


# How Maryland Increased ICP Presence in Long Term Care Facilities

## Dr. Brenda Roup, Maryland Department of Health & Mental Hygiene

### A Webber Training Teleclass

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**HOW THE STATE OF MARYLAND INCREASED ICP PRESENCE IN LONG TERM CARE FACILITIES 2003 - 2008**

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 MARYLAND DEPARTMENT OF HEALTH AND MENTAL HYGIENE

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Hosted by Paul Webber  
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**OBJECTIVE #1**

- DESCRIBE HOW MARYLAND DHMH (DEPARTMENT OF HEALTH AND MENTAL HYGIENE) ASSESSED THE STATE OF INFECTION PREVENTION AND CONTROL PROGRAMS IN LONG TERM CARE FACILITIES IN 2003 AND IN 2008

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**OBJECTIVE #2**

- DISCUSS THE METHDODOGY OF PROMULGATING REGULATIONS FOR INFECTION PREVENTION AND CONTROL PROGRAMS IN LONG TERM CARE FACILITIES

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**OBJECTIVE #3**

- DESCRIBE THE DEVELOPMENT AND IMPLEMENTATION OF A BASIC INFECTION CONTROL PROFESSIONALS (ICP) COURSE AND AN ADVANCED SKILLS COURSE FOR LONG TERM CARE FACILITIES IN MARYLAND

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**POPULATION OF MARYLAND, 2006**

- Total Population 5,615,727
  - Metro Baltimore 2,612,164
  - National Capital 1,773,146
  - Northwest 469,376
  - Eastern Shore 432,667
  - Southern 328,074

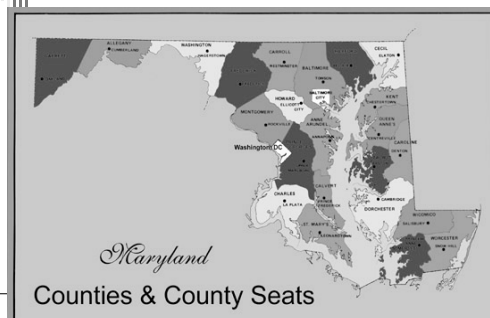
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SOURCE: DHMH VITAL STATISTICS ADMINISTRATION

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**MARYLAND'S 24 COUNTIES**



*Maryland*  
 Counties & County Seats

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## HEALTHCARE FACILITIES IN MARYLAND

- Health Care Facilities:
  - Acute/General Hospitals, 200 beds or less: 21
  - Acute/General Hospitals, 201 beds or more: 28
  - Long Term Care Facilities (LTCF's): 234
  - Specialty Hospitals: 20  
(Behavioral Health and Acute Rehabilitation)

## LICENSED BEDS

- ACUTE/GENERAL/SPECIALTY HOSPITAL BEDS = 13, 650
- COMPREHENSIVE/EXTENDED CARE FACILITIES (LONG TERM CARE) BEDS = 28,500, WITH MEAN OF 120 BEDS, RANGE 18 – 556 BEDS

## MARYLAND PUBLIC HEALTH

- Local Health Departments (24)
  - Each jurisdiction (Baltimore City and 23 counties) has its own Health Department
- State Health Department – Maryland Department of Health and Mental Hygiene (DHMH)

## SEQUENCE OF EVENTS

- 1999 – 2000
  - CONSULTS FROM LTC FACILITIES REVEALED LACK OF KNOWLEDGE ABOUT PREVENTION AND CONTROL OF INFECTION
  - SAME QUESTIONS/CONCERNS ANSWERED REPEATEDLY
  - MULTIPLE REQUESTS FOR GUIDANCE FROM THE STATE

## SEQUENCE OF EVENTS

- 2000 – UPDATED MRSA AND NEW VARICELLA GUIDELINES WRITTEN
- INPUT SOLICITED FROM MARYLAND CHAPTER OF AMERICAN MEDICAL DIRECTORS ASSOCIATION
- VARICELLA GUIDELINE GENERATED OVER 100 PHONE CALLS FROM FACILITIES, PRIMARILY BECAUSE OF RECOMMENDATION THAT STAFF SHOULD BE IMMUNE TO VARICELLA

## SEQUENCE OF EVENTS

- BECAME OBVIOUS THAT EDUCATION BADLY NEEDED
- TWO LTC INDUSTRY GROUPS IN MARYLAND WERE NOT DOING INFECTION CONTROL EDUCATION
- APIC DELMARVA VERY SMALL CHAPTER WITH LIMITED RESOURCES
- TWO OTHER LOCAL APIC CHAPTERS FOCUSED ON ACUTE CARE

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**SEQUENCE OF EVENTS**

- 2001 – BEGAN PLANNING EDUCATION SESSIONS WITH THE TWO INDUSTRY TRADE GROUPS
- 9/11 OCCURRED
- MARYLAND PUBLIC HEALTH BUSY WITH ANTHRAX EXPOSURES AND FEAR OF EXPOSURES

**SEQUENCE OF EVENTS**

- FEBRUARY 2002 – INFECTION CONTROL IN LONG TERM CARE WORKSHOP WITH APIC DELMARVA
- OVER 165 ATTENDEES
- TOPICS INCLUDED
  - IC PROGRAM ELEMENTS
  - SURVEILLANCE
  - OUTBREAK MANAGEMENT

**SEQUENCE OF EVENTS**

- LTC INITIATIVE INTERRUPTED AGAIN IN 2002 AND 2003 WITH:
  - SMALLPOX IMMUNIZATION PROGRAM
  - SARS

**2003 SURVEY**

- SURVEY OF INFECTION CONTROL PRACTICES AND RESOURCES IN MARYLAND, 2003
- PUBLISHED AS "INFECTION CONTROL PROGRAM DISPARITIES BETWEEN ACUTE AND LONG TERM CARE FACILITIES IN MARYLAND"
- AMERICAN JOURNAL OF INFECTION CONTROL, VOL 34, NO.3, 2006

**Survey Purpose and Methods**

- Assess:
  - Scope of responsibilities
  - Amount and types of support
  - Range of infection control (IC) practices among Maryland's Infection Control Professionals (ICPs)
- Mailed to all acute care and specialty hospitals ICPs and to all long term care facilities DONs, JANUARY 2003.

**SURVEY RESPONSE RATES**

- For all facilities: 49%
- By Type of Facility:
  - Acute Hospitals: 36/40 (90%)
    - 200 beds or fewer: 15/15 (100%)
    - 201 beds or more: 21/25 ( 84%)
  - LTCF's: 97/247 (39%)
  - Specialty: 19/20 (95%)

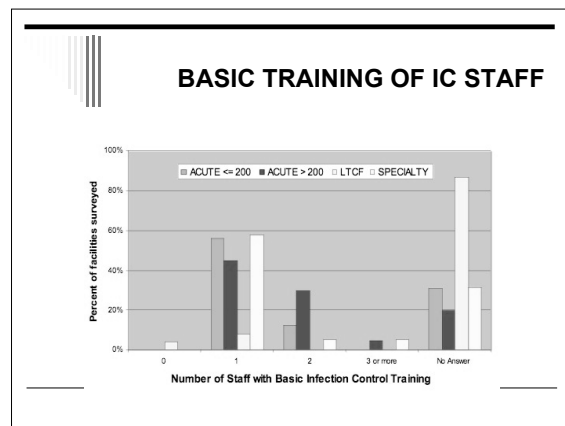
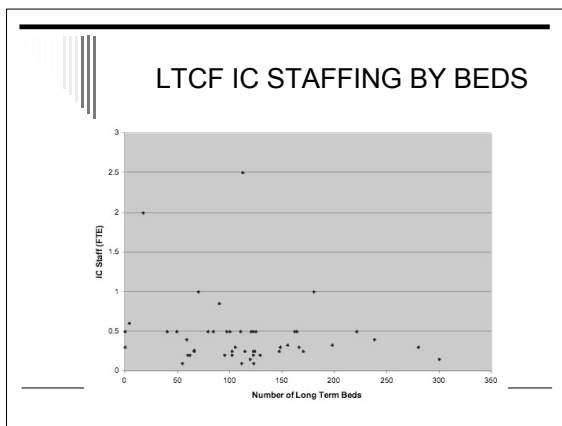
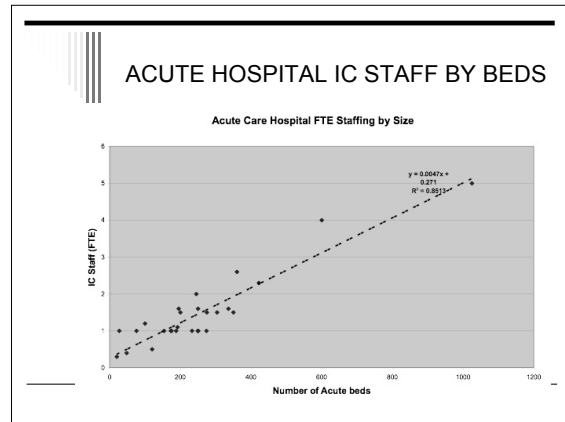
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#### SURVEY RESPONSES (& RATES) BEFORE / AFTER REMINDER POSTCARDS

- Responses after initial mailing only:
  - 110/307 (36%)
- Additional responses after reminder:
  - 41/307 (13%)
- Total responses:
  - 151/307 (49%)



#### CONCLUSIONS

- 49% of all health care facilities responded to IC survey, with 39% from LTCFs
- 90% of all LTCFs in Maryland do not have a trained ICP and do not have in place an infection control program
- Only 20 facilities reported having a trained ICP (20/234 = 8.5%)
- LTCF ICPs would benefit from increased infection control training, epidemiological support, and input into regulatory changes.

#### FOLLOW-UP REGULATORY ACTIONS

DHMH OFFICE OF HEALTH CARE QUALITY  
DHMH COMMUNITY HEALTH ADMINISTRATION  
Office Of Epidemiology And Disease Control Programs

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## OPPORTUNITY KNOCKS

- DURING THE SARS OUTBREAK IN CANADA IN 2003 AND SUBSEQUENT PUBLIC CONCERN, OHCQ BEGAN RECEIVING INQUIRIES FROM LTC FACILITY ADMINISTRATORS
- EDCP AND NURSE CONSULTANT FOR IC BEGAN FORGING RELATIONSHIPS WITH OHCQ

## COMAR 10.07.02 COMPREHENSIVE CARE FACILITIES AND EXTENDED CARE FACILITIES

- REVISION OF SECTIONS .01 – INCORPORATION BY REFERENCE AND .21- INFECTION CONTROL PROGRAM
  - BEGAN PROCESS IN SUMMER OF 2003
  - PROCESS COMPLETED FALL 2004
  - REGULATION .21 REPEALED AND NEW REGULATION .21 ADOPTED EFFECTIVE JANUARY 6, 2005

## COMAR ONLINE (CODE OF MARYLAND ANNOTATED REGULATION)

- <http://www.dsd.state.md.us/comar>
- SEARCH ON BULLET #1:
- 10.07.02.21\* TO GET ALL 4 SECTIONS

## 10.07.02 SECTION .01 INCORPORATION BY REFERENCE

- Centers For Disease Control And Prevention (“CDC”) Guidelines:
  - Guidelines For Preventing Transmission Of Mtb In Health Care Settings, 1994 (Under Revision)
  - Immunization Of Health Care Workers, Recommendations Of ACIP, 1997 (Current)

## 10.07.02 SECTION .01 INCORPORATION BY REFERENCE

- CDC Guidelines (continued)
  - Guidelines For Infection Control In Healthcare Personnel, 1998 (Current)
  - Guidelines For Isolation Precautions In Hospitals, 1996 (Under Revision)
- 2008 REVISION INCLUDES NEW CDC TB, ISOLATION, MDRO, AND HAND HYGIENE GUIDELINES


## 10.07.02 SECTION .21

- .21 Infection Control Program
- .21-1 Employee Health Program
- .21-2 Resident Health Program
- .21-3 Volunteer Health Program
- .21-4 Infection Control-standard Precautions

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## 10.07.02 SECTION .21 KEY PROVISIONS

- Establish, Maintain, Implement Effective IC Program
- Assign At Least One Individual With Education And Training In IC
- ICP Shall Attend A Basic IC Course Approved By OHCQ And EDCP

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## ICP STAFFING FOR LTC

- 2003 SURVEY REVEALED APPROX 1.1 ICP FTE PER 100 ACUTE CARE BEDS IN MARYLAND
- BASED ON THAT, WE RECOMMENDED (AND CONTINUE TO DO SO) 0.5 ICP FTE FOR EVERY 200 BEDS IN LTC FACILITY
- INCLUDES ALL BEDS – SKILLED, LTC, ASSISTED LIVING, AND INDEPENDENT
- THIS RECOMMENDATION WILL BE INCLUDED FOR PUBLIC COMMENT IN REVISED IC SECTION OF COMAR FALL 2008

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## INFECTION CONTROL INSTITUTE FOR NON- ACUTE CARE SETTINGS

**MARCH 2004**

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## STRUCTURE OF ICI

- SPONSORED BY
  - LIFESPAN MIDATLANTIC/BEACON INSTITUTE
  - HFAM/ HEALTH FACILITIES ASSOCIATION OF MARYLAND
  - MARYLAND DEPARTMENT OF HEALTH AND MENTAL HYGIENE, OFFICE OF EPIDEMIOLOGY & DISEASE CONTROL AND OFFICE OF HEALTH CARE QUALITY
  - HOWARD COMMUNITY COLLEGE

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## RESPONSIBILITIES

- LIFESPAN AND HFAM RESPONSIBLE FOR ADMINISTRATION OF COURSE – VENUE, FEES, FOOD, ETC.
- DHMH NURSE CONSULTANT RESPONSIBLE FOR CONTENT AND SPEAKERS
- HOWARD CC RESPONSIBLE FOR PROVIDING NURSING CONTACT HOURS

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## OVERVIEW OF STRUCTURE

- GIVEN TWICE PER YEAR IN MARCH AND SEPTEMBER
- MEETS REQUIREMENTS OF COMAR 10.07.02.21
- VOLUNTEER FACULTY WITH EXTENSIVE INFECTION CONTROL EXPERIENCE IN LONG TERM CARE FACILITIES; MOST ARE “CIC”
- 13 PRESENTATIONS ON BASIC INFECTION CONTROL TOPICS IN LTC

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**PARTICIPATION**

- NURSES FROM LTC FACILITIES
- SURVEYORS FROM DHMH OFFICE OF HEALTH CARE QUALITY
- COMMUNICABLE DISEASE NURSES FROM LOCAL HEALTH DEPARTMENTS
- EPIDEMIOLOGISTS AND NURSE FROM DHMH OFFICE OF EPIDEMIOLOGY AND DISEASE CONTROL
- NOT OPEN TO HEALTHCARE WORKERS FROM FACILITIES OUTSIDE MARYLAND

**PRESENTATIONS**

- INFECTIONS IN THE AGING POPULATION
- INFECTION CONTROL PROGRAM ELEMENTS IN NON-ACUTE CARE SETTINGS
- MICROBIOLOGY 101

**PRESENTATIONS**

- SURVEILLANCE STRATEGIES AND METHODOLOGIES FOR DETECTION OF INFECTIONS
- MULTIDRUG RESISTANT ORGANISMS IN NON-ACUTE CARE SETTINGS
- ISOLATION PRECAUTIONS IN NON-ACUTE CARE SETTINGS

**PRESENTATIONS**

- REPORTING COMMUNICABLE DISEASES
- TUBERCULOSIS 101
- OUTBREAK INVESTIGATION IN NON-ACUTE CARE SETTINGS
- MONITORING OF ANTIBIOTIC USE AND ANTIBIOTIC SENSITIVITY AND RESISTANCE IN NON-ACUTE CARE SETTINGS

**PRESENTATIONS**

- ISSUES RELATED TO ENVIRONMENTAL INFECTION CONTROL AND HAND HYGIENE
- ADULT IMMUNIZATION PRACTICES
- HOW TO PULL IT ALL TOGETHER

**ATTENDANCE AT ICI**  
**MARCH 2004 THRU OCTOBER 2008**

□ LTC RNs	525
□ OHCQ SURVEYORS	51
□ LHD CD STAFF	83
□ DHMH EDCP STAFF	8
□ TOTAL	667

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**ADVANCED SKILLS COURSE  
FOR ICPs IN  
LTC FACILITIES IN MD**

- DEVELOPED AFTER REPEATED REQUESTS FROM LTC ICPs
- OFFERED APRIL 2008
- PREREQUISITE: BASIC IC COURSE
- OVER 100 LTC ICPs ATTENDED
- WILL BE REPEATED IN 2010

**ADVANCED SKILLS  
COURSE TOPICS**

- PRINCIPLES OF INFECTIOUS DISEASE EPIDEMIOLOGY
- STATISTICAL ANALYSIS OF INFECTION DATA
- GRAPHIC PRESENTATION OF INFECTION DATA
- PRINCIPLES OF CLEANING, DISINFECTION, AND PRODUCT SELECTION
- TARGETED SURVEILLANCE FOR LTC

**ADVANCED SKILLS  
COURSE TOPICS**

- MONITORING COMPLIANCE WITH INFECTION PREVENTION PRACTICES
- PRINCIPLES OF ADULT LEARNING IN LTC
- PLANNING FOR INFECTIOUS DISEASE EMERGENCIES IN LTC
- INFECTION PREVENTION RELATED TO CONSTRUCTION/REMODELING
- INFLUENZA IMMUNIZATION
- MANAGEMENT SKILLS FOR LTC FACILITY IC PROGRAMS

**2008 SURVEY OF IC  
RESOURCES AND PRACTICES  
IN LTC FACILITIES IN MD**

- PRELIMINARY DATA ANALYSIS:
- 127/234 FACILITIES RESPONDED (53.4%)
- OF THOSE WHO RESPONDED, 103/127 HAVE A TRAINED ICP WHO MANAGES THE PROGRAM (81.1%)
- OF TOTAL FACILITIES, 103/234 HAVE TRAINED ICP = 44%
- INCREASE FIVEFOLD FROM 8.5% IN 2003

**DHMH EDCP LTCF  
OUTBREAK DATA  
DEC 2006 – MARCH 2008**

OUTBREAKS RECOGNIZED ≤ 14 DAYS	DAYS OF LAG TIME IN REPORTING	NUMBER OF CASES
TRAINED ICP MANAGES PROGRAM	MEAN 3.7 DAYS	MEAN 5 CASES
NO ICP, AND/OR NO TRAINING	MEAN 5.5 DAYS	MEAN 15 CASES

MARYLAND DHMH UNPUBLISHED DATA 2008

**HOW MARYLAND  
INCREASED ICP PRESENCE  
IN LTC FACILITIES**

- FORGING RELATIONSHIPS WITH LTC INDUSTRY TRADE GROUPS AND DEPT OF HEALTH REGULATORY BODIES
- SURVEY RESEARCH ON THE STATE OF IC PRACTICES AND RESOURCES IN MARYLAND LTC FACILITIES
- INPUT INTO UPDATING THE INFECTION CONTROL SECTIONS OF THE LONG TERM CARE FACILITY REGULATION

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**HOW MARYLAND INCREASED ICP PRESENCE IN LTC FACILITIES**

- ESTABLISHMENT OF THE INFECTION CONTROL INSTITUTE FOR NON-ACUTE CARE SETTINGS
- ESTABLISHMENT OF AN ADVANCED SKILLS COURSE FOR LTC ICPs
- FOLLOW-UP SURVEY RESEARCH TO DETERMINE PROGRESS TOWARD ESTABLISHMENT OF IC PROGRAMS IN LTC



**THE NEXT FEW TELECLASSES**

Teleclass sponsored by Virox Technologies www.virox.com	11 Nov. 08	(British Teleclass) Clostridium difficile - Prevention is Better Than Cure Speaker: Prof Mark Wilcox, University of Leeds
	20 Nov. 08	Managing Indoor Air & Water Systems for Infection Control & Prevention Speaker: Andrew Striefel, University of Minnesota
	4 Dec. 08	Halting the Spread of MRSA Between Acute Care Facilities and Long Term Care Facilities Speaker: TBA
	18 Dec. 08	Who, When and Why of Isolation Precautions Speaker: Dr. Michelle Alfa, St. Boniface Hospital, Winnipeg

**2009 Teleclass Schedule ...**

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