

SCIENCE BEAST WORKSHEET.

Question Sheet.

Below are the decisions you will be asked to make as part of SCIENCE BEAST. Where the question is binary (e.g., Yes/No) those options are provided for you. Some questions are open form ("what are your priorities?") and we provide space for you to write you answer.

Underneath each question is a space for notes if you require.

ACT I

HOW LONG DID YOU TAKE _____

Q1. What are your lines of enquiry?

My lines of enquiry are:

- 1: _____
- 2: _____
- 3: _____
- 4: _____
- 5: _____

Notes:

Q2. What are you going to say to your negotiator?

Notes:

Q3. What are you going to say to the media?

Notes:

Q4. What Information do you need to seek?

I need to know:

1: _____

2: _____

3: _____

4: _____

5: _____

Notes:

ACT II

Q5. Do you want to know WHEN or WHERE?

WHEN

WHERE

WHY:

ACT III

HOW LONG DID YOU TAKE _____

Q6: What are your immediate actions?

My immediate actions are:

1: _____

2: _____

3: _____

4: _____

5: _____

Notes:

Q8. What will you say when he calls back?

Notes:

Q9. What approach are you going to take with him?

Notes:

Q10. Given what you know, what will you do next?

Notes

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SCIENCE BEAST ADDITIONAL INFORMATION

HEPARIN

Grieving Families Blame Heparin for Deaths: Makers of blood thinner suggest contamination of drug was deliberate.

MATTHEW JAFFE and KATE BARRETT, January 8, 2009, *ABC News*.

• 5 min read

April 29, 2008— -- Dennis Staples, a radio announcer in Toledo, Ohio, slipped into a coma the day before his 60th birthday. He had been on dialysis for more than two years because of kidney failure, but had fared well with treatment. Then one day, while on dialysis at the doctor's office, Staples went into cardiac arrest. Despite a quick medical response, he never recovered.

Today, his wife Johanna attributes his death to the blood-thinner drug heparin that he received to prevent clotting during treatment.

Dennis Staples may be one of at least 81 patients who died from bad heparin between January 2007 and March 2008, in addition to hundreds of others who have experienced severe allergic reactions like low blood pressure, vomiting and shortness of breath.

The U.S. Food and Drug Administration is now investigating whether the drug's ingredients that came from China became contaminated on purpose or by accident, and where in the supply chain that contamination occurred.

Drug Makers Say Deliberate Contamination Happened Early in Supply Chain/. Both the CEO of heparin manufacturer Baxter and the CEO of Scientific Protein Laboratories, the U.S. firm that operates the Chinese plant from which Baxter and others got their heparin, suggested the contamination was deliberate and happened before the drug's ingredient reached the lab.

"We are greatly concerned that our heparin product appears to be the target of a deliberate adulteration scheme," Robert L. Parkinson, Jr., chairman, CEO and president of Baxter International, Inc., said in a written statement to the House Energy and Commerce Committee's oversight and investigations panel.

David Strunce, CEO of Scientific Protein Laboratories, likewise said, "It seems to us that it's an intentional act upstream in the supply chain."

Derived from pig intestines, often from farms in rural China, heparin is processed and manufactured in various plants in China, the United States and abroad before it is finally administered to patients.

Meantime, the Hubley family, too, told lawmakers heparin was responsible for their losses. Leroy Hubley, also from Toledo, lost both his wife, Bonnie, and his son, Randy, after they received heparin during dialysis for a genetic kidney disease. Bonnie Hubley died in December 2007 and Randy died in January 2008. Both experienced symptoms associated with the contaminated heparin after receiving Baxter's heparin. Other members of the Hubley family continue to receive dialysis for their kidney disease.

"As a nurse, I thought that I would be there to save my husband from any errors, but I guess I was naïve," Randy Hubley's wife, Colleen Hubley, a dialysis nurse, told lawmakers. "I never thought the lifesaving medication we were relying on might be contaminated."

Though estimates suggest more than 80 percent of all active ingredients used by U.S. drug manufacturers come from abroad, the FDA only inspects foreign drug plants about once every 13 years, according to the Government Accountability Office. The GAO finds that China's drug plants are inspected once every 30 to 40 years. The FDA plans to establish permanent overseas offices in numerous countries, including China, to help address the problem.

CHICKEN MACERATOR

Chick culling or unwanted chick killing is the process of separating and disposing of unwanted (male and unhealthy female) chicks, for which the intensive animal farming industry has no use. It occurs in all industrialized egg production whether free range, organic, or battery cage. **Worldwide, around 7 billion male chicks are culled per year in the egg industry.** Because male chickens do not lay eggs and only those on breeding programs are required to fertilize eggs, they are considered redundant to the egg-laying industries and are usually killed shortly after being sexed, which occurs just days after they are conceived or after they hatch. Some methods of culling that do not involve anesthetics include: cervical dislocation, asphyxiation by carbon dioxide and *maceration using a high-speed grinder*.

The Model Code of Practice for the Welfare of Animals: Domestic Poultry states that all culled or surplus newly hatched chicks that are destined for disposal must be treated as humanely as those that will be retained or sold. The Code states that these chicks must be killed promptly by carbon dioxide gassing or maceration. Chicks must then be carefully inspected to ensure they are all are dead.

Maceration is done in a manner to ensure that chicks are killed within a second and, when carried out effectively and competently, this method may be considered more humane than gassing with high concentrations of carbon dioxide. This is because carbon dioxide at high concentrations is aversive to poultry and the method results in prolonged suffering prior to death.

DOG GASSING

The novel coronavirus and the SARS outbreak of 2003 have two things in common: Both are from the coronavirus family, and both have been associated with animals commonly sold in "wet markets."

Historically at such markets, outdoor stalls are squeezed together to form narrow lanes, where locals and visitors shop for cuts of meat and ripe produce. A stall selling caged chickens may abut a butcher counter, where meat is chopped as nearby dogs watch hungrily. Some vendors hock hares, while seafood stalls display glistening fish and shrimp.

Wet markets put people and live and dead animals — dogs, chickens, pigs, snakes, civets, and more — in constant close contact. That makes it easy for zoonotic diseases to jump from animals to humans.

"Poorly regulated, live-animal markets mixed with illegal wildlife trade offer a unique opportunity for viruses to spill over from wildlife hosts into the human population," the Wildlife Conservation Society said in a statement.

In the case of SARS and the new coronavirus disease, called COVID-19, bats were the original hosts. The bats then infected other animals, which transmitted the disease to humans.

The market where the current outbreak may have started, the Huanan Seafood Wholesale Market in Wuhan, was shuttered January 1. Wuhan authorities banned the trade of live

animals at all wet markets there soon after, and China announced a temporary national ban on the buying, selling, and transportation of wild animals in markets, restaurants, and online marketplaces across the country as well. However, research since then has indicated the market may not have been the origin of the outbreak.

That ban is now permanent. Farms that breed and transport wildlife to wet markets were also quarantined and shut down.