

ALASKA LEGISLATURE COMMITTEE FILES

2007-2008

SHES

124

# ALASKA STATE LEGISLATURE



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**Senator Gary Stevens**  
**Senate Majority Leader**

## Memo

To: Senator Bettye Davis, Chair, Senate HESS Committee  
From: Senator Gary Stevens   
Date: February 6, 2007  
Re: SB 62

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I respectfully request a Senate HESS Committee hearing on SB 62, "An Act establishing the Advisory Committee on Public Reporting of Health Care Associated Infections; relating to reporting and dissemination of data concerning health care associated infections" at your earliest convenience.

I anticipate testimony on the bill from representatives of the Department of Health and Social Services, as well as medical industry representatives and others around the state. As such, I would like the hearing teleconferenced to the Homer, Anchorage and Mat-Su Valley Legislative Information Offices.

Thank you for your consideration of this request.

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# Senator Gary Stevens

## Alaska State Legislature

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### Sponsor Statement for SB 62

**"An Act establishing the Advisory Committee on Public Reporting of Health Care Associated Infections"**

SB 62 is legislation recommended by the Task Force to Assess Public Reporting of Health Care Associated Infections, which met during the 2006 Legislative Interim to study the unique challenges facing Alaska with regard to tracking and reporting health care acquired infections. This bill creates the Advisory Committee on Public Reporting of Health Care Associated Infections under the Department of Health and Social Services.

The Advisory Committee will consist of one member of the Senate, appointed by the Senate President, one member of the House of Representatives, appointed by the Speaker of the House, the state official in charge of epidemiology, and nine members appointed by the Governor as follows:

1. two physicians with significant experience in the area of infectious diseases;
2. a representative of the Alaska Native Tribal Health Consortium;
3. a representative of the Alaska Chapter of the Association of Professionals in Infection Control and Epidemiology;
4. a representative of the Alaska State Hospital and Nursing Home Association;
5. a health care consumer from urban Alaska;
6. a health care consumer from rural Alaska;
7. and a statistician.

In the coming years, the Advisory Committee's role will be to develop recommendations for collecting, analyzing and distributing information related to health care associated infections. By January, 2009, the Advisory Committee will provide recommendations to the Department for establishing a pilot program for public reporting of health care associated infections. By January, 2011, the Advisory Committee will provide to the Legislature a report addressing the unique challenges in the state, as well as recommendations for ongoing reporting.

Some 2 million infections a year are acquired in hospitals and an estimated 90,000 people die as a result of these infections, making it the sixth-leading cause of death in the country. The cost to the consumers is between \$4.5 and \$11 billion a year. Given these

**alarming statistics, it is vital for consumers to have full knowledge of how medical facilities fare with infection rates. Passage of SB 62 can help accomplish this goal by providing lawmakers, state health officials and medical professions the opportunity to craft workable legislative recommendations for the collection of data on hospital-acquired infection rates.**

**I urge your support of this important legislation.**

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## MEMORANDUM

January 23, 2007

**SUBJECT:** SB 62; Sectional Summary (Work Order No. 25-LS0332\C)

**TO:** Senator Gary Stevens  
Attn: Doug Letch

**FROM:** Alpheus Bullard   
Legislative Counsel

You have requested a sectional summary of the above referenced bill draft. As a preliminary matter, please note that a sectional summary should not be considered an authoritative interpretation of the bill, and the bill itself is the best statement of its contents.

**Section 1.** Authorizes the Department of Health and Social Services to collect, analyze, and maintain databases of information related to health care associated infections.

**Section 2.** Requires health care facilities to report health care associated infections to the department. Requires the department to disseminate health information obtained under this section to the public. Requires the department to consider the recommendations of the Advisory Committee on Public Reporting of Health Care Associated Infections. This section takes effect in 2009 after the committee established in sec. 3 issues recommendations to the department.

**Section 3.** Establishes the Advisory Committee on Public Reporting of Health Care Associated Infections in the Department of Health and Social Services. Sets out the composition and duties of the committee.

**Section 4.** Requires the governor to consider appointing persons to the new committee who served on the previously established Task Force to Assess Public Reporting of Health Care Associated Infections.

**Section 5.** Requires the committee to provide certain reports in 2009 to the department and in 2011 to the legislature.

**Section 6.** Repeals all sections having to do with the committee in June of 2012.

**Section 7.** Provides that sections 1 and 2 of the Act take effect January 1, 2009.

**Senator Gary Stevens**

**January 23, 2007**

**Page 2**

**Section 8.** Provides that sections 3, 4, and 5 of the Act take effect immediately.

TLAB:med

07-038.med

# FISCAL NOTE

**STATE OF ALASKA**  
**2007 LEGISLATIVE SESSION**

Fiscal Note Number: SB062-DHSS-OPH-02-13-07  
 Bill Version: SB 62  
 ( ) Publish Date: \_\_\_\_\_

Revision Date/Time (Note if correction): \_\_\_\_\_  
 Title: TASK FORCE ON HEALTH CARE INFECTIONS  
 Dept. Affected: Health & Social Services  
 RDU: Public Health  
 Component: Epidemiology

Sponsor: STEVENS  
 Requester: SENATE (HES) Component No. 296

**Expenditures/Revenues (Thousands of Dollars)**

Note: Amounts do not include inflation unless otherwise noted below.

| OPERATING EXPENDITURES | FY 2008      | FY 2009      | FY 2010      | FY 2011      | FY 2012      | FY 2013      |
|------------------------|--------------|--------------|--------------|--------------|--------------|--------------|
| Personal Services      | 140.8        | 176.3        | 176.3        | 176.3        | 176.3        | 176.3        |
| Travel                 | 20.0         | 20.0         | 20.0         | 20.0         | 20.0         | 20.0         |
| Contractual            | 10.0         | 10.0         | 10.0         | 10.0         | 10.0         | 10.0         |
| Supplies               | 15.0         | 5.0          | 5.0          | 5.0          | 5.0          | 5.0          |
| Equipment              |              |              |              |              |              |              |
| Land & Structures      |              |              |              |              |              |              |
| Grants & Claims        |              |              |              |              |              |              |
| Miscellaneous          |              |              |              |              |              |              |
| <b>TOTAL OPERATING</b> | <b>185.8</b> | <b>211.3</b> | <b>211.3</b> | <b>211.3</b> | <b>211.3</b> | <b>211.3</b> |

|                             |  |  |  |  |  |  |
|-----------------------------|--|--|--|--|--|--|
| <b>CAPITAL EXPENDITURES</b> |  |  |  |  |  |  |
|-----------------------------|--|--|--|--|--|--|

|                               |  |  |  |  |  |  |
|-------------------------------|--|--|--|--|--|--|
| <b>CHANGE IN REVENUES (0)</b> |  |  |  |  |  |  |
|-------------------------------|--|--|--|--|--|--|

**FUND SOURCE (Thousands of Dollars)**

|                                       |              |              |              |              |              |              |
|---------------------------------------|--------------|--------------|--------------|--------------|--------------|--------------|
| 1002 Federal Receipts                 |              |              |              |              |              |              |
| 1003 GF Match                         |              |              |              |              |              |              |
| 1004 GF                               | 185.8        | 211.3        | 211.3        | 211.3        | 211.3        | 211.3        |
| 1037 GF/Mental Health                 |              |              |              |              |              |              |
| Other(Specify Type-do not abbreviate) |              |              |              |              |              |              |
| Other(Specify Type-do not abbreviate) |              |              |              |              |              |              |
| <b>TOTAL</b>                          | <b>185.8</b> | <b>211.3</b> | <b>211.3</b> | <b>211.3</b> | <b>211.3</b> | <b>211.3</b> |

Estimate of any current year (FY2007) cost: \_\_\_\_\_  
 Mark this box (X) if funding for this bill is included in the Governor's FY 2008 budget proposal:

**POSITIONS**

|           |   |   |   |   |   |   |
|-----------|---|---|---|---|---|---|
| Full-time | 1 | 1 | 1 | 1 | 1 | 1 |
| Part-time | 1 | 2 | 2 | 2 | 2 | 2 |
| Temporary |   |   |   |   |   |   |

**ANALYSIS:** (Attach a separate page if necessary)

SB 62 establishes the Advisory Committee on Public Reporting of Health Care Associated Infections to develop specific recommendations for the type of data to be collected, the mechanisms for data collection, and the optimal system for synthesizing and disseminating data in a manner useful to all Alaska healthcare consumers. Since 2002, 15 states have enacted legislation that requires hospitals to report hospital acquired infections to state health officials or other state agencies. Advocates of mandatory reporting, including the Consumers Union, believe that making such information publicly available will enable patients to make more informed choices about their healthcare and will improve overall healthcare quality.

Prepared by: Jay Butler, M.D. Phone 465-3090  
 Division: Public Health Date/Time 02/08/2007  
 Approved by: Karleen Jackson, Commissioner Date 02/13/2007  
 Agency: Department of Health and Social Services

**STATE OF ALASKA**  
**2007 LEGISLATIVE SESSION**

**ANALYSIS CONTINUATION**  
**ANALYSIS (Continued)**

The bill requires the Advisory Committee to disband by June 30, 2012. However, 1.5 FTEs will be needed to develop the initial program beginning in FY08. In FY09, a Microcomputer/Network Specialist II (Range 20, 0.5 FTE) will be added. (Continued on Page 2)

**Details of FY08 costs:**

**PERSONAL SERVICES** for staff to administer and run the program (\$140.8): Public Health Specialist II (Range 20D, 1.0 FTE), Administrative Clerk III (Range 10, .5 FTE).

**TRAVEL** (\$20.0): Quarterly 1-day meetings; 1 in Juneau, 3 in Anchorage.

**CONTRACTUAL** (\$10.0): Printing of committee reports.

**SUPPLIES** (\$15.0): Initial setup for two positions - office furniture, computers, printer and general office supplies. After FY08, supply costs would be approximately \$5.0 annually.

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### Sponsor Statement for SB 62

Some 2 million infections a year are acquired in hospitals and an estimated 90,000 people die as a result of these infections, making it the sixth-leading cause of death in the country. The cost to the consumers is between \$4.5 and \$11 billion a year. Given these alarming statistics, it is vital for consumers to have full knowledge of how medical facilities fare with infection rates. Passage of SJR 19 can help accomplish this goal by providing lawmakers, state health officials and medical professions the opportunity to craft workable legislative recommendations for the collection of data on hospital-acquired infection rates.

SJR 19 creates the Task Force to Assess Public Reporting of Health Care Associated Infections. This ten member panel will consist of two senators, two representatives, the Chief of Epidemiology for the State of Alaska, one healthcare consumer from rural Alaska, one healthcare consumer from urban Alaska, a representative of the Alaska Native Tribal Health Consortium, a representative from the Alaska Chapter of the Association of Professionals in Infection Control and Epidemiology, and a representative of the Alaska State Hospital and Nursing Home Association.

During the 2006 Legislative Interim, the Task Force will be asked to:

- (1) Review experience to date with public reporting of hospital-associated infections.
- (2) Develop a white paper to be used for drafting legislation for reporting of healthcare associated infections. The white paper will address the unique healthcare challenges of Alaska and would encompass:
  - (a) Mechanism(s) for reporting;
  - (b) Identifying data sources and possible outcome and process measures to be reported;
  - (c) Timeline for implementation;
  - (d) Infrastructure needs for supporting a robust ongoing reporting system for dissemination of accurate data.

I ask for your support of this important legislation.



Last update 2/20/07

**2007 Legislative Session**  
**Hospital-acquired infection public reporting bills**  
Click on bill numbers to access bill text

**Georgia - HB 61; SB 78; SB 150**

**Bill Status:** HB 61 in House Committee on Health and Human Services; SB 78 and SB 150 in Senate Health and Human Services

**Bill Sponsor(s):** HB 61: Rep. Powell; SB 78: Sen. Hamrick and Hill (Judson); SB 150: Sen. Hill (Judson)

**Other Information:** HB 61 is based on the Consumers Union model act and is the best bill so far.

**Hawaii - HB 1438; SB 1239**

**Bill Status:** HB 1438: Introduced on 1/22; SB 1239: Introduced on 1/24.

**Bill Sponsor(s):** HB 1438: Rep. Belatti; SB 1239: Sen. Fukunaga.

**Other Information:** Both bills require public reporting of hospital infection rates.

**Indiana - HB 1592; SB 513; SB 531**

**Bill Status:** HB 1592: Introduced and referred to House Committee on Public Health on 1/12; SB 513: Introduced and referred to Senate Committee on Health and Provider Services on 1/23; SB 531: Introduced and referred to Senate Committee on Health and Human Services 1/23.

**Bill Sponsor(s):** HB 1592: Sen. Dvorak; SB 513: Sen. Aking; SB 531: Sen. Dillon

**Other Information:** HB1592 and SB513 require public reporting of hospital infection rates. SB 531 allows for a committee and agency to determine what infection information should be reported.

**Kansas - HB 2342, HB 2271**

**Bill Status:** HB 2342 and HB 2271: Introduced 1/29; referred to House Committee on Health and Human Services 2/2.

**Bill Sponsor(s):** Both bills sponsored by the House Committee on Health and Human Services

**Minnesota - SF 755, HF 1076**

**Bill Status:** SF 755: introduced 2/12; sent to committee on Health Housing and Family Security; HF 1076 introduced and referred to House Health and Human Services (2/19).

**Bill Sponsor(s):** SF 755: Sen. Berglin; HF 1076: Kahn; Huntley; Ruud; Fritz; Abeler; Murphy, E.

**New Mexico - HB 165; HB 944**

**Bill Status:** HB 165: Introduced 1/17; assigned to House Committee on Judiciary; then House Committee on Health and Governmental Affairs; HB 944: Introduced 2/6 and referred to House Health and Governmental Affairs..

**Bill Sponsor(s):** HB 165: Rep. Anderson; HB 944: Rep. Rodella

**Oregon - HB 2524**

**Bill Status:** Introduced 1/30; referred to Health Care Committee 2/6; assigned to subcommittee on Health Policy 2/8; public hearing held 2/15.

**Bill Sponsor(s):** Rep. Tomei, Greenlick, Barker, Barnhart, Boone, Buckley, Cannon, Clem, Cowan, Dingfelder, Galizio, Gelsner, Gilliam, Holvey, Lim Nelson, Riley, Rosenbaum, Shields, Witt

**Texas - HB 1398; HB 678; SB 288**

**Bill Status:** HB 1398 introduced 2/13, referred to the House Public Health Committee 2/19; HB 678 introduced 1/22, referred to House Public Health Committee (2/6); SB 288: introduced 1/24.

**Bill Sponsor(s):** HB 1398: Rep. Delisi; HB 678 Rep. Davis; SB 288: Sen. Nelson

**Other Information:** HB 1398 reflects recommendation of a state advisory committee on hospital infections.

**Washington - HB 1106**

**Bill Status:** Substitute passed by Health Care and Wellness Cmte (11-2) on 2/8; referred to Appropriations Committee 2/12; scheduled for public hearing in the House Committee on Appropriations at 3:30 PM. (Subject to change) on 2/22.

**Bill Sponsor(s):** Rep. Campbell

**West Virginia – HB 2234; SB 85**

**Bill Status:** HB 2234 in House Cmte on Health and Human Resources 1/16; SB 85 in Senate Cmte on Health and Human Resources 1/15.

**Bill Sponsor(s):** HB 2234: Rep. Hamilton; Hrutkay, Hatfield; SB 85: Sen. Hunter and Foster.

## Hospital-acquired infections take toll on bottom lines

Posted 11/21/2006 12:16 AM ET

By Julie Appleby, USA TODAY

Reducing the number of infections patients contract while in hospitals would not only benefit patients but also hospitals' profits.

Researchers say the finding in a study out Monday counters an assumption that hospitals make money on patients who fall ill with a hospital-acquired infection because they often receive higher payments from insurers for dealing with complicated cases. But the higher payments do not cover the additional costs.

"This adds economic strength to the notion that we ought to be doing away with infections," says Richard Shannon, co-author of the study and vice chair of clinical affairs in the department of medicine at the University of Pennsylvania.

"Not only is it the right thing to do from the patient perspective," he says, "but infections are in fact costing payers and hospitals lots of money."

His study showed an average \$26,839 loss to the hospital for each patient who came down with one type of infection called a central-line-associated bloodstream infection. A central line is a catheter placed into a vein to provide fluids or medication. Of 54 patients who got that type of infection during a three-year period at the one hospital studied, only four resulted in a break-even or profit for the hospital.

That's because the costs of caring for a patient who gets an infection usually far exceed the amount the facility is paid by insurers, says the study, one of three studies on the effects of hospital-acquired infections published in the *American Journal of Medical Quality*.

The journal articles come as hospitals nationwide are being asked to provide more information on cost and quality, but many have balked at providing information on hospital-acquired infections. Debate is ongoing about what types of infections should be reported and how to tell whether patients got the infections while in the hospital, came to the facility with them or developed them after being discharged.

Hospital-acquired infections are estimated to affect about 2 million patients annually and cause an estimated 100,000 deaths, according to one of the studies.

About 16 states have laws covering a variety of infection-reporting requirements for hospitals, but only Pennsylvania has issued a public report that gives infection rates at individual hospitals. Last week, Pennsylvania reported that more than 19,000 patients got an infection while in a hospital last year, raising costs.

The two other reports in the same issue of the journal take issue with another assumption about hospital infections: that patients who get them may have higher risks that cause them to come down with infections.

"Hospital-acquired infection is not an anticipated byproduct of taking care of the very ill," says David Nash, editor of the journal and chairman of the Department of Health Policy at Jefferson Medical College in Philadelphia. "It's a failure in the process of how medical care is delivered."





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## R.I. Lawmaker Targets Hospital Errors

February 27, 2007

Between 44,000 and 98,000 patients die each year in U.S. hospitals because of mistakes, infections and other adverse situations. That's more deaths than those caused by breast cancer, AIDS or car accidents.

Most of those deaths are avoidable, according to Rhode Island Sen. Charles J. Levesque (D-Dist. 11, Portsmouth, Bristol), who has introduced legislation aimed at reducing their occurrences in hospitals in his state.

Senator Levesque's "Patient Safety and Medical Error Reduction Act" (2007-S 0650) would require all hospitals in Rhode Island to participate in a program to increase patient safety by reducing medical errors.

Most of the hospitals in Rhode Island are among the 3,000 hospitals nationwide already participating voluntarily in a campaign run by the Institute for Healthcare Improvement to reduce medical errors, infections and other mishaps.

Their voluntary participation is excellent, said Senator Levesque, but he would like to see them all taking part.

"Everybody involved in the health care system wants patients to be safe and to receive proper care when they're in the hospital. I'm sure we can all agree that all hospitals in Rhode Island should be doing everything they can to reduce mistakes, hospital-acquired infections and medication errors so every patient can leave the hospital healthier than when he or she arrived," said Levesque.

The act specifically lists two national organizations — the National Quality Forum and the Institute for Healthcare Improvement — that have developed programs to help reduce medical errors, but hospitals would be allowed to use other programs as long as they are approved by the Department of Health. Each hospital would be required to report their progress in improving patient safety.

The act would also link hospitals' performance in terms of patient safety to funding by allowing the Department of Human Services to use it to determine their reimbursement rates.

Common ways hospitals can increase patient safety include standardizing safety, communication and sterilization procedures. Computerizing patient information to the greatest extent possible is also a way to reduce the possibility of human error.

According to a 1999 Institute of Medicine report, To Err is Human, costs of preventable "adverse events" in hospitals are estimated to be between \$17 billion and \$29 billion every year.

"Mistakes in hospitals hurt everyone. They tarnish the health care industry, they cost everyone money in the form of higher health care and insurance costs, and worst of all, they cost lives. I commend the hospitals in Rhode Island that are already taking the initiative to reduce errors and infections, and I hope this legislation formalizes this process and ensures every hospital's full compliance," said Senator Levesque.

Source: R.I. Legislative Press Bureau

Find this article at:

<http://www.insurancejournal.com/news/east/2007/02/27/77190.htm>

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### State eyes hospital infection reports

By Jessica Fargen  
Boston Herald Health & Medical Reporter  
Wednesday, February 21, 2007 - Updated: 04:01 AM EST

**Jessica Fargen**  
Boston Herald Health & Medical Reporter

Recent Articles by Jessica Fargen

Patients may soon be able to shop for the safest hospitals thanks to a new \$1 million public health plan that will make rates of deadly infections at Bay State medical centers readily available to the public for the first time.

The Department of Public Health team, which has enlisted 50 experts and surveyed 73 hospitals so far, expects to make recommendations in June on how to reduce life-threatening in-hospital infections and put in a place a plan to make the rates public, officials said yesterday.

Hospital-acquired infections kill 90,000 Americans each year, including about 2,000 Bay Staters, and some experts say those deaths are largely preventable. Patients contract the infections at the hospital in many ways, including surgery, bacteria-ridden catheter tubes and unwashed hands.

Paul Levy, president of Beth Israel Deaconess Medical Center, created a big stir recently when he posted the hospital's infection rates on his blog and encouraged other hospitals to follow suit without a complicated state mandate.

"Wouldn't it be easier to try it out voluntarily - see how it goes?" he told the Herald. "My point is these numbers are available in real time. We all keep track of it. All the state has to do is set up a Web site and let us enter our data."

Sen. Richard T. Moore, (D-Uxbridge), chairman of the Legislature's Health Care Financing Committee, has filed a bill that would add Massachusetts to the list of 16 states that have passed mandatory reporting of hospital infections.

But public health officials are taking a more measured approach, hiring experts, doing research and surveying hospitals.

"Just the nature of the patients, the case mix of patients means that there is not a one-size-fits-all solution to the problem," said Nancy Ridley, director of the Betsy Lehman Center, which is leading the project with the DPH.

Massachusetts General Hospital spokeswoman Valerie Wencis echoed that concern, saying the hospital won't post its rates until it's mandated.

"You have to have a standard across all the hospitals," she said. "That's something that needs to be taken into consideration before rates would be put online or made public."

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# Public Health Impact of Healthcare-Associated Infections



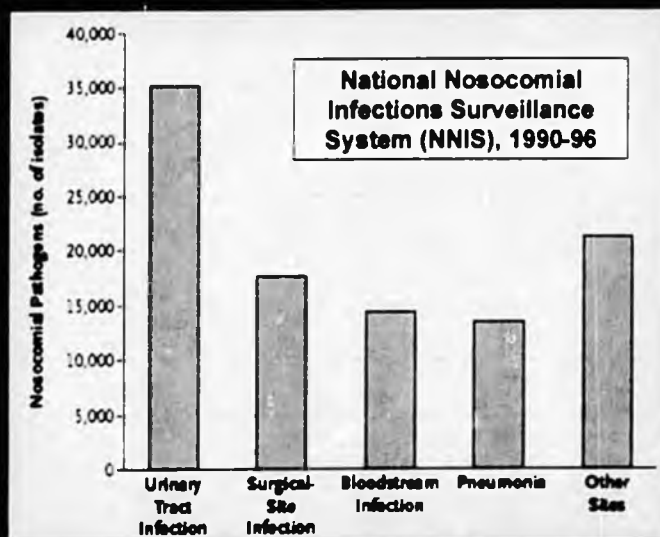
## Overview

- | Public health impact of healthcare-associated infections
- | Trends in health care and healthcare-associated infections
- | Challenges collection and dissemination of accurate data

## Public Health Impact

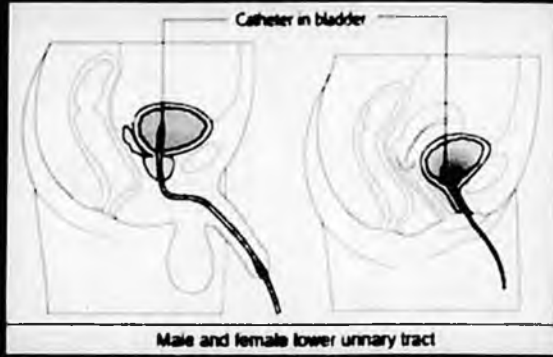
- 5%-10% of hospitalized patients develop  $\geq 1$  infections
  - 25% occur in ICU
- 2,000,000/year in US
  - 90,000 deaths
  - \$4.5 to \$5.7 billion in health care costs
- 70% of all healthcare-associated bacterial infections are caused by organisms resistant to  $\geq 1$  antimicrobial drug

## Four Conditions Account For ~80% of Healthcare-Associated Infections



Burke JP. *N Engl J Med* 2003; 348:651-685

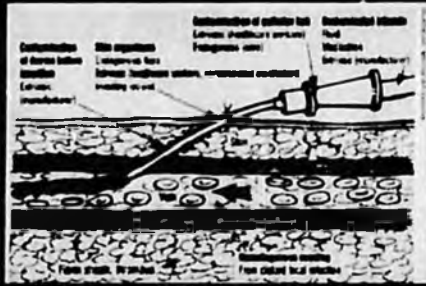
# Urinary Tract Infections



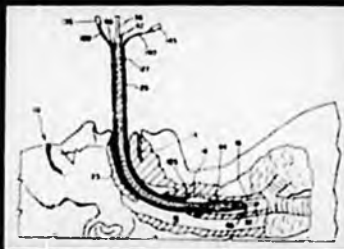
# Surgical Site Infections



# Bloodstream Infections



# Pneumonia



## Microbes of Concern

### † *Clostridium difficile* diarrhea

Increasingly diagnosed among persons in the community

### † Drug-resistant bacterial infections

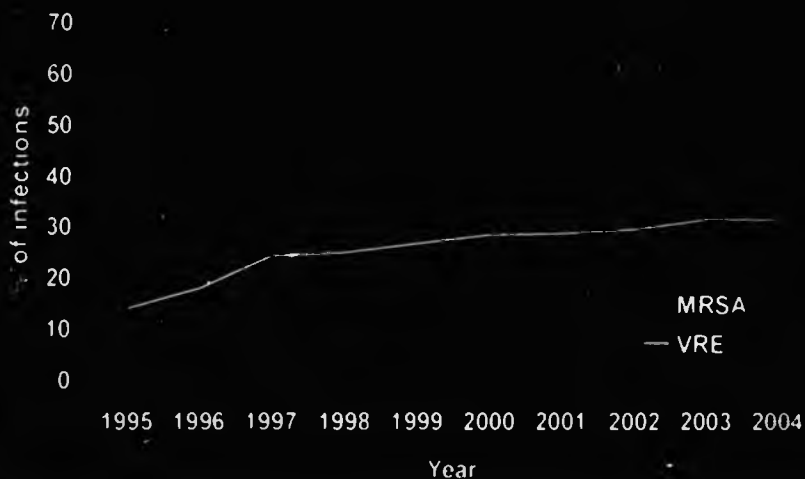
Methicillin-resistant *Staphylococcus aureus* (MRSA)

Vancomycin intermediate and vancomycin-resistant *Staphylococcus aureus* (VISA and VRSA)

Vancomycin-resistant *Enterococcus* infections

Extended-spectrum beta-lactamase-producing gram-negative infections

## Proportion of ICU-Related Infections Due to MRSA and VRE, US, 1995-2004



CDC. *Am J Infect Control* 2004; 32:470-85

## Preventability

Estimated that 30% of healthcare-associated infections can be prevented by effective infection surveillance, prevention, and control programs



## Trends in Health Care and Healthcare-Associated Infections

| Variable   | Year  |       |
|--|-------|-------|
|  | 1975  | 1995  |
| No. of admissions ( $\times 10^{-6}$ )                         | 37.7  | 35.9  |
| No. of patient-days ( $\times 10^{-6}$ )                       | 299.0 | 190.0 |
| Average length of stay (days)                                  | 7.9   | 5.3   |
| No. of inpatient surgical procedures ( $\times 10^{-6}$ )      | 18.3  | 13.3  |
| No. of nosocomial infections ( $\times 10^{-6}$ )              | 2.1   | 1.9   |
| Incidence of nosocomial infections (no. per 1000 patient-days) | 7.2   | 9.8   |

## Trends in Healthcare and Healthcare-Associated Infections



## Challenges Common to All Measures of Patient Safety

- † Events are uncommon (e.g., serious medication errors) or rare (e.g., wrong site surgical procedures)
- † Few events or outcomes have standardized definitions
- † Surveillance generally relies on self-reporting
- † Population at risk largely unknown
- † Specifics of event (e.g., time of day or hospital day) often unspecified or cannot be determined

Pronovost PE, et al. JAMA. 2006; 296:696-7

## Challenges to Healthcare-Associated Infections Data Collection

### † Changes in how healthcare is provided

More procedures and treatments are performed on out patients without hospitalization

Many healthcare-associated infections develop after the patient is home

Which institutions should be required to report?



## Challenges to Healthcare-Associated Infections Data Collection

### † Accuracy of surveillance

Hospitals doing the best job will appear to have more infections than those giving little effort

## Challenges to Reporting

### What should be reported?

Outcome measures (e.g., infection rates)

Requires adjustment for patient population to avoid bias

Potential for untoward consequences

Decreased resources for infection control

Denial of care for patients at highest risk

Process measures (e.g., pre-op antibiotics, hand hygiene, influenza vaccination rates, catheter insertion practices)

Do not require adjustment for patient population

Better for small hospitals

Assumes health benefits from process

## Challenges to Reporting

While process measures examine how effectively hospitals provide specific types of evidence-based care, outcome measures help keep organizations focused on the real goal—maximizing patient health.

Asst. Prof. in the Department of  
Harvard School of Public Health

JGIM AB JAMA 2006; 296:957

## Challenges to Reporting

### How should data be presented?

- Raw numbers vs. rates

    E.g. Hospital A has 30 surgical site infections monthly while Hospital B has 60

### How should data be reported?

- Media?
- Internet?
- Printed reports?

## Challenges to Reporting

- How should data be presented?
- How should data be reported?
- Factors unique to Alaska
- Factors universal to infection control programs

# Public Reporting of Healthcare-Associated Infections



Jay C. Butler MD, FAAP, FACP  
Deputy Director for Science and Medicine  
Division of Public Health

## Overview

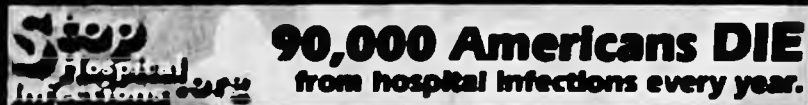
- ▮ Goals of reporting
- ▮ History
- ▮ Related quality improvement initiatives
- ▮ Experience in other states
- ▮ Recommendations
- ▮ Model Legislation
- ▮ Specific issues for Alaska

## Goals

- Provide relevant quality indicators of infection control practice in order to
  - Reduce the risk of healthcare-associated infections
  - Inform health care consumers

## History

- Issue raised into public consciousness by media reports and activism  
Consumers Union



Mothers Against Medical Error (MAME)

- In 2003 Senators Barack Obama and Mary Flowers introduced Public Act 093-563--  
Hospital Report Card Act Signed into law Aug 20 2003 effective Jan 1 2004
- Followed by Pennsylvania in November and by Missouri in 2004

## Related Quality Improvement Initiatives

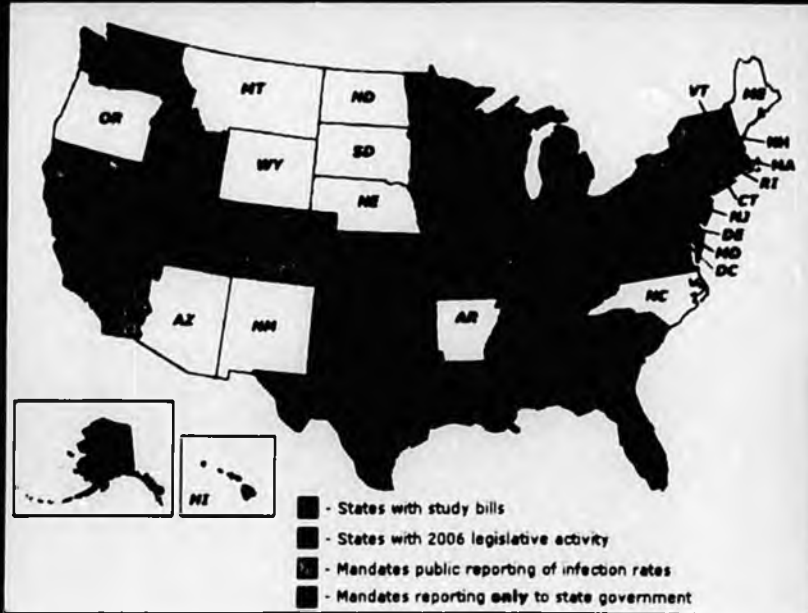
- Agency for Healthcare Research and Quality (AHRQ)
- 2001 report on 79 patient safety practices
  - 22 (28%) involved infection control
- 11 practices judged worth of widespread implementation
  - 5 involved infection control including
    - Appropriate use of pre-op antibiotics
    - Maximal sterile barrier during placement of central venous catheters



## Related Quality Improvement Initiatives

- Centers for Medicare and Medicaid (CMS) and AHRQ
  - Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS) Survey
  - 27-item questionnaire to assess patient satisfaction, approved by Nation Quality Forum
  - Hospitals required by CMS to begin collecting data in March 2007

## Experience in Other States



## California

- SB 719: An Act Relating to Health Facilities  
Signed into law Sept. 28, 2006
- Establishes the Hospital Infections Disease Control Program
- Requires Health Department and general acute care hospitals to implement measures relating to surveillance and prevention of HAI
- By July 1, 2007, a Healthcare Associated Infection Advisory Committee to make recommendations on methods of reporting HAIs

## Colorado

- HB 06-1045 signed into law June 2, 2006
- Creates an advisory committee on assist Dept of Health and Environment in development of data collection, formatting, and dissemination
- Requires health facilities to collect data on
  - Cardiac surgical site infections
  - Orthopedic surgical site infections
  - Central line related bloodstream infections
- Data collection begins July 31, 2007, and data are submitted to CDC's National Healthcare Safety Network (NHSN)
- Requires all facilities with >50 beds to have a certified infection control professional to collect data

## Connecticut

- Public Act 06-142 creates an 11-member Committee on Healthcare-Associated Infections responsible for developing, operating, and monitoring a mandatory reporting system
- Committee will provide a report to the Dept of Public Health detailing measures and processes by Oct. 1, 2007
- First annual report to be made public Oct. 1, 2008

## Florida

- HB 1629 signed into law June 14, 2004
- "this bill allows patients to obtain information regarding hospital infection rates in an understandable format"

## Illinois

- "Hospital Report Card Act" became law Aug 20, 2003, effective Jan 1, 2004
- Calls for disclosure of staffing levels in clinical care areas
- Requires quarterly reports of
  - Surgical site infections
  - Ventilator-associated pneumonia
  - Central-line bloodstream infections
- Dept of Health currently developing rules for reporting

## Maryland

- SB 135 became law on April 8, 2006
- Requires comparable evaluation system to be established by the Maryland Health Care Commission to include infection information from hospitals
- System must adhere to CDC and HICPAC guidelines on public reporting

## Missouri

- SB 1279 - The Missouri Nosocomial Infection Control Act of 2004
- Establishes advisory panel to dictate rules for data collection, analysis, risk adjustment, and types of infections reported
- Advisory panel will consider standards established by CDC for
  - Low risk surgical site infections
  - Ventilator associated pneumonia
  - Central line associated bloodstream infections
  - Other categories
- First report deadline from Missouri Healthcare Associated Infection Reporting System (MHIRS) - Dec 1, 2006
- HB 1099 (2006 session) - eliminate reporting of VAP

## Nevada

- Chapter 191 of state statute requires reporting of the sentinel events to the Health Division:
  - Surgical site infections
  - Ventilator-associated pneumonia
  - Central line-related bloodstream infections
  - Urinary tract infections
- Does NOT provide for public disclosure of these data

## New Hampshire

- HB 1741 signed into law on June 15, 2006, effective July 1, 2007
- Requires hospitals to report on infections to the Dept of Health and Human Services which will create and maintain a database for:
  - Central line related bloodstream infections
  - Ventilator associated pneumonia
  - Surgical site infections
  - Central line insertion practices
  - Pre-op prophylactic antibiotics
  - Influenza vaccination coverage among employees, patients, and residents
- Commissioner of Health will determine frequency of reporting and consider other possible measures

## New York

- Chapter 284 of the Public Health Law signed July 19, 2005, requiring hospitals to report hospital-acquired infections to Dept of Health
- Pilot phase begin Jan 1, 2007: no public reporting by hospital name
- Annual reports providing hospital-specific data beginning with data for 2008, to include
  - Central line-related infections
  - Selected surgical site infections

## Pennsylvania

- Legislation passed into law Nov 2003
- All acute care hospitals submit data on 14 categories of infection to the Health Care Cost Containment Council
- Beginning January 2004, data submitted on
  - Surgical site infections
  - Urinary tract infections
  - Ventilator-associated pneumonia
  - Catheter-related bloodstream infections

## Pennsylvania Report, November 2006

- 52-page report
- Page 1 1<sup>st</sup> sentence  
In 2005 hospitals reported 19,154 cases in which patients contracted an infection while in the hospital a rate of 12.2 infections/1,000

cases

Hospital-acquired Infections  
in Pennsylvania

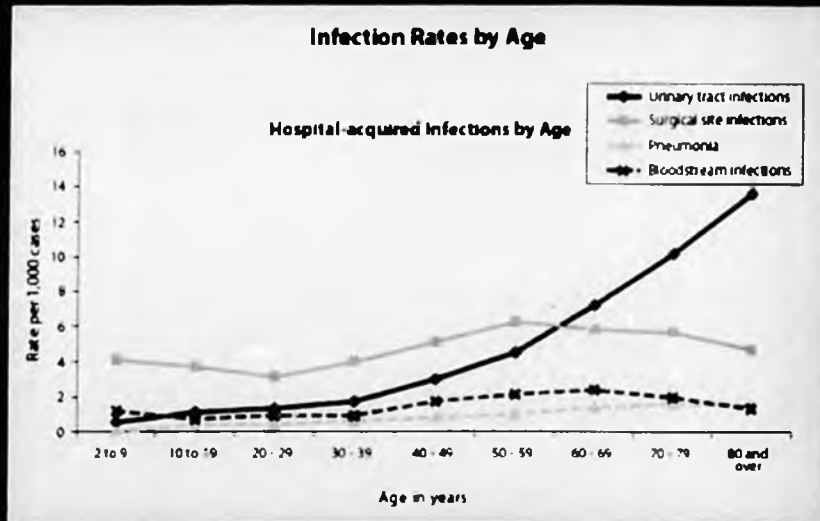


PHC4

### Hospital-acquired Infections in Pennsylvania

|   | Number<br>of Cases | Mortality |         | Average<br>Length<br>of Stay<br>(in Days) | Average<br>Charge |
|---|--------------------|-----------|---------|---|-------------------|
|   |                    | Number    | Percent |   |                   |
| Cases with a hospital-acquired infection    | 19,154             | 2,478     | 12.9    | 20.6                                      | \$185,260         |
| Cases without a hospital-acquired infection | 1,550,010          | 36,238    | 2.3     | 4.5                                       | \$31,389          |

## Hospital-acquired Infections in Pennsylvania



## Hospital-acquired Infections in Pennsylvania

| Commercial Insurance Payments               | Peer Group 1 | Peer Group 2 | Peer Group 3 | Peer Group 4 |
|---|--------------|--------------|--------------|--------------|
| Cases with a hospital-acquired infection    | \$74,482     | \$35,044     | \$24,206     | \$18,603     |
| Cases without a hospital-acquired infection | \$10,657     | \$7,402      | \$5,837      | \$4,260      |

|                          | Number of Cases | Infection Rate per 1,000 Cases* | Mortality |            | Average Length of Stay (in Days) | Average Charge |
|--------------------------|-----------------|---------------------------------|-----------|------------|----------------------------------|----------------|
|                          |                 |                                 | Number    | Percent    |                                  |                |
| <b>United Regional</b>   | <b>2,078</b>    | <b>NA</b>                       | <b>94</b> | <b>2.2</b> | <b>4.1</b>                       | <b>\$9,892</b> |
| Cases with Infections    | 39              | 13.1                            | 4         | 10.3       | 11.0                             | \$34,836       |
| Urinary Tract            | 19              | 6.4                             | 2         | 10.5       | 11.3                             | \$36,122       |
| Surgical Site            | 6               | 16.3                            | 0         | 0.0        | 7.7                              | \$17,479       |
| Pneumonia                | 12              | 4.0                             | 1         | 8.3        | 9.0                              | \$35,660       |
| Bloodstream              | 2               | 0.7                             | NR        | NR         | NR                               | NR             |
| Multiple                 | 0               | NA                              | NA        | NA         | NA                               | NA             |
| Cases without Infections | 2,931           | NA                              | 90        | 3.1        | 4.0                              | \$9,550        |
| <b>Brookville</b>        | <b>1,885</b>    | <b>NA</b>                       | <b>36</b> | <b>1.9</b> | <b>3.9</b>                       | <b>\$6,738</b> |
| Cases with Infections    | 6               | 3.2                             | 1         | 16.7       | 6.8                              | \$11,124       |
| Urinary Tract            | 5               | 2.7                             | 1         | 20.0       | 7.4                              | \$11,466       |
| Surgical Site            | 1               | 5.6                             | NR        | NR         | NR                               | NR             |
| Pneumonia                | 0               | NA                              | NA        | NA         | NA                               | NA             |
| Bloodstream              | 0               | NA                              | NA        | NA         | NA                               | NA             |
| Multiple                 | 0               | NA                              | NA        | NA         | NA                               | NA             |
| Cases without Infections | 1,879           | NA                              | 35        | 1.9        | 3.9                              | \$6,724        |
| <b>Bechtel</b>           | <b>76</b>       | <b>NA</b>                       | <b>2</b>  | <b>2.6</b> | <b>3.6</b>                       | <b>\$8,689</b> |
| Cases with Infections    | 0               | NA                              | NA        | NA         | NA                               | NA             |
| Urinary Tract            | 0               | NA                              | NA        | NA         | NA                               | NA             |
| Surgical Site            | 0               | NA                              | NA        | NA         | NA                               | NA             |
| Pneumonia                | 0               | NA                              | NA        | NA         | NA                               | NA             |
| Bloodstream              | 0               | NA                              | NA        | NA         | NA                               | NA             |
| Multiple                 | 0               | NA                              | NA        | NA         | NA                               | NA             |
| Cases without Infections | 76              | NA                              | 2         | 2.6        | 3.6                              | \$8,689        |

## Pennsylvania.

"While you shouldn't be comparing hospital to hospital, it does give us the opportunity to talk to other hospitals to say, 'You have a very low infection rate, so what are you doing?'" said Dr. Samuel Altano, vice president of medical affairs at St. Joseph Medical Center.

## South Carolina

- Signed into law May 31, 2006
- Requires Dept Health & Environmental Control to
  - Establish an Advisory Committee
  - Compile data on infections from health facilities
    - Surgical site infections
    - Ventilator-associated pneumonia
    - Central line-related bloodstream infections
    - Other categories decided by Dept and Committee
- Reports every 6 months beginning Feb 1, 2008

## Tennessee

- SB 2978 signed into law June 20, 2006 effective immediately
- Based on recommendations of Task Force created in 2005 session
- Facilities with >24 beds report to NHSN
  - Central line-associated infections in ICUs
  - Surgical site infections associated with coronary artery bypass grafts

## Vermont

- H.0881 signed into law May 31, 2006
- Reporting system to be developed by Commissioner of Health, with representatives from
  - public oversight commission
  - Hospitals
  - health care professionals
  - members of the public

## Virginia

- HB 1570, signed into law on March 21, 2005
- Requires acute care hospitals to report information on infections to NHSN and release these data to Board of Health
- Board may release data to public upon request
- Reporting to begin July 1, 2008

## Other Study States: Texas

- SB 872 authorized Dept of Health Services to establish 14 member advisory panel met 9 times, Nov 2005-Oct 2006
- Recommendations (Nov 2006)
  - Implement reporting state collects data through electronic interface
  - Focus on outcome measures (process measures already reported to JCAHO and CMS)
    - Central-line associated bloodstream infections
    - Selected surgical site infections
    - Nosocomial respiratory syncytial virus (RSV) infection in pediatric units
  - 0.8 to 1.0 ICUs per 100 occupied acute care beds
  - Data validation required
  - Published rates do not define standard of care in civil actions
  - Patient confidentiality strongly protected
  - Consider MRSA in future reporting
  - Advisory panel
  - Adequate appropriation

## Recommendations: HICPAC (2005)

- Does not recommend for or against mandatory reporting
- Specific recommendations
  - Use established public health surveillance methods
  - Create multidisciplinary advisory panels
  - Choose appropriate process and outcome measures
    - Central line insertion practices
    - Surgical antimicrobial prophylaxis
    - Influenza vaccination among patients and health care providers
    - Central line associated bloodstream infections
    - Surgical site infections
  - Provide regular and confidential performance feedback to health care providers

McKibben E, et al. Am J Infect Control 2005; 33:217-26

## Recommendations: HICPAC (2005)

- † Rationale for inclusion and potential limitations of each indicator
- † Guidelines on numerator and denominator
- † Glossary

Mc Kibben L, et al. Am J Infect Control 2005; 33: 217-26

## Recommendations: SHEA, APIC, CSTE CDC--Essentials of Public Reporting of Healthcare-Associated Infections (2006)

1. Prior to public disclosure, data should be submitted to an agency with expertise in infection prevention, risk adjustment, healthcare epidemiology, and assessment of statistical relevance. Generally requires resources (MO, MA)
2. Data should be collected by with appropriate training and/or certification in infection prevention. Working group discourages use of administrative data alone because of inherent inaccuracies

Recommendations: SHEA, APIC, CSTE  
CDC--Essentials of Public Reporting of  
Healthcare-Associated Infections (2006)

- 3 Utilize specific outcome measures based on National Healthcare Safety Network (NHSN) definitions and methodology with risk adjustment reasonable options
    - Central line associated blood stream infections in the ICU
    - Surgical site infections reasonable options include:
      - Coronary artery bypass
      - Colon resection
      - Hip or knee arthroplasty
      - Laminectomy
      - Total abdominal hysterectomy
- (Advised against ventilator associated pneumonia, catheter associated urinary tract infections as outcome measures)

Recommendations: SHEA, APIC, CSTE  
CDC--Essentials of Public Reporting of  
Healthcare-Associated Infections (2006)

- 4 Utilize process measure healthcare worker influenza vaccination rate
- 5 Avoid unintended consequences of public reporting
  - Maintain data quality assurance by using accepted standards for methodology (e.g. NHSN)
  - Use definitions that do not require subjective interpretation
  - Address difference in patient acuity through appropriate risk adjustment
  - Minimize lag time between submission of data and publication
  - Issue annual (not quarterly) reports OR develop rolling 12 month reporting period

## Model Legislation: APIC, SHEA, and IDSA, January 2006

- State Health Department ("Agency") has authority to collect data on HAIs
- Multidisciplinary panel guides Agency
- Agency and advisory panel shall determine outcomes measured and methodology
- Specifically endorses methods and recommended practices from CDC, NHSN, HICPAC, National Quality Forum
- Consideration of other surveillance networks, such as Surgical Care Improvement Program
- Provides timelines for establishing methodology and dissemination plans
- Reports from hospitals shall not be made public
- Reports and studies by Agency based upon such information shall be public information and may identify specific health care entities
- Data not standard of care, shall not be utilized in civil litigation

## Model Legislation: Consumers Union, Sept 2006

- Initial model withdrawn
- Data collected by hospitals:
  - Surgical site infections
  - Ventilator-associated pneumonia
  - Central line-related bloodstream infections
  - Urinary tract infections
  - Other categories
- Hospital licensing agency, state health care data collection agency, or state public health agency
  - Defines specific procedures
  - Receives quarterly reports from hospitals for period up to 1 month before report is submitted
  - Data collection begins 1 year after bill become effective

## Model Legislation: Consumers Union, Sept 2006

- ▮ Advisory Committee (majority of members representing interests other than hospitals) to assist in all aspects of data collection, formatting and release
- ▮ Annual reports summarizing quarterly reports to Legislature, published on website
- ▮ All reports shall be risk adjusted
- ▮ Also address
  - Privacy
  - Penalties
  - Regulatory oversight

## Specific Issues for Alaska

- ▮ Relatively few hospitals
- ▮ Most are small (<50 beds)
- ▮ Reporting requirements for military and Native hospitals
- ▮ Limited choice in hospitals
  - Only 3 cities have >1 hospital
    - ▮ Anchorage: Providence, Alaska Regional, ANF, IC, Elmendorf
    - ▮ Fairbanks: Memorial, Bassett
    - ▮ Sitka: Mt. Edgecombe, Sitka Community



# Hospital-acquired Infections

FIG. 3. Hospital-acquired infectious fourth leading cause of death in the United States



Source: Morbidity 2005

\*Hansen DM, Berman TR, Hendrix GA, et al.  
Am J Clin Path 1999; 111:847-88  
© 1999 W.B. Saunders Company and Mosby Publishers 1099-1739/99/05



## Health Grades Study 2005

- ❖ Despite hospital and regulatory efforts occurrence of HAIs is increasing in the United States
- ❖ Up about 20 percent from 2000 to 2003
- ❖ *HAIs correlated most highly with overall hospital performance compared with the other 12 patient safety indicators studied suggesting that HAIs may be a proxy of overall patient safety*

### Infection Control Programs-the need for a systems approach<sup>1</sup>

- ❖ the safest highest performing organizations make it clear that safety is everyone's job this includes quick identification of things that have gone wrong rapid investigation and open learning about problems One hospital in the PRHI has driven down CVC bloodstream infections by 90% using this system based approach

## Why conduct surveillance of Healthcare Associated Infections (HAIs)?

- ❖ Surveillance is used to identify and monitor the occurrence of infections that are associated with health care settings, to assess the effectiveness of practices that are aimed at reducing the occurrence of these infections, and to identify areas for improvement.

### ❖ Example

- ❖ Steps: Find HAIs, collect data, analyze and report
- ❖ ICP primary role is to find those HAIs

We are drowning in information and starving for knowledge.

Ruthemorelli, Reuters, 1997, p. 10



• But What is IMPORTANT Today?

## Virtual vs Traditional Surveillance

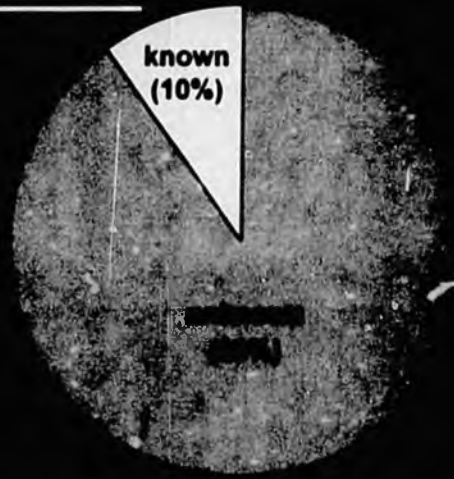


### Traditional Infection Surveillance: Very Limited Scope

- ❖ ICU, High-risk Nursery, Surgery
  - 70% of HAIs occur outside of the ICU
  - 66% of central venous catheter patients are outside of ICUs

## Current Targeted Surveillance Coverage (limited infection types limited locations)

Based on the limitations of manual chart abstraction hospitals use a targeted surveillance approach that identifies only about 10% of all infections that are contracted in the hospital



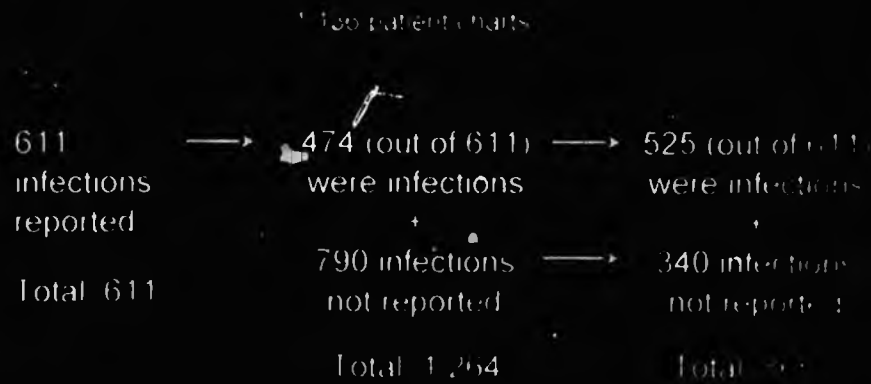
CDC  
Division of Healthcare Quality Promotion (DHQP)  
Issues in Healthcare Settings

**About NNIS**

**Overall NNIS Methodology**  
 Gaynes RP. Surveillance of nosocomial infections. In: Abrutyn E, Goldmann DA, Scheckler WE, eds. Saunders Infection Control Reference Service. Philadelphia: W. B. Saunders, 1998: 23-26.  
 Gaynes RP, Horan TC. Surveillance of nosocomial infections. In: Mayhall CG, ed. Hospital Epidemiology and Infection Control, 3rd edition. Philadelphia: Lippincott Williams and Wilkins, 1999: 1285-318.  
 Horan TC, Emori TG. Definitions of key terms used in the NNIS System. Am J Infect Control 1997;25:112-6.  
 Horan TC, Emori TG. Definitions of nosocomial infections. In: Abrutyn E, Goldmann DA, Scheckler WE, eds. Saunders Infection Control Reference Service. Philadelphia: W. B. Saunders, 1998: 17-22.

**Accuracy of NNIS Data**  
 Emori, TG, Edwards JR, Culver DH, et al. Accuracy of reporting nosocomial infections in intensive-care-unit patients to the National Nosocomial Infections Surveillance System: A pilot study. Infect Control and Hosp Epidemiol 1998;19:308-16.

## NNIS Surveillance: Not Objective. Repeatable; Biased



## Update on the National Healthcare Safety Network (NHSN) CDC

### APIC Chapter Leaders Teleconference

R. Monina Klevens, DDS, MPH

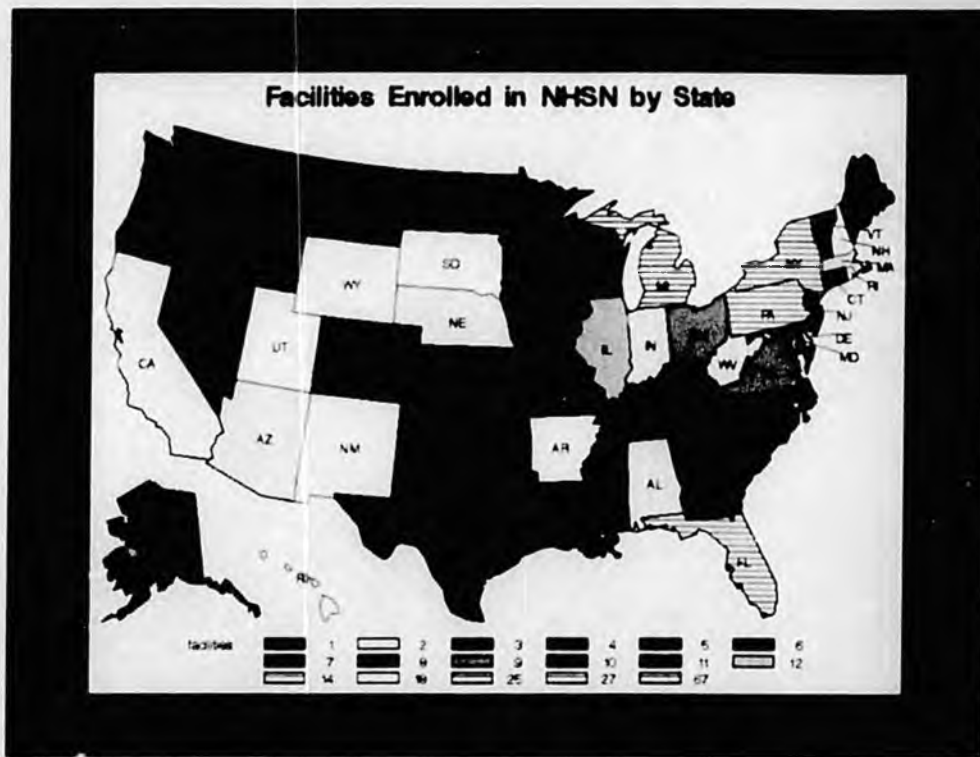
Daniel Pollock, MD

Healthcare Outcomes Branch

Division of Healthcare Quality Promotion

December 5 and 7, 2006

SAFER • HEALTHIER • PEOPLE 



States using NHSN for mandatory reporting of health care-associated infections

| State | Date approved | Date for routine reporting |
|-------|---------------|----------------------------|
| MO    | May 2004      | Dec 2006                   |
| NY    | Jul 2005      | 2007                       |
| SC    | May 2006      | Feb 2007                   |
| CT    | Jan 2006      | Oct 2007                   |
| CO    | Jan 2006      | Jan 2007                   |
| VT    | Jan 2006      | 2007                       |
| IN    | Jan 2006      | Oct 2007                   |
| Va    | Oct 2006      | Jan 2007                   |

## What is Needed?

- ❖ Efficient, objective measure of nosocomial infections (hospital-wide)
- ❖ New Model for Infection Control
  - ❖ Leverage technology
  - ❖ Comprehensive surveillance, targeted process improvement
  - ❖ Eliminate confrontation
  - ❖ Manage as a business issue

## Electronic surrogate measure of the incidence of hospital-acquired infections

- ❖ Hospital wide
- ❖ Objective
- ❖ High correlation with cost, LOS & chart review
- ❖ Rapidly computable from electronic clinical data
- ❖ Goal Setting & Executive Outcomes with the NIM Scorecard
- ❖ Normalized for Intra-Inter-Hospital Comparison

## Clinical Validation of the Marker

Expert Chart Review of Outpatient Admissions

|             |           |            |
|-------------|-----------|------------|
| Sens = 80%  | Sens = 83 | Sens = 0.4 |
| Spec = 100% | Spec = 99 | Spec = 95  |

Cost per NI Identified

Manual Surveillance = \$925.63

MedMined = \$30.81

## Validation Study Conclusions

“These two studies demonstrate that in nearly 1,000 total patients whole house surveillance for NI rates now can be accomplished using available computer technology and this provides a meaningful opportunity for monitoring improvements in patient safety.”

# Identifying Nosocomial Infections Electronically

“Automated bloodstream infection surveillance with electronic data is an accurate alternative to surveillance with manually collected data”

## NNIS vs Whole House



| Hospital Name             | NNIS          |            |               |              | Modified Surveillance |              |               |              | %      |
|---------------------------|---------------|------------|---------------|--------------|-----------------------|--------------|---------------|--------------|--------|
|                           | NO            | IS         | Total         | % Rate       | NO                    | IS           | Total         | % Rate       |        |
| Hospital A Comparing Both | 32,088        | 148        | 32,243        | 0.46%        | 7,702                 | 374          | 8,076         | 4.63%        | 11.80% |
| Hospital B Comparing Both | 42,208        | 288        | 42,497        | 0.68%        | 8,908                 | 636          | 9,544         | 6.02%        |        |
| Hospital C Comparing Both | 18,778        | 179        | 18,957        | 0.95%        | 3,842                 | 242          | 4,084         | 2.12%        |        |
|                           | <b>99,074</b> | <b>515</b> | <b>99,589</b> | <b>0.51%</b> | <b>20,452</b>         | <b>1,252</b> | <b>21,704</b> | <b>2.16%</b> |        |

| Hospital Name | NNIS           |            |                |              | Modified Surveillance |               |                |              | %     |
|---------------|----------------|------------|----------------|--------------|-----------------------|---------------|----------------|--------------|-------|
|               | NO             | IS         | Total          | % Rate       | NO                    | IS            | Total          | % Rate       |       |
| Hospital D    | 42,088         | 254        | 42,342         | 0.60%        |                       |               |                |              | 8.29% |
| Hospital E    | 8,112          | 58         | 8,170          | 0.71%        |                       |               |                |              |       |
| Hospital F    | 32,687         | 112        | 32,799         | 0.34%        |                       |               |                |              |       |
| Hospital G    | 29,088         | 174        | 29,262         | 0.59%        |                       |               |                |              |       |
| Hospital H    | 17,138         | 88         | 17,226         | 0.51%        |                       |               |                |              |       |
| Hospital I    | 9,888          | 22         | 9,910          | 0.22%        |                       |               |                |              |       |
| Hospital J    |                |            |                |              | 28,228                | 1,384         | 29,612         | 5.13%        |       |
| System K      |                |            |                |              | 108,148               | 2,817         | 110,965        | 2.57%        |       |
| System L      |                |            |                |              | 81,681                | 5,788         | 87,469         | 6.96%        |       |
| System M      |                |            |                |              | 87,728                | 4,887         | 92,615         | 5.56%        |       |
| System N      |                |            |                |              | 80,788                | 1,828         | 82,616         | 2.26%        |       |
| System O      |                |            |                |              | 141,488               | 10,522        | 152,010        | 6.91%        |       |
|               | <b>137,322</b> | <b>688</b> | <b>138,010</b> | <b>0.50%</b> | <b>487,088</b>        | <b>27,427</b> | <b>514,515</b> | <b>5.33%</b> |       |

## Nosocomial Infection Marker (NIM)

- ❖ Accepted by PA's PHC4 for house wide patient reporting
- ❖ Accepted by Alabama Hospital Association-Hospital Executive and Clinicians for public reporting
- ❖ Being used for efficiency, creating a host of different reporting requirements
- ❖ Validated by clinicians in over 200 hospitals
- ❖ Being used by all the major facilities in Alabama performance improvement efforts
- ❖ Electronic reporting is available through a secure model for manual reporting
- ❖
- ❖

## Existing Data Extraction

