dodge police department where he had been taught that pseudoephedrine was used to manufacture methamphetamine illegally." *Id.*

mine precursor.⁹⁴ Shortly thereafter, the police stopped the defendants.⁹⁵ The Eighth Circuit held that the police had reasonable suspicion to do so, since “the defendants’ actions were consistent with those of methamphetamine manufacturers trying to disguise their illegal operations.”⁹⁶

Similarly, in *United States v. Huegli*,⁹⁷ the Western District of Wisconsin held that a Multiple-Purchasers Strategy was reasonably suspicious. In *Huegli*, a loss prevention officer noticed two men enter a Shopko store.⁹⁸ They appeared to be working in tandem.⁹⁹ The younger man went to the over-the-counter drug section, looked around, and then walked around the perimeter of the store without selecting any merchandise.¹⁰⁰ He returned to the over-the-counter drug section, where he joined the older man.¹⁰¹ Within a few seconds of each other, each man picked out two boxes of pseudoephedrine, and the older man went to the front of the store.¹⁰² The younger man continued to walk the perimeter of the store for ten minutes and eventually checked out, purchasing nasal spray and a can of pop in addition to the pseudoephedrine.¹⁰³ Continuing his surveillance of the two men, the loss prevention officer noticed them get into the same truck, after which they opened their packages of pseudoephedrine and placed the contents in a bag.¹⁰⁴ The loss prevention officer also noticed that the truck was from Iowa, a state with a severe methamphetamine problem.¹⁰⁵ Eventually, the truck left the Shopko parking lot and pulled into the parking lot of an adjacent Cub grocery store.¹⁰⁶ The loss prevention officer notified the police department, and the police stopped the two men.¹⁰⁷ In holding that the police had the reasonable suspicion to justify an investigatory stop, the district court explained that the actions of the men, “as reported to the police by [the loss prevention

94. *Id.*

95. *Id.*

96. *Id.* at 448.

97. No. 05-CR-060-S, 2005 U.S. Dist. LEXIS 14825 (W.D. Wis. July 21, 2005), *aff'd*, No. 05-CR-060-S-01, 2005 U.S. Dist. LEXIS 16082 (W.D. Wis. Aug. 3, 2005).

98. *Huegli*, 2005 U.S. Dist. Lexis 14825, at *1.

99. *Id.* at *1–2.

100. *Id.* at *2.

101. *Id.*

102. *Id.* Two boxes of pseudoephedrine were the maximum that Shopko allowed its customers to purchase. *Id.*

103. *Id.*

104. *Id.* at *2–3. The loss prevention officer also said he believed they ingested some sort of substance while in the truck. *Id.* at *3.

105. *Id.* at *3.

106. *Id.*

107. *Id.* at *3–4.

officer], so closely followed the meth-cooker's shopping [modus operandi] as to verge on probable cause"¹⁰⁸

State courts have also found reasonable suspicion from Multiple-Purchasers Strategies. In *State v. Nebergall*,¹⁰⁹ a clerk at an Iowa convenience store observed a vehicle pull into the empty parking lot and park in a "dark spot" some distance away from the lighted front entrance to the store.¹¹⁰ After approximately five minutes, two men emerged from the vehicle.¹¹¹ The two men split up upon entering the store and pretended not to know each other.¹¹² One immediately walked to the register and bought cigarettes and two bottles of pseudoephedrine.¹¹³ The other, after walking to the back of the store, returned to the front of the store and bought two bottles of pseudoephedrine after the first man had completed his purchase.¹¹⁴ The two men returned to the vehicle and moved it to a different dark area of the parking lot, after which a female exited the vehicle, entered the store, and purchased two bottles of pseudoephedrine.¹¹⁵ The Iowa Court of Appeals held that the police had reasonable suspicion to stop the car:

Although the mere purchase of two bottles of pseudoephedrine by multiple, associated persons may arguably be a seemingly innocent activity, when combined with other facts and circumstances surrounding the multiple purchases involved here we find the detaining officer had reasonable grounds to suspect wrongdoing and was justified in conducting an investigatory stop to resolve any ambiguity as to whether criminal activity was afoot.¹¹⁶

Three decisions from Minnesota have also recognized that a Multiple-Purchasers Strategy is reasonably suspicious. In *State v. Vereb*,¹¹⁷ a Wal-Mart employee notified the police that two men had made several trips into the store to purchase a large quantity of pseudoephedrine.¹¹⁸ The police stopped the two men, and the Minnesota Court of Appeals subsequently held that the

108. *Id.* at *16–17. The court then described the modus operandi in detail: "two men from Iowa come to Wisconsin, drive to a generic big-box store on the edge of town, enter separately, mosey aimlessly, purchase the store's limit on pseudoephedrine, dump the pills into a communal bag in their truck, ingest some sort of substance, and then drive to the adjacent grocery store, most likely to buy more cold tablets." *Id.* at *17.

109. No. 3-864/03-0472, 2003 Iowa App. LEXIS 1122 (Ct. App. Dec. 24, 2003).

110. *Nebergall*, 2003 Iowa App. LEXIS 1122, at *2. The clerk testified that he was watching the car closely because no one emerged from the car for approximately five minutes and he feared he might be robbed. *Id.*

111. *Id.*

112. *Id.*

113. *Id.*

114. *Id.* at *2–3.

115. *Id.* at *3.

116. *Id.* at *13–15.

117. 643 N.W.2d 342 (Minn. Ct. App. 2002).

118. *Vereb*, 643 N.W.2d at 345.

police had reasonable suspicion to do so.¹¹⁹ In *State v. Lillico*,¹²⁰ two citizen informants observed three people in a Kmart collectively purchase eight packages of pseudoephedrine and some Coleman lantern fuel.¹²¹ While in Kmart, the three of them appeared to ignore each other, but they reunited in the parking lot and exchanged money.¹²² Citing *Vereb*, the Minnesota Court of Appeals held that the police had reasonable suspicion to stop them.¹²³ Finally, in *Forbrook v. State*,¹²⁴ a loss prevention officer at a Target store informed the police that two men “had entered the store together, but thereafter split up; each had purchased two boxes of pseudoephedrine, a known precursor material in methamphetamine manufacture; and they were joined in the parking lot by a third man, who had also purchased pseudoephedrine.”¹²⁵ The Minnesota Court of Appeals held that this conduct provided the police with reasonable suspicion to justify an investigatory stop.¹²⁶

At least two courts faced with a Multiple-Purchasers Strategy, however, have declined to find reasonable suspicion. First, in *State v. Bulington*,¹²⁷ the Indiana Supreme Court held that, under the Indiana Constitution’s analogue to the Fourth Amendment,¹²⁸ a textbook two-person Multiple-Purchasers Strategy did not provide the reasonable suspicion that would justify an investigatory stop.¹²⁹ The two defendants in *Bulington* entered a Meijer together. Each selected three boxes of pseudoephedrine, proceeded to separate checkout counters, walked out of the store separately, reunited at the same truck, and emptied the contents of their purchases into the same bags.¹³⁰ In refusing to hold that the police had reasonable suspicion, the

119. *See id.* at 347. The court also observed that when the police officer attempted to follow the vehicle, it began traveling at excessive speeds. *Id.* While this does not appear to have been central to the court’s holding, traveling at excessive speeds is justification for a stop regardless of whether other facts merit reasonable suspicion. *See Whren v. United States*, 517 U.S. 806, 813 (1996).

120. A03-961, 2004 Minn. App. LEXIS 852 (Ct. App. July 20, 2004).

121. *Lillico*, 2004 Minn. App. LEXIS 852, at *3.

122. *Id.* In addition, they were all traveling in a car with no license plates, “a common tactic in methamphetamine cases.” *Id.*

123. *Id.* at *4–5.

124. A05-678, 2006 Minn. App. Unpub. LEXIS 424 (Ct. App. May 2, 2006).

125. *Forbrook*, 2006 Minn. App. Unpub. LEXIS 424, at *2.

126. *Id.* at *4. The court also noted the “nervous” behavior of the defendant, but that occurred only after the initial stop. *Id.* at *3.

127. 802 N.E.2d 435 (Ind. 2004) (3–2 decision).

128. IND. CONST. art. I, § 11. The court noted that “[a]lthough art. I, § 11, of the Indiana Constitution appears to have been derived from the Fourth Amendment and shares the same language, we interpret and apply art. I, § 11, independently from Fourth Amendment jurisprudence.” *Bulington*, 802 N.E.2d at 438. The court did not address the claim under the Fourth Amendment, but its analysis of the investigatory stop at issue is still relevant for the purposes of this Note.

129. *Bulington*, 802 N.E.2d at 436, 441–42. The dissent emphatically disagreed, arguing that “the police had a *moral certainty*, not just reasonable suspicion, that they had some unregulated pharmaceutical manufacturers on their hands.” *Id.* at 442 (Boehm, J., dissenting) (emphasis added).

130. *Id.* at 436.

court concluded that courts in other jurisdictions have found reasonable suspicion only

when the customer (1) purchases a combination of methamphetamine precursors from one store; (2) purchases a combination of precursors from several stores; (3) purchases . . . one precursor and then commits a traffic violation warranting a traffic stop; and (4) purchases one precursor and the arresting officer has knowledge of defendant's previous involvement with methamphetamine.¹³¹

Second, in *State v. Schneider*, a Kansas Court of Appeals similarly refused to find reasonable suspicion in a Multiple-Purchasers Strategy.¹³² In *Schneider*, two men were talking in the cold-pill aisle as they each picked out two packages of cold tablets containing pseudoephedrine.¹³³ "One of the males waited outside in a truck after he purchased two packages of cold tablets, while the second male walked around the store and purchased some toys, football cards, and shampoo in addition to the two packages of cold tablets."¹³⁴ Eventually, the second man got into the truck with the first man, and they left the parking lot.¹³⁵ Referring to the prosecution's reasonable suspicion argument as "'a little scary,'" the court held that the police did not have reasonable suspicion to detain the defendants.¹³⁶

The driving force behind the *Bulington* and *Schneider* courts' misplaced resistance to finding reasonable suspicion in a Multiple-Purchasers Strategy appears to be the "he was only buying cold medicine" defense. Such a defense has a visceral appeal for the vast majority of people who have themselves purchased cold medicine and believe—correctly—that their own innocuous purchases should not justify an investigatory stop. This is readily apparent in the *Bulington* court's oversimplified argument that "[t]he opportunities for official arbitrariness, discretion, and discrimination are simply too great if we were to find that the purchase by two companions of three packages each of cold medicine justifies a search or seizure."¹³⁷ The *Schneider* court's language is even starker and even more of an oversimplification: "[T]his court has never held that the mere purchase and possession of two packages of cold pills containing pseudoephedrine is sufficient evidence to infer criminal intent. We agree with the district court in finding the State's position 'a little scary.'"¹³⁸

The *Bulington* and *Schneider* courts' reactions may stem from fears of exposing perfectly legal purchases to frighteningly invasive costs. Unfortu-

131. *Id.* at 441 (footnotes omitted). A traffic violation would automatically warrant a stop, however, with or without pseudoephedrine purchases. *See supra* note 119.

132. 80 P.3d 1184 (Kan. Ct. App. 2003).

133. *Schneider*, 80 P.3d at 1186.

134. *Id.*

135. *Id.*

136. *Id.* at 1189.

137. *State v. Bulington*, 802 N.E.2d 435, 440 (Ind. 2004) (footnote omitted).

138. *Schneider*, 80 P.3d at 1189.

nately, decisions like the Mississippi Supreme Court's in *Burchfield v. State*¹³⁹ give some credence to that concern. In *Burchfield*, the court found that "two white males in a Cadillac with Arkansas license plates had each purchased a quantity of pills containing pseudoephedrine[,] . . . which justified an investigatory stop."¹⁴⁰ The Mississippi Supreme Court's explanation is dubious. The court neither provided additional information about the context of the purchase nor adequately explained why the totality of the circumstances justified reasonable suspicion.¹⁴¹ The court's cursory description would encompass far too many innocent people to justify reasonable suspicion, including many people who are not trying to circumvent pseudoephedrine restrictions.

The overwhelming majority of pseudoephedrine purchases will not—and should not—justify an investigatory stop. What distinguishes a properly identified Multiple-Purchasers Strategy, including the factual scenarios in *Bulington* and *Schneider*, is that the totality of the circumstances indicates a heightened probability of criminal activity. The purchasers in these situations have coordinated their actions to circumvent the pseudoephedrine restrictions that were specifically implemented to prevent such purchasers from obtaining the inordinately large quantities of pseudoephedrine necessary to manufacture methamphetamine. Such deliberate circumvention decreases the probability that the purchases are innocuous and increases the probability that the purchasers will use the pseudoephedrine to manufacture methamphetamine.

Even the Indiana Court of Appeals has implicitly recognized the problems that the Indiana Supreme Court created in *Bulington*. In *Barrett v. State*,¹⁴² a Meijer loss prevention officer informed police that two people working in tandem had purchased several boxes of pseudoephedrine¹⁴³—essentially the very same facts that were present in *Bulington*. Nevertheless, the Court of Appeals held that the police *did* have reasonable suspicion to stop the individuals' car, based upon one additional fact: the car's "passenger-side tires were on the fog line for thirty to fifty yards."¹⁴⁴ As the dissent accurately noted, this is a dubious distinction from *Bulington*¹⁴⁵—and definitely not an intellectually honest one. Such is the life of a state court of appeals, however, when the state's highest court has decided that such recurring suspicious conduct is not really suspicious at all.

Admittedly, people other than methamphetamine manufacturers may occasionally engage in conduct that resembles a Multiple-Purchasers Strategy. For example, what if a large family gets a cold simultaneously and needs to

139. 892 So. 2d 191, 195 (Miss. 2004).

140. *Burchfield*, 892 So. 2d at 195.

141. *See id.*

142. 837 N.E.2d 1022 (Ind. Ct. App. 2005).

143. *Barrett*, 837 N.E.2d at 1024.

144. *Id.* at 1025.

145. *Id.* at 1031 (Mathias, J., dissenting).

purchase a larger amount of pseudoephedrine than permitted by law at one store?¹⁴⁶ In such a situation, the family, whose intentions are entirely innocent, might engage in a Multiple-Purchasers Strategy to obtain the requisite amount of pseudoephedrine.¹⁴⁷ The ultimate question in a reasonable suspicion analysis, however, is the *probability* that such conduct is innocent and the degree of suspicion that attaches to the conduct.¹⁴⁸ If the purchases of pseudoephedrine appear designed to circumvent the restrictions and obtain inordinately large amounts of pseudoephedrine, then the degree of suspicion increases and justifies the limited intrusion of an investigatory stop, even if some likelihood of innocent activity exists. This is the point at which the limited level of the intrusion becomes particularly salient, since an investigatory stop should quickly verify that the hypothetical family purchased the pseudoephedrine for innocuous reasons, without subjecting the family to the indignity that would accompany an arrest.

The manner of detecting suspicious purchases also serves as a buffer against stopping innocent purchasers. Retail stores provide law enforcement with most of the information regarding suspicious purchasers.¹⁴⁹ Since restrictions on pseudoephedrine purchases already hurt pseudoephedrine sales and limit the choices available to consumers, retailers will be reluctant to exacerbate the problem and further detract from their business. Any embarrassing detention of an innocent purchaser might create a backlash against the store that reported the purchaser to law enforcement, and retailers will almost certainly hesitate to report pseudoephedrine purchases if the retailers believe that the conduct is innocent. A detained customer is an unhappy customer.

B. *The Multiple-Stores Strategy*

Courts have been more willing to hold that a Multiple-Stores Strategy¹⁵⁰ merits reasonable suspicion than to hold that a Multiple-Purchasers Strategy

146. Inevitably, many methamphetamine manufacturers also claim something along these lines when stopped by law enforcement officials. *See* Forbrook v. State, No. A05-678, 2006 Minn. App. Unpub. LEXIS 424, at *3 (Ct. App. May 2, 2006) (“When asked about his purchase of pseudoephedrine, appellant stated that the pills were intended for his mother, who was sick.”).

147. They might also engage in a Multiple-Stores Strategy. *See infra* Section III.B.

148. *See* United States v. Sokolow, 490 U.S. 1, 9–10 (1989).

149. *See, e.g.*, United States v. Ameling, 328 F.3d 443, 445 (8th Cir. 2003); *see also* Donahoe, *supra* note 43 (describing how pharmacists work with law enforcement officials and keep an eye on customers purchasing pseudoephedrine). Critics may respond that this implicates privacy concerns regarding consumer purchases of pseudoephedrine. Granted, some privacy has given way in the face of the need to restrict and track certain types of pseudoephedrine purchases. Nonetheless, many state laws, and the new federal law, attempt to mitigate the intrusion into consumer privacy by prohibiting anyone other than law enforcement from obtaining logs of purchases from retail stores. *See supra* text accompanying notes 42, 50.

150. As explained *supra*, a Multiple-Stores Strategy occurs when at least one person purchases the maximum amount of pseudoephedrine permitted at one store, then drives to another store or stores and again purchases the maximum amount of pseudoephedrine.

does.¹⁵¹ The Eastern District of Missouri faced a textbook example of the Multiple-Stores Strategy in *United States v. Thurston*.¹⁵² In *Thurston*, a police detective observed the defendant purchase two boxes of pseudoephedrine at Target.¹⁵³ Recognizing the defendant from a previous arrest, the detective followed him to Walgreens, where the detective saw him purchase two more boxes of pseudoephedrine.¹⁵⁴ The court held that the police had reasonable suspicion to stop the defendant, even though the four boxes did not contain enough pseudoephedrine to constitute “prima facie evidence of intent” to manufacture methamphetamine under Missouri law.¹⁵⁵

Similarly, the Iowa Supreme Court’s decision in *State v. Heuser*¹⁵⁶ exemplifies how a Multiple-Stores Strategy meets the threshold for reasonable suspicion in practice. In *Heuser*, a Target store employee noticed a man and a woman purchase numerous packages of pseudoephedrine and leave the parking lot together in a van.¹⁵⁷ The employee notified the police, who located the van at Wal-Mart and observed the woman exit the store with additional purchases.¹⁵⁸ Then, the couple drove to Walgreens, where the man purchased several boxes of pseudoephedrine and asked about lithium batteries.¹⁵⁹ The court held that the police had reasonable suspicion to stop the couple because their “conduct was consistent with people engaged in the manufacture of methamphetamine who generally try to avoid suspicion by gathering cold medication and batteries from a number of stores.”¹⁶⁰

The Mississippi Supreme Court has also held that a Multiple-Stores Strategy is reasonably suspicious. In *Williamson v. State*,¹⁶¹ an anonymous tip informed police that two white males purchased “large quantities” of pseudoephedrine from a Campbell’s Big Star after previously attempting to

151. The Kansas Court of Appeals has even hinted that the Multiple-Stores Strategy might be more suspicious than the Multiple-Purchasers Strategy, with only the former justifying an investigatory stop. See *State v. Poage*, 129 P.3d 641, 645 (Kan. Ct. App. 2006) (distinguishing *Schneider* because in *Schneider* “there were no attempts at multiple purchases, at more than a single store”).

152. No. S1-4:02 CR 494 CDP DDN, 2003 U.S. Dist. LEXIS 14954 (E.D. Mo. May 14, 2003).

153. *Thurston*, 2003 U.S. Dist. LEXIS 14954, at *3.

154. *Id.*

155. *Id.* at *8–10.

156. 661 N.W.2d 157 (Iowa 2003). A Multiple-Purchasers Strategy and other factors are also present here, but the court’s description focuses mostly on the Multiple-Stores Strategy.

157. *Heuser*, 661 N.W.2d at 160.

158. *Id.* The police did not observe what these purchases were. *Id.*

159. *Id.* Lithium batteries are another methamphetamine precursor. See *supra* note 14.

160. *Heuser*, 661 N.W.2d at 162. The court, however, was careful to note that “[t]his is not a case where a person possessed only a large amount of cold medicine or only a number of lithium batteries.” *Id.* Instead, the defendant had “an unusually large number of pills,” and the police “had reasonable cause to suspect [he] also possessed lithium batteries.” *Id.* “These facts, coupled with [his] suspicious conduct of driving store to store gathering medication and switching-off with his companion to buy the pills formed a solid basis [for reasonable suspicion].” *Id.* The court did not explicitly address whether, in its view, the conduct would have resulted in reasonable suspicion without the presence of lithium batteries.

161. 876 So. 2d 353 (Miss. 2004).

purchase pseudoephedrine from a Family Dollar Store.¹⁶² The men left the Campbell's Big Star in a white van and proceeded to Fred's Dollar Store, where police stopped them.¹⁶³ Although the court's opinion dealt primarily with the reliability of the anonymous tip, the Mississippi Supreme Court held that the defendants' Multiple-Stores Strategy provided the police with reasonable suspicion to stop the van.¹⁶⁴

These courts have correctly recognized that a properly identified Multiple-Stores Strategy merits a finding of reasonable suspicion justifying an investigatory stop. Like the Multiple-Purchasers Strategy described in Section III.A, methamphetamine manufacturers use the Multiple-Stores Strategy to circumvent pseudoephedrine restrictions and obtain the large quantities of pseudoephedrine required to manufacture methamphetamine. Thus, to the extent that many of the criticisms levied at the Multiple-Purchasers Strategy analysis in Section III.A could also be levied at this Section's Multiple-Stores Strategy analysis, the responses to those criticisms are very similar.¹⁶⁵ For example, the "he was only buying cold medicine" defense is as equally futile in the Multiple-Stores Strategy context as in the Multiple-Purchasers Strategy context. The totality of the conduct remains the overarching determinant of reasonable suspicion.¹⁶⁶

C. Hybrid Scenarios and Additional Precursors

In Sections III.A and III.B, this Note treated the two purchasing strategies independently and contended that each pseudoephedrine purchasing strategy alone merits a finding of reasonable suspicion. Admittedly, though, some of the court decisions detailed above involved hybrids of the two strategies¹⁶⁷ or contained aggravating circumstances, such as the purchase of additional methamphetamine precursors,¹⁶⁸ a suspicious vehicle,¹⁶⁹ prior ex-

162. *Williamson*, 876 So. 2d at 354.

163. *Id.*

164. *Id.* at 355–56.

165. *See supra* text accompanying notes 137–149.

166. *See supra* Part II and Section III.A.

167. *See, e.g., United States v. Ameling*, 328 F.3d 443, 448 (8th Cir. 2003) (noting that the defendants traveled to two stores to spread out the purchase of methamphetamine precursors); *United States v. Huegli*, No. 05-CR-060-S, 2005 U.S. Dist. LEXIS 14825, at *17 (W.D. Wis. July 21, 2005) (describing how the defendants went to the parking lot of an adjacent grocery store, "most likely to buy more cold tablets"); *State v. Heuser*, 661 N.W.2d 157, 160 (Iowa 2003) (noting that both defendants went into the first store and purchased numerous packages of pseudoephedrine before traveling to additional stores); *see also supra* notes 92, 156.

168. *See, e.g., Ameling*, 328 F.3d at 448 (describing the purchase of a lithium battery at the second store); *Heuser*, 661 N.W.2d at 162 (emphasizing that the defendant possessed both pseudoephedrine and lithium batteries); *State v. Lillico*, No. A03-961, 2004 Minn. App. LEXIS 852, at *3 (Ct. App. July 20, 2004) (noting that the defendants also purchased Coleman lantern fuel, a methamphetamine precursor).

169. *See, e.g., Huegli*, 2005 U.S. Dist. LEXIS 14825, at *3, *17 (noting that the defendants' vehicle had an Iowa license plate and that it was common for Iowa methamphetamine manufacturers to come to Wisconsin to purchase precursors); *State v. Nebergall*, No. 3-864/03-0472, 2003 Iowa

perience with the suspect,¹⁷⁰ or other evasive conduct.¹⁷¹ Other court decisions have also dealt with hybrids of the two strategies.¹⁷²

A hybrid strategy increases the degree of suspicion, since it allows purchasers to obtain pseudoephedrine even more quickly and in even greater quantities than either of the two strategies does individually.¹⁷³ For instance, in a hypothetical hybrid of the Multiple-Purchasers Strategy and the Multiple-Stores Strategy, two people would go to a store, split up, pretend not to know each other, each purchase the maximum permissible amount of pseudoephedrine, and meet outside the store, after which they would travel to an additional store or stores and repeat this behavior. This hybrid strategy would allow them to maximize their purchases of pseudoephedrine. Consequently, the case for reasonable suspicion is even stronger for such a hybrid strategy than for each strategy individually,¹⁷⁴ although this Note maintains that each of the purchasing strategies also meets the threshold for reasonable suspicion individually and justifies an investigatory stop.

Likewise, the purchase of pseudoephedrine alongside additional methamphetamine precursors—such as lithium batteries, drain cleaner, or coffee filters—strengthens the case for reasonable suspicion.¹⁷⁵ A combination of methamphetamine precursors increases the degree of suspicion by increasing the probability that the purchaser will use them to manufacture methamphetamine and decreasing the probability that their

App. LEXIS 1122, at *14 (Ct. App. Dec. 24, 2003) (describing the vehicle's out-of-county license plate); *Lillico*, 2004 Minn. App. LEXIS 852, at *3 (noting that the car had no license plate); *Burchfield v. State*, 892 So. 2d 191, 193 (Miss. 2004) (explaining that the car had an Arkansas license plate).

170. See, e.g., *United States v. Thurston*, No. S1-4:02 CR 494 CDP DDN, 2003 U.S. Dist. LEXIS 14954, at *3-4 (E.D. Mo. May 14, 2003) (noting that the detective recognized the suspect from a previous arrest).

171. See, e.g., *Nebergall*, 2003 Iowa App. LEXIS 1122, at *14 (describing how the vehicle parked in a dark area in the parking lot and no one exited the vehicle for five minutes); *State v. Vereb*, 643 N.W.2d 342, 347 (Minn. Ct. App. 2002) (noting that the vehicle traveled at "excessive speeds" when the officer attempted to follow it).

172. See, e.g., *State v. Morgan*, No. 33568-9-II, 2006 Wash. App. LEXIS 1326, at *1-2 (Ct. App. June 27, 2006).

173. See *State v. Hugo*, No. 5-962 / 05-0519, 2006 Iowa App. LEXIS 253, at *1-2 (Ct. App. Mar. 29, 2006) ("On several occasions, one of [the defendants] would enter a store and buy a quantity of the pills after the other had made a similar purchase and had exited. On some occasions the couple would travel to a different pharmacy on the same day and repeat the process." (footnote omitted)).

174. Some courts have even come close to holding that such a hybrid strategy provides probable cause for an arrest. See, e.g., *People v. Yaklich*, No. C049001, 2006 Cal. Unpub. LEXIS 8427, at *8-13 (Ct. App. Sept. 21, 2006) (holding that a hybrid strategy combined with the purchase of hydrogen peroxide provided probable cause for an arrest); *Morgan*, 2006 Wash. App. LEXIS 1326, at *13-14 (holding that a hybrid strategy, combined with the purchase of two additional precursors, provided probable cause for an arrest).

175. See, e.g., *United States v. Nanos*, No. 06-1797, 2006 U.S. App. LEXIS 30984, at *3 (8th Cir. Dec. 13, 2006) (finding reasonable suspicion from the simultaneous purchase of pseudoephedrine, hydrogen peroxide, and coffee filters, combined with other suspicious behavior); cf. *United States v. Barnhart*, No. 04-40168-01/02/03-RDR, 2005 U.S. Dist. LEXIS 33056, at *6-7 (D. Kan. Dec. 12, 2005) (finding reasonable suspicion from a Multiple-Purchasers Strategy combined with a purchase of air tubing and an association with a pseudoephedrine shoplifter).

purchase is innocuous. In many cases, the purchaser obtains these other precursors alongside pseudoephedrine via a Multiple-Purchasers Strategy or a Multiple-Stores Strategy.¹⁷⁶ Although this Note will not address the additional precursor wrinkle in further detail, among the factors that could influence the reasonable suspicion calculus in such scenarios are how many precursors are purchased, whether the combination of precursors is commonly purchased together for legitimate use, and how many innocuous items are purchased alongside the precursors.¹⁷⁷ In each case, these factors affect the totality of the circumstances and the probability that the purchase is susceptible to an innocent explanation.

CONCLUSION

The Supreme Court's totality-of-the-circumstances approach to reasonable suspicion, as well as the weight of authority considering the issue, support this Note's conclusion that certain types of pseudoephedrine purchases justify an investigatory stop. Even if "buying cold medicine" itself sounds innocuous, methamphetamine manufacturers have developed purchasing strategies to transform this outwardly innocent activity into a means of obtaining inordinately large quantities of pseudoephedrine. Law enforcement officials therefore have recourse, under the Fourth Amendment, for investigating these suspicious purchasing strategies and combating the methamphetamine epidemic.

176. See, e.g., *United States v. Ameling*, 328 F.3d 443, 448 (8th Cir. 2003); *State v. Heuser*, 661 N.W.2d 157, 162 (Iowa 2003); *State v. Lillico*, No. A03-961, 2004 Minn. App. LEXIS 852, at *3 (Ct. App. July 20, 2004).

177. The last factor should also influence the reasonable suspicion calculus where pseudoephedrine is the only precursor purchased. More innocuous items decrease the amount of accompanying suspicion. Although methamphetamine manufacturers could try to conceal their activities by purchasing precursors alongside many innocuous items, they are almost certainly limited by the cost of this deceptive technique. Every innocuous item purchased alongside the precursors raises the cost of production for the batch of methamphetamine. Perhaps manufacturers could mitigate that problem by purchasing precursors alongside innocuous items that the manufacturers would otherwise need for legitimate uses. Given the large amount of pseudoephedrine (and the array of other precursors) needed for a batch of methamphetamine, however, this deceptive technique is still limited by its cost.