

Improving Human Antibiotic Use in the Community

Get Smart: Know When Antibiotics Work



Lauri Hicks, DO

Director, Office of Antibiotic Stewardship
Medical Director, Get Smart: Know When Antibiotics Work

November 4, 2015

Get Smart: Know When Antibiotics Work Program History

- ❑ CDC launched the National Campaign for Appropriate Antibiotic Use in the Community in 1995
- ❑ In 2003, the program was renamed Get Smart: Know When Antibiotics Work and coincided with a big media launch
- ❑ Historical focus on acute respiratory tract infections (ARTIs)
- ❑ The program aims to reduce the spread of antibiotic resistance by:
 - Promoting provider adherence to appropriate prescribing guidelines;
 - Decreasing demand for antibiotics among healthy adults and parents of young children; and
 - Increasing adherence to prescribed antibiotics



Get Smart Provider Tools

- ❑ Treatment guidelines and academic detailing sheets
- ❑ Continuing education resources
- ❑ Medical school curriculum
- ❑ Symptomatic prescribing pad
- ❑ Guide to outpatient antibiotic stewardship interventions on website

Rx Name: _____
Date: ____/____/____

GET SMART
Know When Antibiotics Work

Diagnosis:

Cold Middle ear fluid (Otitis Media with Effusion, OME)
 Cough Viral sore throat
 Flu Other: _____

You have been diagnosed with an illness caused by a virus. Antibiotics do not cure viral infections. If given when not needed, antibiotics can be harmful. The treatments prescribed below will help you feel better while your body's own defenses are fighting the virus.

General instructions:

Drink extra water and juice.
 Use a cool mist vaporizer or saline nasal spray to relieve congestion.
 For sore throats, use ice chips or sore throat spray; lozenges for older children and adults.

Specific medicines:

Fever or aches:
 Ear pain:

Use medicines according to the package instructions or as directed by your healthcare provider. Stop the medication when the symptoms get better.

Follow up:

If not improved in ____ days, if new symptoms occur, or if you have other concerns, please call or return to the office for a recheck.
 Other: _____

Signed: _____

For More Information call 1-800-CDC-INFO
or visit www.cdc.gov/getsmart

Get Smart About Antibiotics Week (Annually Since 2008)

Goal

To increase the number of actively engaged program partners in the promotion of Get Smart messages to target audiences

Target audiences:

General public, providers, hospital administrators, global interest groups, and policy makers

Partners

- Governmental agencies (state, federal, intl)
- Professional societies
- Non-profit organizations
- Businesses
- Media outlets



Save the date for November 16-22, 2015!

Partnership Examples

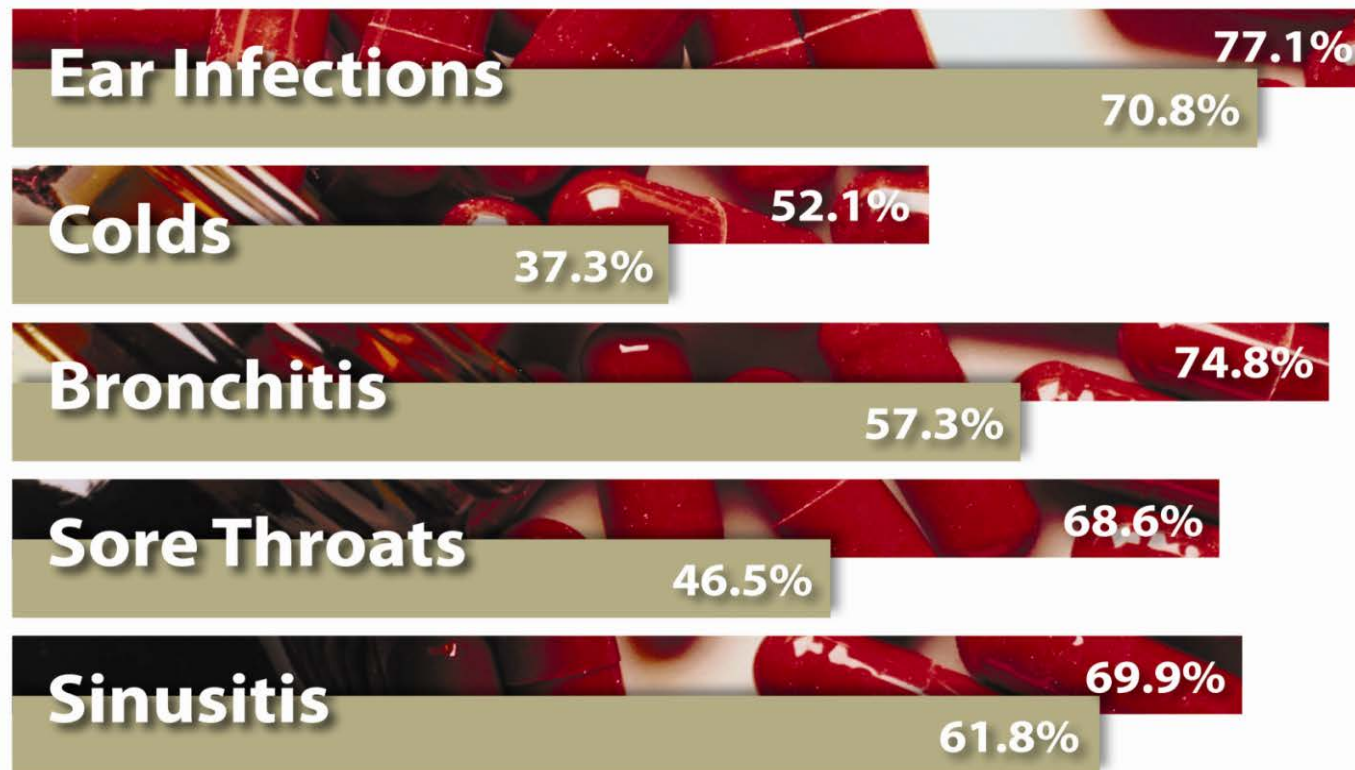
- Federal
 - Supporting activities with the Veterans Administration exploring appropriate antibiotic prescribing in outpatient clinics and the use of clinical decision support to improve prescribing
- Professional society
 - American Academy of Pediatrics (AAP) released updated Principles for Judicious Prescribing in Pediatrics in 2013; developing continuing medical education (CME) for pediatricians
- State
 - Fund state and local health departments to develop and implement programs promoting appropriate antibiotic use in the community; 15 states funded in 2015
- Corporate
 - Working with Walmart to develop an in-store PSA to be shown during check-out
 - Collaborating with the What to Expect Foundation to update content in the “What to Expect” series of books to highlight the importance of using antibiotics appropriately

Measuring Human Antibiotic Use in the Community

- ❑ CDC surveys—help us assess both volume of antibiotic use and appropriateness
 - The National Ambulatory Medical Care Survey (NAMCS)
 - The National Hospital Ambulatory Medical Care Survey (NHAMCS)
- ❑ Proprietary data collected for pharmaceutical marketing—provide granular details about prescribing by county and state
 - Antibiotic expenditures
 - Population-based prescribing (based upon prescriptions filled)
- ❑ Qualitative research – surveys, focus groups, etc.
- ❑ Quality measure data (e.g. Healthcare Effectiveness and Information Set)
- ❑ Other data sources include claims datasets, NHANES surveys, and healthcare system data

A decade's difference: Doctor visits resulting in antibiotic prescription 1995-96 vs. 2005-06

Percent of visits



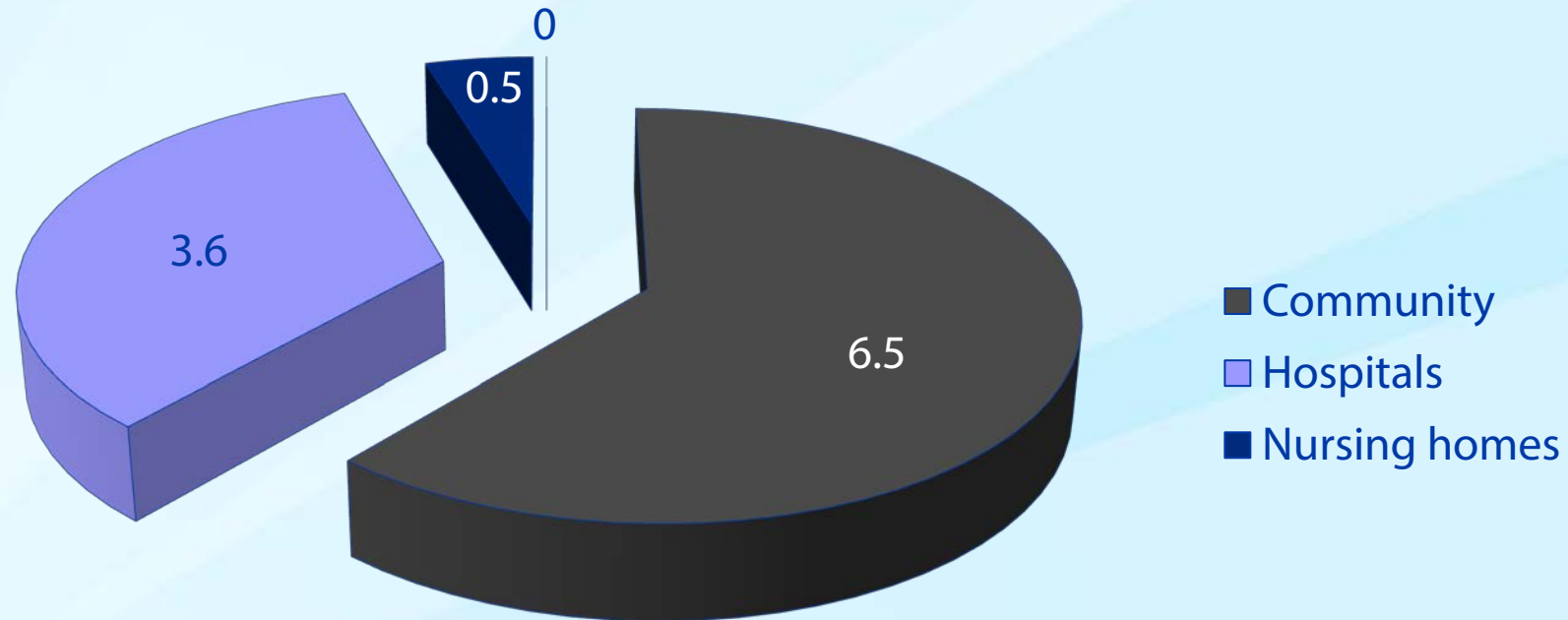
All trends shown are significant ($p < .05$)
Data Source: National Ambulatory Medical Care Survey
and National Hospital Ambulatory Medical Care Survey

All trends shown are significant ($p < .05$)

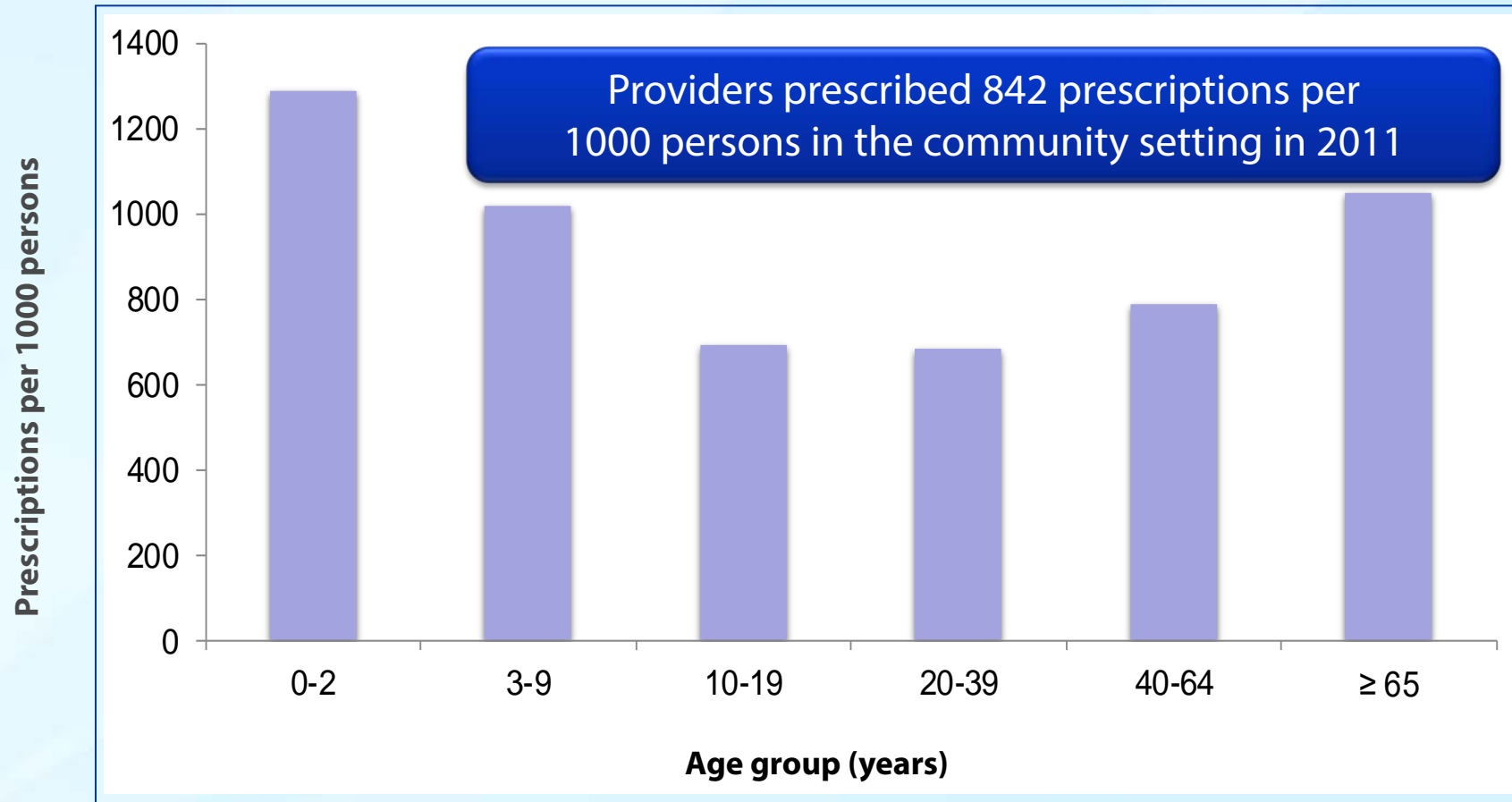
Data Source: National Ambulatory Medical Care Survey and National Hospital Ambulatory Medical Care Survey

Human Antibiotic Prescription Costs in Billions (\$US), by Treatment Setting, United States

For 2009, total costs \$10.7 billion

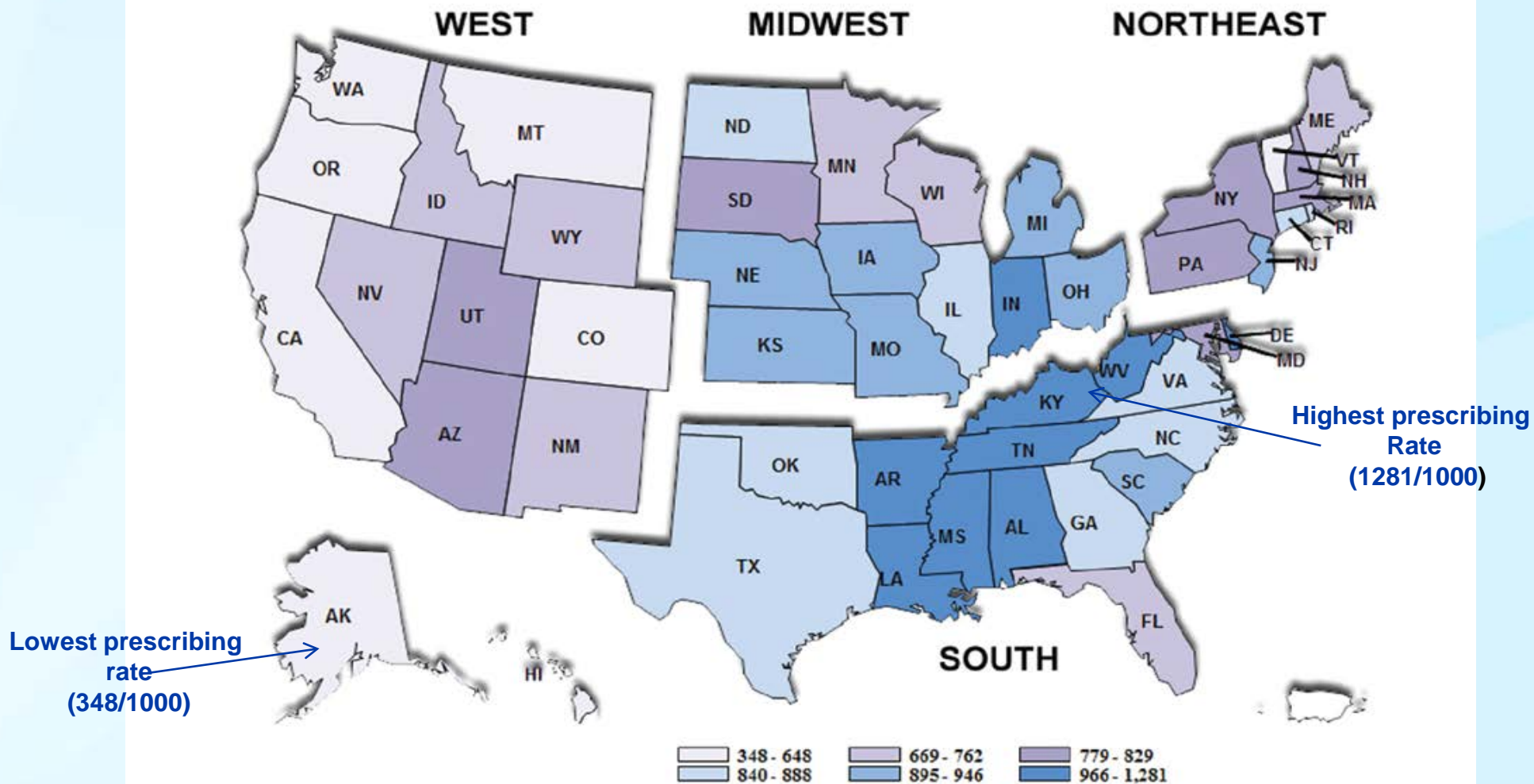


Outpatient Antibiotic Prescribing Practices United States, 2011



Antibiotic Prescriptions per 1000 Persons by State, 2011

Figure 1a)



Lessons Learned from Two Decades of Appropriate Antibiotic Use Activities

- Start with measurement of antibiotic use and research (data for action)
- Tailor messages to target audiences
- Develop a partnership network and leverage support through effective partnerships
- Support local intervention programs
- Develop national policies that will facilitate implementation
- Changing behavior and culture takes time