HIDDEN CARGO: A CAUTIONARY TALE ABOUT AGROTERRORISM AND THE SAFETY OF IMPORTED PRODUCE

I. INTRODUCTION

The attacks on the World Trade Center and the Pentagon on September 11, 2001 ("9/11") demonstrated to the United States ("U.S.") Government the U.S. is vulnerable to a wide range of potential terrorist attacks.[1] The anthrax attacks that occurred immediately following the 9/11 attacks further demonstrated the vulnerability of the U.S. to biological attacks.[2] The U.S. Government was forced to accept its citizens were vulnerable to attacks within its own borders and the concern of almost every branch of government turned its focus toward reducing this vulnerability.[3] Of the potential attacks that could occur, we should be the most concerned with biological attacks on our food supply. These attacks are relatively easy to initiate and can cause serious political and economic devastation within the victim nation.[4]

Generally, acts of deliberate contamination of food with biological agents in a terrorist act are defined as "bioterrorism."[5] The World Health Organization ("WHO") uses the term "food terrorism" which it defines as "an act or threat of deliberate contamination of food for human con-

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[1] Rona Hirschberg, John La Montagne & Anthony Fauci, *Biomedical Research – An Integral Component of National Security*, NEW ENGLAND JOURNAL OF MEDICINE (May 20, 2004), at 2119, *available at* http://content.nejm.org/cgi/reprint/350/21/2119.pdf (discussing the vulnerability of the U.S. to biological, chemical, nuclear, and radiological terrorist attacks).

[2] *Id.*; Anthony Fauci, *Biodefence on the Research Agenda*, NATURE, Feb. 20, 2003, at 787; Mark Wheelis, Rocco Casagrande & Laurence Madden, *Biological Attack on Agriculture: Low-Tech, High Impact Bioterrorism*, 52 BIO SCIENCE 569, 569, *available at* http://docserver.ingentaconnect.com/deliver/connect/aibs/00063568/v52n7/s7.pdf.

[3] Wheelis, Casagrande & Madden, *supra* note 2, at 573.

[4] COMMITTEE ON BIOLOGICAL THREATS TO AGRICULTURAL PLANTS AND ANIMALS ET AL., COUNTERING AGRICULTURAL BIOTERRORISM 20, 22 (The National Academies Press 2003) [hereinafter *COMMITTEE ON BIOLOGICAL THREATS*]; Wheelis, Casagrande & Madden, *supra* note 2, at 569.

[5] BARBARA RASCO & GLEYN BLEDSOE, BIOTERRORISM AND FOOD SAFETY 2 (CRC Press 2005).

sumption with chemical, biological or radionuclear agents for the purpose of causing injury or death to civilian populations and/or disrupting social, economic or political stability."[6] The potential damage and the fact such contamination can cause extensive economic harm means these attacks are different in their scope when compared to both what is considered bioterrorism and food terrorism. The more appropriate term, which will be used throughout this Comment, is "agroterrorism." This term more effectively conveys the actual intent of a terrorist in perpetrating an attack towards this country's food. The difference between bioterrorism and agroterrorism is the intent of the terrorist carrying out the attack. The intention behind an act of agroterrorism is to disrupt a complex, but fragile system designed to supply food across the globe and to instill a country's citizens with a lack of confidence in the government's ability to protect them and their food supply.[7]

This Comment will examine the U.S.'s vulnerability to acts of agroterrorism in the supply chain, concentrating on the importation of produce from other countries. This Comment will also examine if the U.S. has made any effective progress in the development of laws to protect against acts of agroterrorism. Discussion will include an exploration of case studies and an in-depth review of the development of the law designed to protect against such threats and the implementation of the law by the Food and Drug Administration ("FDA"). Then follows an examination of the legal history of the U.S. law designed to deter agroterrorism and the recent developments in the law since the occurrence of the 9/11 attacks. This discussion will include an analysis of the U.S. Government's involvement in the development of law, and an evaluation of the U.S.'s recent policies designed to combat and prevent acts of agroterrorism and their effectiveness. This Comment will also examine the options and proposed solutions that could be implemented to more effectively combat agroterrorism. The evidence used in these discussions will be based on an examination of historical records and significant writings by the experts in this field. Finally, by weighing the evidence and concerns presented, a conclusion of the food safety measures requiring implementation for the protection of the U.S. agricultural industry will be discussed.

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[6] World Health Organization Food Safety Department, *Food Safety Issues: Terrorist Threats to Food Guidance for Establishing and Strengthening Prevention and Response Systems*, at 4 (2002), http://www.who.int/foodsafety/publications/general/en/terrorist.pdf.

[7] Advisory Panel to Assess Domestic Response Capabilities for Terrorism Involving Weapons of Mass Destruction, *First Annual Report to the President and Congress: Assessing the Threat*, at 12-14 (Dec. 15, 1999), http://www.rand.org/nsrd/terrpanel/terror.pdf.

II. THE POTENTIAL OF AN AGROTERRORISM ATTACK

In September of 2002, a panel of terrorism experts concluded the nation's food supply had serious safety issues.[8] Jennifer Kuzma of the National Research Council reported that even if the U.S. inspectors were able to inspect the majority of the food products crossing the U.S. border from other countries, there is no guarantee that they would discover a biological agent capable of tainting agricultural products being smuggled into the U.S.[9] The Central Intelligence Agency reports interest in biological and chemical materials among terrorists is growing.[10] The Federal Bureau of Investigation ("FBI") believes domestic terrorists are more likely to use biological agents than chemical agents.[11] Before he was appointed director of the Office of Public Health Preparedness, Dr. Donald Henderson wrote the U.S. is not nearly as prepared to deal with biological agents as it is prepared to deal with other attacks carried out through the use of nuclear or chemical agents.[12] The prior focus of public health agencies was on the use of weapons of mass destruction.[13] Their focus only recently turned to the deliberate use of a biological agent to sabotage the food supply.[14]

Experts believe the U.S. is highly vulnerable to terrorist attacks on its food supply[15] and the impact of such an attack could devastate the U.S. and its economy.[16] Following the attacks of 9/11, Tommy Thompson, the former secretary of Health and Human Services, expressed his concern before Congress about the potential for the nation's food supply to

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[8] William La Jeunesse, *Nation's Food Supply Needs Protection*, FOX NEWS, Sep. 24, 2002, http://www.foxnews.com/story/0,2933,63977,00.html.

[9] *Id.*

[10] U.S. GEN. ACCOUNTING OFFICE, COMBATING TERRORISM: NEED FOR COMPREHENSIVE THREAT AND RISK ASSESSMENTS OF CHEMICAL AND BIOLOGICAL ATTACKS 17-18 (Sep. 7, 1999), *available at* http://www.gao.gov/archive/1999/ns99163.pdf.

[11] *Id.* at 18.

[12] MARION NESTLE, SAFE FOOD: BACTERIAL, BIOTECHNOLOGY, AND BIOTERRORISM 265 (University of California Press 2004) (2003).

[13] RASCO & BLEDSOE, *supra* note 5, at 2.

[14] *Id.* at 3.

[15] Sheryl Stolberg & Judith Miller, *Threats and Responses: Bioterrorism; Many Worry that Nation is Still Highly Vulnerable to Germ Attack*, THE NEW YORK TIMES, Sep. 9, 2002, at A16, *available at* http://www.lexis.com; *COMMITTEE ON BIOLOGICAL THREATS*, *supra* note 4, at 95.

[16] Jason George, *Fear grows of attack on food supply; Officials seek ways to safeguard agriculture*, CHICAGO TRIBUNE, Sep. 30, 2006, at C3, *available at* http://www.lexis.com (discussing FBI Deputy Director John Pistole's comments that the threat of agroterrorism is real and its "impact could be devastating"); *COMMITTEE ON BIOLOGICAL THREATS*, *supra* note 4, at 3.

become a target of a terrorist attack, and said he was not satisfied with the inspections being performed to protect it.[17] After the discovery of documentation regarding the U.S. agriculture industry in Afghanistan following the attacks of 9/11, it is clear terrorist groups, such as al Qaeda, have considered planning an attack on our nation's food supply.[18] The concern about these threats stems from the current organization of our food supply system, which exposes our food supply to contamination by terrorists.[19] Through the use of unsophisticated resources, a terrorist could initiate an outbreak of food contamination that could bring about severe consequences.[20] The WHO accurately points out that because of globalization, any contamination of the world's shared systems of food production and distribution could become a widespread crisis and affect a large number of people across the globe.[21]

The word "terrorism" is often associated with personal injuries, disfigurements, and the loss of human life caused by terrorist acts like those of the murder-suicide bombers in Iraq and the murderous acts of the 9/11 hijackers. When discussing the effects of agroterrorism, the social and economic threats are more prevalent.[22] The terrorists who would initiate an attack through the deliberate contamination of food hope that the widespread effect of their attack is a loss of confidence in the safety of the U.S.'s agriculture.[23] If a terrorist attack was carried out on the U.S. food supply, consumer confidence in the U.S.'s food safety programs would plummet, similar to the decrease in consumer confidence in airport security seen after the 9/11 attacks.[24] An attack anywhere in the

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[17] Julian Barnes & Keith Bradsher, *A Nation Challenged: Agriculture Inspections; Concerns that U.S. Food Supply is Vulnerable to Terrorist Attack*, THE NEW YORK TIMES, Oct. 24, 2001, at B9, *available at* http://www.lexis.com.

[18] RASCO & BLEDSOE, *supra* note 5, at 133; George, *supra* note 16.

[19] RASCO & BLEDSOE, *supra* note 5, at 133; Caroline Smith DeWaal, *Rising Imports, Bioterrorism, and the Food Supply*, 59 FOOD DRUG L.J. 433, 434, *available at* http://www.lexis.com.

[20] RAND National Defense Research Institute, *Agroterrorism: What Is the Threat and What Can Be Done About It?* 1-2 (2003), http://www.rand.org/pubs/research_briefs/RB7565/RB7565.pdf.

[21] World Health Organization, *supra* note 6, at 16.

[22] *COMMITTEE ON BIOLOGICAL THREATS*, *supra* note 4, at 20, 22; RAND, *supra* note 20, at 1.

[23] *COMMITTEE ON BIOLOGICAL THREATS*, *supra* note 4, at 22; George, *supra* note 16.

[24] *A System Rued: Inspecting Food Before the House Committee on Government Reform Subcommittee on Civil Service and Agency Organization*, at 10 (Mar. 30, 2004) (statement of Caroline Smith DeWaal, Director of Food Safety Center for Science in the Public Interest), http://reform.house.gov/UploadedFiles/Dewall_cspi.pdf [hereinafter *DeWaal Statement*].

world[25] could obstruct the normal operation of the food supply chain causing economic harm all around the world[26] and the implementation of new embargoes.[27] The allegation that an attack has occurred would cause consumers to lose confidence in the safety of their food supply.[28] Without a sense of confidence, no matter how unfounded the allegation of contamination, consumers would not buy these fruits or vegetables and this would have an impact on our national economy.[29]

The recent *E. coli* outbreak caused by the consumption of contaminated spinach provides an example of how quickly contaminated produce can negatively affect our economy.[30] The contaminated spinach originated from a California based company and caused at least one hundred and ninety-nine people in twenty-six states and one person in Canada to become sick.[31] The FDA also confirmed three people have died from consuming the contaminated spinach, including two elderly women in Wisconsin and Nebraska and a two-year-old child in Idaho.[32] The company voluntarily recalled its spinach after the initial government investigations confirmed that its spinach was contaminated.[33] This recall will not only hurt the company that produced the contaminated spinach, but the entire $325 million-a-year spinach industry.[34] It is estimated that this outbreak caused a $50 million loss to the industry in less than a month and will continue to cause extensive financial losses until the public's confidence in the safety of spinach returns.[35]

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[25] DeWaal, *supra* note 19, at 434.

[26] Advisory Panel to Assess Domestic Response Capabilities for Terrorism Involving Weapons of Mass Destruction; *supra* note 7, at 14.

[27] Wheelis, Casagrande & Madden, *supra* note 2, at 570.

[28] *COMMITTEE ON BIOLOGICAL THREATS*, *supra* note 4, at 20, 22.

[29] RASCO & BLEDSOE, *supra* note 5, at 4.

[30] George, *supra* note 16.

[31] FDA, FDA NEWS: FDA STATEMENT ON FOODBORNE E. COLI 0157:H7 OUTBREAK IN SPINACH (Oct. 6, 2006), *available at* http://www.fda.gov/bbs/topics/NEWS/2006/NEW01486.html (last visited Oct. 12, 2006) (the states affected by the outbreak are Arizona, California, Colorado, Connecticut, Idaho, Illinois, Indiana, Kentucky, Maine, Maryland, Michigan, Minnesota, Nebraska, Nevada, New Mexico, New York, Ohio, Oregon, Pennsylvania, Tennessee, Utah, Virginia, Washington, West Virginia, Wisconsin, and Wyoming).

[32] *Id.*

[33] Julia Preston & Monica Davey, *Possible Source of Bad Spinach is Named as Outbreak Widens*, THE NEW YORK TIMES, Sep. 16, 2006, at A1, *available at* http://www.lexis.com; Libby Sander, *Company Acts to Stem E. Coli Risk*, THE NEW YORK TIMES, Sep. 28, 2006, at A21, *available at* http://www.lexis.com.

[34] Matthew Philips, *They're Seeing Red Over Greens*, NEWSWEEK, Oct. 2, 2006, at 43, *available at* http://www.lexis.com.

[35] *Id.*

Our agriculture and food system is highly vulnerable to attack because of its complexity.[36] There have been a few instances which clearly demonstrate the harm that can be caused by the deliberate contamination of our food system. The first occurred in 1984 when a cult group intentionally used *Salmonella* bacteria to contaminate salad bars in various restaurants in Oregon.[37] This simple act of deliberate contamination resulted in seven hundred and fifty people becoming ill.[38] Another occurred in January 2003, when ninety-two people became ill after they purchased and ate ground beef from a supermarket in Michigan where an employee had intentionally contaminated the meat with nicotine.[39]

In addition to the recent spinach outbreak, there are currently no known examples of intentional contamination of our food supply at the grower or producer stage of the supply chain. However, the naturally occurring and accidental outbreaks of livestock diseases that have occurred to date illustrate the widespread personal and economic damage an attack at this stage could theoretically cause. The outbreak of foot-and-mouth disease in livestock in the United Kingdom ("U.K.") resulted in an estimated financial loss of $10 billion in the country's tourism and agriculture industries and at least four million animals had to be destroyed.[40] It is estimated a similar attack in the U.S. could result in losses of at least $24 billion and approximately thirteen million animals having to be destroyed.[41] In the U.S., an outbreak of *Salmonella enteritis* in 1994 caused simply by eating a national brand of ice cream made two hundred and twenty-four thousand people ill.[42] In 2002, the outbreak of *E. coli O157:H7* resulting from ground beef produced by a plant in Colorado caused at least forty-six people in sixteen states to become ill.[43] Another outbreak in 2002, involving frozen "ready-to-eat turkey and chicken products" manufactured in Pennsylvania, caused forty-six illnesses in eight states, as well as seven deaths and three stillbirths or miscarriages from *Listeria monocytogenes* contamination.[44]

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[36] George W. Bush, *Homeland Security Presidential Directive/HSPD-9* (Jan. 30, 2004), *available at* http://www.whitehouse.gov/news/releases/2004/02/print/20040203-2.html [hereinafter *Bush: HSPD-9*].

[37] U.S. GEN. ACCOUNTING OFFICE, BIOTERRORISM: A THREAT TO AGRICULTURE AND THE FOOD SUPPLY 4 (Nov. 19, 2003), *available at* http://www.gao.gov/new.items/d04259t.pdf [hereinafter *GAO: BIOTERRORISM*].

[38] *Id.*

[39] *Id.*

[40] *Id.*

[41] *Id.*

[42] *Id.* at 5.

[43] *Id.*

[44] *Id.*

The above examples illustrate how quick and widespread an outbreak can become once a foreign pathogen is introduced into our food supply. There is an even greater potential a devastating outbreak will occur from contaminated produce than from livestock disease outbreaks.[45] If meat is cooked properly, most disease causing pathogens would be killed.[46] Unfortunately, the majority of produce consumed in the U.S. is eaten raw and consumers fail to adequately wash the produce as recommended by the FDA before consuming it.[47] Therefore, the disease causing pathogens are not killed before the produce is consumed. Caroline Smith DeWaal, director of food safety for the nonprofit Center for Science in the Public Interest, acknowledged produce is not safer than other food products.[48] DeWaal also pointed out the FDA's research has shown produce grown in the U.S. is less likely to be contaminated than produce imported from other countries.[49] This fact is disturbing and opens the door for a serious terrorist attack as the U.S. begins to import more and more seasonal fruits and vegetables to provide the American consumer with the produce he desires year-round.[50]

In 2000, the U.S. imported approximately $49 billion in fresh and processed foods from other countries, which included approximately $8 billion worth of fruit and vegetable products.[51] The majority of these imports came from countries with less strict regulations and lower standards of sanitation and security.[52] What is even more disconcerting is it has become impossible for the inspectors at the borders to inspect all of the items being imported because of the high number of imports coming into the U.S.[53] Typically only two percent of the food imported annually

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[45] Marian Burros, *Produce is Growing Source of Food Illness*, THE NEW YORK TIMES, Sep. 16, 2006, at A13, *available at* http://www.lexis.com (the Centers for Disease Control and Prevention reported that the number of outbreaks in 2004 caused by contaminated produce surpassed the number of outbreaks caused by beef, poultry or fish).

[46] NESTLE, *supra* note 12, at 117; FDA, FOOD SAFETY NEWS FLASH FROM THE FDA: FOOD TAMPERING; AN EXTRA OUNCE OF CAUTION, http://www.cfsan.fda.gov/~acrobat/stamper.pdf (last visited Sep. 16, 2006) [hereinafter *FDA: NEWS FLASH*].

[47] *See FDA: NEWS FLASH*, *supra* note 46 (reporting that twenty percent of consumers do not wash their hands and kitchen surfaces before preparing food); FDA, SAFE HANDLING OF RAW PRODUCE AND FRESH-SQUEEZED FRUIT AND VEGETABLE JUICES 6, http://www.cfsan.fda.gov/~acrobat/prodsafe.pdf (last visited Sep. 16, 2006).

[48] Sandra Boodman, *Raw Menace: Major Hepatitis A Outbreak Tied to Green Onions*, THE WASHINGTON POST, Nov. 25, 2003, at F01, *available at* http://www.lexis.com.

[49] *Id.*

[50] *Id.*; NESTLE, *supra* note 12, at 114.

[51] NESTLE, *supra* note 12, at 114.

[52] *Id.*

[53] *GAO: BIOTERRORISM*, *supra* note 37, at 3.

to the U.S. is inspected.[54] In early 2004, at a hearing of the House Appropriation Committee's Subcommittee on Agriculture, Lester Crawford, Acting Commissioner for the FDA, pronounced that the FDA was "overwhelmed" by the increased amount of imports coming into the U.S.[55] Furthermore, FDA inspectors charged with performing these inspections previously admitted to the U.S. General Accounting Office ("GAO") they had not even been trained on food security issues and procedures.[56]

Finally, the extensive harm that could be caused by the importation of contaminated produce is illustrated by an outbreak of *Hepatitis A* in 2003 in Pittsburgh that was traced back to scallions grown in Mexico and imported to the U.S.[57] As a result of this outbreak, which constituted the nation's largest outbreak of *Hepatitis A*, six hundred and five people became ill and three people died.[58] This occurrence confirms the safety concerns of importing produce; the U.S. system designed to protect consumers from unsafe food is ineffective.

III. THE DEVELOPMENT OF CURRENT SYSTEM OF FOOD SAFETY

The U.S. Government began to take some responsibility for food safety in the late nineteenth century when it passed the first food safety laws in response to public demands.[59] In 1890, after European countries refused to buy U.S. exports of beef because they were concerned about safety, Congress passed the Meat Inspection Act, which permitted the inspection of some meat products prior to export.[60] Congress did not pass any further food safety laws until 1906, after Upton Sinclair's publication of *The Jungle*.[61] This book exposed the unsanitary nature of the American meat packing industry where dead rats were shoveled into sausage-grinding machines, human remains of workers who fell into vats were packaged and shipped out to the public and bribed inspectors ig-

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[54] Caroline Smith DeWaal, Kristina Barlow & Giselle Hicks, *Outbreak Alert! Closing the Gaps in Our Federal Food-Safety Net*, at 2 (Center for Science in the Public Interest 7th ed. 2005), http://www.cspinet.org/foodsafety/OutbreakAlert2005.pdf.

[55] *Dewaal Statement*, *supra* note 24, at 2.

[56] U.S. GEN. ACCOUNTING OFFICE, FOOD-PROCESSING SECURITY: VOLUNTARY EFFORTS ARE UNDER WAY, BUT FEDERAL AGENCIES CANNOT FULLY ASSESS THEIR IMPLEMENTATION 4 (Feb. 2003), *available at* http://www.gao.gov/new.items/d03342.pdf [hereinafter *GAO: FOOD-PROCESSING SECURITY*]

[57] Boodman, *supra* note 48.

[58] *Id.*

[59] NESTLE, *supra* note 12, at 50.

[60] *Id.*

[61] *Id.* at 50-51.

nored the slaughtering of diseased cows for beef.[62] Sickened by reading Sinclair's allegations, President Theodore Roosevelt called upon Congress to investigate the industry.[63] Congress's investigators quickly confirmed the worst of what Sinclair wrote about, and in 1906, Congress passed the Pure Food and Drug Act and the Meat Inspection Act.[64]

Congress assigned oversight of this new legislation to the United States Department of Agriculture ("USDA") which internally divided the supervision responsibility of the Meat Inspection Act to its Bureau of Animal Industry and the Pure Food and Drug Act to its Bureau of Chemistry.[65] Under the Meat Inspection Act, the Bureau of Animal Industry was required to inspect every animal before and after slaughter and to destroy animals that were "filthy, decomposed, or putrid."[66] On the other hand, the Pure Food and Drug Act required the Bureau of Chemistry to collect samples of the food products to determine if they have been tampered with or mislabeled.[67] Over time, as the Pure Food and Drug Act was amended, it led to the creation of the FDA, which was eventually transferred out of the USDA and into the Department of Health and Human Services.[68] This division of responsibilities through the establishment of separate agencies under the control of different departments created the system of agency division that exists today, which is responsible for some of the current concern expressed towards our food safety system.[69]

The GAO described the current system of food safety as a "patchwork structure" that has been a continuing hindrance in the U.S. Government's attempts to develop effective means of addressing the concerns of agroterrorism.[70] In 2001, Robert Robinson, an official of the GAO, provided Congress with the following explanation:

> The federal regulatory system for food safety did not emerge from a comprehensive design but rather evolved piecemeal, typically in response to particular health threats or economic crises. Addressing one new worry after an-

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[62] UPTON SINCLAIR, THE JUNGLE 141, 105, 41 (Barnes & Noble Books 2003) (1906); *See also* NESTLE, *supra* note 12, at 51-52.

[63] Maura Spiegel, *Introduction* to UPTON SINCLAIR, THE JUNGLE, at xiii, xvii (Barnes & Noble Books 2003) (1906).

[64] NESTLE, *supra* note 12, at 52.

[65] *Id.*

[66] *Id.*

[67] *Id.* at 53.

[68] *Id.* at 54.

[69] *Id.* at 52.

[70] U.S. GEN. ACCOUNTING OFFICE, FOOD SAFETY AND SECURITY: FUNDAMENTAL CHANGES NEEDED TO ENSURE SAFE FOOD 1 (Oct. 10, 2001), *available at* http://www.gao.gov/new.items/d0247t.pdf [hereinafter *GAO: FOOD SAFETY*].

> other, legislators amended old laws and enacted new ones. The resulting organizational and legal patchwork has given responsibility for specific food commodities to different agencies and provided them with significantly different regulatory authorities and responsibilities.[71]

Within our current system of food safety, there are twelve different agencies charged with administering approximately thirty-five laws.[72] The majority of the nation's food safety responsibilities are vested with two agencies: the Food Safety and Inspection Service in the USDA is responsible for meat, poultry, and processed eggs, and the FDA is responsible for most other foods, including fruits and vegetables.[73]

The Federal Food, Drug, and Cosmetic Act ("FFDCA") granted the FDA the authority to monitor the safety of most non-meat food products not regulated by the USDA.[74] The FDA is currently responsible for the safety of seventy-five percent of the domestic and imported foods consumed in the U.S.[75] The FDA's responsibilities include the inspection of fruits and vegetables imported into the U.S., which constitute forty percent of the country's total supply of fruits and vegetables.[76] However, the FDA has not been given the tools or resources required to carry out its assigned responsibilities successfully.

While the courts have continually reasserted the fact that Congress's purpose for enacting the FFDCA and creating the FDA was to protect public health and the safety of the consuming public,[77] the FDA has not been entirely successful because of limited resources and the fragmented development of the U.S. system of food safety.[78] While the USDA has the authority to sample and reject imported meat and poultry products that do not meet U.S. safety standards, until very recently the FDA did not have the authority to reject any imported foods that did not meet the

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[71] *Id.* at 3.

[72] *Id.* at 2.

[73] *Id.* (the focus of this comment is directed to the protection of the imported fruits and vegetables; therefore, this discussion will focus on the role and responsibility of the FDA).

[74] *See* 21 U.S.C. §§ 301 et seq. (MB 2006); *See also GAO: FOOD SAFETY*, *supra* note 70, at 2.

[75] NESTLE, *supra* note 12, at 265.

[76] *Id.* at 59.

[77] McDermott v. Wisconsin, 228 U.S. 115, 130 (1913); United States v. Lexington Mill & Elevator Co., 232 U.S. 399, 409 (1914); United States v. Dotterweich, 320 U.S. 277, 280 (1943); United States v. 55 Cases Popped Corn, 62 F.Supp. 843, 844 (Idaho 1943); Barnes v. United States, 142 F.2d 648, 651 (Cal. 1944); C. C. Co. v. United States, 147 F.2d 820, 824 (Ga. 1944); United States v. Two Bags, Poppy Seeds 147 F.2d 123, 127 (Ohio 1945); United States v. Crown Rubber Sundries Co., 67 F.Supp. 92, 93 (Ohio 1946); United States v. Kordel, 164 F.2d 913 (Ill. 1947), *aff'd*, 335 U.S. 345, 349 (1948).

[78] DeWaal, *supra* note 19, at 433.

established safety standards.[79] Neither the FDA nor the USDA have the authority to order recalls of contaminated foods and must ask companies to recall contaminated foods voluntarily.[80] The FDA is overwhelmed and is only able to inspect two percent of the food imported to the U.S. under its jurisdictions.[81] While foods under the authority of the FDA have been linked to two-thirds of food contamination outbreaks, the FDA only receives thirty-eight percent of the federal government's total food safety budget.[82] It is because of the FDA's limited resources that it is only able to station inspectors at ninety of the nation's three hundred and sixty ports of entry.[83] Furthermore, the number of people the FDA employs in its field offices has decreased from two thousand two hundred and seventeen in 2003 to only one thousand nine hundred sixty-two in 2006.[84] The FDA's inability to implement its responsibilities either because of limited funding or statutory authority does not inspire consumer confidence in the safety of our food and the federal government should intervene.

IV. RECENT DEVELOPMENTS IN THE FOOD SAFETY LAWS

In October 1997, a committee organized by President Bill Clinton to examine potential food safety problems within the U.S. agricultural industry advised him of problems with the safety of the nation's produce.[85] The President announced a new plan designed to assure the citizens of the U.S. that the fruits and vegetables they consumed were safe, no matter whether they were grown in the U.S. or other countries.[86] Under the President's direction, the USDA and the FDA issued guidelines on safe agricultural practices in a document entitled "Guidance for Industry:

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[79] Jim Monke, *CRS Report for Congress: Agroterrorism: Threats and Preparedness*, at 10 (Aug. 13, 2004), http://www.fas.org/irp/crs/RL32521.pdf; NESTLE, *supra* note 12, at 114.

[80] DeWaal, Barlow & Hicks, *supra* note 54, at 2.

[81] *Id.* (on April 1, 2004, before the Subcommittee on Agriculture, Rural Development, and Related Agencies of the House Committee on Appropriations, Lester Crawford, the acting commissioner of the FDA testified that the FDA is only able to inspect two percent of the estimated six million shipments of imported foods that come into the U.S. each year because of funding restrictions); DeWaal, *supra* note 19, at 436.

[82] DeWaal, Barlow & Hicks, *supra* note 54, at 2.

[83] DeWaal, *supra* note 19, at 436.

[84] Ricardo Alonso-Zaldivar, *Questions & Answers / The FDA; Food, Drugs and a Beleaguered Agency*, LOS ANGELES TIMES, Oct. 1, 2006, at A17, *available at* http://www.lexis.com.

[85] FDA, USDA & CDC, GUIDANCE FOR INDUSTRY: GUIDE TO MINIMIZE MICROBIAL FOOD SAFETY HAZARDS FOR FRESH FRUITS AND VEGETABLES 3 (Oct. 26, 1998), *available at* http://www.foodsafety.gov/~dms/prodguid.html.

[86] *Id.*

Guide to Minimize Microbial Food Safety Hazards for Fresh Fruits and Vegetables."[87] This was only a voluntary guidance document that was never intended to be implemented as a regulation or mandate of the industry's practices.[88] This guidance document was the FDA's attempt to provide guidance to other countries that produced food for the American consumer, to help ensure the safety of their produce.[89] With the continuing questions of the U.S. government's ability to guarantee the safety of produce, this document assisted in addressing consumers' concerns about potential domestic and foreign food safety outbreaks.[90] Interestingly, the basic principles and general recommendations made by this guidance document make no reference whatsoever to intentional contamination of the nation's supply of fruits and vegetables.[91]

The current system in the U.S. was designed to defend against unintentional contamination of our food supply and is not adequate to prevent acts of intentional contamination.[92] The government's previous legislative attempts to detour terrorism were through the implementation of anti-terrorism laws designed to punish the terrorists who carried out such an attack with civil and criminal penalties.[93] The Biological Weapons Antiterrorism Act of 1989 prohibits individuals from developing or possessing any biological agent for use as a weapon that can cause death or disease in a human, an animal or a plant.[94] The punishment for violation of this statute can be up to life in prison.[95] On the other hand, agroterrorism was not recognized by Congress when it enacted the Defense Against Weapons of Mass Destruction Act of 1996, which failed to address the economic consequences of agroterrorism within its definition of weapons of mass destruction.[96] California also introduced its own legislation to penalize intentional contamination of crops; however, this statute is more concerned with recouping the costs of damaged crops and

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[87] *Id.*

[88] *Id.* at 3-4.

[89] *Id.*

[90] *Id.* at 5-6.

[91] *Id.* at 7-8.

[92] COMMITTEE ON BIOLOGICAL THREATS, *supra* note 4, at 3, 5.

[93] RASCO & BLEDSOE, *supra* note 5, at 22-23.

[94] *See* 18 U.S.C. §§ 175 et seq. (MB 2006); Wheelis, Casagrande & Madden, *supra* note 2, at 573.

[95] 18 U.S.C. § 175 (a) (MB 2006).

[96] *See* 50 U.S.C. § 2302 (MB 2006); Rocco Casagrande, *Biological Warfare Targeted at Livestock*, 52 BIOSCIENCE 577, 580 (2002), *available at* http://docserver.ingenta-connect.com/deliver/connect/aibs/00063568/v52n7/s8.pdf.

does not directly address the issue of agroterrorism.[97] In 2001 to 2002, twenty-three other states passed legislation to protect crops from vandalism by increasing penalties for such acts.[98] From 2003 to 2004, no state introduced any crop protection legislation,[99] until 2005 when two bills were introduced to help protect against the destruction of crops.[100] While states have begun to introduce limited legislation attempting to detour crop destruction and contamination, the federal government has the responsibility to develop laws designed to prevent agroterrorism.[101] President Bush has recognized these threats to our food supply are serious,[102] and in 2004, he issued Homeland Security Presidential Directive 9 ("HSPD 9") which established a national policy to defend the nation's agriculture and food system against terrorist attack.[103]

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[97] Cal. Food & Agric. § 52100 (MB 2006) (provides that any person who willfully and knowingly damages or destroys any field crop product is liable for the actual damages involving research, testing and crop development costs directly related to the crop that has been damaged or destroyed); *See also* RASCO & BLEDSOE, *supra* note 5, at 23.

[98] Pew Initiative on Food and Biotechnology, *2001-2002 Legislative Activity Related to Agricultural Biotechnology* (June 2003), *available at* http://pewagbiotech.org/resources/factsheets/legislation/factsheet2002.php (the following states passed legislation related to crop destruction in 2001-2002: Arkansas, Arizona, Colorado, Florida, Georgia, Hawaii, Iowa, Idaho, Kansas, Louisiana, Michigan, Missouri, Mississippi, Montana, North Carolina, North Dakota, Oregon, South Carolina, South Dakota, Utah, Virginia, Washington, and West Virginia).

[99] Pew Initiative on Food and Biotechnology, *Agricultural Biotechnology Remains Active Topic in State Legislatures in 2003* (May 2004), *available at* http://pewagbiotech.org/resources/factsheets/legislation/factsheet2003.php; Pew Initiative on Food and Biotechnology, *State Legislative and Local Activities related to Agricultural Biotechnology Continue to Grow in 2003-2004* (May 2005), *available at* http://pewagbiotech.org/resources/factsheets/legislation/factsheet2004.php.

[100] Pew Initiative on Food and Biotechnology, *State Legislative Activity Related to Agricultural Biotechnology in 2005* (June 2006), *available at* http://pewagbiotech.org/resources/factsheets/legislation/factsheet.php (the states that introduced this legislation were Hawaii and Massachusetts, which were both carried over to 2006).

[101] Victoria Sutton, *Bioterrorism Preparation and Response Legislation – The Struggle to Protect States' Sovereignty While Preserving National Security*, 6 THE GEORGETOWN PUBLIC POLICY REVIEW 93, at 14-15 (2001), http://www.ttu.edu/biodefense/gppr.pdf (after a review of the law related to the states' sovereignty and the role of the federal government to preserve the security of the nation, Victoria Sutton concluded that the federal government and not state governments have the responsibility to implement legislation to provide a national defense against agroterrorism).

[102] George W. Bush, *Biodefense Fact Sheet: President Bush Signs Biodefense for the 21st Century* (April 28, 2004), *available at* http://www.whitehouse.gov/news/release/2004/04/20040428-6.html.

[103] Bush: *HSPD-9*, *supra* note 36 (setting forth the following policy goals: 1. Identifying and prioritizing sector-critical infrastructure and key resources for establishing protection requirements; 2. Developing awareness and early-warning capability to recognize threats; 3. Mitigation vulnerabilities at critical production and processing nodes; 4. Enhancing

The federal law prior to HSPD 9 was designed to deter terrorism through the threat of punishment by making it a crime to influence the policy of the government by intimidation or coercion through acts that are dangerous to human life.[104] It is a federal crime to knowingly provide "material support" to terrorists[105] or to knowingly harbor or conceal terrorists.[106] It is also a federal crime to tamper, attempt to tamper or even threaten to tamper with the contents container or labeling of a consumer product, the definition of which includes food, in a manner that could cause death or bodily injury.[107] These laws were more concerned with the punishment of the terrorist after the attack occurred than with the prevention of a terrorist attack or thwarting an attack once it has been set into motion. This is especially true in an agroterrorism attack where the terrorist is able to implement an attack through an act of contamination that can occur either within or outside the U.S.[108]

In recommendations made in the *9/11 Commission Report* to prevent future terrorist attacks, agroterrorism attacks and the deterrence and prevention of such attacks were not mentioned.[109] However, Congress was aware of the need to enhance the security of the U.S. and passed the Public Health Security and Bioterrorism Preparedness and Response Act of 2002 (the "Bioterrorism Act"), which President Bush signed into law on June 12, 2002.[110] The Bioterrorism Act instructed the FDA to implement new rules and safeguards regarding the registration of food processors, notice of imports, detention procedures for imports, and increase record keeping.[111] To provide the FDA time to evaluate individual shipments and determine if an inspection is required, importers are now required to give the FDA advance notice prior to importing any food.[112] The FDA and the Department of Homeland Security Bureau of Customs and Border Protection integrated their information systems to facilitate coopera-

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screening procedures for domestic and imported products; and 5. Enhancing response and recovery procedures).

[104] 18 U.S.C. § 2331 (5) (MB 2006).

[105] 18 U.S.C. § 2339A (MB 2006).

[106] 18 U.S.C. § 2339 (MB 2006).

[107] 18 U.S.C. § 1365 (MB 2006); *See also* RASCO & BLEDSOE, *supra* note 5, at 23.

[108] *COMMITTEE ON BIOLOGICAL THREATS*, *supra* note 4, at 95.

[109] *See* NATIONAL COMMISSION OF TERRORIST ATTACKS UPON THE UNITED STATES, THE 9/11 COMMISSION REPORT (W.W. Norton & Company 2004).

[110] Public Health Security and Bioterrorism Preparedness and Response Act of 2002, Pub. L. No. 107-188, *available at* http://www.fda.gov/oc/bioterrorism/bioact.html (last visited Oct. 8, 2006).

[111] Monke, *supra* note 79, at 9.

[112] *Id.* at 10.

tion between the two agencies.[113] The Bureau of Customs and Border Protection has also agreed to have its officers inspect imported foods, on the FDA's behalf, at ports of entry where the FDA does not have any inspectors.[114] Under the Bioterrorism Act, the FDA also obtained the authority to detain food imports if the shipment presents a serious health threat.[115]

While these new rules were designed to prevent an agroterrorism attack from occurring, in reality, they do little to prevent any attack.[116] The FDA claims that these rules will discourage a terrorist from attacking by creating a paper trail that can be used as evidence against him in a criminal trial.[117] This position is not very convincing when you consider the fact that these same terrorists have found individuals willing to act as murder-suicide bombers and give up their own lives to accomplish an attack.[118] Due to objections received from the food industry, the statutorily imposed notice requirement designed to permit inspections of food prior to being imported into the U.S., has been reduced by the FDA from twelve to thirty-six hours down to two to eight hours thereby severely reducing its effectiveness.[119] In an attempt to expand its authority, the requirements of the Bioterrorism Act have been implemented by the FDA in all aspects of the food system whether or not the situation involves an act of terrorism or intentional contamination.[120] The FDA has successfully exploited both the public and Congress's concerns over a potential terrorist attack and has expanded its authority over the nation's food supply and its distribution system.[121]

On November 25, 2003, President Bush signed the Homeland Security Act into law, which consolidated the nation's more than twenty-five security agencies.[122] The stated mission of the new Department of Homeland Security ("DHS") was to "prevent terrorist attacks within the United States, reduce America's vulnerability to terrorism, and to minimize the damage and recover from attacks that do occur."[123] However, the agen-

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[113] *Id.*
[114] *Id.*
[115] *Id.*
[116] RASCO & BLEDSOE, *supra* note 5, at 86.
[117] *Id.*
[118] *Id.*
[119] DeWaal, *supra* note 19, at 438.
[120] RASCO & BLEDSOE, *supra* note 5, at 87.
[121] *Id.* at 85-86.
[122] JEANNE GUILLEMIN, BIOLOGICAL WEAPONS: FROM THE INVENTION OF STATE-SPONSORED PROGRAMS TO CONTEMPORARY BIOTERRORISM 178 (Columbia University Press 2005).
[123] *Id.* at 179.

cies charged with protecting our food supply from terrorist attacks were not placed under the supervision of the DHS.[124] While the DHS has modernized capabilities and a current understanding of terrorists and their techniques, the FDA is forced to rely solely on outdated statutes and untrained inspectors with limited funding to deal with the problem of agroterrorism.[125]

V. RECOMMENDATION FOR CONSOLIDATION

Similar to how the federal government approached the issue of national security by consolidating the nation's security agencies following the attacks of 9/11, the nation's food security system needs to be modernized and consolidated. To promote food safety, the federal government should unify the separate and mostly uncoordinated agroterrorism prevention and response programs that are currently implemented by many different federal, state and local agencies.[126] Consolidation would help conserve resources and more effectively implement the security measures designed to protect the nation's food supply.[127] Unfortunately, there is currently no publicly available, interagency national plan designed to defend our country's agriculture from intentional contamination by biological agents.[128]

The recommendation to create a single food safety agency is not a new idea and it has been recommended by many different governmental agencies and departments for years.[129] In 1988, the Food Marketing Institute proposed that "the government's role can be accomplished if authority and responsibility for food safety are assigned to a single federal government agency . . . . It is vital that those agencies that currently have food safety responsibility be given sufficient resources to do the job properly and to ensure public confidence."[130] The GAO has also made this recommendation to Congress on many different occasions. In 1993, the GAO told Congress that creating a single food safety agency would be the most effective way for the government to deal with the emerging

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[124] DeWaal, *supra* note 19, at 436 (referencing that twelve agencies still enforce thirty-five separate food safety laws).

[125] *GAO: FOOD-PROCESSING SECURITY*, *supra* note 56, at 4; DeWaal, *supra* note 19, at 439; DeWaal, Barlow & Hicks, *supra* note 54, at 2.

[126] RAND, *supra* note 20, at 2.

[127] Richard Durbin, *Food Safety Oversight for the 21st Century: The Creation of a Single, Independent Federal Food Safety Agency*, 59 FOOD DRUG L.J. 383, 384 (2004).

[128] *COMMITTEE ON BIOLOGICAL THREATS*, *supra* note 4, at 96.

[129] NESTLE, *supra* note 12, at 130.

[130] *Id.* at 130-131.

food safety issues and to ensure the safety of the nation's food supply.[131] Then again in 1999, the GAO reported the following to Congress:

> During the past 25 years, we . . . have issued reports detailing problems with the federal food safety system and made numerous recommendations for change. While many of these recommendations have been acted upon, improvement efforts have fallen short, largely because the separate agencies continue to operate under the different regulatory approaches implicit in their basic authorities. Consequently, it is unlikely that fundamental, lasting improvements in food safety will occur until systematic legislative and structural changes are made to the entire food safety system.[132]

Once again in 2001, the GAO advised Congress a single food agency that could administer a uniform set of laws is needed to resolve the problems with current systems and the emerging food safety issues.[133]

In 2004, Representative Rosa DeLauro, co-chair of the Congressional Food Safety Caucus, introduced legislation in the House of Representatives to consolidate our food safety agencies into a single agency called the Food Safety Administration ("FSA").[134] Senator Richard Durbin has also introduced similar bills for Senate approval.[135] The FSA would have the responsibility of enforcing the food safety laws, inspecting food to ensure its safety and establishing the relevant food safety standards.[136] The new agency would integrate the food safety inspection and regulation aspects of the USDA and the FDA and other food safety programs currently handled by other federal departments.[137] An Administrator appointed by the President and confirmed by the Congress would be placed in charge of the FSA.[138] In addition to the creation of a single food safety agency, the food safety legislation currently in effect must be replaced by a modernized and consistent food safety-statute.[139] The new laws would be implemented by the FSA with a clear definition of the

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[131] U.S. GEN. ACCOUNTING OFFICE, FOOD SAFETY: A UNIFIED, RISK-BASED SYSTEM NEEDED TO ENHANCE FOOD SAFETY 1 (Nov. 4, 1993), *available at* http://archive.gao.gov/t2pbat5/150274.pdf.

[132] U.S. GEN. ACCOUNTING OFFICE, FOOD SAFETY: U.S. NEEDS A SINGLE AGENCY TO ADMINISTER A UNIFIED RISK-BASED INSPECTION SYSTEM 2 (Aug. 4, 1999), *available at* http://www.gao.gov/archive/1999/rc99256t.pdf.

[133] *GAO: FOOD SAFETY*, *supra* note 70, at 1.

[134] DeWaal, Barlow & Hicks, *supra* note 54, at 14.

[135] *Id.*; Cindy Skrzycki, *No Stomach for Tougher Food Oversight*, THE WASHINGTON POST, Oct. 3, 2006, at D01, *available at* http://www.lexis.com.

[136] DeWaal, Barlow & Hicks, *supra* note 54, at 14.

[137] *Id.*

[138] *Id.*

[139] *Id.* (replacing the Federal Food, Drug and Cosmetic Act, the Federal Meat Inspection Act, the Poultry Products Inspection Act, and the Egg Products Inspection Act with a new statute).

role and responsibilities of the new unified agency.[140] The FSA must also be granted enhanced authority to inspect imported foods through increased inspections at our country's ports of entry and the ability to initiate mandatory recalls of contaminated food.[141]

Numerous other countries have already created a unified food safety system that covers the entire food supply and now exist in the U.K., Netherlands, Germany, and New Zealand.[142] The European Union has even established the European Food Safety Authority, an independent agency designed to monitor food safety throughout the European Union nations through a unified network of laws.[143] In five years, the consolidated agency in the U.K. has successfully increased public confidence in food safety and has reduced the number of food safety outbreaks.[144] In the U.S., on the other hand, Congress has failed to follow the recommendations to create a single food safety agency and modernize the nation's food safety system.[145] The current governmental agencies have only attempted to protect their own funding and resources and have not worked to consolidate our outdated national food safety system.[146] It is time for the federal government to take "politics out of food safety,"[147] consolidate our food safety system, and stop simply reacting to crises after they occur when it is too late to prevent them.[148]

VI. CONCLUSION

The *E. coli* outbreak caused by contaminated spinach that recently occurred in the U.S. provides a clear demonstration of the impact an outbreak can have on our economy and our confidence in the safety of our food.[149] The recent spinach outbreak was not intentional, but had it been caused by terrorists able to undermine the limited food safety measures

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[140] *Id.* at 15.

[141] *Id.*

[142] *DeWaal Statement*, *supra* note 24, at 9.

[143] European Food Safety Authority, *Fact Sheet – History*, http://www.efsa.europa.eu/etc/medialib/efsa/about_efsa/124.Par.0020.File.dat/factsheet_en_history1.pdf (last visited Oct. 2, 2006); NESTLE, *supra* note 12, at 138.

[144] Food Standards Agency, *Strategic Plan 2005-2010: Putting Consumers First*, at 3, 7, 12, http://www.food.gov.uk/multimedia/pdfs/stratplan0510.pdf (last visited Oct. 2, 2006).

[145] NESTLE, *supra* note 12, at 131.

[146] *Id.* (in 1993, the FDA commissioner expressed his desire to consolidate the food safety system, but only if the FDA was placed in charge of these efforts and its role was strengthened).

[147] *Id.* at 133 (quoting a spokesman for the National Food Processors Association following President Clinton's creation of the President's Council on Food Safety in 1998).

[148] Durbin, *supra* note 127, at 385.

[149] George, *supra* note 16.

currently in place, the consequences would have been much worse.[150] The effects of an attack would not only harm more people, but according to Greg Pompelli, an economist for the USDA, it could have a lasting negative affect on the U.S. agriculture industry.[151] In connection with its investigation into 9/11, the 9/11 Commission charged the federal government with a "failure of imagination" in its ability to predict and prevent an attack by suicide pilots.[152] The failures of our current system of food safety leave the citizens of the U.S. vulnerable to the threat of agroterrorism.[153] The federal government should act promptly to consolidate the FDA and the USDA into a single food safety agency and implement the necessary laws to eliminate the possibility that, in the future, it will be charged with another failure of imagination, but this time to prevent an attack on our food supply.[154]

ADAM STIRRUP*

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[150] *Id.*

[151] *Id.*

[152] NATIONAL COMMISSION OF TERRORIST ATTACKS UPON THE UNITED STATES, *supra* note 109, at 336.

[153] DeWaal, Barlow & Hicks, *supra* note 54, at 16.

[154] *Id.*

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