Case 1 Sole Remaining Supplier

The heart pacemaker is a modern wonder. The device has a timer that resets itself every time the patient's heart beats. If the heart does not beat on schedule (say, within 1.2 seconds), the pacemaker gives a stimulus that causes a heartbeat.

But the technology was not always so sophisticated, and its early limitations form the background of this true story, told to Markkula Center for Applied Ethics Director Thomas Shanks, S.J., by one of the participants. Although the events happened 20 years ago, the ethical issues they raise are still relevant.

It's 1975, and you are on the board of directors of a company that makes transistors. Among the many companies with whom you have a contract is one that makes heart pacemakers.

Pacemaker technology is in its infancy. When doctors implant a pacemaker, the patient's normal heartbeat is disabled, and he or she relies entirely on the device. If it fails, the patient's heart stops. Doctors are not very adept at installing the pacemakers, which are extremely delicate; there is even a story of a person yawning deeply, pulling the pacemaker wire in his chest, and dying.

After that and many similar incidents, the board begins to reconsider whether your company should sell to the pacemaker company. Members of the board feel this situation is a major lawsuit just waiting to happen and your company, as well as the company you supply, will be liable. In addition, you feel the specs the pacemaker company uses to test the transistors are not very strong.

You and the board decide to get out of the business before it's too late. You tell the pacemaker company representatives about your conclusion, and they respond, "You can't stop selling us the transistors. You are the sole remaining supplier for us. Everyone else has backed out for the same reasons you're giving. If you don't sell us the product, we'll go out of business. Pretty soon, no one will be making heart pacemakers, and many people need them. Without the pacemaker, people don't even have a chance."

You take that information back to the board. People around the table have different opinions. One person says, "This is a bad deal, and it isn't our problem. We don't make enough on this sale to make the risk worthwhile." Another person says, "We don't know how other companies use the transistors we sell them; why should we be concerned about this one? What about that baby who died when the transistor in the incubator failed? We didn't know how that company was using the transistor." Another person says, "I think we're missing the real issue here. Don't we have an ethical obligation to sell the product to the pacemaker company? What will happen if we don't sell to them?" Another person says, "Give me a break. Our only obligation is to our shareholders. And how did we get so stupid that we're the last source? I'm telling you, we don't need this." Finally, the chair of the board says, "OK. Let's make a decision."

What do you do?

This case was written by Thomas Shanks, S.J., Executive Director of the Markkula Center for Applied Ethics.
Case 2 Outsourcing

The Case of the Plant Relocation
By Karen Musalo

Production costs are rising. Your company can make more money for shareholders by relocating your plants to a country with lower labor costs and fewer regulations. Using this case, Stan Raggio, senior vice president for sourcing and logistics at The Gap, and Karen Musalo, then director of the Markkula Center for Applied Ethics International Human Rights and Migration Project, discussed the ethical issues companies should consider at an Ethics Roundtable for Executives.

You are the chief executive of Electrocorp, an electronics company, which makes the onboard computer components for automobiles. In your production plants, complex hydrocarbon solvents are used to clean the chips and other parts that go into the computer components. Some of the solvents used are carcinogens and must be handled with extreme care. Until recently, all of your production plants were located in the United States. However, the cost of production has risen, causing profits to decline.

A number of factors have increased production costs. First, the union representing the workers in your plant waged a successful strike resulting in increased salary and benefits. The pay and benefits package for beginning employees is around $15/hour. A second factor has been stringent safety regulations. These safety procedures, which apply inside the plant, have been expensive in both time and money. Finally, environmental regulations have made Electrocorp's operations more costly. Electrocorp is required to put its waste through an expensive process before depositing it at a special disposal facility.

Shareholders have been complaining to you about the declining fortunes of the company. Many of Electrocorp's competitors have moved their operations to less-developed countries, where their operating costs are less than in the United States, and you have begun to consider whether to relocate a number of plants to offshore sites. Electrocorp is a major employer in each of the U.S. cities where it is located, and you know that a plant closure will cause economic dislocation in these communities. You know that the employees who will be laid off because of plant closures will have difficulty finding equivalent positions and that increased unemployment, with its attendant social costs, will result. However, you are aware of many other corporations, including your competitors, that have shut down their U.S. operations, and it is something that you are willing to consider.

You have hired a consultant, Martha Smith, to investigate the sites for possible plant relocation. Ms. Smith has years of experience working with companies that have moved their operations to less-developed countries to reduce their operating costs. Based on your own research, you have asked Ms. Smith to more fully investigate the possibility of operations in Mexico, the Philippines, and South Africa. A summary of her report and recommendation for each country follows:

Mexico

A number of border cities in Mexico would be cost-efficient relocation sites based on both labor, and health and safety/environmental factors. Workers in production plants comparable to Electrocorp's earn about $3 per day, which is the prevailing wage. There is frequent worker turnover.
because employees complain that they cannot live on $3/day, and they head north to work illegally in the United States. However, a ready supply of workers takes their place.

Mexican health and environmental laws are also favorable to production. Exposure to toxic chemicals in the workplace is permitted at higher levels than in the United States, allowing corporations to dispense to some degree with costly procedures and equipment. Mexico's environmental laws are less strict than those of the United States, and a solvent recovery system, used to reduce the toxicity of the waste before dumping, is not required.

The only identifiable business risk is possible bad publicity. The rate of birth defects has been high in many Mexican border towns where similar plants are in operation. Citizen health groups have begun protests, accusing the companies of contamination leading to illness.

Philippines

Conditions in the Philippines are more favorable than those in Mexico in terms of labor and health and safety/environmental factors.

The prevailing wage in the Philippines is about $1/day, and young workers (under 16) may be paid even less. As in Mexico, the workers complain that the rate of pay is not a living wage, but it is the present market rate.

The health and safety and environmental regulations are equivalent to those in Mexico, but there have been no public complaints or opposition regarding birth defects, cancers, or other illnesses.

South Africa

Conditions in South Africa are positive in some respects, but not as favorable in economic terms as in Mexico or the Philippines. The prevailing wage in South Africa is about $10/day. Furthermore, there is a strong union movement, meaning that there may be future demands for increases in wages and benefits.

The unions and the government have been working together on health and safety issues and environmental protections. Exposure to toxic chemicals in the workplace is not permitted at as high a level as in Mexico and the Philippines. Although the equipment necessary to reduce toxic chemicals to an acceptable level is not as costly as in the United States, this expense would not be incurred in the other two countries. Furthermore, there are requirements for a solvent recovery system, which also increases operation expenses.

You have to decide how you would like to proceed. Your options are to further investigate one or more of the overseas sites or to simply continue all operations within the United States. Examine each possibility and the factors you will consider in weighing the pros and cons.
Case 3 Product Defects

First Warnings

Fred James, chief executive of Nutritional Foods Inc., a $50 million manufacturer of healthful foods, listened with concern as John Healy, his vice president for production, described reports that had come in during the past hour.

The reports came from two county health departments, one in Seattle and the other in Southern California. In each case, the health department official reported a possible link between acute food poisoning of a child and an unpasteurized apple product produced by Nutritional Foods and distributed throughout the Western United States. The health departments had not yet ruled out all other possible causes. Additional information was not yet available, and Healy did not have batch numbers for the products in question.

Nutritional Foods was rapidly becoming the best-known brand of natural or nonpasteurized foods in the Western United States. It made its products in two facilities, one in California's Central Valley and the other in a coastal city of Central California. Fresh fruit and vegetable products were shipped from growing regions throughout the West to these two facilities for processing and canning or bottling. The handling of nonpasteurized products was critical as contamination could occur in picking, transporting, or processing the fresh product.

Distribution was also critical to the freshness and safety of the company's products. Daily distribution from the company's processing facilities in company-owned refrigerated trucks ensured freshness.

Unpasteurized products had been popular in the health-food market for many years, but Nutritional Foods was the most successful of several companies seeking to appeal to the mainstream market as well as to the niche consumer. The company's success had led to its rapid growth and the construction of its new processing facility in the Central Valley.

"OK, John," said James, "what's our response? Do two 'maybes' mean we should do something immediately? We have had an occasional report, perhaps one every couple of months, during the past two years. None of those turned out to be traceable to our product. Do two reports represent anything other than a statistical quirk? Should we be doing anything but waiting for the final reports from the health departments in a couple of days?"

Concern Deepens

Healy dispatched company managers to the two counties where initial reports indicated there might be acute food poisonings related to one of the company's unpasteurized products. He was startled a short time later to receive a third and fourth report similar to the first two.

Although also not conclusive, the new reports made Healy wonder if something was terribly wrong. Healy immediately dispatched company managers to the two new counties, urging all four to get the batch numbers of the products in question. He also asked for an immediate meeting with James.
"Now what should we do?" asked Healy. "Should we warn the retailers, asking them to stop selling the product? Should we also warn the public? Such a move could devastate the company's reputation and its stock price at a critical moment. Don't we have an obligation to think long and hard before we take that step? How much certainty must we have and how serious does a problem have to be for us to proceed?"

Time to Act?

Healy was deeply troubled when he heard from his managers that health officials in the four counties they visited were virtually certain Nutritional Foods' product was indeed involved in the food poisonings. All the batch numbers, however, were not available. The two cases where company managers could get batch numbers were from a single day's production.

Healy was further troubled that three additional reports of possible food poisonings had come in by the end of the workday, though two were relayed by newspaper reporters. Each was checking claims by consumers that one of Nutritional Foods' products had made them sick. One of the reports involved a different company's products.

Healy also heard late in the afternoon from one of his children who had read in an Internet nutritional chat room that Nutritional Foods had a poisoning problem. Had the time come, Healy wondered, for more dramatic action? If so, what action should he take?

Crisis

At 7 p.m., Nutritional Foods announced publicly and through its retail network that it was pulling all batches of the unpasteurized product associated with all but one of the alleged poisoning incidents. Once the news hit the wire services, 50 more calls cascaded into company headquarters late that night and early the next morning. Most were from consumers alleging they, too, had been poisoned by the company's products. Five more were reports from health professionals who stated they were treating possible poisonings.

At 9 a.m. the next morning, James convened a meeting of his Crisis Action Committee, an ad hoc group of managers that had been formed a few months earlier for just such a crisis. "Let me put several questions before the group," said James. "Are we doing enough by conducting a recall for the specific product in question, publicly asking consumers to return all unused products to their local retailer, and asking retailers to stop selling and return all of their supply to us? The press has done a pretty good job getting the word out. It's on the front page of perhaps 80 percent of the daily newspapers in our distribution area this morning.

"Should we do more to notify customers? Should we consider pulling all our products? The calls this morning allege adverse reactions from many different products.

"And what should be our strategy toward those who have been made sick by our product? If we show concern, isn't there a risk we will look like we are admitting liability? Finally, what should we do about the sickest of those affected? Two children are reported this morning to be in critical condition."

If you were Fred James, what action would you take?
**Case 4 Product Safety**

Susan Jones works for an agricultural chemical company, Agri-Cide. She is the field representative for the 100-mile radius around Alachua County. In this county, pineapples are the main cash crop that her company specializes in. Her supervisor is Alice Contrary, who is also in charge of all the field representatives in Florida.

Agri-Cide has recently introduced a controversial insecticide that targets pinyworms, the main affliction of the pineapple crop in this area. It is Susan’s job to sell and endorse this new option to the surrounding pineapple growers. Susan has reservations about the product, and decides to confront her supervisor with her fears. She walks into Alice’s office just after lunchtime, and Alice is on the telephone with the regional sales supervisor. Susan hears this conversation:

"But Bob… I know our sales are down, but the farmers have not accepted our new crop protection chemical completely," Alice said. "I know, we just need more time…yes I understand. OK Bob. All right, I will see what I can do."

Alice then hangs up the telephone and sees Susan standing before her. "Hey Susan," Alice sighs, "what can I do for you?"

"Well Alice, I have a few questions about our new chemical application," Susan said. "How safe is it exactly for the ground water? I have read up on the new product, and the results seem a little inconclusive."

Alice replies, "Well, you don’t really think we would send you out to the farmers with a product that is unsafe, do you? Of course, with any new chemical product, there are bound to be a few reservations. It is your job to sell a product, not question it."

"I know Alice," Susan says, "but I have a problem selling a product I don’t fully back to farmers who trust my word. How can I sell it if I don’t fully understand it?"

"Well the FDA approved the use of it, and that is all the reassurance you should need," Alice said. "I was just on the telephone with Bob and he is not happy with your area sales, Susan. I am getting chewed out because we aren’t up to the same level of sales we were at the previous year. I think you need to worry about just doing your job."

Susan frowned and said, "OK Alice, I will do my best."

The next day Susan went to call on a long-time customer, Bert Shoe. Bert has been an innovative farmer as long as Susan has known him.

"Hey there Bert! How is life treating you?" Susan asks.

"Just great Susan!" Bert replies, looking at her like she just brightened his day. "Have you brought me some of that stuff you said would surely clear up my pinyworm problem?"
"Sure did, Bert. I feel like I should let you know a couple of things first, though. I don’t know exactly what our product will do to the water in the surrounding area. Probably nothing, but I am not sure, so I am letting you know," Susan said.

"That’s why I trust you Susan, I know I can count on you to tell it to me straight," Bert replied. "I don’t think I will buy any of that stuff just yet. You let me know how it turns out, and then we’ll see."

This conversation was pretty much repeated throughout the day with all the other customers Susan called on. By the end of the month, her sales were the lowest in the state. Alice repeatedly asked her if there was a problem she was having, and Susan just came back with the same points she had always brought up.

Bob called Alice again and demanded to know why the sales for the new chemical were so low. Alice said, "I just don’t feel as if our employees are behind the product 100%. Maybe we should do some more training with the chemical and see if that improves things."

"We don’t have that kind of time and money to invest in that right now Alice," Bob said. "We already invested a lot of hours and money training this sales force to go sell, sell, sell. I don’t really think we have a problem. If your team isn’t cutting it, maybe you need some new players. Or maybe the team needs a new coach."

"I see what you’re getting at, and I don’t think that will be necessary Bob," Alice said.

The next two weeks went by and Susan’s sales continued to be low. She was summoned to Alice’s office.

"Susan," Alice began, "you have done a fine job here at Agri-Cide, but I am afraid I am going to have to let you go. You know the tremendous pressure we are under to keep up our sales, and for the past few months you haven’t been keeping up, despite our many talks. I will be happy to provide you with references or any other recommendations you may need. I am truly sorry this partnership didn’t work out to be a win-win situation for everyone."

Discussion Questions:

1) What would you have done if you were Susan? Alice?
2) Is there any one else Susan could have talked with about her reservations?
3) Are ethics worth losing your job? A guilty conscience over firing someone?
Case 5 Animal Welfare

She just sat there, starring into space. She was in a state of disbelief. It was only her second year showing steers and her steer had been named Grand Champion. It was an honor she’d been prepared for her whole life.

Kim already knew that she could expect $5.00 a pound tonight during the auction. Last year her steer had only brought in 73 cents, and this was sure to be an improvement.

She wasn’t just happy about the money, although it would start a nice college fund. Next year, she would be on the cover of the sale brochure, with her steer. She would show that brochure to prospective buyers, and they would know that she raised good steers. Maybe that would get more buyers to come out next year. That would help the whole program. Kim lived close to the fair and the large brunt of responsibility for bringing out buyers fell on her shoulders. For exhibitors who traveled five or more hours, it was easier to bring the steer home and sell it there than to bring buyers to the sale.

She couldn’t wait to tell everyone. For three months, while others were sleeping in and spending lazy afternoons at the beach, she’d been working. Up at 6 a.m. seven days a week to feed, then wash, brush and dry for four hours. Now it was all paying off.

She jumped up to get her steer ready for the sale.

"Come on girl. You’ve got to get up to the ring. NOW." It was the voice of her father, and he sounded tense.

"But, I’m only half ready. Besides, I’ve got another half-hour. What’s your problem?"

"You’ve got to go around. You’re not going through the barn."

This was said with "the look," which meant that he would not be explaining why she would have to go all the way around the barn.

Mumbling under her breath about fairs that spend all their money to build nice wide exhibitor-friendly hallways and then make them walk all the way around the complex, Kim backed her steer out of the chute and headed for the door.

After several minutes, girl and steer, with father trailing behind, arrived at the door to the sale pen. With a final brushing of the steer, the girl took a deep breath and walked into the ring.

But the crowd wasn’t looking at her yet. Across the way, blocking the aisle she should have used to arrive at the ring, a group of demonstrators marched. Signs proclaiming "Meat Is Murder" were waving in the air.

The girl turned to try to catch her father’s eye. Obviously, he had known that the demonstrators were there and had wanted her to avoid them. No such luck. They soon caught sight of her in the ring and, realizing that she had gone a different route from stall to ring, began to move closer to the ring. Soon they were blocking the view of the bidders and chanting louder and louder.
Officials from the fair finally arrived to handle the situation, and the girl was asked to lead her new very jumpy animal out of the ring until the auction could proceed.

Inside, demonstrators were continuing to block the aisle, while more steers were led up for the auction. Exhibitors from all around the barn came to the arena to voice their objections to the demonstration. Each group began to yell at the other, but no one was truly heard. The fair officials were working to keep the two groups separate, to keep the demonstration from becoming violent. Mr. Lee, the newly appointed vice president in charge of the agriculture programs stepped up to take the microphone from the auctioneer. He had to find a way to quiet the two groups quickly.

Meanwhile, the girl walked behind the barn and tied her steer to the wash rack. Her father, angry at such demonstrations, went inside to add his word to the ensuing disagreement. She wished he wouldn’t. In a sense, she agreed with the demonstrators. She was going to miss her steer, and she would certainly never eat that particular steer.

Before her father came back, reporters began arriving. Nothing like this had ever happened at the fair before. With so many members of the media already on the grounds, many reporters came running to the unexpected demonstration. A few television reporters pulled the lead demonstrators out of the barn to interview.

"The children involved in this action have no idea what they are involved in," one of the demonstrators said. "Most of them don’t know where the cattle go after today. Cattle are slaughtered in the cruelest manner, and these children are forced to support it." As the demonstrator spoke, he caught sight of the girl and her steer.

"Why this young lady, right there, is a perfect example. Her father sends cattle to their death regularly. Their cattle are kept outdoors throughout the winter. This girl is taught only to hate animals."

The reporter quickly ended the interview, excited to have a new voice for his story. He was heading for Kim, ready to ask her questions.

Discussion Questions:

1) How would you respond to the demonstration if you were the youth? If you were the reporter? A fair official? Another exhibitor?
2) How can the fair official effectively control the demonstration? What actions should be taken to before continuing the auction?
3) Also present at the fair are members of the public, uninvolved with the demonstration or the auction. What actions, if any, should be made by the fair officials to insure their enjoyment of the fair? What should be done by exhibitors to counteract the perception of exhibiting cattle put forth by the demonstrators?
4) Should children involved agriculture programs that place them in the public eye be prepared to work with media? The public? How can this be accomplished?
5) Some fairs have developed an area outside the livestock arena for demonstrators. Is this an appropriate solution to the incident described in this case study?
Case 6 Drilling for Oil

Drilling for oil in Alaska's Arctic National Wildlife Refuge (ANWR) has been a source of contention among policymakers for years. In 1980 Congress expanded ANWR by 9.5 million acres, with 1.5 million acres (known as section 1002) set aside for the study of petroleum production potential. In 1987, 1991, and 1995 legal measures to drill in the 1002 area were proposed and defeated. The issue was raised again when President George W. Bush made drilling in section 1002 part of his national energy agenda. The events of September 11, 2001 have resulted in intensifying the debate.

Proponents make three major arguments for drilling in ANWR: (1) In light of recent economic downturns and the unstable diplomatic situation in the Middle East, the U.S. must increase domestic oil supply in order to decrease dependence on foreign oil. (2) The area occupied by wells and drilling equipment has shrunk by approximately 60% since the development of the Prudhoe Bay oil field. Developments in drilling technology allow a single pad to tap multiple oil pockets at distances of up to four miles. These advances have minimized the environmental impact of petroleum extraction. As evidence, production supporters point to the fact that despite fears to the contrary, the caribou herd in the Prudhoe/Kuparuk oil field region has increased in population. (3) Most Inupiat Eskimos in the area favor oil leasing for the economic opportunities exploration may provide.

Opponents of drilling counter that (1) even if section 1002 produces the maximum projected amount, oil consumption will continue to rise exponentially. Conservation (such as increasing vehicle fuel efficiency), rather than expanding production, note the opponents, is the only long-term solution. (2) The negative ecological impact on the area outweighs any potential benefit from oil production, in the opinion of the opponents. The plain of section 1002 provides critical calving area for a caribou herd five times as large as the Prudhoe/Kuparuk herd in an area one-fifth the size. Development in this areas, the opponents contend, would push the herd into the foothills where calves would be prone to predation and starvation from scarcity of resources. (3) The opponents point out that not all Native Americans favor drilling. The Gwich'in Indians, for example, consider the area sacred. The Gwich'in also subsist on caribou and fear the negative impact that petroleum production might have on the herd.

The controversy remains unresolved. Since control of the Senate switched last year, Majority Leader Tom Daschle (Democrat, South Dakota) has vowed to defeat a bill passed in the House of Representatives that would tap ANWR. On the other hand, Chairman of the House Resource Committee Jim Hansen (Republican, Utah) argues that in light of the September 11 terrorist attacks drilling in ANWR is more important than ever, and has urged the Senate to pass the House energy bill in the interest of national security.
**Case 7  Comparable Worth**

In October of 1999 the government of Canada agreed to pay 2.3 billion dollars to 230,000 federal workers, both current and retired, in the form of back pay with interest, to conform with the principle of "equal pay for work of equal value" embodied in Canada's Human Rights Act. The drafters of this law, enacted more than twenty years ago, noted that the vast majority of women in the workforce in Canada were clustered in a small number of "women's" jobs, such as office worker, nurse, or waitress. Women in these jobs, the drafters of Canada's Human Rights Act observed, usually receive less pay than men in predominantly male jobs, which, despite their higher salaries, are comparable to the predominantly female jobs in terms of factors such as the mental or physical demands of the job, working conditions, or educational prerequisites.

To address this situation, the government of Canada organized a committee made up of employees and managers drawn from various Canadian federal government departments to develop a numerically based system for comparing predominantly male and predominantly female jobs. The committee rated a wide array of jobs in terms of four factors: educational prerequisites, job responsibilities, mental demands, and on the job working conditions. The committee determined that "male" jobs tended strongly to have higher salaries than female jobs at the same point levels. For example, a chief librarian made $35,050 while a dairy herd improvement manager made $38,766. A computer operations supervisor made $20,193, while a forestry project supervisor made $26,947. A typist made $10,531, while a sailor made $14,097. In all of the above instances the predominantly female and the predominantly male jobs were determined to have comparable point levels.

The Canadian government's 2.3 billion dollar settlement has drawn strong criticism. Monte Solberg, a Reform Party member of the Canadian Parliament lamented that "[t]o come up with some concept where a bunch of bureaucrats arbitrarily decide, based on some abstract theory, that one job that women dominate is somehow the same as another completely different job that men dominate - it's unworkable." Other critics protest that the settlement will increase the taxes in Canada, whose taxpayers already shoulder the highest tax burden among the Group of Seven industrialized nations.

Defenders of the Canadian government's settlement view it as needed to rectify, what they consider, the discriminatory impact upon female workers of the Canadian government's employment compensation policies over many years. Even if the lower wages for predominantly female jobs reflect going market salary rates, say the supporters of the settlement, these market rates themselves reflect pervasive discrimination against women in the workforce. Furthermore, the supporters of the settlement contest that the settlement will have a severely negative impact upon the Canadian economy. In this regard, Daryl Bean, President of the Canadian federal service union, estimated that over 40% of the 2.3 billion would be returned as taxes to the government.
Case 8 Saving Life

In England, the Whitaker family faced a terrible situation: their son, Charlie, suffered from a rare disorder that prevented his body from producing red blood cells. Without daily medications and frequent transfusions, Charlie would simply die. With them, he continues to live, but under close medical care.

For a while, it looks as though Charlie’s parents had figured out an answer to this dilemma. They proposed to use in vitro fertilization to have another child, but with an added twist. They would, as is usual in this procedure, have the eggs fertilized outside the womb in a laboratory dish, but they would then include an additional step. Using new screening techniques, they would screen the embryos to see which would be most able to donate blood-making cells to Charlie. That would be the one that they would choose to implant and bring to term.

In contrast to the United States and many other countries, in England someone proposing such a procedure must obtain government permission – in this case, from the Human Fertilization and Embryology Authority. The Authority rejected the request by the Whitaker family, saying that it was not right to create a human life with the express intent of saving another life.

This case raises two kinds of questions.

First, do you agree with the Authority’s decision? Why or why not? What are the significant moral considerations in this case? What consideration is decisive for you?

Second, who should make these decisions? The United States does not currently have such a board, nor do most other countries. However, something similar is currently under consideration in several countries. Leaving aside financial considerations about who should bear the cost for the moment, who should have the right to make the final decision in such cases? Who should make the decision if the procedure is being paid for by federal health insurance? Private health insurance? The individual patient or family?

Case 9 Confidentiality

Mrs. Sheila Murphy lives in a small town in the foothills of the Rocky Mountain West. Her roots in this town are deep. Sheila's grandparents were ranchers and her aunts, uncles, and cousins still live in the area. Ever since she and her husband announced her pregnancy, there has been much enthusiasm and support. Sheila considers herself lucky because she and her family know and trust Dr. Hughes, a family physician who serves the small community. There is, however, a problem. During Sheila's last visit, Dr. Hughes discovered an open lesion and diagnosed it as a genital herpes lesion. Dr. Hughes explained that if Sheila has open lesions at the time of delivery, a C-section will have to be performed to prevent the child from becoming infected. Sheila is very upset. She says her husband knows about the problem and they do not want the information entered into her medical record.

Sheila doesn't want Dr. Hughes to talk to anybody about this problem. She scheduled an appointment believing she could rely on the "confidentiality" that has always surrounded their relationship. Dr. Hughes understands Sheila's concerns. The receptionist in Dr. Hughes office is Sheila's sister-in-law. Since the receptionist also types the patient records, she will see any information Dr. Hughes places in Sheila's chart. Sheila knows many of the nurses and aides who work in the hospital; several of them are also members of her church.

Questions for consideration:

What is Dr. Hughes to do? Entering the information about her condition into Sheila's records may seriously complicate her life in this community. Should Dr. Hughes' knowledge of community standards influence her decision? What is Dr. Hughes responsibility to other members of the community, also under her care? Would having an ethics committee or asking for an ethics consult help Dr. Hughes make a decision, or would such a committee cause further complications? Is anonymity ever possible in a small rural community?


Case 10  Artificial Womb

In Japan, an artificial womb has been created that incubates goat fetuses. The scientists who developed it say they are working on a model that can be used for human fetuses, but that the technology is ten or more years away.

The womb is a plastic box filled with amniotic fluid and attached to a number of devices that monitor vital functions. Researchers remove the fetus from the mother at 17 weeks of development. A pump replaces the placenta by supplying oxygen and food that goes directly into the fetus's blood. The fetus lies submerged in the fluid, and its blood supply is cleaned and oxygenated by a dialysis machine through the umbilical cord.

Currently a goat fetus can stay in the womb a maximum of three weeks, but scientists are working to extend this time and to solve the problems when the goat fetuses are removed from the artificial womb. Some have lived for a few days, others for much longer.

Unfortunately, the media has sensationalized the research and distorted the device's use. They have speculated that women might want this technology because it would free them from the pain of childbirth. Scientists, however, envision how the artificial womb would benefit women with frequent miscarriages or problems with pregnancy and/or infertility.

Questions:

1) Should scientists continue this research and development? Why or why not?
2) Why would some people be against this technology? Give three reasons.
3) Would you personally use this artificial womb?
4) In the movie The Abyss, divers use a liquid ventilation that fills the lungs with fluid and allows the lungs to extract oxygen from the water. This technology is actually under experimentation in a laboratory in Pennsylvania. How does it relate to the artificial womb?
5) At present, a woman has legal rights over her own fetus. Who would "own" or have legal responsibility for the fetus in an artificial womb?
6) How might the artificial womb affect the abortion debate?
Case 11 Smoking

Next Tuesday is the election, and Marcia Oster doesn't know how she will vote. It isn't the race for governor or the judge's election that has left her confused and undecided; it is the referendum.

Marcia's state is asking its constituents to vote on a ban on smoking in all public places, including restaurants, businesses, and bars. Such a ban would require businesses to set aside an area a few feet outside of the business for people to smoke.

California recently passed such a measure. It prohibits all smoking of tobacco products in all (100%) of enclosed places of employment. The objective, cited in the law, is "to reduce employee exposure to environmental tobacco smoke." Smokers can have an enclosed smoking room, if it has proper ventilation. Employers must also post nonsmoking signs at the entrance to their establishment. This includes all restaurants and bars. The California ban was implemented gradually over a five-year period, and only in 1998 did the third phase, which affects bars and clubs, go into effect.

Although Marcia doesn't smoke, both her parents do, and they have told her many times that they feel discriminated against by groups pushing for nonsmoking areas and by laws that restrict where smokers can go. It doesn't bother them not to smoke when shopping, but they are angry about the ban in restaurants and bars. Most restaurants in their state already have nonsmoking sections, and Marcia's parents feel that this is enough.

Marcia has a friend, Cathy, who has very strong feelings on the other side of the issue. Cathy is very allergic to cigarette smoke. Her physicians have told her to stay away from smoke whenever possible because it triggers her asthma. Cathy argues that people should be allowed to do what they want, as long as their actions do not harm others. People can eat all they want and drink all they want, because these things don't impose on others. Smoking, however, does. Cathy says that if you are around smokers, you have no choice but to breathe in the smoke they exhale, and this is harmful. In fact, some scientists have determined that the exhaled smoke actually contains more carbon monoxide than the smoke inhaled directly from the cigarettes.

Marcia can't decide how to vote on the measure.

Questions:

1) How would you vote if you were Marcia?
2) Should the state be able to regulate where one smokes? Why or why not?
3) Businesses, too, suffer from a smoking ban through a loss of customers. Many bars in California have filed suit to stop the ban, but so far they have not succeeded. Should businesses have the right to decide who comes into and what is done in their premises? Why or why not?
4) The California law demands that an owner ask nonemployees to stop smoking, and to use reasonable steps to stop them. What are some reasonable steps?
5) Many opponents to the California law say that it "deprives people from using a legal product in a private establishment." Should the government of California or any state make cigarettes illegal? Why or why not?
Case 12 Evolution

The week before the start of the new semester would be a busy one for Sandra Maxwell. As one of three biology teachers at Irving Community College in Marshall, Alabama, she would have to meet with the entire science department, get her laboratory ready, and review the new textbooks.

Last year the department had gone through the long, tedious adoption procedure that involved reading and rating over fifteen different books. They had narrowed the fifteen down to three, and the community college board picked from those. Sandra really didn't care which one they had picked; no matter what, she would have to redo her lessons to fit a new book.

There was even more about her new textbook that Sandra didn't know. The Alabama State Board of Education had adopted an anti-evolution insert to go in all high school and state college biology texts. The insert stated that evolution is a "controversial theory" accepted by "some scientists." When Sandra saw the insert, she was upset. Could she teach creationism?

Creationism, broadly speaking, is the view that God (the Judeo-Christian God) created the universe, life, and the various kinds of life. Some creationists have sought to undermine the theory of evolution by claiming, for example, that the earth is only 10,000 years old, not 4.5 billion, and that therefore evolution hasn't had time to occur. They also have argued that DNA could not have developed on its own without the help of an "intelligent agent" - namely, God.

Ever since State v Scopes, the famous Tennessee "Monkey Trial" in 1925 (dramatized in the 1960 film Inherit the Wind), the biology classroom has been the site of a battle pitting science against religion. In the era of the Scopes trial, American fundamentalists had pressed for, and achieved in some states, the passage of anti-evolution laws. More recently, as reported in Science magazine in 1996, creationists have attempted a new strategy: persuading local school boards to give "equal time" in school curricula to alternative theories such as "scientific creationism." In several states-Ohio and Georgia being two-legislatures are considering bills that will require biology teachers to present "alternative theories" to evolution.

Sandra Maxwell and her fellow biology teachers were confused and unhappy about the situation. As a teacher, Sandra wasn't sure what to do.

Questions:

1) What should Sandra do? Give three options.
2) If you were a member of the legislature in any of the states considering the bills referred to, would you vote to include "creationism" in the curriculum? Give three reasons why or why not.
3) Some biology teachers are skipping evolution altogether in order to avoid the controversy. Do you think evolution should be left out of the curriculum? Why or why not?
4) Although many of the "anti-evolution laws" have been struck down at the state and federal level, groups have found other ways to promote "creationism." One of these is getting onto local school boards who select textbooks. What might textbook companies do to avoid problems with these school boards? Give three options.

In 1982, in McLean v Arkansas Board of Education, a federal district court ruled that "creation science" is religion, and in 1987, the Supreme Court reaffirmed that in Edwards v Aguillard, ruling that "creationism" could not be taught in the public schools. Speculate on the reasoning behind these rulings.
Case 13 Censorship

You are the Principal of Pleasantville High School, located in an area twenty-five miles from the center of a large Midwestern city. Originally semi-rural, the area has undergone rapid growth and social change over the past two decades. Completion of a major expressway has brought high tech growth and large numbers of engineers, scientists, and other professional people with extremely diverse ethnic and religious backgrounds.

Ahmed Said, a student at Pleasantville High School, browses the shelves of the school library one day in search of sources for his history paper on the historical roots of the Arab-Israeli conflict. His eyes fall upon a volume entitled "The Protocols of the Elders of Zion"* which he looks over and decides to check out. The next day at school he tells other students about the contents of the book. A Jewish student, David Greenburg, overhears Ahmed's description of The Protocols and tells his parents about it.

Deeply disturbed, David's parents contact the B'nai Brith Anti Defamation League (ADL), a group devoted to combating anti-Semitism. After verifying that Pleasantville High School's library in fact has a shelf copy of The Protocols of the Elders of Zion, the ADL lodges a furiously angry protest with the Principal of Pleasantville High School (i.e. yourself). You, in turn, investigate the situation and learn the following. It appears that in the early years of the high school, when it opened in the late 1960's, there was an assistant school librarian with anti-Semitic inclinations who worked for the high school only a short time before being let go for unsatisfactory work. This individual, however, during her short tenure, had the responsibility of ordering books, and it is believed that, without authorization, she had The Protocols of the Elders of Zion purchased by the library.

*The Protocols of the Elders of Zion is a notorious tract of anti-Semitic propaganda, widely used to stir up anti-Semitic passions in Europe in the late nineteenth and early twentieth century. Purporting to be the manifesto of a tightly knit Jewish conspiracy bent on dominating the world, The Protocols is a fraud, in all likelihood, the work of secret police in czarist Russia during the late nineteenth century, who wanted to provoke widespread anti-Semitic violence against Russian Jews.
Case 14 Research Ethics

Jenny Ito is a second year graduate student working in the biology lab of Chris Holzer. Ito has been overseeing an experiment that Holzer designed to determine whether a special anti-bacterial coating can reduce the incidence of infection associated with the use of steel surgical pins. With Holzer's help, Ito has inserted a two-inch pin into the right tibia of thirty rabbits; fifteen of the pins are standard surgical pins, and fifteen have the anti-bacterial coating. About one-quarter inch of each pin protrudes the skin. Ito also inoculated all of the rabbits at the insertion point with $1 \times 10^8$ staphylococcus aureus and routinely administers morphine at 5 mg/kg to alleviate any discomfort the rabbits may be experiencing because of the procedure. For almost a month, Ito has cared for the rabbits and recorded her observations, watching for any sign of distress or infection.

In her weekly meeting with Holzer, Ito reports that none of the rabbits seems to be particularly uncomfortable, and none of them show any signs of infection.

Holzer seems impatient. "If we don't get an infection, we won't learn anything. Here's what we'll do. Since it would be a shame to have put these rabbits through this, not to mention wasting all your time, without getting some results, I want you to help things along a bit. I want you to inoculate all of the rabbits with $1 \times 10^9$ pseudomonas aeruginosa. We'll see what happens then."

Ito hesitates. "The protocol specifies Staphylococcus, Dr. Holzer."

Holzer brushes this off. "It's only a small change. We've been approved to run the risk of infecting these rabbits; all we're going to do is give the process a little boost." And with that Holzer walks away.

Ito knows how to do what she's been asked, but she is not sure whether she should. When she gets home that night, she mentions her dilemma to her roommate, Ruth Thompson, an English major.

Thompson snorts, "Why are you so squeamish now? Go ahead and do it. In fact, if you really want to make him happy, you should put the new bacteria on just the untreated pins. That'll prove his point."

Ito responds, "Thanks for the sarcasm. You know I can't do that; it would be bad science."

The whole thing is bad science, "Thompson retorts, "torturing bunnies like that."

Ito throws up her hands in exasperation. "You're not helping me at all, Ruth! I know you don't approve of animal experimentation, but sometimes it's necessary, and I'm convinced that this is one of those times. Still, pseudomonas can cause a really nasty infection, and I hate to subject the rabbits to it, especially since it's so hard to treat. You know, they're sort of cute and I've gotten quite fond of them over the last month. And then there's the whole question of the protocol . . ." Ito moans as she throws herself on the couch.

Thompson takes a deep breath. "Well, your boss has already told you that it falls within the realm of reasonable interpretation of the protocol. You've always got to interpret everything, you know. Besides, you always planned on some of the rabbits developing infections. What does it matter if they're infected by one bacterium or another? Hey, if it makes you feel better, look at it this way: If you don't get results, you'll just have to yank the pins from this batch and operate on a new bunch
of bunnies. In the end, you would reduce the suffering if you just brewed up the new bugs and poured them on." With that, Thompson walks away, clearly disgusted by the whole procedure.

Ito does not feel any more sure of the proper course of action. Can you help her? What should she do?
Case 15 “Cheating”

You are in tenth grade. Your school’s handbook prohibits “cheating, which includes plagiarism, academic dishonesty, copying the work of others, and other conduct that undermines the academic objective of the assignment.”

A. Your English class is reading A Tale of Oedipus’ Scarlet Tempest, a long, difficult work of literature that has bored and puzzled generations of students.

1. If the teacher does not say anything about the use of study aids, is it cheating to use Cliff Notes as long as you read the book as well?

2. If the teacher does not say anything about the use of study aids, is it cheating to read Cliff Notes instead of reading the book?

3. If the teacher specifically forbids the use of study aids, is it cheating to use Cliff Notes as long as you read the book as well?

4. If the teacher specifically forbids the use of study aids, is it cheating to use Cliff Notes instead of the book?

5. Should English teachers state that they prohibit the use of Cliff Notes and similar study aids, both in school and out of school? If so, how does the teacher respond when a student points out that the teacher was seen reading literary criticism in the library the day before teaching the novel?

B. Assume your first paper on A Tale of Oedipus’ Scarlet Tempest is due next week. You must develop your own topic.

“Write a piece of literary analysis; this is not a research paper,” the teacher said. Teacher has said nothing specific about the use of study aids. Without using Cliff Notes, you read the novel. You are proud of yourself for having identified water as a symbol of cleansing and rebirth. You prepare an outline and rough draft.

Four days before the paper is due, you borrow a friend’s Cliff Notes. It contains a section on key symbols and themes, including “Water Symbolism.” You read it and realize that you made virtually all of the same points in your rough draft, but you believe the Cliff Notes analysis sounds more sophisticated. You tinker a bit with your rough draft and reword a few of your ideas, based on Cliff’s insights. You prepare a final draft and turn in your paper.

1. Have you cheated if you cite Cliff Notes?

2. Have you cheated if you do not cite Cliff Notes as a source?

3. Assume the teacher is Brady Olson. He has been on the faculty since the Eisenhower administration.

He reads your paper (cited or not, it doesn’t matter), and says, “This paper on water symbolism is right out of the Cliff Notes. It’s not acceptable.” What do you say? What should he do?