

# Visitor Restriction Policies and Practices in Children's Hospitals: Results of an Emerging Infections Network Survey

Alice Pong<sup>1</sup>, Mekleet Faltamo<sup>2</sup>, Susan Beekmann<sup>3</sup>, Philip M. Polgreen<sup>3</sup>, Andi L. Shane<sup>4,5</sup> for the pediatric members of the Infectious Diseases Society of America's Emerging Infections Network

<sup>1</sup> Rady Children's Hospital San Diego and Division of Pediatric Infectious Diseases, Department of Pediatrics, University of California San Diego, San Diego, CA.

<sup>2</sup> Emory University College of Arts and Sciences, Atlanta, GA.

<sup>3</sup> Department of Internal Medicine, University of Iowa Carver College of Medicine and Departments of Epidemiology and Biostatistics, University of Iowa College of Public Health, Iowa city, IA.

<sup>4</sup> Division of Pediatric Infectious Diseases, Department of Pediatrics, Emory University School of Medicine, Atlanta, GA.

<sup>5</sup> Children's Healthcare of Atlanta, Atlanta, GA

For additional information please contact:

Alice Pong  
Pediatric Infectious Diseases  
Rady Children's Hospital San Diego  
apong@rchsd.org]

## ABSTRACT

**Introduction:** Balancing the prevention of infections in pediatric healthcare settings with family-centered care is challenging. Visitor restriction policies (VRP) are difficult to implement and enforce. The purpose of this study was to delineate the timing, indications for, and assessment of VRP in pediatric facilities.

**Methods:** The Infectious Diseases Society of America Emerging Infections Network surveyed 334 pediatric infectious disease consultants via an electronic survey. Descriptive analyses were performed.

**Results:** One hundred seventy (51%) of eligible respondents completed a survey between 12 July – 15 August 2016. Of these, 44 (27%) reported not knowing if their facility had a VRP and 17 (10%) reported having a policy but were unfamiliar with details. 104 (61%) reported being somewhat familiar with the details of their VRP and 92 (88%) had a VRP in all inpatient units. Age-based VRP were reported by 77 (74%), symptom-based by 101 (97%), and outbreak-specific by 78 (75%). VRP were also implemented in the emergency department by 5 (5%), outpatient clinic by 9 (9%), day surgery by 6 (6%), or radiology by 3 (3%). Symptom-based VRP were seasonal in 24 (24%) of facilities, with 71 (70%) implemented year-round. Communication of VRP to families occurred at admission at 89 (87%) and through signage in care areas by 65 (64%). Communication of VRP to staff occurred by email at 79 (77%), meetings at 56 (55%) and signage in staff only areas at 50 (49%). Enforcement was the responsibility of nursing (82, 80%), registration clerks (59, 58%), unit clerks (54, 53%), the infection prevention team (32, 31%), or clinicians (16, 16%).

The effectiveness of VRP was assessed by 63 (62%) through active surveillance of hospital acquired respiratory infections; 29 (28%) used active surveillance of healthcare worker exposures and 30 (29%) used patient/family satisfaction.

**Conclusion:** VRP vary in scope, implementation, enforcement, and physician awareness in pediatric facilities. A prospective multisite evaluation of outcomes would facilitate the adoption of uniform guidance.

## BACKGROUND

- Hospital acquired viral infections are a notable source of morbidity and expense.
- Infections may be introduced into the hospital environment by staff, other patients, or visitors.
- Visitor restriction policies (VRP) are often implemented as a strategy to limit transmission of community acquired pathogens however these restrictions may be in conflict with benefits such as family centered care.
- Few studies have evaluated the impact or effectiveness of visitor restrictions on acquisition of viral infections in the hospital setting.
- There are no specific national guidelines for visitor restriction.

## OBJECTIVE

The purpose of this study was to describe policies and practices related to visitor restrictions in Emerging Infection Network member pediatric facilities in the United States and Canada.

## METHODS

- The Emerging Infections Network (EIN) is a provider based sentinel network of infectious disease clinicians, who are members of the Infectious Disease Society of America (IDSA) and/or the Pediatric Infectious Disease Society (PIDS).
- Web-based survey was available from July 12- August 15, 2016 for 334 members of EIN whose registration indicated that they care for children.
- Non-responders received a second and third invitation after 9 and 11 days, respectively.
- Survey questions included:
  - Familiarity with primary institution's VRP
  - Specifics of VRP
  - Units where policies are enacted
  - How policies are communicated to families, visitors, staff
  - How compliance and effectiveness are assessed
- Responses were tabulated using Microsoft Excel. Analyses was performed using SAS software, version 9.4 (SAS Institute).

## RESULTS

- 170 members responded to the survey.
- 44 (27%) were unaware and 104 (61%) were familiar with their institution's VRP (Table 1). Subsequent analyses are based on responses from 104 members familiar with their institution's policy.
- 92 (88%) reported VRP in place for all inpatient units. VRP were in place in the emergency department by 5 (5%), outpatient clinic by 9 (9%), day surgery by 6 (6%), and/or radiology by 3 (3%) respondents.
- Among respondents reporting seasonal restrictions, most were implemented based on local epidemiology of influenza and RSV (Table 2).
- Communication of VRP to families occurred prior to admission for 48 (47%), upon admission 89 (87%) and/or with signage 65 (64%). Communication to staff occurred by email 79 (77%), meetings 56 (55%), and/or signage 50 (49%).
- Effectiveness of the VRP was evaluated by active surveillance of hospital acquired respiratory infections for 63 respondents (62%), healthcare worker exposures for 29 (28%), and patient/family satisfaction for 30 (29%). 38 (37%) reported there was either no mechanism to monitor effectiveness or they were not aware of any.

**Table 1. Reported Types and Timing of Visitor Restrictions in Pediatric Medical Institutions\***

Type of restriction	Number of respondents reporting restriction (% of 104)	Timing of restriction	Number of respondents reporting restriction type (% per restriction group)
Age restriction	77 (74%)	All year	20 (26%)
		Seasonal	54 (70%)
		Not stated	3 (4%)
Symptom restriction	101 (97%)	All year	71 (70%)
		Seasonal	24 (24%)
		Not stated	6 (6%)
Outbreak restriction	78 (75%)	All year	34 (44%)
		Seasonal	34 (44%)
		Not stated	10 (11%)

**Table 2. Timing of visitor restriction\***

Determining factor	Number of responses (N= 83)
Specific dates	26 (31%)
Local epidemiology of influenza	63 (76%)
Local epidemiology of RSV	39 (47%)
Other local epidemiology or issues	21 (25%)
Not sure	2 (2%)

\* Some respondents chose more than one option.

## CONCLUSIONS

- Visitor restriction policies (VRP) vary widely in terms of indications for implementation, targeted ages, and duration, communication, and enforcement in pediatric healthcare facilities.
- A prospective multisite evaluation of visitor restriction policy (VRP) impact on pathogen transmission and patient satisfaction could inform uniform guidance for VRP in pediatric hospitals.