Randy's Return: A Case Study in Food Safety Regulation

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A Study of Ethics: Case Study #1

Randy’s Return: A Case Study in Food Safety Regulation

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Introduction:
Case studies are an effective and engaging way to integrate ethical issues into disciplinary content in college courses. By putting students in the position and circumstances of the story’s character, they can examine ethical decisions from multiple perspectives and gain insights on diverse points of view through discussions with their classmates.

In this case, students are placed in the position of Randy Johnson, a quality control specialist at a ground-beef processing facility. When faced with irregularities in the reporting of microbiological contamination of ground beef samples, Randy must choose a course of action while balancing his ethical integrity, the effect of his decision on his beloved home town, and his future with the company. Through this example, students see the issues faced by individuals in regulatory positions whose decisions may have far-reaching effects.

The case is designed to have students consider the ethical implications in the regulation of industries for the benefit of public health when such regulation may result in adverse economic consequences; inform students of regulations and testing protocols in beef and poultry production; and enable risk assessment analyses using pathogens in ground beef as a model system. It is appropriate for use in introductory and upper-level courses in science such as Environmental Science, General Biology, Microbiology, and Bioethics. With its applicability to the ethical issues faced in a number of non-science occupations (law enforcement, accounting and finance), it would also be useful in a host of courses across other disciplines.

This paper will provide the case overview, suggestions on presenting the case, and a list of resources on food safety and pathogens in the meat-processing industry. The characters and company in this case are fictional, and any similarities to actual individuals or entities are purely coincidental.

Case Overview:

Randy Johnson’s return to Conemaugh was no surprise. While most of his high school classmates had left their native Western Pennsylvania for more prosperous parts of the country, Randy had long made clear his desire to come back to his home town, settle down, and raise a family in familiar surroundings. So after graduating from Penn State University with a Bachelor’s degree in Animal Sciences, no one was shocked when Randy returned to Conemaugh, his family, and his high-school sweetheart to begin his post-baccalaureate life.

Time had been not been kind to Conemaugh. Once a thriving economic center, the town had seen its manufacturing base carried overseas by cheaper labor prices, its once hectic railroad yards become solemn monuments of rusted steel, and the parades of soot-covered men returning from the coal mines at shift’s end slowly dwindle as the mining companies left one after another. Randy recalled the day his grandfather came home from the steel mill with his “pink slip” clutched tightly in his calloused hand, and he remembered seeing his Aunt weeping softly over the kitchen sink when the decision to close the last mine was announced. He watched his parents work long hours to make ends meet - his father in a furniture warehouse by day and his mother in housekeeping at the local hospital at nights. But despite these hardships, Randy was proud of his hometown and things were looking up. Spurred by tax breaks and grants aimed at reinvigorating economically-depressed areas, St. Louis-based
Prairie Processing constructed a ground beef-processing facility in town in the late 1990s that provided employment for around two hundred local residents and invigorated the town’s lagging economy. It was here that Randy found his dream job.

The plant in Conemaugh received scraps and cuttings from Prairie Processing’s slaughterhouses in the Midwest and processed them into frozen ground beef patties for the fast food and consumer markets. After a widespread and well-publicized outbreak of *E. coli* in the Western United States in the early 1990s, Prairie Processing instituted a series of protocols for regularly testing its products to detect a variety of harmful bacteria, particularly the highly pathogenic *E. coli* O157:H7 strain. Randy’s educational background and training in microbiological testing techniques secured him full-time employment as a Quality Assurance (QA) specialist, and he began working at the plant shortly after his return. Randy’s daily duties included taking samples of ground beef from the processing floor at two-hour intervals, testing them for bacteria, culturing the samples in incubators, recording the results, and forwarding the data to his direct supervisor. While his duties were somewhat repetitive and monotonous, Randy carried them out diligently, realizing that this position was a stepping-stone to a supervisory position (and beyond) with the company.

Randy’s direct supervisor, Walter “Wally” McClaren, was no stranger. Wally graduated two years ahead of Randy at Conemaugh High, had been a close friend of Randy’s older brother, and was someone Randy had emulated as long as anyone could remember. Word has it that Wally put in a good word for Randy with the folks in Human Resources during the interviewing process, which helped Randy land the job over several other applicants with more experience and education.

After several months at the plant, Randy was settling into his position and looking ahead to a long and prosperous career with the company. Things were good all over. The plant was consistently meeting its monthly production quotas; Prairie Processing’s earnings were up; and Randy had received a stellar evaluation from his supervisor at his six-month performance review. On a cloudless, breezy day in May, Randy celebrated the start of his eighth month of employment with his normal morning duties - checking the bacterial counts from the previous day, assembling the data, and preparing the summary report for his supervisor. He walked the report up to Wally’s office as he always did, but instead of returning straight to the lab, Randy paused to discuss some issues with Wally concerning a new bacterial sampling protocol they were testing. Their conversation was cut short, however, when Wally was called away briefly to investigate a minor incident in the processing area. Randy plopped down in Wally’s chair to await his return and noticed his bacterial report from the previous day (still attached to one of his trademark green clipboards) and Wally’s data summary for the head of QA sitting precariously atop a pile of unsteady papers on Wally’s desk. After rescuing the reports from a potentially catastrophic fall, he casually examined the two data sets and noticed a number of clear discrepancies - samples found to be positive for bacteria on Randy’s sheet were marked negative on the summary report, and bacterial counts for a number of samples were underreported, in some cases by more than 50%. When Wally returned and saw Randy staring at the two reports with a puzzled look, a frown tinged his face.

“Walk with me,” Wally said, and the two made their way outside to the parking lot. Moving away from the clusters of conversationalists on their break, Wally leaned against the hood of his brand new, cherry-red Dodge Dakota pickup. “You would have found out eventually,” he began, “so you may as well hear it from me. If you want to move up in QA around here, you’ve got to know how to play the game. Management doesn’t want to see a lot of positive results and high bacterial counts, so we fudge a few numbers here and there - no big deal. The feds [Department of Agriculture] can review our records, and if they see lots of positives [samples testing positive for bacteria], they could come in for unannounced inspections, request copies of all our records, and generally make life difficult for management. And when life’s bad for management, life’s really bad for us. Squeaky wheels don’t get
promotions around here, so all the supervisors do just like I do. How do you think I got this truck and was promoted to supervisor so quick? You know how I learned how things were done? I had this same conversation my supervisor 18 months ago!"

Wally paused and lowered his eyes to his shoes for a moment. “Besides, what’s going to happen to all these people if the plant’s closed due to repeated violations?” he asked, waving his hand across the assembled throng in the parking lot. “It’s not like there are any other jobs in this town. If this place closes, then this town is dead. It’ll be just like the ‘80s all over again. Not only will everyone at the plant lose their jobs, but all the restaurants and stores downtown - they’re gone too. People tend to go out to eat a lot less when they’re on unemployment,” he said, adding a slight sneer for emphasis. Wally leaned back further onto the truck’s hood, took a deep breath, and looked Randy over. “After all,” he said, in a much subdued voice, “it’s not like our little ‘data modifications’ are going to hurt anyone. The chains [fast food chains] all cook the heck out of their burgers to avoid getting sued, and there’s not a consumer out there who hasn’t heard about E. coli and the other bugs [pathogens] that could be in hamburgers – the ‘Jack in the Box’ outbreak took care of that – and they know they’ve got to cook their burgers properly at home. Dang, if you’re stupid enough to eat undercooked hamburger nowadays, you deserve to get sick.”

After several seconds of uncomfortable silence, Wally pushed off the hood and hopped to his feet in an unusually graceful display of dexterity. As he headed toward the plant, he stopped to put his arm around Randy’s shoulder, as he had done innumerable times when they were young. “Well, we better get back,” Wally said. “The place could fall apart without us.”

Teaching the Case:

Introduction and Warm-Up: (10 minutes)

In all courses, students would need to be presented with basic material on microbiological pathogens and “industrial” food production to be able to fully comprehend and appreciate the case study. This could be accomplished by in-class instruction or a series of readings from the provided list. The case should begin with a brief overview of this material followed by a distribution of the case to the class. In large enrollment and lower-level courses, the case should be discussed in groups of 10 students. The composition of the groups should be assigned by the instructor to allow students to interact with unfamiliar classmates and to facilitate discussion of the case. In smaller, upper-level courses, the case could be discussed with the class as a whole, as instructors could manage a discussion with a small number of upper-level students effectively.

In-Depth Discussion: (40 minutes)

Several questions can be provided to help students focus their analysis of this case:

- If you were Randy, what would you do?

Students will be asked to state what they would do in Randy’s position. They must place themselves in his shoes, with his existing loyalties to his home town and his supervisor. Leave the question open-ended to allow students many different courses of action.

- Can E. coli and other food-borne pathogens really hurt you? How widespread is food poisoning from ground beef and poultry and what are the overall economic costs?

Students can review materials from the Recommended Readings to address this question. The Recommended Reading from Fast Food Nation has a particularly descriptive account of the effects of the E. coli O157:H7 strain on a young child affected in the 1993 “Jack in the Box” outbreak. It is excellent for illustrating the emotional side of the issue but graphic in
its descriptions of the disease’s progression. The USDA Foodborne Illness Cost Calculator shows the frequency and economic consequences of food poisoning, and is a useful resource for risk assessment exercises.

- If the meat from the plant were sold exclusively in Conemaugh, would that change your chosen course of action?
Students are now presented with a conflicting benefit to their home town - should I protect the town’s prosperity by covering up violations or protect the health of the town’s residents by reporting them? It would be interesting to examine instances where students change their actions as a result of this new information. Is it okay to gamble with the health of strangers but not your friends and family?

- If the meat from the plant was used in school lunches (locally or otherwise), would that change your course of action?
Again, students are asked to evaluate the situation with an additional variable included, and fertile discussions could result by probing students whose opinions change. Do opinions change if children are specifically listed as food consumers?

- Assume you were in Randy’s position in QA at the plant, having moved to Conemaugh after graduation from college. What would you do in the same situation?
Students are asked to evaluate the same case from their individual perspective. The elements of the case tying Randy’s loyalties to his home town and childhood friends would not be relevant, so it would allow students to make decisions with greater objectivity. If students answer differently to this question than to the initial one, an interesting examination of the reasoning could be performed.

- Was it proper for Randy to review the reports on Wally’s desk without his knowledge or permission?
This question asks if Randy’s decision to review the reports on Wally’s desk was, in itself, an unethical act. Did Randy have the right to review a summary of data he had collected, or is that a violation of his supervisor’s privacy?

Conclusion: (10 minutes)
Given the complexities of the case, it would likely not be productive to limit the choices to an “either-or” situation and take a class vote. Rather, I would suggest having students write an opinion paper summarizing: (a) their group’s discussion of the issue and the major viewpoint expressed by each group member and (b) a detailed description of their chosen course of action, with justification. Historically, such assignments have been very well-received by students in introductory-level courses. Students in upper-level courses could be asked to provide the same information and to include data from risk assessment exercises to back up their action.

Recommended Resources:

(1.) PBS Frontline: “Modern Meat” (Television Program)
http://www.pbs.org/wgbh/pages/frontline/shows/meat/
Sixty-minute program from PBS’ award-winning Frontline series. Describes (and, more importantly, shows) the process of modern meat production and the recent history of food safety regulations concerning ground beef in the United States.

(2.) “How to Outsmart Dangerous E. Coli Strain”
FDA Consumer
http://vm.cfsan.fda.gov/~lrd/ecoli.txt
Describes the characteristics of *E. coli* O157:H7, major outbreaks in the early 1990s, and suggestions for food safety regarding this pathogen.

(3.) Economic Research Service, United States Department of Agriculture
Briefing Room: Industry Food Safety Actions
http://www.ers.usda.gov/briefing/industryfoodsafety/
Clearinghouse of articles related to food safety in the meat-processing industry.
Suggested readings include (but are not limited to):
- Regulation and Industry
- Conventional Practices and Technology

(4.) Economic Research Service, United States Department of Agriculture
Economic Assessment of Food Safety Regulations: The New Approach to Meat and Poultry Inspection
Detailed description of Hazard Analysis and Critical Control Points (HACCP) system used in meat production. Contains economic assessments of the system’s impacts.

(5.) Economic Research Service, United States Department of Agriculture
Data: Foodborne Illness Cost Calculator
http://www.ers.usda.gov/data/foodborneillness/
Interactive calculator that estimates the costs associated with sickness, disability, and premature death associated with foodborne illnesses. Excellent resource for cost-benefit and risk assessment analyses.

(6.) American Meat Institute
Fact Sheets and Info Kits
http://www.meatami.com/Content/NavigationMenu/PressCenter/FactSheets_InfoKits/Fact_Sheets_Info_Kits.htm
A series of brief fact sheets about basic topics in meat production.
Suggested readings include (but are not limited to):
- *E. coli* O157:H7
- Microbiological Testing in the Meat and Poultry Industry
- Overview of the U.S. Meat and Poultry Inspection System
- Pathogen Control in Ground Beef

*Fast Food Nation*
(7.) Eric Schlosser
Chapter 9, pp. 193-222, “What’s in the Meat”
Perennial Publishers
Provides material on the history and politics of regulation in the meat industry, and gives moving descriptions of the effects of *E. coli* O157:H7 illness on individuals.