



Update on DHQP Outbreak Investigations HICPAC February 2008

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Response Team

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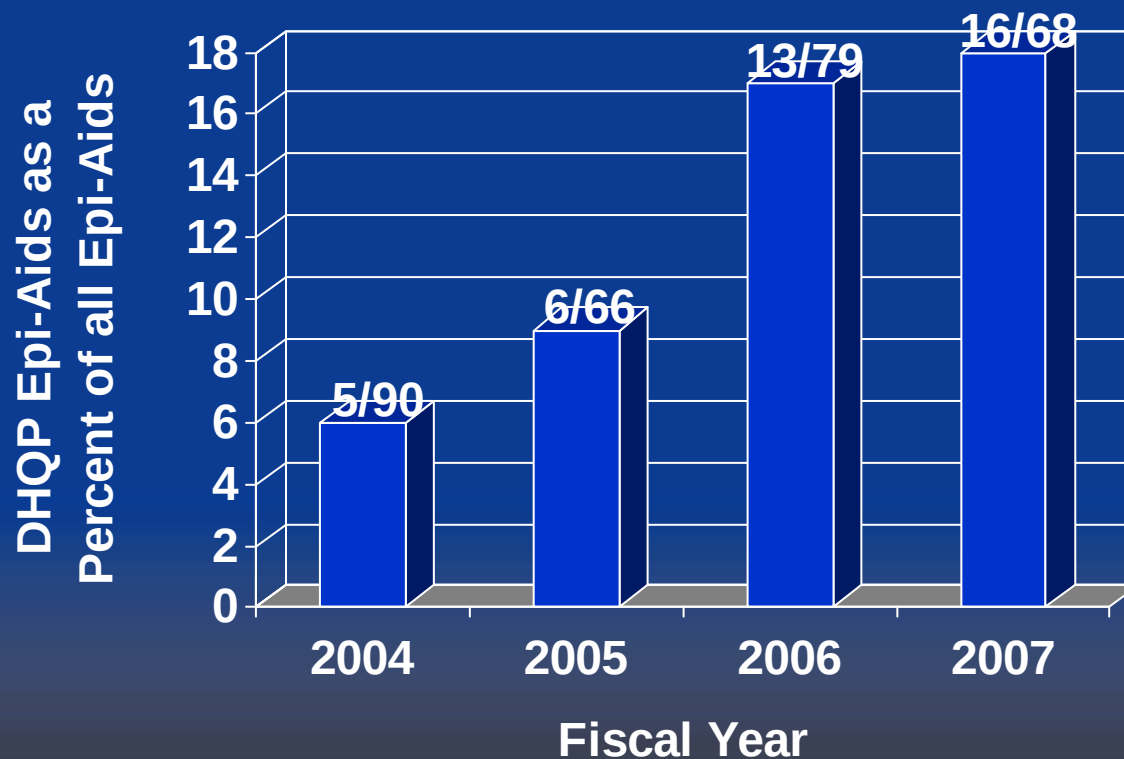


DHQP Involvement in Outbreak Investigations

- One-time phone calls and e-mails
 - Several new each week
- On-going assistance from Atlanta
 - A few in progress at any time
- Sending teams into the field (“Epi-Aids”) at the invitation of state health departments



DHQP Involvement in CDC Epi-Aids





Why the Increase?

- Better surveillance throughout healthcare?
- Climate of transparency and zero tolerance for healthcare infections prompting more calls to public health?
- More awareness of DHQP expertise?



What are we Investigating?

- Some things have not changed:
 - Surgical site infections
 - MRSA
 - *C. diff*
- But they do have a twist
 - Community MRSA outbreaks have exceeded healthcare MRSA
 - Community *C. diff* also on the rise



Some Things Have Changed- What's Hot

- More outbreaks caused by Gram negative pathogens- especially multi-drug resistant and especially *Acinetobacter*
 - 1-2 Epi-Aids per year for *Acinetobacter* outbreaks the last 3 years
 - 0 per year for several years before



What's Hot

- Outbreaks following ambulatory procedures:
 - Ophthalmology clinics and Toxic Anterior Segment Syndrome
 - Urology clinics and infections after prostate biopsy and cystoscopy
- Outbreaks related to compounded medical products
 - 1-2 outbreaks per year for last few years



What's Hot

- Outbreaks related to tissue and organ transplantation
 - Organ transplant issues have made the most news of late, but tissue related outbreaks have occurred almost every year



What's Hot

- Adverse drug reactions
 - Infectious- blood stream infections among pulmonary hypertension patients receiving IV prostanooids
 - Non-infectious- deaths among infants related to cough and cold medications



National Product Investigations

- Seem to be becoming more frequent
- On average 1-2 DHQP investigations per year result in a national recall of a medical product or device:
 - Prefilled heparin and saline syringes contaminated with *Serratia*
 - Heparin associated with anaphylactic reactions



Why?

- Communication networks definitely enhance our ability to link cases in different areas to common products.
- Product manufacturing and distribution has also become more complicated.
 - Increasingly products are made in components by one or more companies, assembled by another and distributed by yet others
 - Increased opportunities for problems



Successes

- Characterizing emerging pathogens
- Policy and practice recommendations
- Enhanced collaboration with FDA



Outbreak Investigations That Have Helped Characterize Emerging Pathogens



- Initial recognition and characterization of the USA-300 strain of MRSA as a major cause of community skin and soft tissue infection infections.
- Initial recognitions and characterization of the BI/NAP1 epidemic strain of *C. diff* in the US



Seeing Beyond the Individual Outbreak

- Our goal is always to search for something in each outbreak that might prevent similar ones from happening again.
- That has led to several policy/practice recommendations in the past few years.



Policy and Practice Recommendations-Accomplishments



- Guidelines for the use of human tissues contaminated with certain pathogens
- Use of face masks for myelograms
 - (HICPAC recommendation 2004)
- Guidelines for the use of gadolinium in dialysis patients
- Guidelines for reprocessing cataract surgical equipment
 - With ASCRS
- Recommendations against the use of cough and cold medications in children less than two.



Enhanced collaboration with FDA



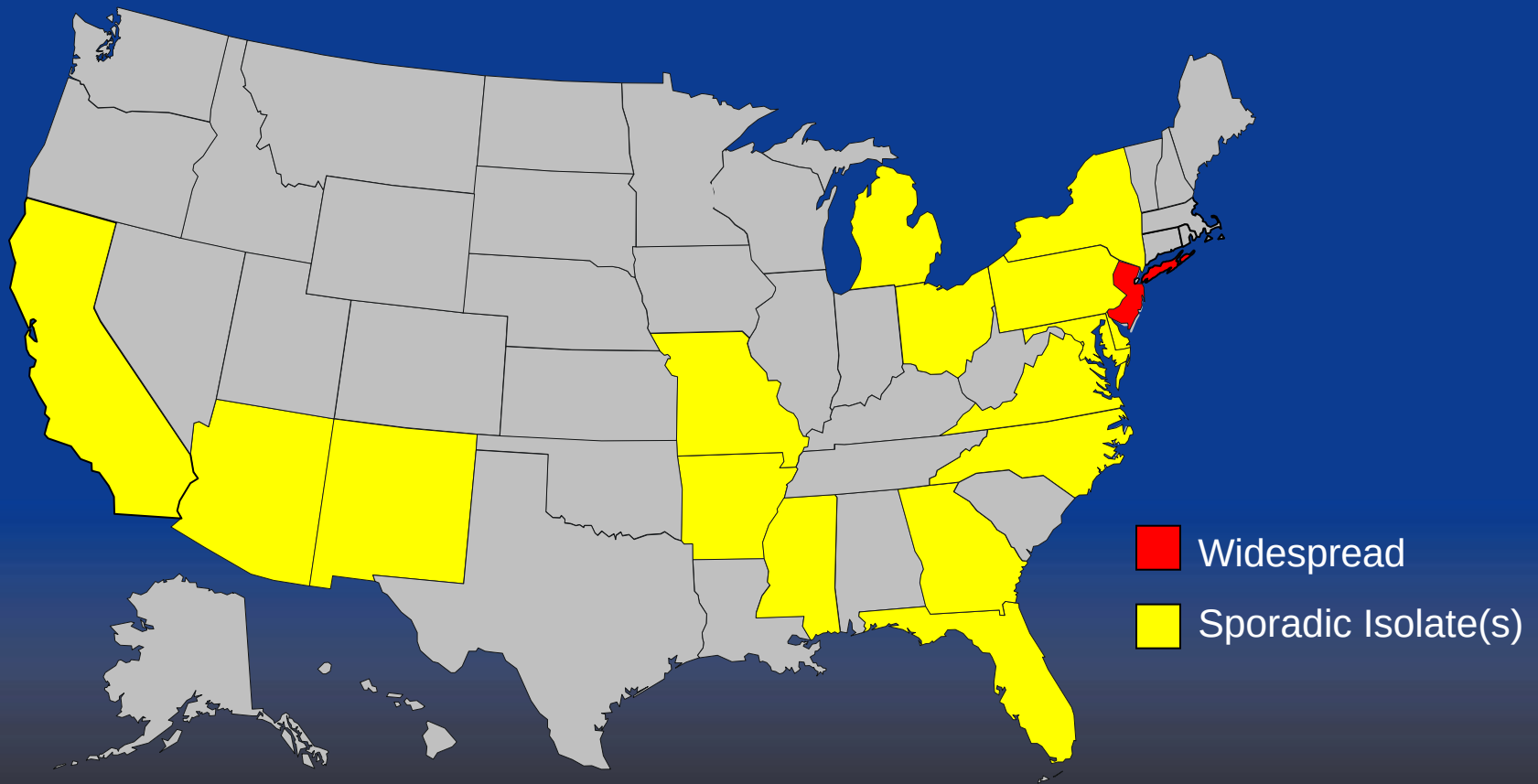
- Unprecedented level of co-operation with FDA.
- DHQP increasingly recognized as a source of help in product investigations because we can contribute epidemiologic and microbiologic expertise.



What's Next- Characterizing New Issues

- Working with our environmental microbiology lab to design and carry out studies to better assess the transmission dynamics of healthcare pathogens.
- Working to try and better understand the emerging issue of KPC producing organisms.

Geographical Distribution of KPC-Producers





What's Next- Policy and Practice Recommendations

- Guidelines for infection control for pulmonary hypertension patients.
 - With PHA
- Guidelines for re-processing urologic equipment.
 - With AUA
- Recommendations for evaluation and follow up of breaches in instrument reprocessing.



What's Next- Policy Efforts

- CDC and FDA are collaborating on a major patient safety initiative
 - We'd like to explore even more opportunities to collaborate with FDA
- We continue to seek opportunities to partner with various professional societies as well as state and local health departments to enhance our educational efforts.



How Can We Do More Together?

- HICPAC can help point us towards emerging issues in infection control where investigations might yield important early information.
- Can we leverage HICPAC's status to better utilize outbreaks to educate people about infection control?