



Hospital infection control efforts

Linus Ndegwa, MPHE, HCS
Infection Control, Manager

Global Disease Detection-GDD

Centers for Disease Control and Prevention-Kenya



SAFER • HEALTHIER • PEOPLE™



OUTLINE

- Introduction to IPC
- Activities in Kenya
- Achievements / Results
- Next steps

Infection Prevention and Control in Kenya



- Pathogens transmitted in hospitals responsible for substantial morbidity and mortality in Kenya
- Infection control crucial to reducing hospital transmission of existing and emerging diseases





Global Burden of Poor IPC Practices

- In US, an estimated **2million/year** HAIs occur every year
 - Cause more than 90,000 deaths annually
 - Cost 4.5-5.7 billion \$ in additional healthcare spending annually
 - More serious illness
 - Prolong hospital stay
- Little data from African countries
- World Health Organization (WHO) estimates 10-30% of all admissions result in an HAI
- 1.4 million people at any given time have HAIs



Global Burden of Poor IPC Practices

- 80% of HAIs are either:
 - UTIs
 - Surgical sites
 - Pneumonia and
 - Blood associated with IV devices



Effects

- Long term disability
- Excess deaths
- Massive additional financial burden
- High cost on patients and families



Activities

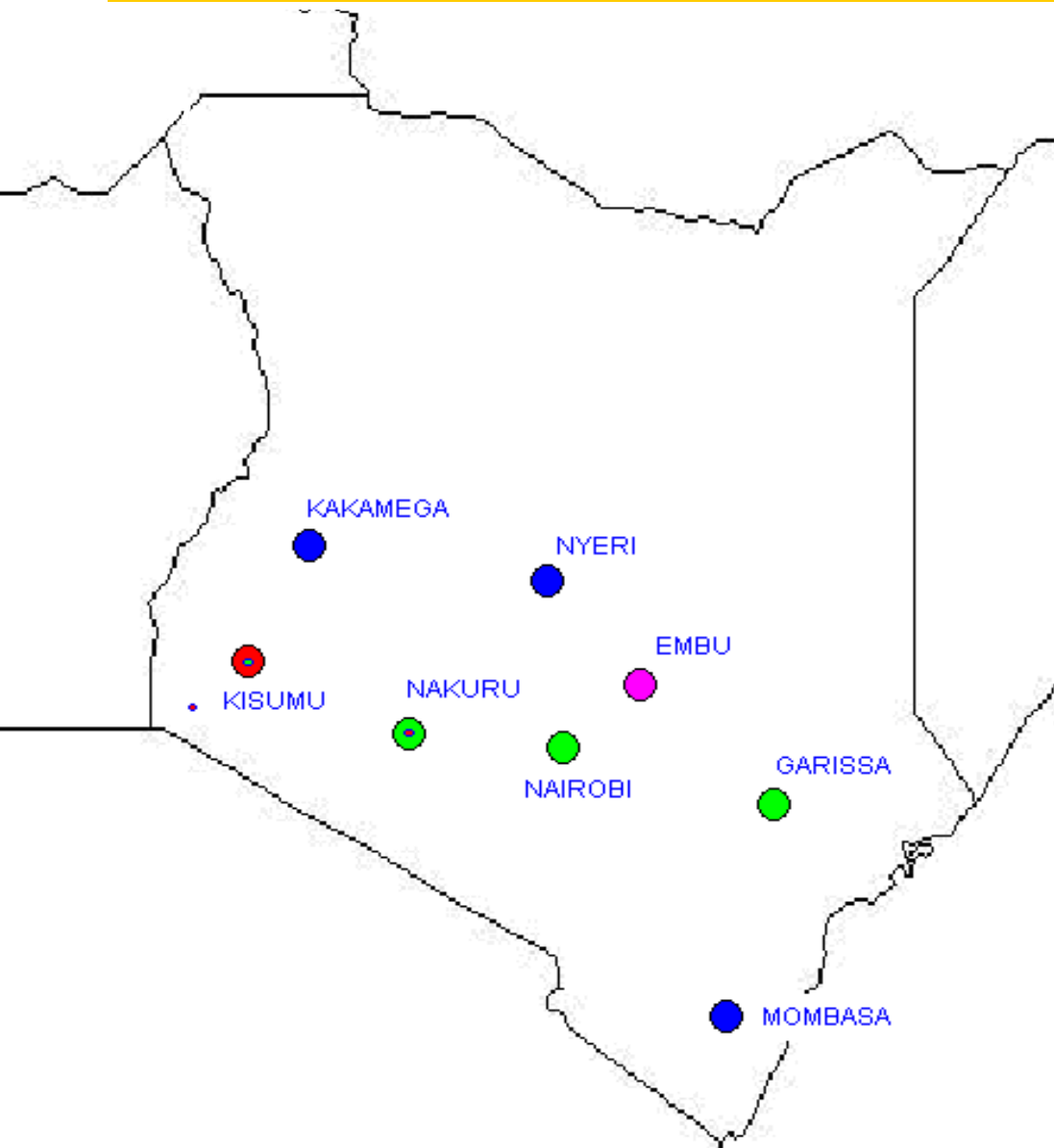








- **March 2005: injection safety targeting blood borne pathogen**
 - **Collaboration: JSI-MMIS, PATH, AED**

- **Dec 2006: Respiratory infection targeting airborne infection**
 - **Collaboration between: CDC-Kenya**
 - Global Disease Detection Division
 - International Emerging Infections Program
 - **MOH**
 - Division of Nursing
 - Division of Health Promotion
 - **CDC-Atlanta, Division of Healthcare Quality Promotion**

- African Medical and Research Foundation (AMREF)
- Kenya Medical Training College

IPC/ VSAT Network Sites



-  GDD - VSAT -UP AND RUNNING (ALSO HAVE "SKYPE")
-  NEXT PHASE INSTALLATION
-  GDD RIDING ON NURSES WORK FORCE VSAT
-  NURSES WORKFORCE RIDING ON GDD VSAT
-  HOMABAY TOWN -POINT-EXTENSION OF THE NURSES WORKFORCE PROJECT
-  SECURITY CLEARANCE - NOT YET



IPC objectives



- **Reduce the HAIs in Kenyan Health Facilities**
- **Contribute to establishing sustainable safe health care waste management systems**
- **Increase health care worker and patients' safety**



Infection control: Main issues

- inadequate financial support
- low levels of resources as well as poor risk perception
- lack of basic training
- Badly structured and equipped facilities
- Technological gap

Infection control : Main issues-2



- inadequate direction often related to a lack of monitored systems, leadership and policy.
- Improper handling of health care waste
- Improper antibiotics use and lack of microbiological information
- Understaffing and overcrowding



How does Antibiotics resistance Fit in to IPC Activities?

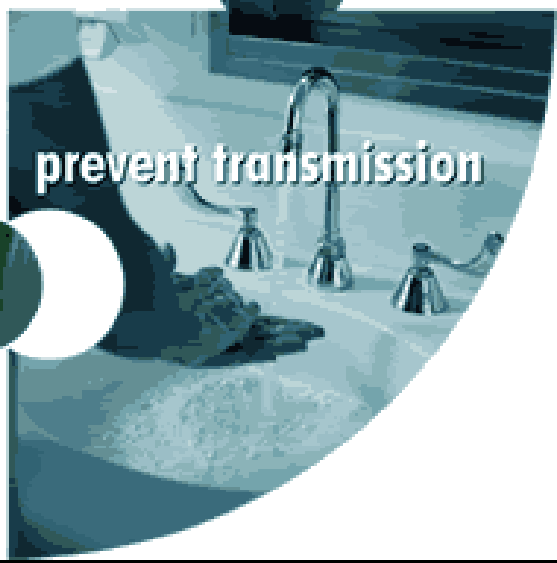
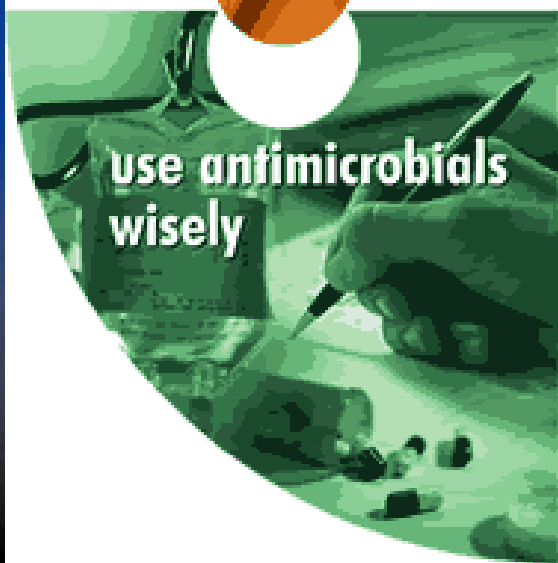
- Infection Prevention/Control (IPC) Fundamentals
 - Standard Precautions
 - hand hygiene, PPE, disinfection, inj. safety, waste mgmt.
 - Transmission based precautions
 - Contact, Droplet, Airborne
- Putting IPC fundamentals into practice requires administrative support and HCW motivation into good clinical practices
- Antibiotic resistance organism increases hospitals stay of patients
 - Part of HAI

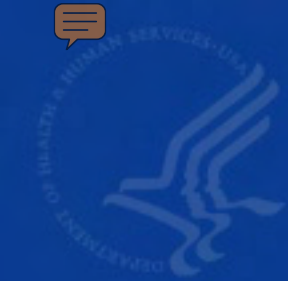


Preventing antimicrobial resistance



- Prevent antimicrobial resistance in healthcare settings.
- The campaign centers on four main strategies:
 - prevent infection
 - Decrease antimicrobial use
 - diagnose and treat infection
 - Appropriate use of microbial saves life
 - use antimicrobials wisely
 - Programs to improve antimicrobial use are effective
 - prevent transmission
 - HCW can prevent the spread of infection from patient to patient





IPC MEASURES

- Decrease transmission and acquisition of infectious agents e.g.
 - proper hand hygiene
 - safe work practices
 - use of personal protective equipment (PPE)
 - Safe injection practices





Our approach

- **Training and capacity building**
 - E-Learning course
 - Traditional classroom course
- **Advocacy and behavior change**
- **Monitoring and evaluation**
- **Research**

Low-Cost Interventions



Practicing
“Cover your cough”

- Respiratory cohorting
 - Patient placement decisions
 - Bed spacing
 - Cough etiquette
- Hospital Isolation Rooms
- Health care waste management
- Reduce unnecessary injections



Achievements



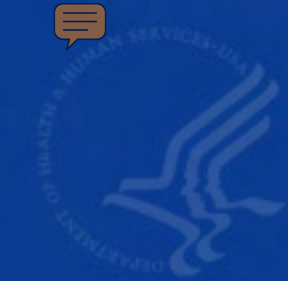
- Over 22,000 Health workers trained in safe injection practices in context of IPC
- Integration into pre-service training
- Set up 8 **E-learning centres**
- Infection Control staff conduct sensitizations and give reminders in their hospitals



Achievements



- Advocacy and sensitization to supply some IPC supplies
- Emphasis on hand hygiene increasing
 - Sensitizations
 - Monitoring/auditing
 - Local production



Achievements



- Infection control committees
 - Most facilities have IPC committees



Challenges



- Infrastructure and supplies
- Shortage of HCWs and patient crowding
- Lack of IPC policy to guide the HCW
- Lack of infection control training for healthcare workers
- Healthcare worker attitudes

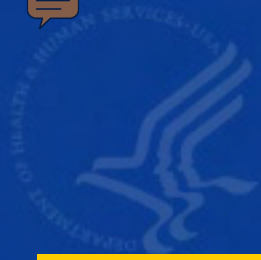


Challenges



- Waste and supply management strategies
- Sustainability
 - Integration into pre-service training
- Leveraging resources for IPC
- National policy and guidelines on comprehensive IPC
- National IPC committee





Posters

Protect Your Family. Protect Yourself.

In the hospital...



Observe visiting hours, limit the number of visits, and do not visit if you are sick.



...then wash your hands.

Wash Your Hands

Protect Your Patients. Protect Yourself.

Stop the spread



Wash before each patient contact



Wash after each patient contact



s, and influenza.

Hand hygiene is the **most effective way** to prevent the spread of infections in hospitals



HAI Surveillance project: Importance



- Raises Awareness
 - Quantifies the burden of HAI
 - Highlights circumstances under which HAIs occur
- Provides feedback to motivate
 - Healthcare workers
 - Administrators and policy makers
- Generates data to evaluate interventions
 - Educational campaigns
 - Hand hygiene
 - Respiratory cohorting



HAI Surveillance Project: Current Status

- Hired four surveillance officers
- Completed training of officers and hospital staff
- Developed tools to identify and follow hospital acquired infection
 - Assessment of antibiotic use
- Trained officers to complete hand hygiene audits