

ANTHRAX -- A mythical scenario*

	Scenario		Sverdlovsk	
	<u>Cum.Cases</u>	<u>%</u>	<u>Cum.Cases</u>	<u>%</u>
Day 3	3600	1	2	3
4	10,000	16	5	7
5	23,000	36	9	13
6	50,000	79	13	21
7	63,000	99	18	25
8+	a few		53	75

Scenario: Virtually all cases have occurred by day 7
No organized program for AB distribution
"If everything was done right and there was an
antibiotic program , perhaps we could
save 10-15%"

Sverdlovsk:
Under 20% of cases have occurred by day 7
Only 50% have occurred by day 12

Working Group:
Recommends stockpile and 60 day antibiotic
administration for exposed population

***Created by Research Planning Incorporated (RPI) and presented on Nightline**

ANTHRAX -- A mythical scenario- II

Scenario: Don't give antibiotics to anyone with symptoms. It will do no good.

Working Group: Early antibiotic administration is essential given the rapid course of the disease.

Scenario: Supplies of army vaccine are flown into the area on day 6 of the epidemic for ? purpose

Working Group: There is no vaccine for civilian use at this time. Because of long incubation period, program with doses at day 0 and 15 makes sense

Scenario: Emergency medical personnel arrive -- Day 5 - with body suits and masks

Working group: If a surface is heavily contaminated with spores at the immediate site of a release or spill, decontamination may decrease the slight risk of acquiring anthrax.

An aerosol would be fully dispersed within hours to 1 day at most.

SMALLPOX - the challenge of a small outbreak

Assumption:

On day 0, 80 persons exposed at a meeting; 50 infected

35 persons from metropolitan D.C.

10 persons from towns less than 90 minutes away

5 persons from more distant areas

The epidemic begins:

	<u>True cases</u>	<u>Suspects</u>	<u>Total</u>
Day 7	1	0	1
8	0	0	0
9	2	0	2
10	1	0	1
11	6	0	6
12	8	4	12
13	12	8	20
14	10	6	16
15	7	12	19
16	1	10	11
17	2	15	17

- Who detects the outbreak and how
- What is the role of the first responders
- Of what value are space suits, respirators, sensors
- Who interviews patients to determine possible source of infection and names of contacts
- Who keeps the press informed

SMALLPOX - the challenge of a small outbreak III

The second wave of cases begins in a highly susceptible population

Multiplier -- depending on the season of the year

Probably 10:1 to 30+:1

Cases are reported from other countries

Do we share our vaccine supply

Parting thought

If we are to deal intelligently with the threat of biological weapons, those who have knowledge and experience in the field of biology, medicine and public health must place a central role in analysis, planning, implementation and research. This has only begun to be understood by some.