

# Shelter-in-Place: Decisions and Challenges

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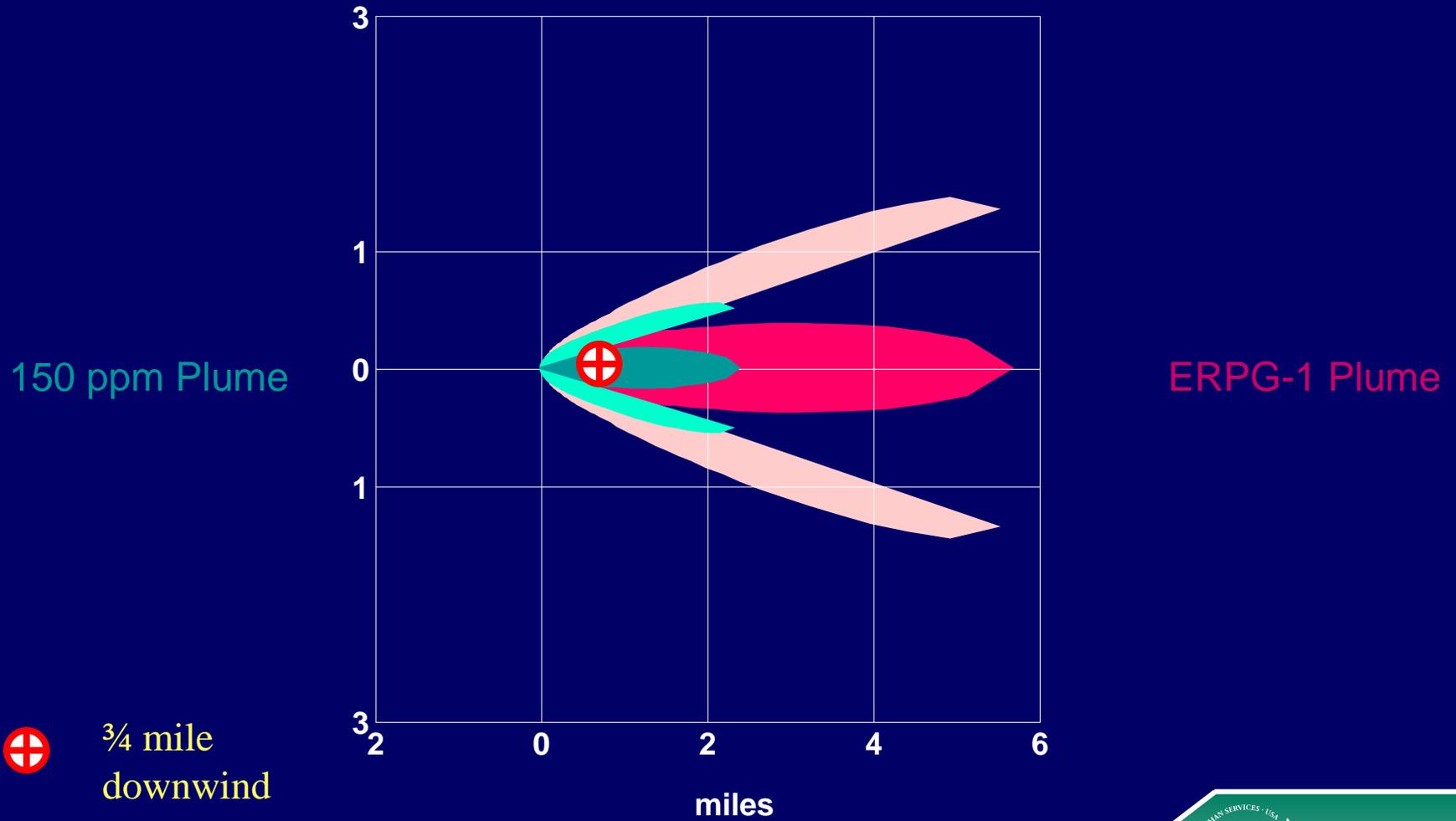
Data to Message Panel  
CARPA Summit  
Air Quality in Emergency Response  
October 16, 2008  
Sacramento, CA  
Rich Nickle, ATSDR



**ATSDR**  
AGENCY FOR TOXIC SUBSTANCES  
AND DISEASE REGISTRY

# Ammonia Release From a Tankcar Spring Day in Georgia

miles



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AND DISEASE REGISTRY

# Ammonia Concentration vs Time 3/4 mile Downwind

ppm

2,000

1,500

1,000

500

0

0

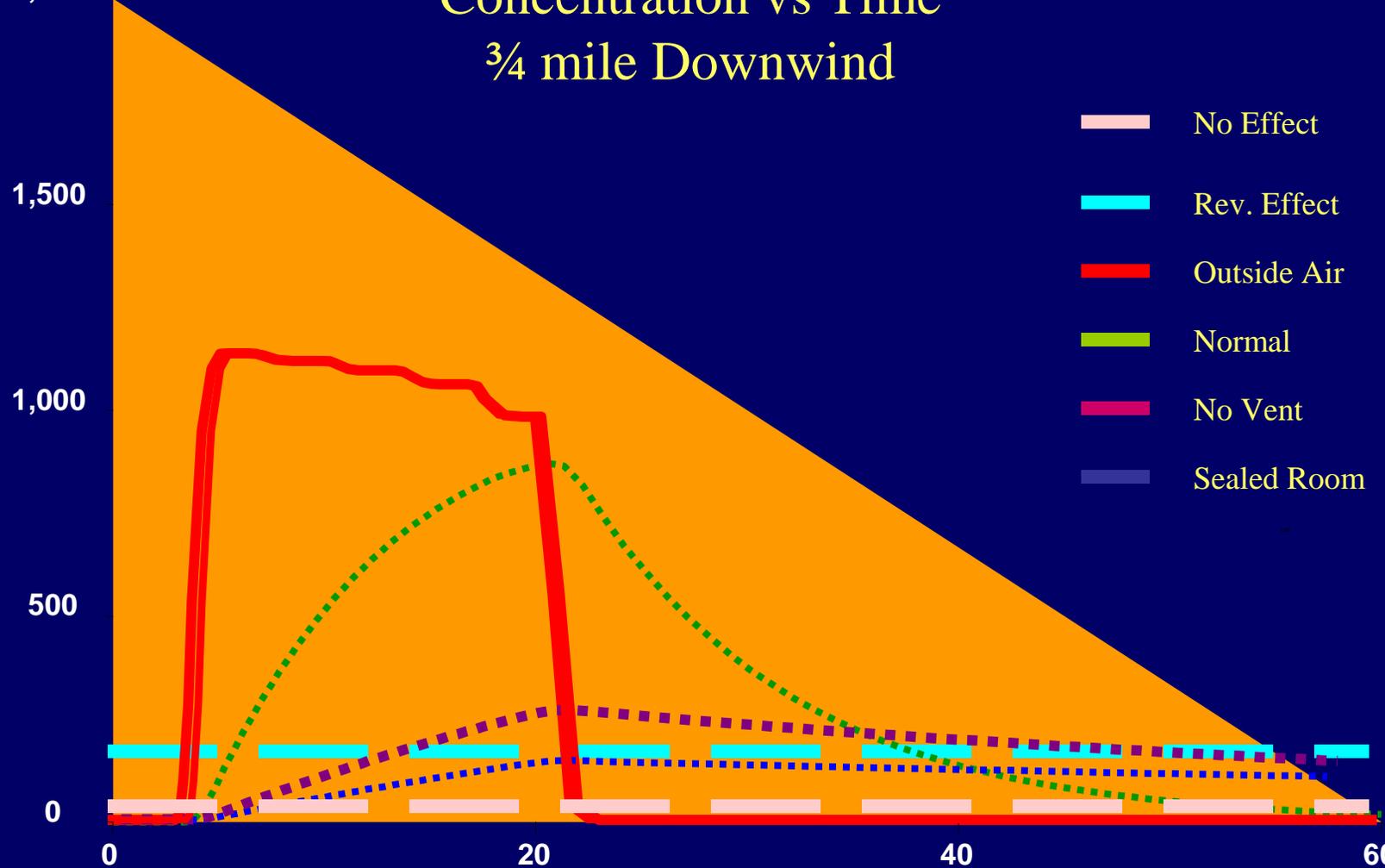
20

40

60

minutes

- No Effect
- Rev. Effect
- Outside Air
- Normal
- No Vent
- Sealed Room



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# Ammonia Concentration vs Time ¾ mile Downwind

ppm

2,000

1,500

1,000

500

0

0

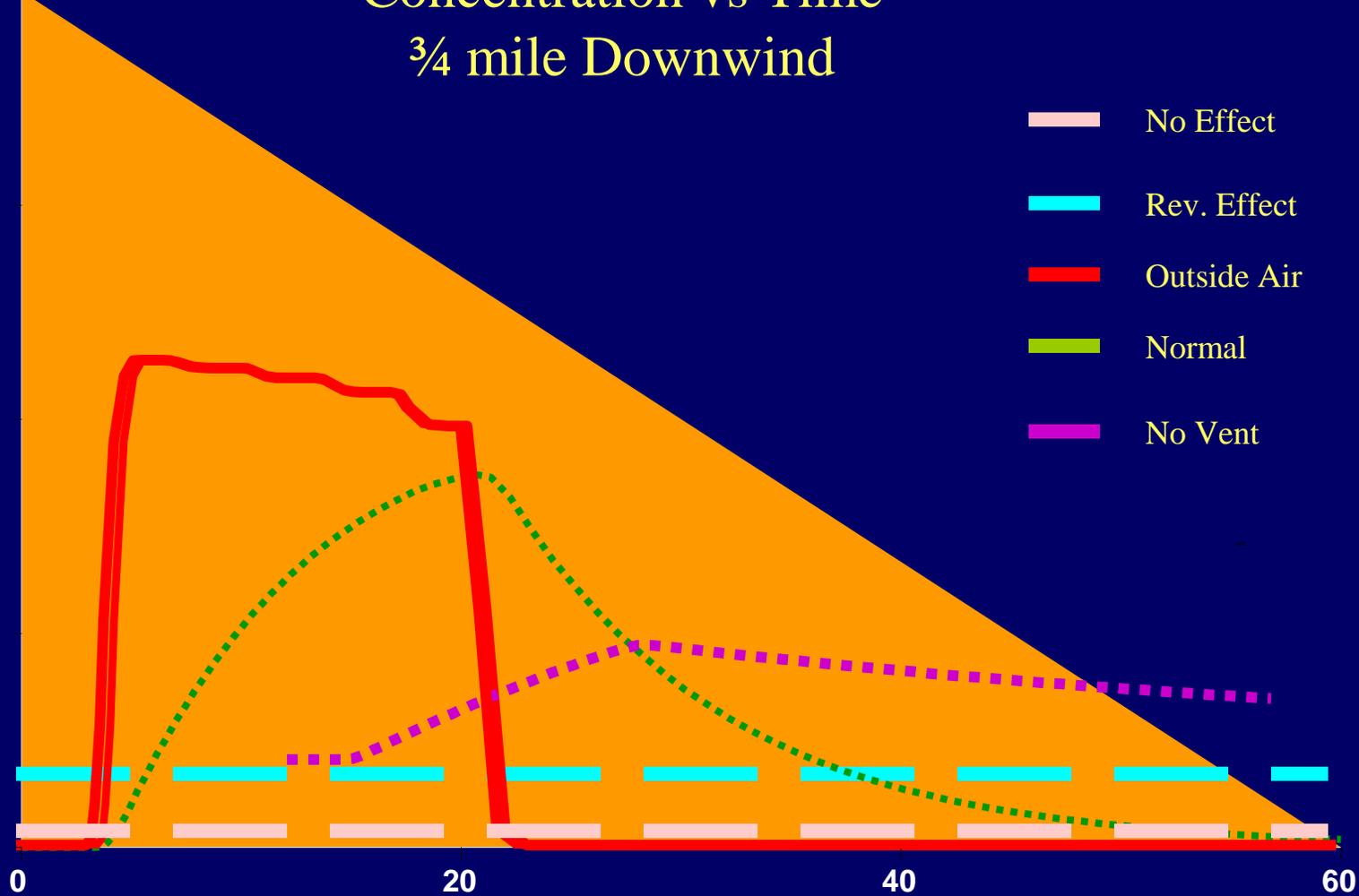
20

40

60

minutes

- No Effect
- Rev. Effect
- Outside Air
- Normal
- No Vent



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