# Health Group

### You are a Researcher of Endocrine Disrupters

#### Your Background and Biography

Traditional risk-management tests assume that the more of something you are exposed to, the more dangerous it is. For example, the more smoke you inhale, the more likely you are to die from lung cancer. However, you have become increasingly convinced that the real problem with plastics, and potentially many other chemicals, requires a very different understanding of risk. For chemicals in plastics the risk does not seem to be about how much is in your system but about timing: when or how regularly you are exposed. These subtle poisons are endocrine disrupters, and they are a much bigger problem than anyone understands.

You hold a Ph.D. in integrative physiology with a primary research interest in reproductive biology. You first became aware of the problems of endocrine disruptors through your work on frog reproduction. Unexplained birth defects and strange conditions in your frogs led you to the work of Theo Coburn, a pioneering scientist of endocrine disruptors. After reading her work you began your own studies. You have now published several scientific articles documenting evidence of endocrine disruption in frogs.

Though you have always loved animals and you are deeply troubled by the effect of endocrine disruption on animal populations, you increasingly have focused your advocacy efforts on humans. The research is far from complete, but ample evidence from carefully conducted studies demonstrates the potential effects of endocrine disruption on humans. However, since the effects of endocrine disruptors are subtle and difficult to trace, plastic manufacturers have been resistant and unwilling to act on the evidence. You hope that increased public awareness will push the industry into action. This hearing is one opportunity for you to make your alarming findings more widely known and to inspire action.

Endocrine disrupters have the most detrimental effect on children because they affect the way we grow and develop. Exposure to even a low dose of a disruptor at a specific developmental moment can affect a child's endocrine system and the way he or she develops. Yet children today are exposed to more potentially harmful plastic products than ever before. Even more worrying, parents exposed to endocrine disruptors may show no ill effects themselves but can pass the effect on to their children. This fact turns the way scientists think about toxicity upside down and requires a great deal of research.

At this hearing you will emphasize the need to take endocrine disruptors seriously and research them extensively. Manufacturers must be made responsible for testing their products not just for standard toxins but for endocrine disruptors as well. This topic is complicated and poorly understood, and you see it as your responsibility to help people understand this real, scientifically documented problem.

### **Your Mission**

Your goal at this hearing is to convince the Regulators to include the Health Group's recommendations in their final regulation. To make this argument effectively, you must

- Complete the assigned readings listed at the bottom of this page;
- Work closely with the other members of your group to develop clear answers to the Regulators' questions;
- Make use of as much specific information as possible to develop strong arguments that plastics need to be proven safe rather than assumed safe and that the only way to protect against the effects of toxins is to prevent the production of potentially toxic plastics;
- Read as much as you can about your position and the positions of the other groups; and
- Complete written reflections on your character, interest group, and readings as assigned.

## **Your Victory Objectives**

- You will receive 10 points if the Regulators select your group's proposal as the final regulation.
- The Regulators will rank the interest groups by how well their goals are represented in the final regulation. You will receive between 1 and 5 points based on how the Health Group is ranked and how well the regulation reflects your goals.

### Sources

### **Health Group Sources**

- Case Study: Plastics and the Human Body
- "Report on Bisphenol A," video, www.youtube.com/watch? v=8wXGrzDIcr8&feature=endscreen

### Your Individual Sources

- "Endocrine Disruptors," by the National Resources Defense Council
- Select **one article** from the bibliography on *The Case of Plastics* website recommended for the Health Group. Read the article and write two paragraphs summarizing the article and how it will be useful to you in the upcoming debate.