

# Infection Prevention in Nursing Homes



**Carol Goldman, BScN, CIC**

**Infection Prevention and Control Consultant**

**IFIC Secretary, Board of Directors**

**CHICA-Canada**

# Infection Prevention in Nursing Homes



**At the conclusion of the session the delegate will:**

- 1. Discuss the common infections associated with Nursing Homes**
- 2. Discuss common outbreaks associated with Long Nursing Homes**
- 3. Describe elements of an Infection Prevention and Control Programme in Nursing Homes**

9th Congress of the  
International Federation of  
Infection Control



Santiago, Chile  
14 - 17 October 2008



# Infection Prevention in Nursing Homes



**A nursing home is a facility that provides rehabilitative, restorative, and/or ongoing skilled care for those of all ages in need of assistance with activities of daily living**

# Infections in Nursing Homes



- Prevalence of infection documented between 5.4 and 32.7 per 100 residents per month
- Infection incidence rates have been documented between 1.5 and 9.4 per 1,000 resident days
- An estimated 1.5 million infections occur annually in LTC facilities in the United States

Nursing Homes, May 2006, Linda Spaulding

# Infections in Nursing Homes



- **Are the most common immediate cause of death in nursing home residents**
- **Facility-acquired infections account for 30% of all hospital admissions from nursing homes**

Nursing Homes, May 2006, Linda Spaulding

# Infections in Nursing Homes



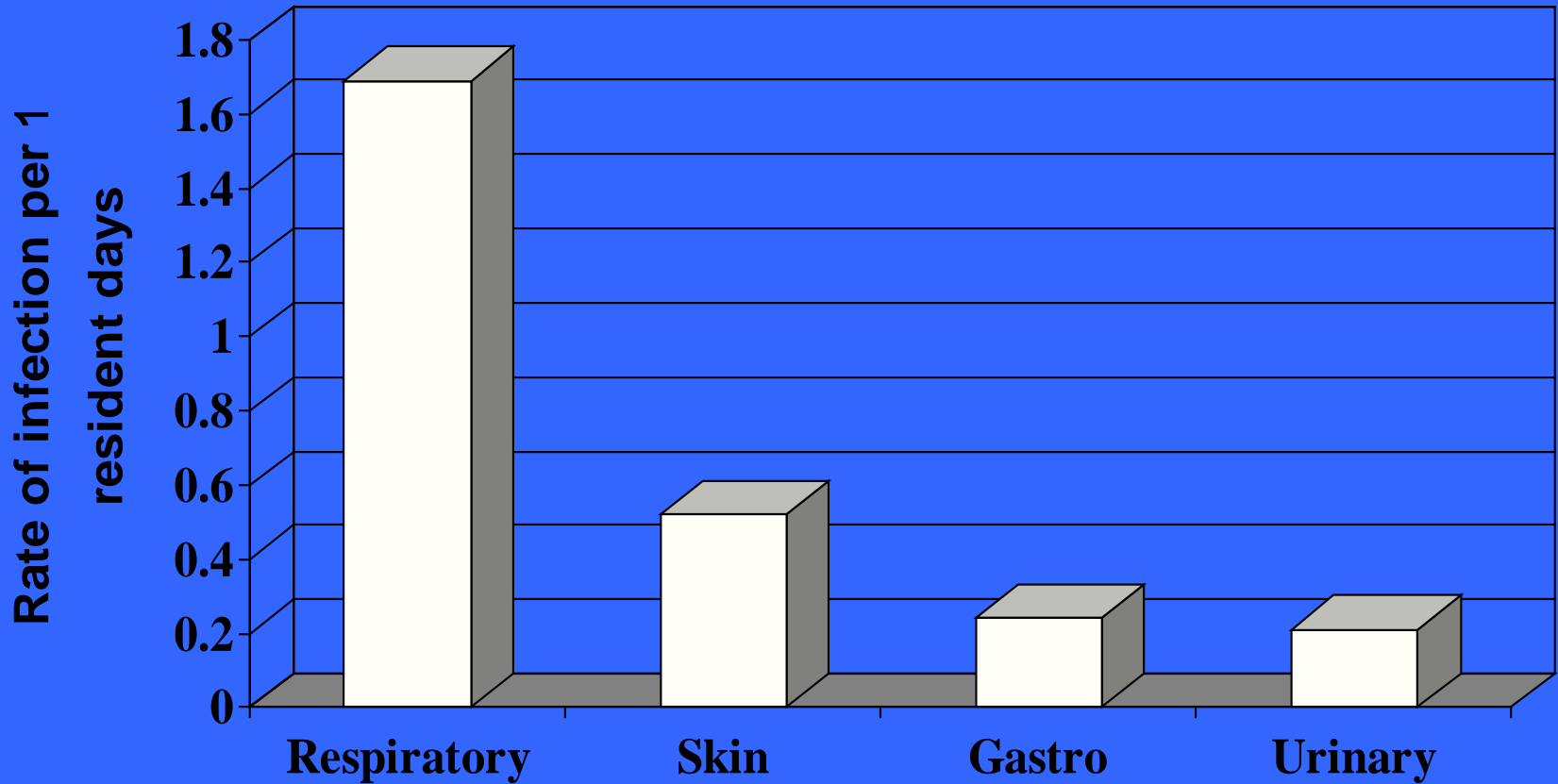
- **3 yr study looking at respiratory infections in Toronto**
- **0.42 infections per 1000 resident-days**
- **Outbreaks occurred year round, with no seasonal pattern**
- **Pneumonia developed in 72 (15%)**
- **58 (12%) required transfer to hospital**
- **The case-fatality rate was 8% (37/480)**

# Infections in Nursing Homes

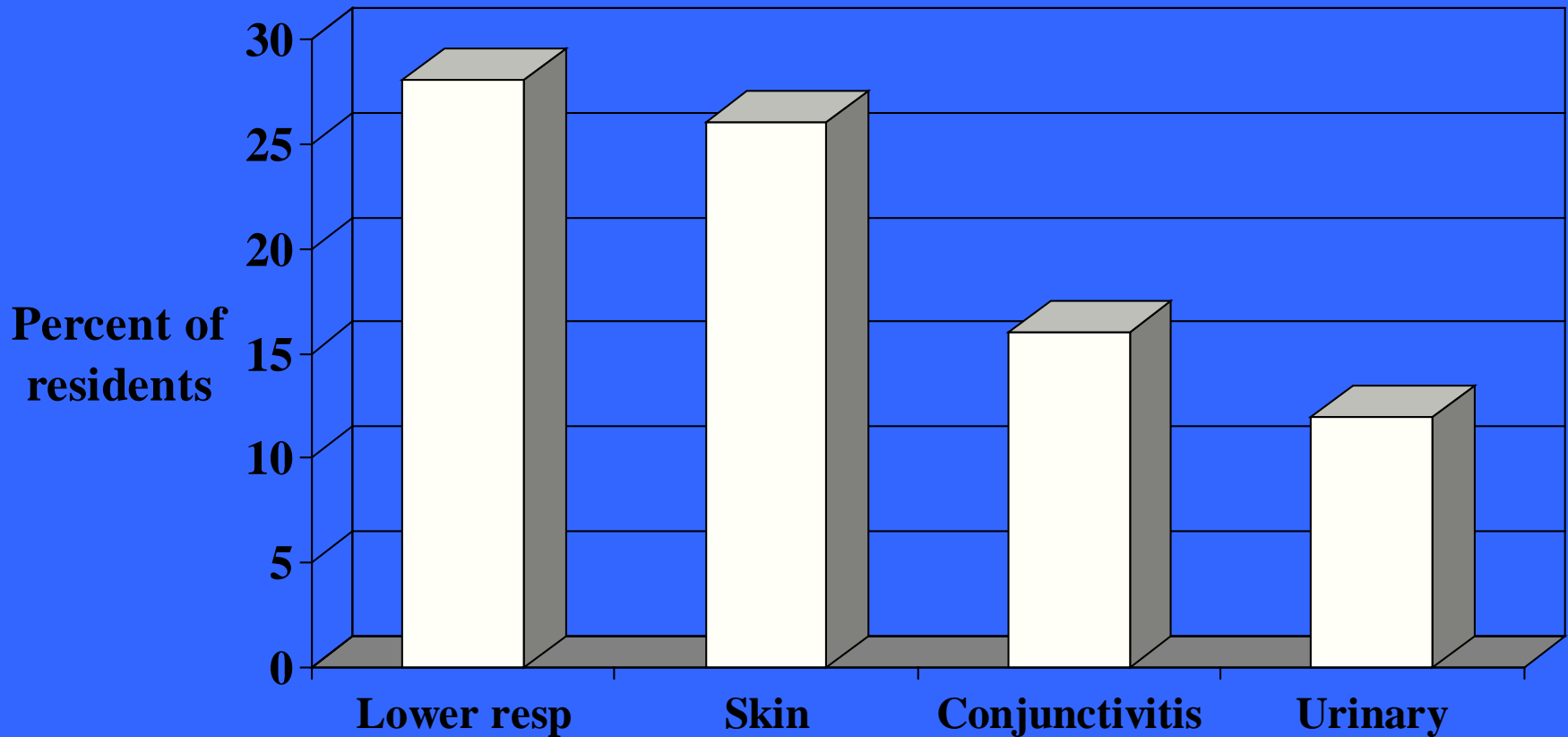


- urinary infections
- respiratory infections
- skin and soft tissue infections
- GI
- Outbreaks also occur frequently, and some facilities have a high prevalence of colonization of residents with antimicrobial-resistant organisms

# Infections in residential long term care for the elderly in Canada, 1994-1996



# Prevalence of infections in Italian long term care facilities



# Comparing ICP Programmes



## In LTC:

- fewer resources
- less expertise/increased turnover
- multiple duties
- diagnostic facilities
- residence
- medical record
- limited research

# Goals of Infection Control Programmes in LTC



- **Decrease morbidity/mortality attributable to infections in residents**
- **Prevent and control outbreaks of infection**
- **Prevent acquisition of infection by staff members**
- **Limit costs of care attributable to infections**
- **Limit antimicrobial use**
- **Maintain resident functional status**
- **Maintain optimal social environment for residents**

# Infection Control Programmes in LTC



- ICPs hold many hats- sometimes not a dedicated person
- Limited level of training
- Limited access to computers and ‘secretarial’ help

# Elements of an Infection Control Programme



- Infection Control Committee
- Surveillance
- Outbreak Investigation
- Policies and Procedures
- Isolation Precautions
- Resident Health
- Occupational Health
- Education
- Antibiotic Review and Control

# Infection Control Committee



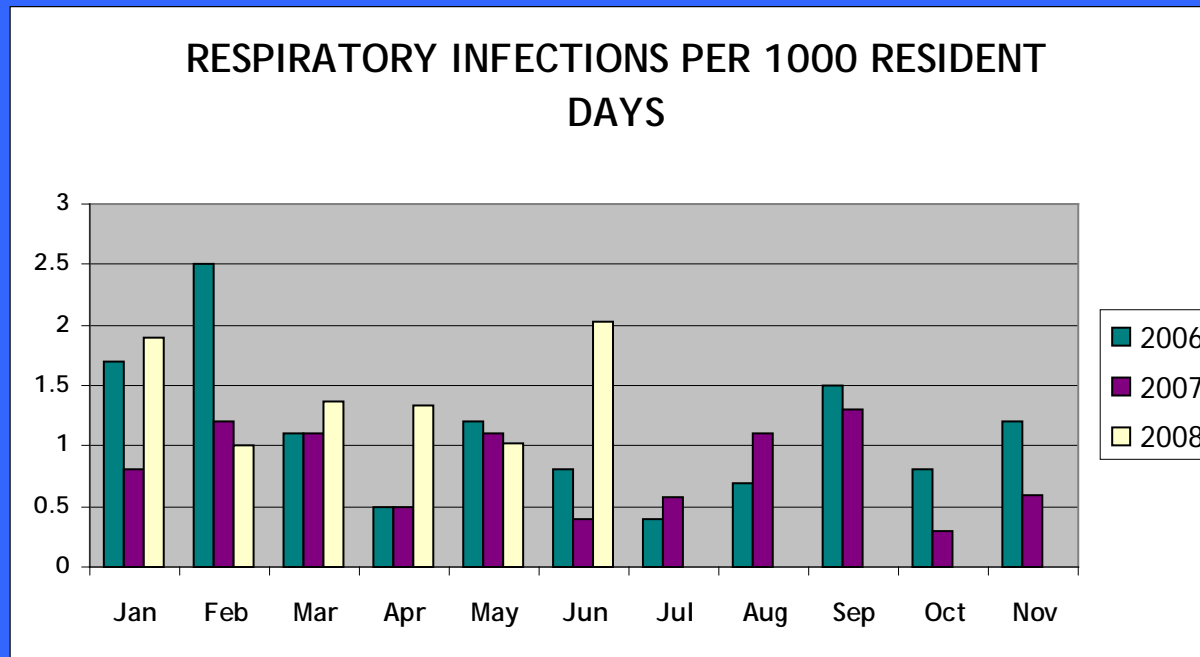
- **Overall responsibility for overseeing the programme**
- **Representative members across the facility**
- **Meet regularly**
- **Delegate to the ICP the running of the programme**

# Surveillance



- **Simple effective data collection**
- **Infections in residents and staff**
- **Written definitions**
- **Collect the data based on resources and risks**
- **Utilize data to recommend IC efforts, direct education, identify problems and detect outbreaks**

# Example of a Report



Formula:

Number of Respiratory Infections (per month)

1000

X Number of Resident Days

# Example of a Report



USA National Incident Rate for Long Term Care =  
0.3 to 4.7

- The respiratory infection incident rate per 1000 resident days for this quarter ranged from 1.33 to 2.02. This figure is well within the range of the USA National rate for Long Term Care which is 0.3 to 4.7.
- Surveillance remains high and staff report any respiratory symptoms in a timely manner and action is taken immediately. Cleaning of the unit is enhanced with the first onset of respiratory activity.

# Example of a Report



## Actions:

- **Education sessions will be booked for 2008. Attendance at these sessions is mandatory for all staff.**
- **Surveillance of the Home is conducted on a daily basis and Public Health is contacted at the first sign of any respiratory activity.**

# Outbreak Investigation



**Need written policies defining authority for intervention**

- communication**
- initiation of precautions**
- restriction of visitors or staff**
- public health communication**
- Rx or prophylaxis**

# Policies and Procedures



## Should include:

- statements of organisation of programme
- isolation precautions
- hand hygiene
- environmental services
- laundry and dietary
- waste management
- maintenance, renovation and construction

# Isolation Precautions



**Clear authority for initiating and discontinuing precautions**

- **Procedures for Airborne, Contact and Droplet Contact Isolations**
- **Standard/Routine Practices**

# Resident Health



## Baseline information at admission

- TB programme
- Immunisation programme including influenza programme

# Occupational Health



- **Baseline health assessment**
- **Immunisation programme**

# Education



- All staff should receive IC education on the as part of their orientation with annual updates or whenever changes are made and prn
- Education should be provided for residents, family members and volunteers
- In the event of an outbreak, additional education should be provided to residents, families and staff on the implicated infection and the actions being taken

# Education



- Education should also be provided to the ICP
- The ICC should ensure that opportunities to participate in meetings and seminars related to infection control are available to the ICP
- In addition, the ICP should have access to infection control journals to assist in fulfilling the role

# Antibiotic Review and Control



- **Periodic review of antibiotics**
- **Regular audits of prescribing**
- **Indication for use**
- **Restriction patterns**
- **Review by ICC**

# Gracias--Adios



9th Congress of the  
International Federation of  
Infection Control



Santiago, Chile  
14 - 17 October 2008

