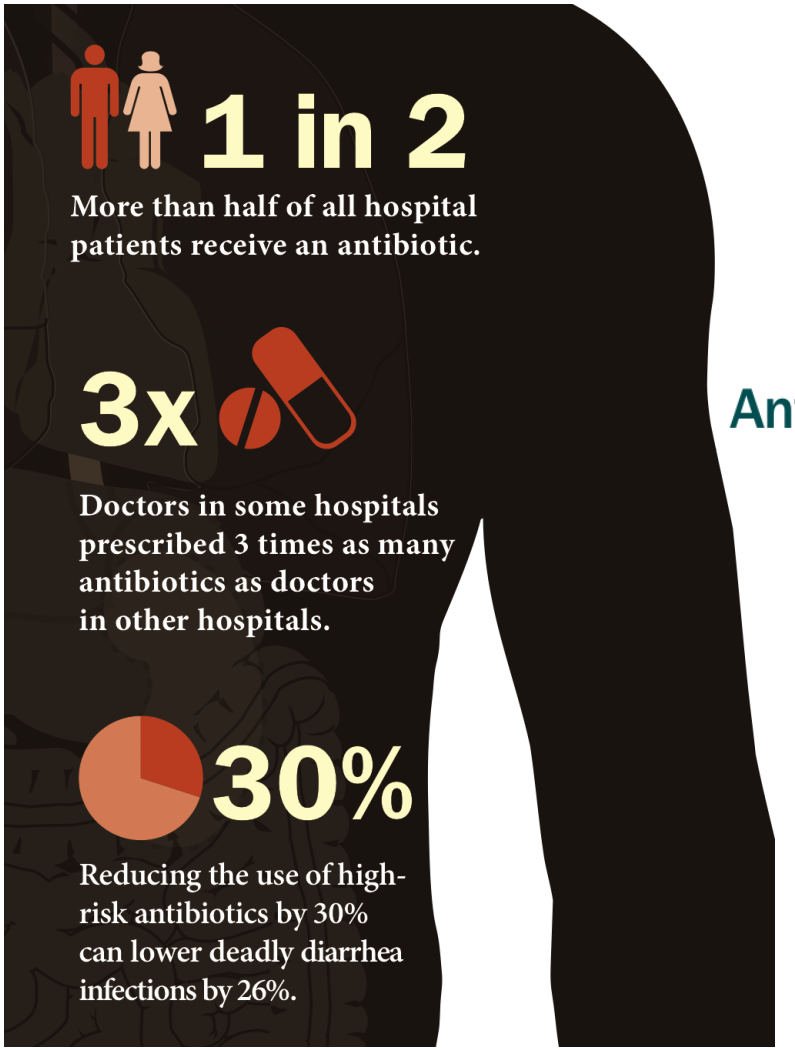
Antimicrobial Stewardship Subcommittee Update

HAI-AC Meeting

May 8, 2014

Centers for Disease Control
March 2014



CDC Vitalsigns™
March 2014

Making Health Care Safer

Antibiotic Rx in Hospitals: Proceed with Caution

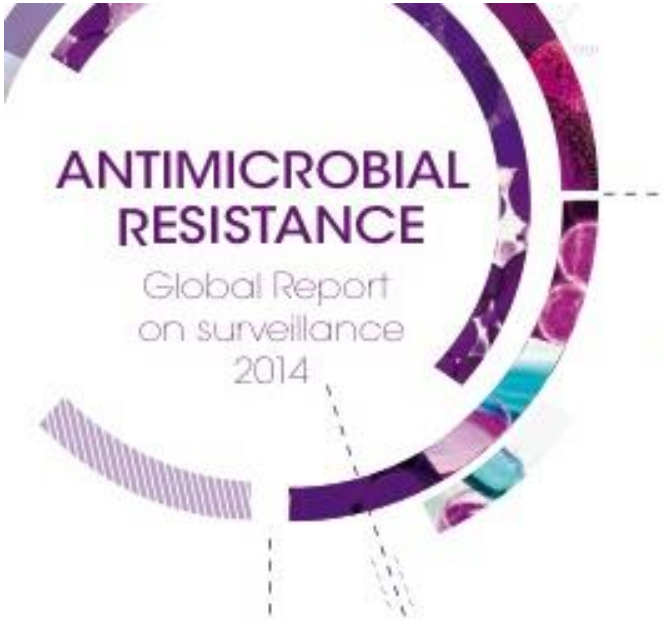
CDC. *MMWR* March 4, 2014;63:1-7.

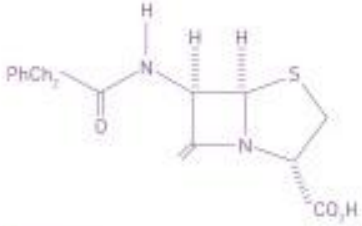
Centers for Disease Control March 2014

- CDC recommends that all hospitals implement antibiotic stewardship programs that include, at a minimum, seven core elements:
  1. Leadership support
  2. Accountability through a single physician lead
  3. Drug expertise through a single pharmacy lead
  4. Action including at least one intervention, such as an "antibiotic timeout," to improve prescribing
  5. Tracking prescribing and resistance patterns
  6. Reporting local prescribing and resistance information directly to clinicians
  7. Education for clinicians
- Urgent action is needed to promote correct antibiotic prescribing to ensure these lifesaving drugs work in the future

CDC. *MMWR* March 4, 2014;63:1-7.
http://www.cdc.gov/getsmart/healthcare/implementation/core-elements.html

World Health Organization
April 2014





What you need to know

WHO's first global report on antimicrobial resistance, with a focus on antibiotic resistance, reveals that it is no longer a prediction for the future. Antibiotic resistance - when bacteria change and antibiotics fail - is happening **right now**, across the world

The report is the most comprehensive picture to date, with data provided by 114 countries

Looking at 7 common bacteria that cause serious diseases from bloodstream infections to gonorrhoea

High levels of resistance found in all regions of the world

Significant gaps exist in tracking of antibiotic resistance

World Health Organization
April 2014

Over the last 30 years, no major new types of antibiotics have been developed

What does this mean?

Without urgent action we are heading for a post-antibiotic era, in which common infections and minor injuries can once again kill

How can infections be prevented in the first place to reduce the need for antibiotics?

Better hygiene | Access to clean water and sanitation | Infection control in healthcare facilities | Vaccination

Subcommittee Members

- Karen Anderson
- Mike Butera, MD
- Elizabeth Clark, MPH, RN
- Stan Deresinski, MD
- Catherine Liu, MD
- Jeff Silvers, MD
- Keith Teelucksingh, PharmD
- Dan Uslan, MD
- Meetings via teleconference on 1/16/14, 2/19/14, 3/27/14, and 4/24/14

Antimicrobial Stewardship Subcommittee

- Subcommittee appreciates the support of the HAI-AC in unanimously approving the ASP introduction and 3-tier definition at the 12/12/13 meeting
  - Motion approved by HAI-AC: “CDPH disseminate the preface/introduction and 3-tier definition as “guidance” to acute care hospitals.”
- Subcommittee appreciates CDPH’s work in disseminating this information via the Spotlight on ASP Project

CDPH: Spotlight on ASP Project

The California Antimicrobial Stewardship Program Initiative

The CDPH HAI Program supports the Antimicrobial Stewardship Program Initiative to provide consultation and education for assisting California hospitals and other healthcare facilities to implement these importa antimicrobial utilization. The purpose of an antimicrobial stewardship program in a healthcare facility is to measure and promote the appropriate use of antimicrobials by selecting the appropriate agent, dose, durat minimizing toxicity and the emergence of antimicrobial resistance. Antimicrobial stewardship is **essential** in the control of *Clostridium difficile* infections and the emergence of infections due to multidrug resistant

California law requires that general acute care hospitals implement programs for monitoring the judicious use of antibiotics and requires a quality improvement committee with responsibility for oversight. California statewide assessment of antimicrobial stewardship programs and published the findings in 2013 at The State of Antimicrobial Stewardship in California .

We are pleased to launch our new Spotlight on Antimicrobial Stewardship Programs project, which allows hospitals to share their antimicrobial stewardship program strategies and progress, and identifies Californi serve as mentors to other hospitals in various stages of antimicrobial stewardship program implementation. This webpage will update each hospital's implementation progress as more antimicrobial stewardship ac volunteer hospitals will be added to the site on a quarterly basis.

Spotlight on Antimicrobial Stewardship Programs

The following hospitals have agreed to share progress on the implementation of their **Antimicrobial Stewardship Programs (ASP).** Activities listed were defined by the California HAI Advisory Committee as those that comprise varying levels of Program implementation. An "√" indicates the hospital is currently performing the activity.

		Basic Program				Intermediate Program				Advanced Program		
		1. Institution-specific antimicrobial stewardship policy	2. Physician-supervised multidisciplinary ASP committee or workgroup convened and/or procedures adopted	3. ASP support provided by a physician or pharmacist with antimicrobial stewardship training from a recognized professional organization or post graduate education	4. ASP activites routinely reported to hospital quality improvement committees	5. Annual antibiogram developed (using CLSI guidelines), distributed to medical staff, and follow-up education provided.	6.Institutional guidelines for the management of common infection syndromes adopted (e.g., order sets, clinical pathways, empiric antimicrobial therapy guides, etc.)	7. Usage patterns of antibiotics (determined to be important to the local resistance ecology) monitored using Defined Daily Dosing (DDD) or Days of Therapy (DOT)	8. Regular antimicorbial stewardship education provided to hospital staff and committees	9. Antimicrobial formulary reviewed annually and changes made based on local antibiogram	10. Prospective audits of antimicrobial prescriptions performed and intervention/feedback provided	11. Formulary restriction with preauthorization implemented
1	**Children's Hospital & Research Center** Oakland, Major Teaching, 190 beds ID Physician: Brian Lee, MD blee@mail.cho.org Pharmacist: Cynthia Huwe, PharmD chuwe@mail.cho.org	√	√	√	√	√	√	√	√	√	√	√
2	**Eden Medical Center** Castro Valley, Community, 144 beds ID Physician: Jeffrey Silvers, MD silverj@sutterhealth.org ID Pharmacist: Christopher Martinez martinc@sutterhealth.org	√	√	√	√	√	√	√	√	√	√	√
3	**Santa Barbara Cottage Hospital** Santa Barbara, Community, 450 beds ID Physician: Alan Sugar, MD alan.sugar@gmail.com ID Physician: David Fisk, MD dfisk@sansumclinic.org Pharmacist: Karla Killgore Smith, PharmD											

http://www.cdph.ca.gov/programs/hai/Pages/AntimicrobialStewardshipProgramInitiative.aspx

Antimicrobial Stewardship Subcommittee

- Subcommittee unanimously agreed that a stronger statement in support of the necessity of antimicrobial stewardship programs in acute care hospitals was both warranted and necessary

California Health and Safety Codes

- 1288.8: California Department of Public Health (CDPH) must require general acute care hospitals to "develop a process for evaluating the judicious use of antibiotics, the results of which shall be monitored jointly by appropriate representatives and committees involved in quality improvement activities."
- 1288.5: Healthcare Associated Infections Advisory Committee "…shall make recommendations on the **use of national guidelines** and the **public reporting of process measures** for preventing the spread of HAI…"

National Guidelines on Antimicrobial Stewardship

- IDSA/SHEA:
  - Guidelines for Developing an Institutional Program to Enhance Antimicrobial Stewardship (2007)
- Centers for Disease Control and Prevention:
  - Get Smart for Healthcare Campaign
  - Antibiotic Resistance Threats Report (2013)
  - Core Elements of Hospital Antibiotic Stewardship Programs (2014)
- SHEA/IDSA/PIDS:
  - Position Statement on Antimicrobial Stewardship (2012)

Action Item
(see proposed statement)

- CDPH require acute care hospitals to develop and implement, at minimum, a basic tier antimicrobial stewardship program as previously defined by the HAI-AC. This is a necessary means of reducing the spread of antibiotic-resistant HAIs, and this recommendation is supported by *national guidelines* put forth by both government and professional organizations

Action Item
(see proposed statement)

- CDPH require acute care hospitals to provide data about which ASP components have been implemented. Based on the ASP definition (as previously approved by the HAI-AC), acute care hospitals will be designated as having a basic, intermediate, or advanced ASP. This designation as well as the ASP components that have been implemented will be publically reported. These ASP components represent *process measures* for preventing the spread of antibiotic-resistant HAIs. The collection and reporting of these data should be mandatory.

Next Steps

- Search for another subcommittee member who is a pharmacist with expertise/experience with antimicrobial stewardship
- Compile list of interested pharmacists, invite those interested to submit a short personal statement, followed by review and approval by subcommittee

Next Steps

- Develop a toolkit for California acute care hospitals to provide assistance on how to meet the components that define basic, intermediate, and advanced programs
- Subcommittee members have each taken on 2-3 ASP components
  - Develop one paragraph description of the component
  - Outline steps or strategies/gather examples of how the component can be successfully implemented