

An Anthrax Outbreak Averted: Public Health Response to a Contaminated Envelope on Capitol Hill—Washington, D.C., 2001



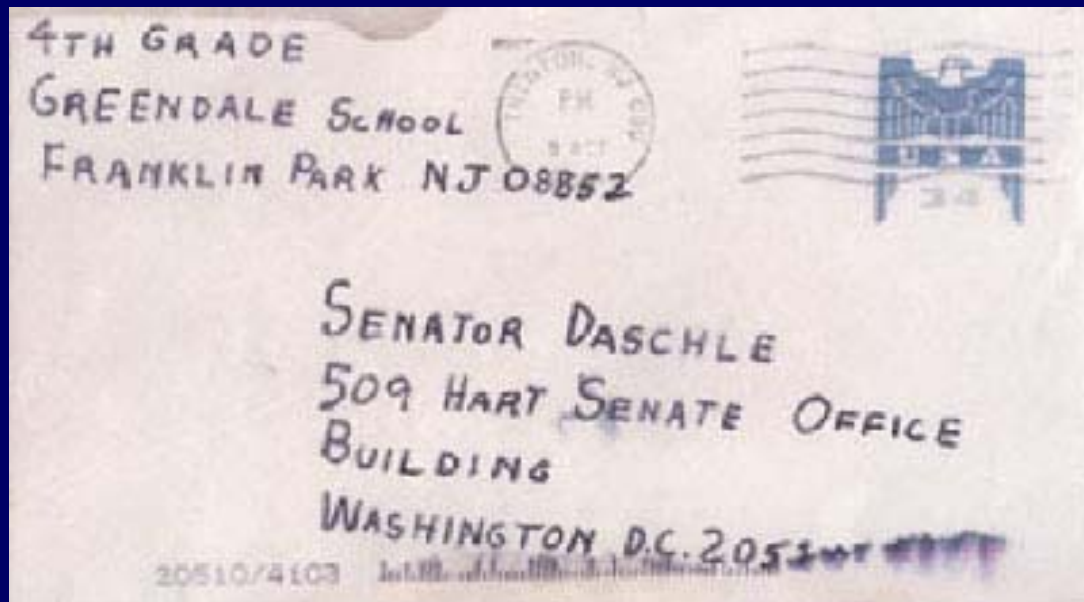
Vincent Hsu, MD, MPH
Centers for Disease Control and Prevention

Bioterrorism Awareness

- Heightened awareness of bioterrorist attacks following September 11
- Anthrax cases in Florida and New York
- Senate staff receive training in biological threat response

October 15: First Hour

- 9:45 AM Envelope opened
- 9:55 First responders arrive, tests powder for *B. anthracis*



October 15: First Hour

- 10:15 Initial *B. anthracis* test positive
- 10:30 Ventilation shut down
- 10:30 OAP arrives
 - begins nasal swab (NS) testing
 - administers prophylaxis

1. Define Exposure Area and Population at Risk

- Obtain floor diagrams
- Analyze ventilation system
- Nasal swab results



2. Identify and Follow Up Population At Risk

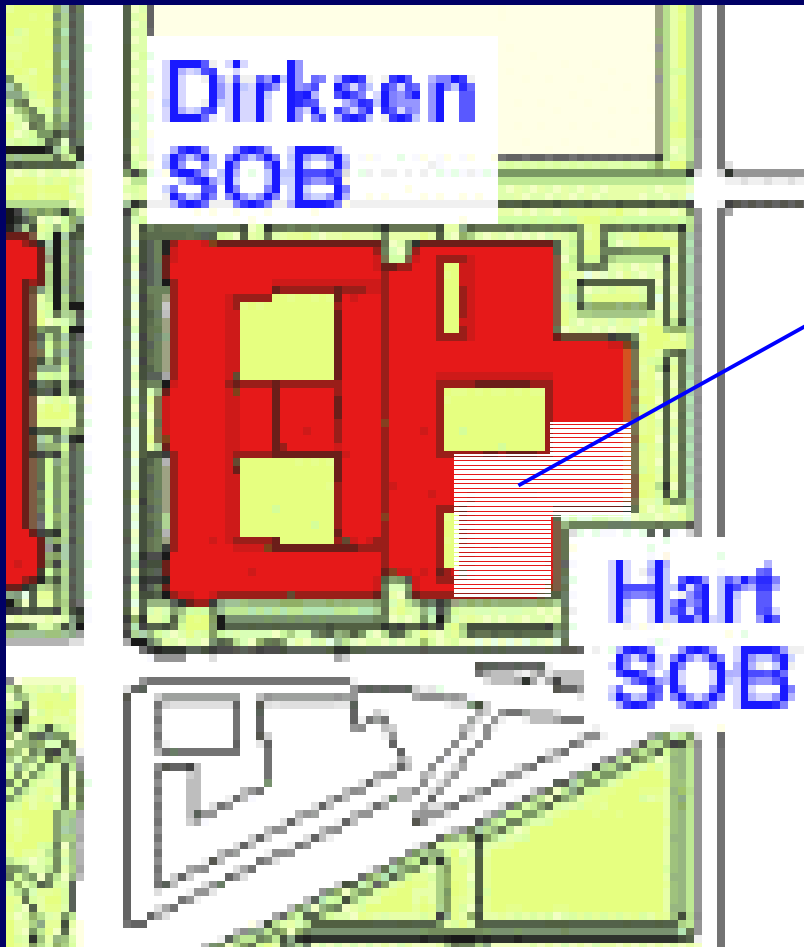
- Interview persons in Daschle and Feingold offices
- Obtain comprehensive list of all persons in exposed area
- Media broadcasts
- Monitor for symptoms of anthrax

3. Assess Use of NS Testing

Persons with positive NS

- Repeat NS for *B. anthracis* culture at 7 days post-exposure
- Test for IgG antibodies to *B. anthracis* protective antigen (anti-PA) at 7, 21, and 42 days post-exposure

Defined: Exposure Area and Population at Risk



Exposure Area

Southeast quadrant of Hart Building: 5th and 6th floors

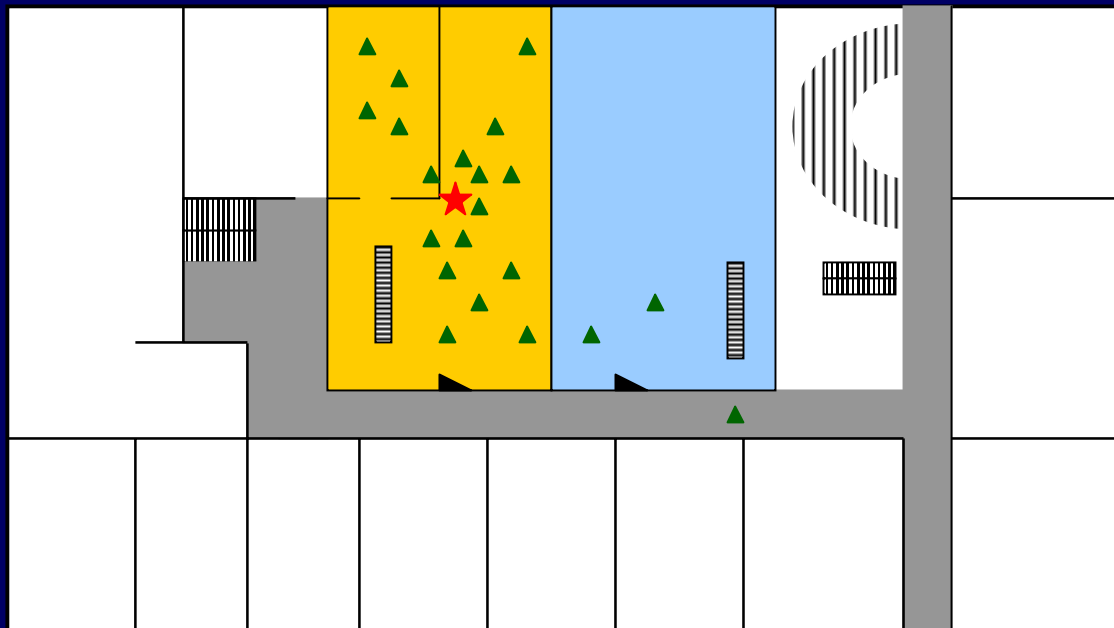
Population at Risk

All persons in the exposure area on October 15

Identified: Population at Risk on Oct. 15

Category		Total	Number with positive NS (%)
Senate Staff	Daschle	38	20 (53)
	Feingold	27	2 (7)
	Other	252	0
Visitors		66	0
Responders		59	6 (10)
Total		442	28 (6)

SE 6th Fl. Hart Bldg

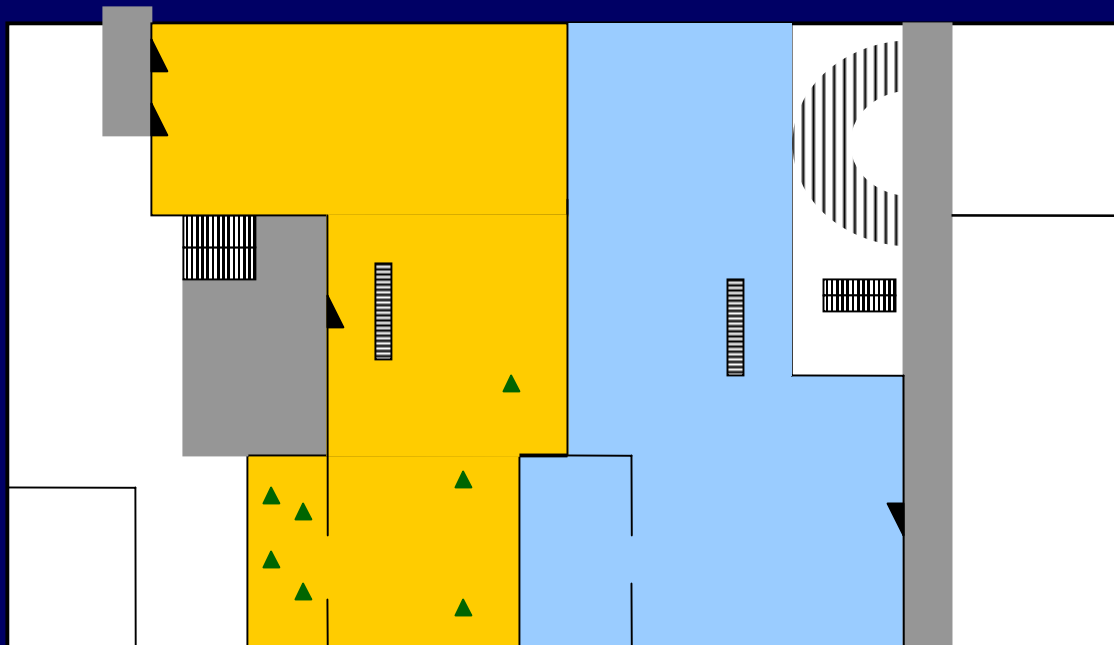


- Daschle office
- Feingold office
- ★ Envelope opened
- ▴ Doorway
- Staircase

▲ 6th Fl. Positive NS

Group	No. pos.	Tot. No.	% pos.
Daschle	13	13	100
Feingold	2	15	13
Responders	6	59	10

SE 5th Fl. Hart Bldg



- Daschle office
- Feingold office
- Doorway
- Staircase

▲ 5th Fl. Positive NS

Group	No. pos.	Tot. No.	% pos.
Daschle	7	25	28
Feingold	0	15	0

Follow Up and Nasal Swab Assessment

Among all persons in the exposed area (N=442)

Prophylaxis duration → 60 DAYS

No. developing anthrax → 0

Among persons with positive nasal swabs (N=28)

Repeat NS at 7 days → NEGATIVE

Anti-PA IgG (7, 21, 42 days) → NEGATIVE

Conclusion: Anthrax Outbreak Averted

- Rapid identification of anthrax spores, control measures, prophylaxis
- Assessment of exposure area and identification of population at risk
- Early NS for *B. anthracis* useful epidemiologic tool for environmental exposure

Recommendations

- Secure area and shut down ventilation
- Define exposure area and identify population at risk
- Administer prompt prophylaxis
- Monitor for subsequent illness
- Trace back letter path through postal system

Acknowledgments

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Architect of the US Capitol: title photograph, floor diagrams, and maps

Coauthors are listed in italics

