

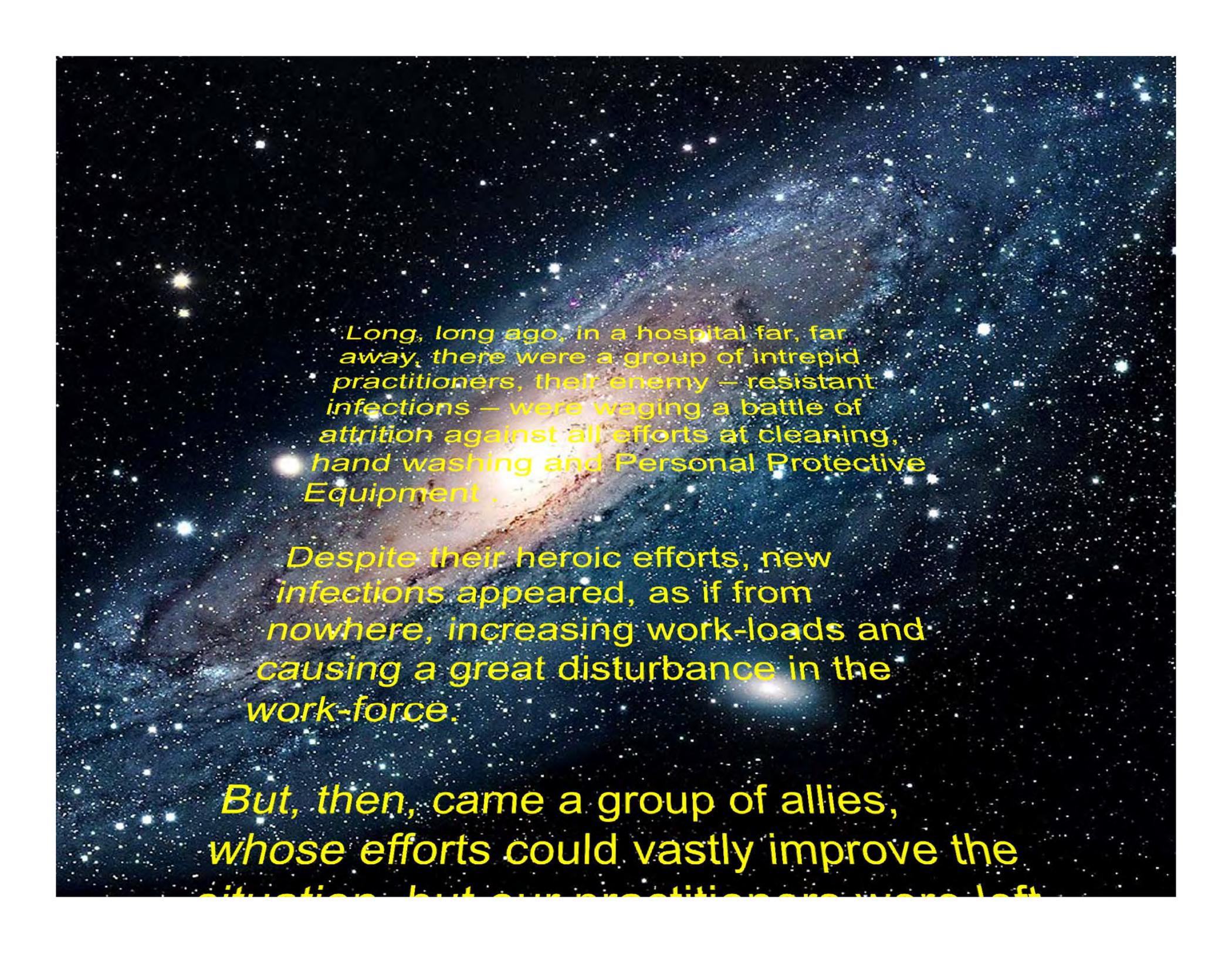


What Can ICPs do for stewardship

Harnessing, THE FORCE of ICPs

Dr. Jennifer Grant

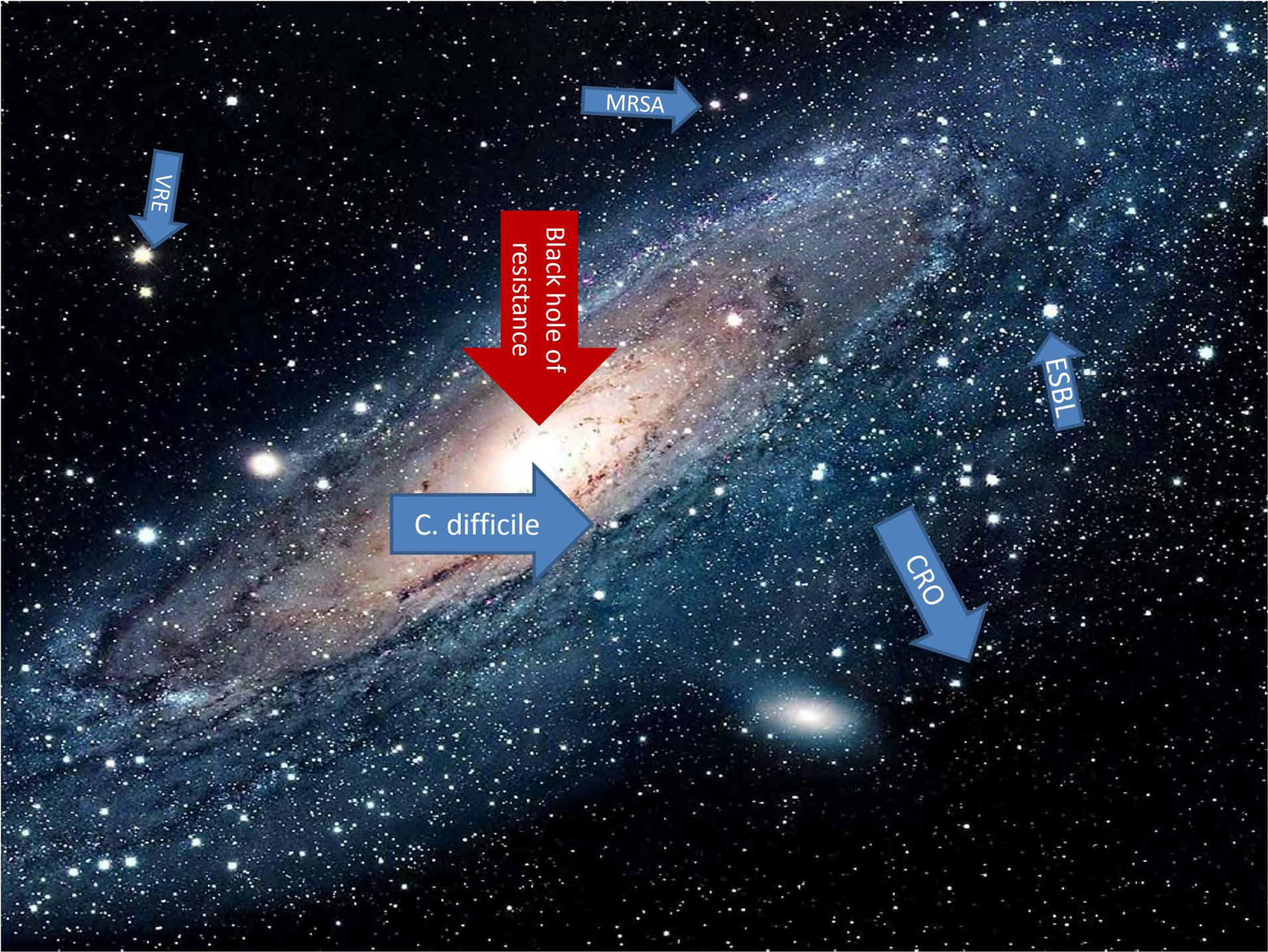
March 4, 2016



Long, long ago, in a hospital far, far away, there were a group of intrepid practitioners, their enemy – resistant infections – were waging a battle of attrition against all efforts at cleaning, hand washing and Personal Protective Equipment .

Despite their heroic efforts, new infections appeared, as if from nowhere, increasing work-loads and causing a great disturbance in the work-force.

But, then, came a group of allies, whose efforts could vastly improve the situation, but our practitioners were left



VRE

MRSA

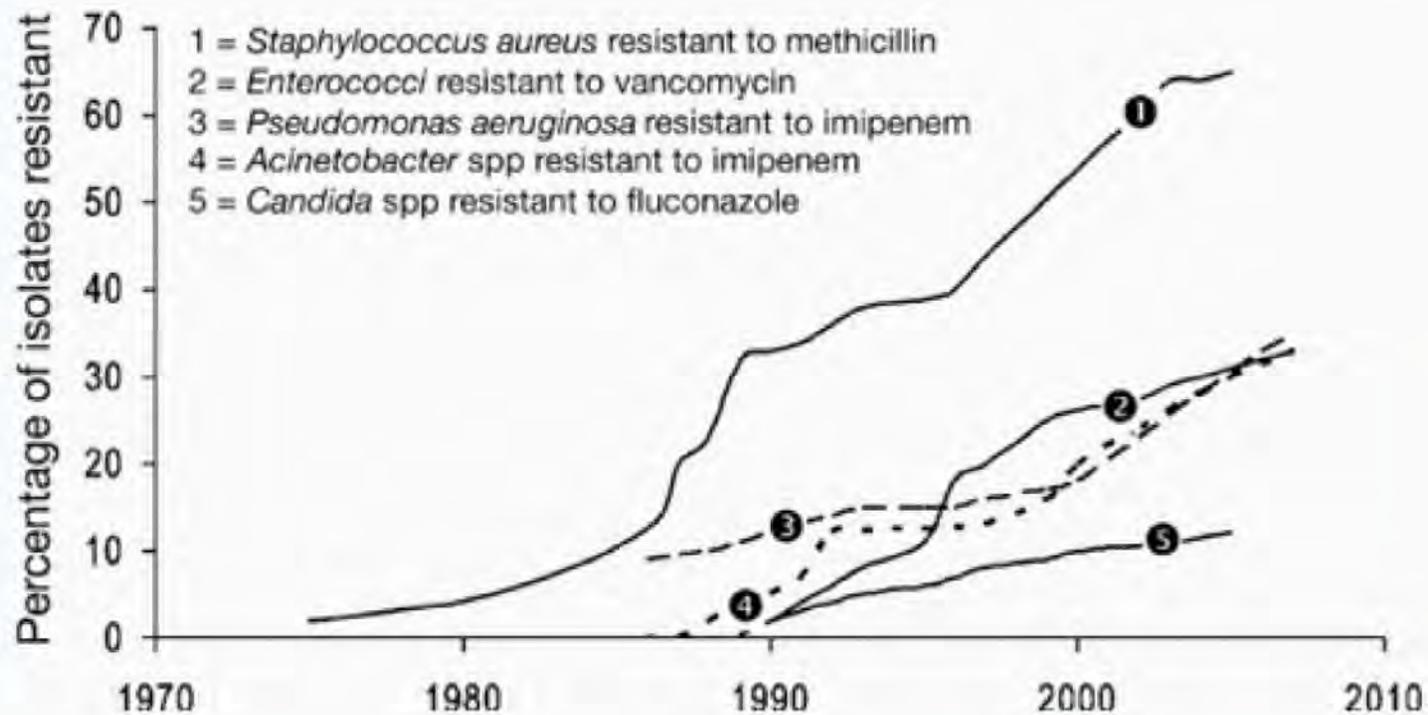
Black hole of
resistance

C. difficile

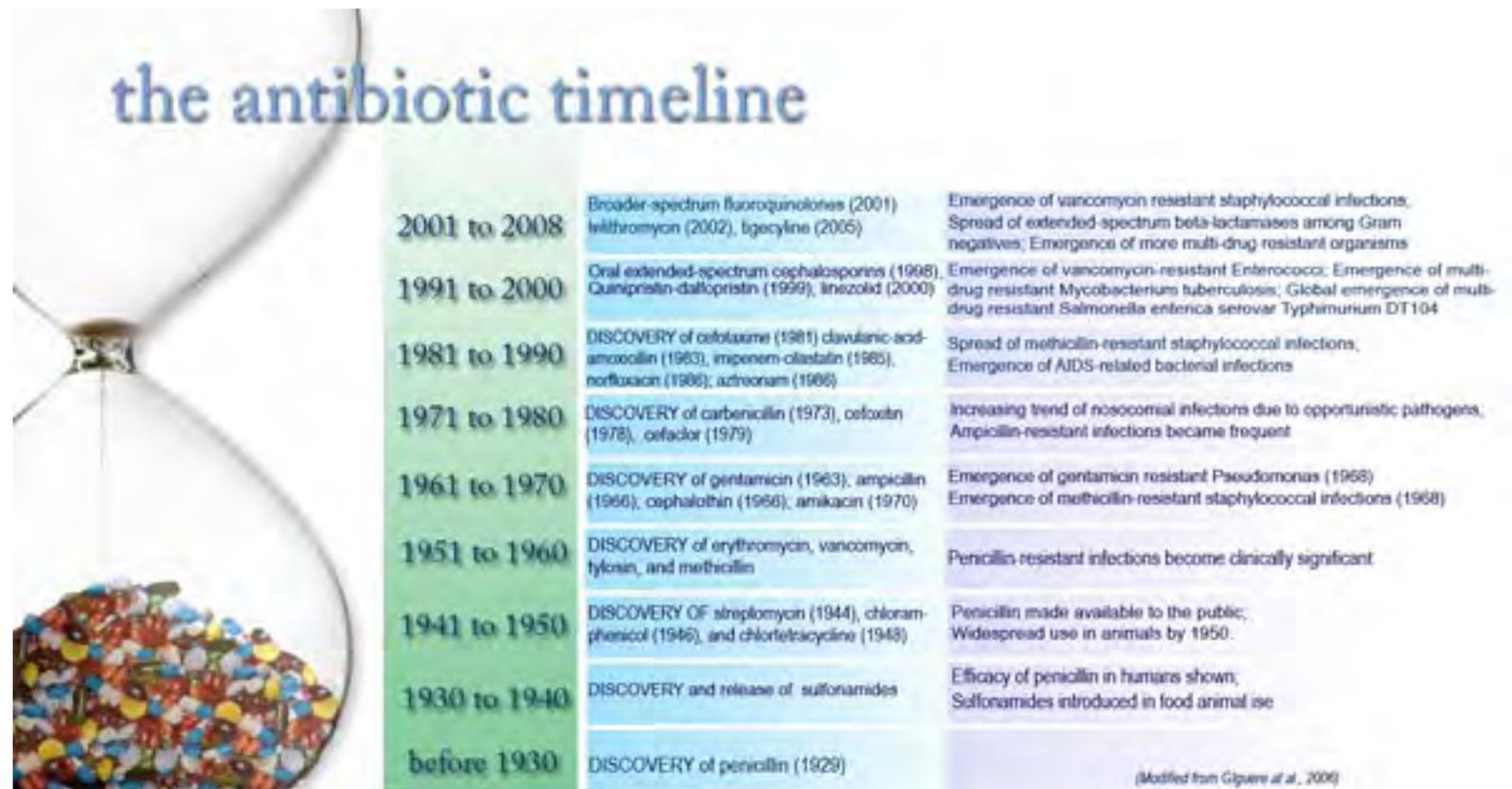
CRO

ESBL

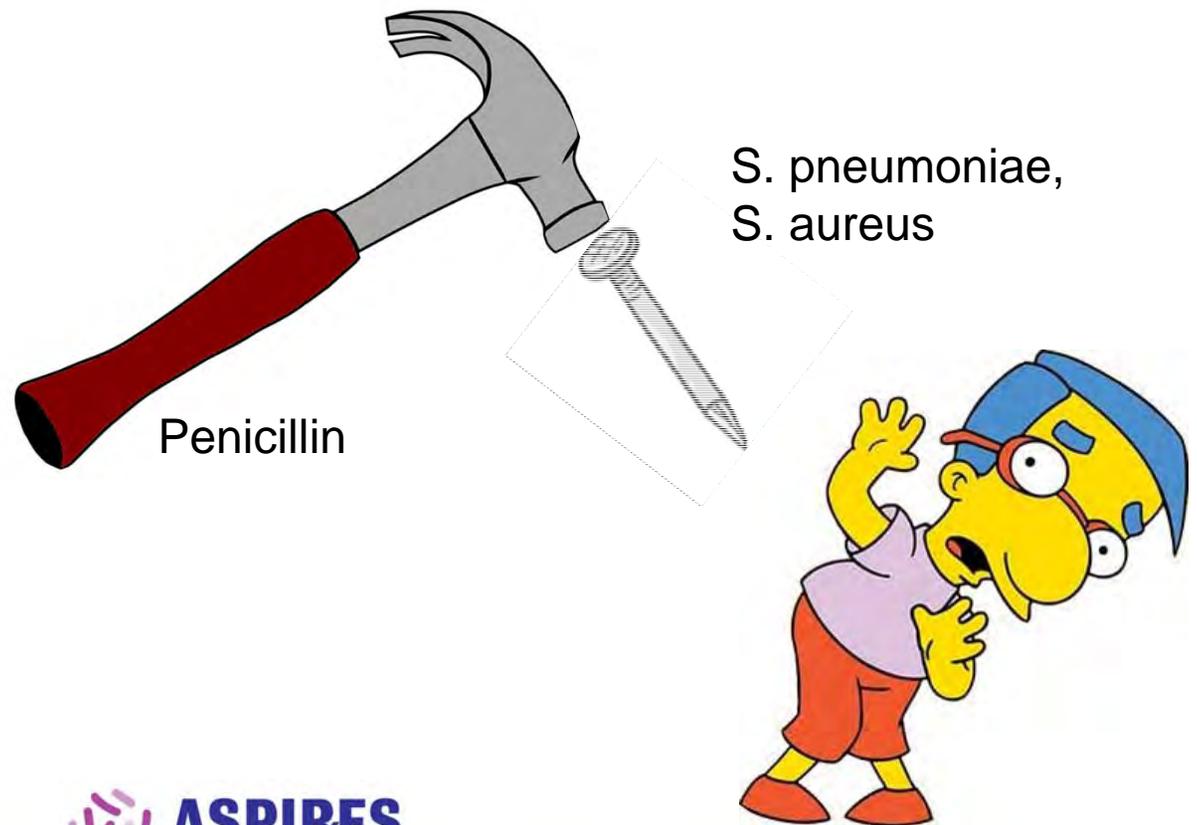
Antimicrobial Resistance for Selected Pathogens over Time



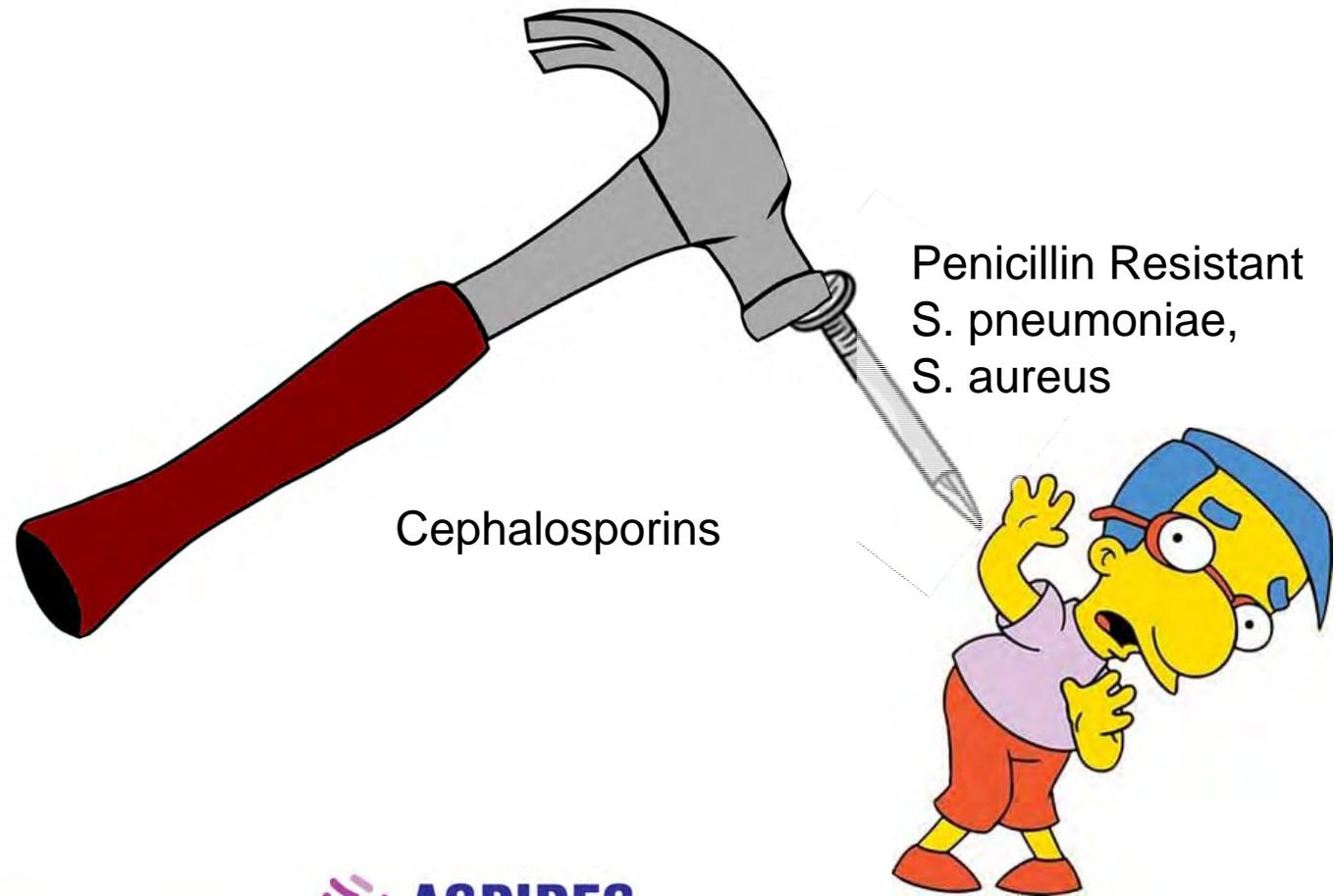
How Did We Get Here?



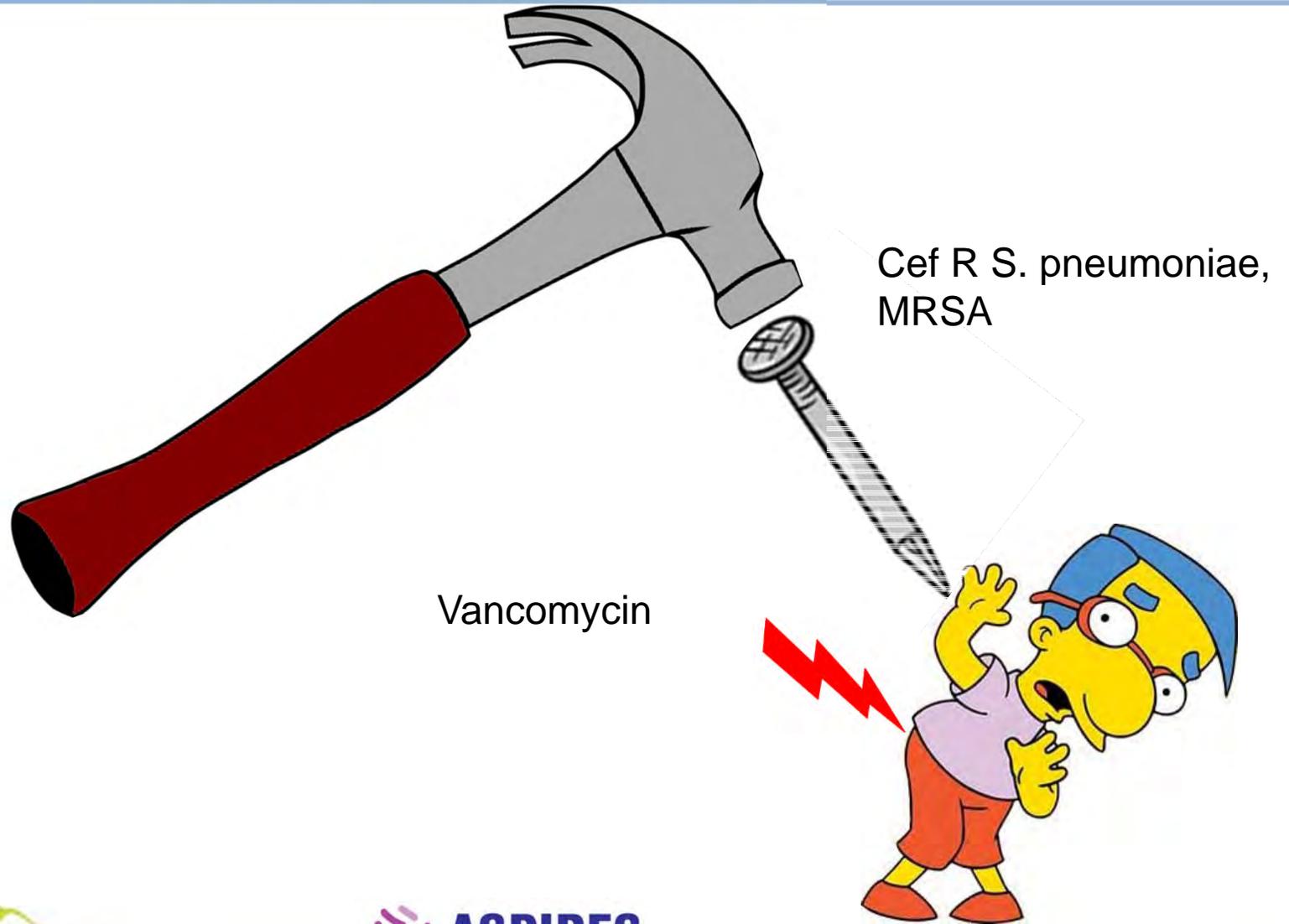
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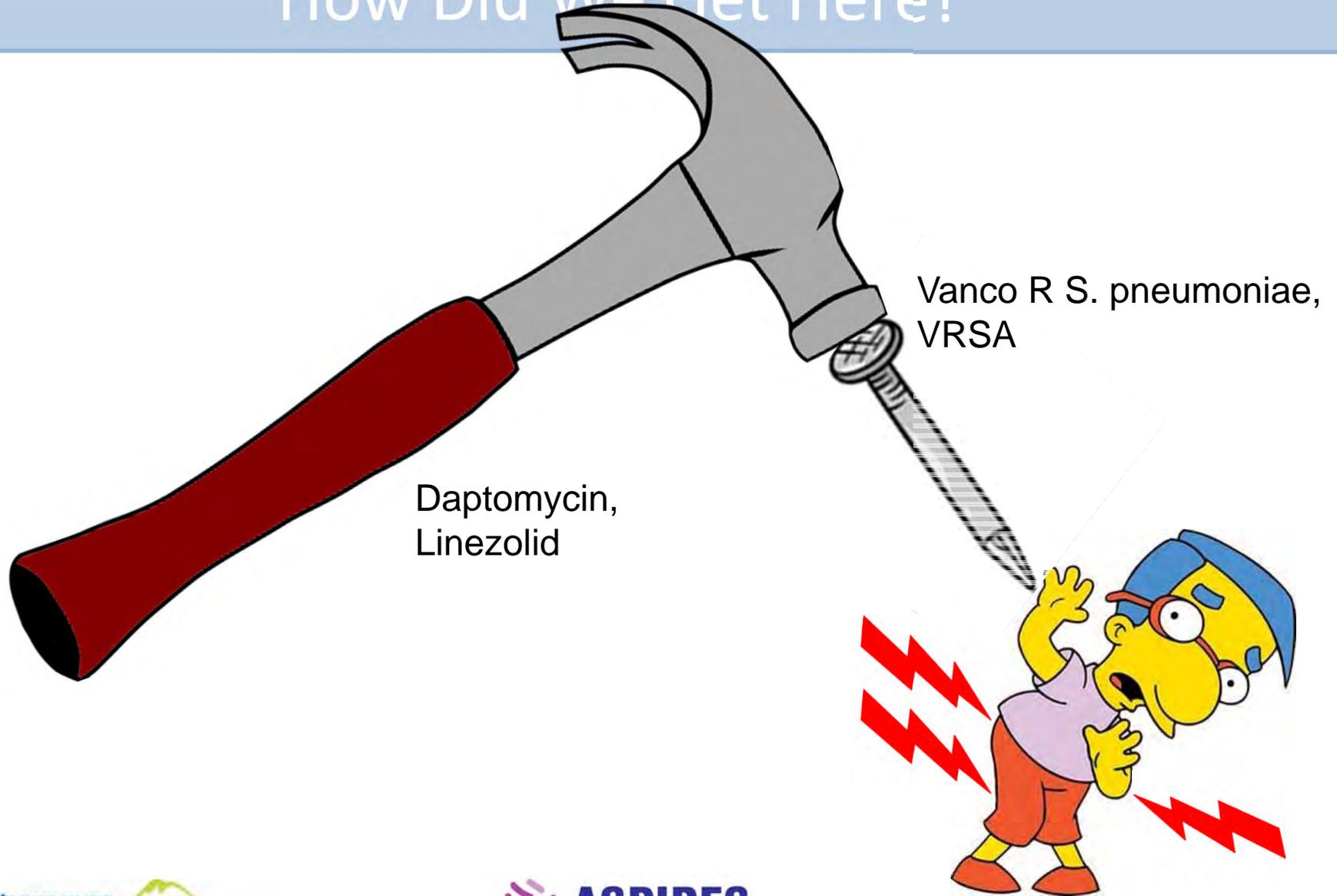
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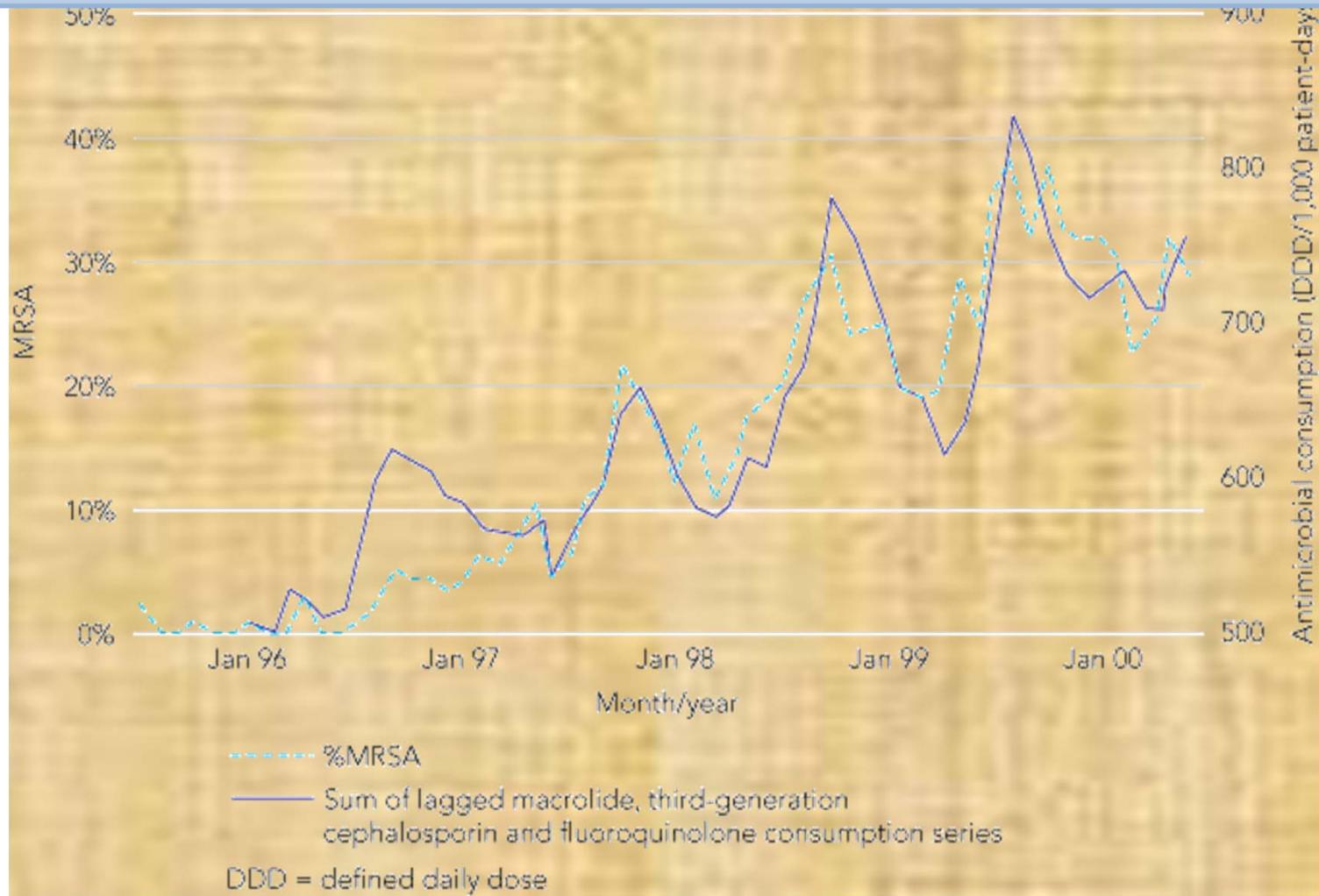
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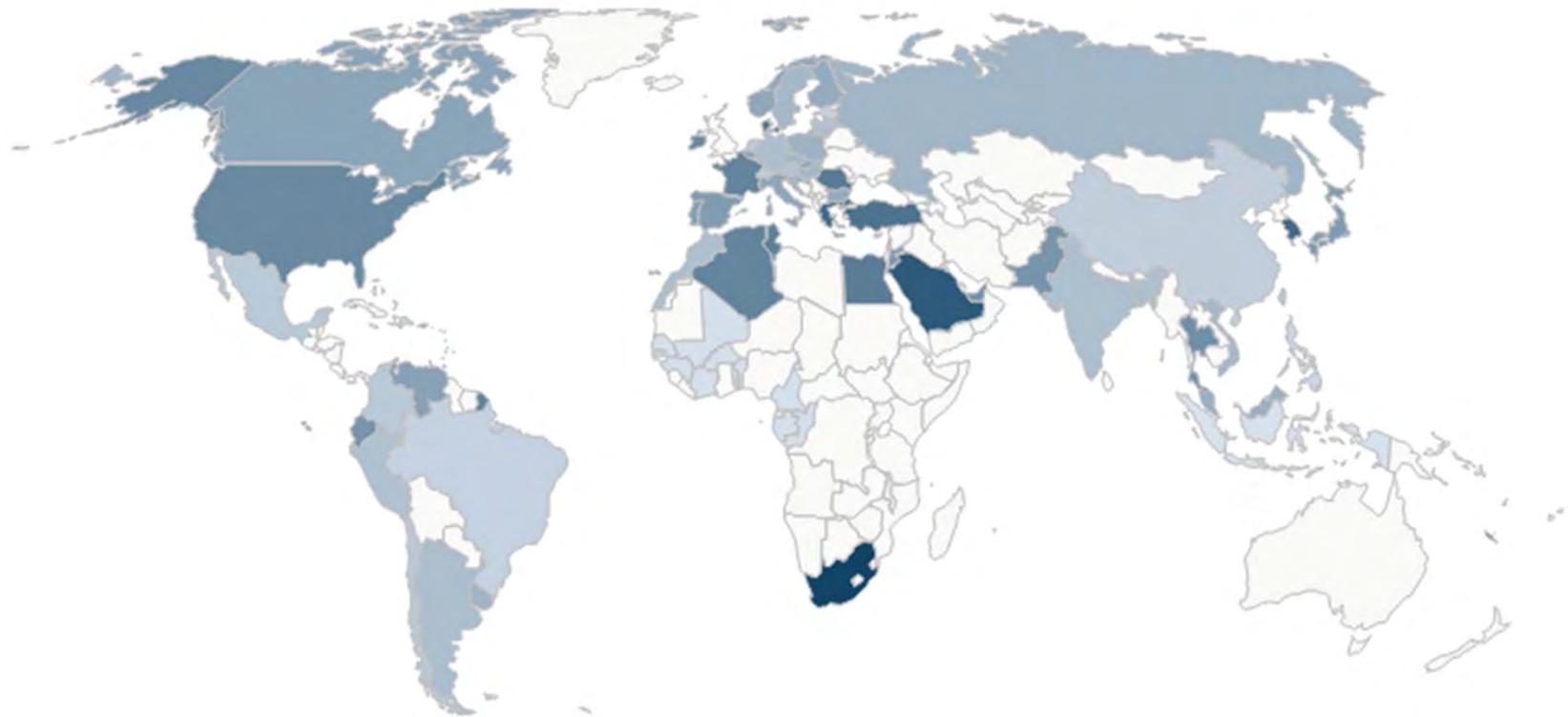
<https://www.mja.com.au/journal/2010/193/8/safer-use-antimicrobials-hospitals-value-antimicrobial-usage-data>

How Did We Get Here?

Use of All antibiotics in 2010

Source: IMS Health

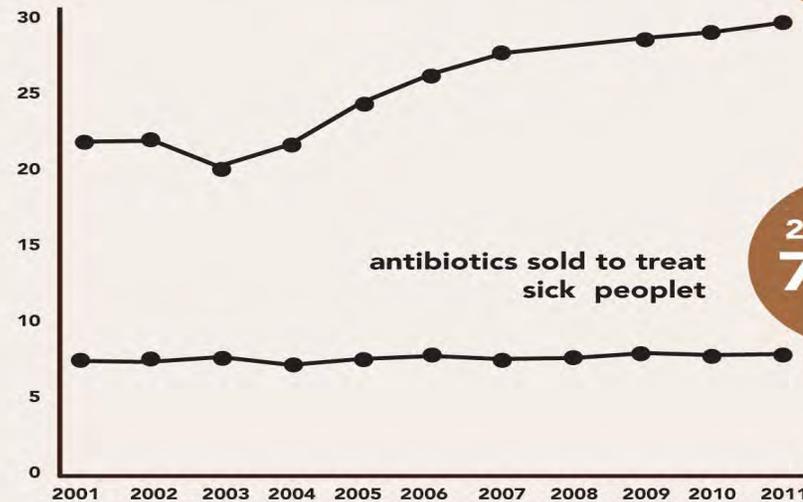
Std Units/
1000 Pop



How Did We Get Here?

MOST DRUGS GO TO LIVESTOCK

millions of pounds sold



2011
29.9M

2011
7.7M

Source: Pew Charitable Trusts. 2013. Record-high antibiotic sales for meat and poultry production. Available:

<http://www.pewhealth.org/other-resource/record-high-antibiotic-sales-for-meat-and-poultry-production-85899449119>

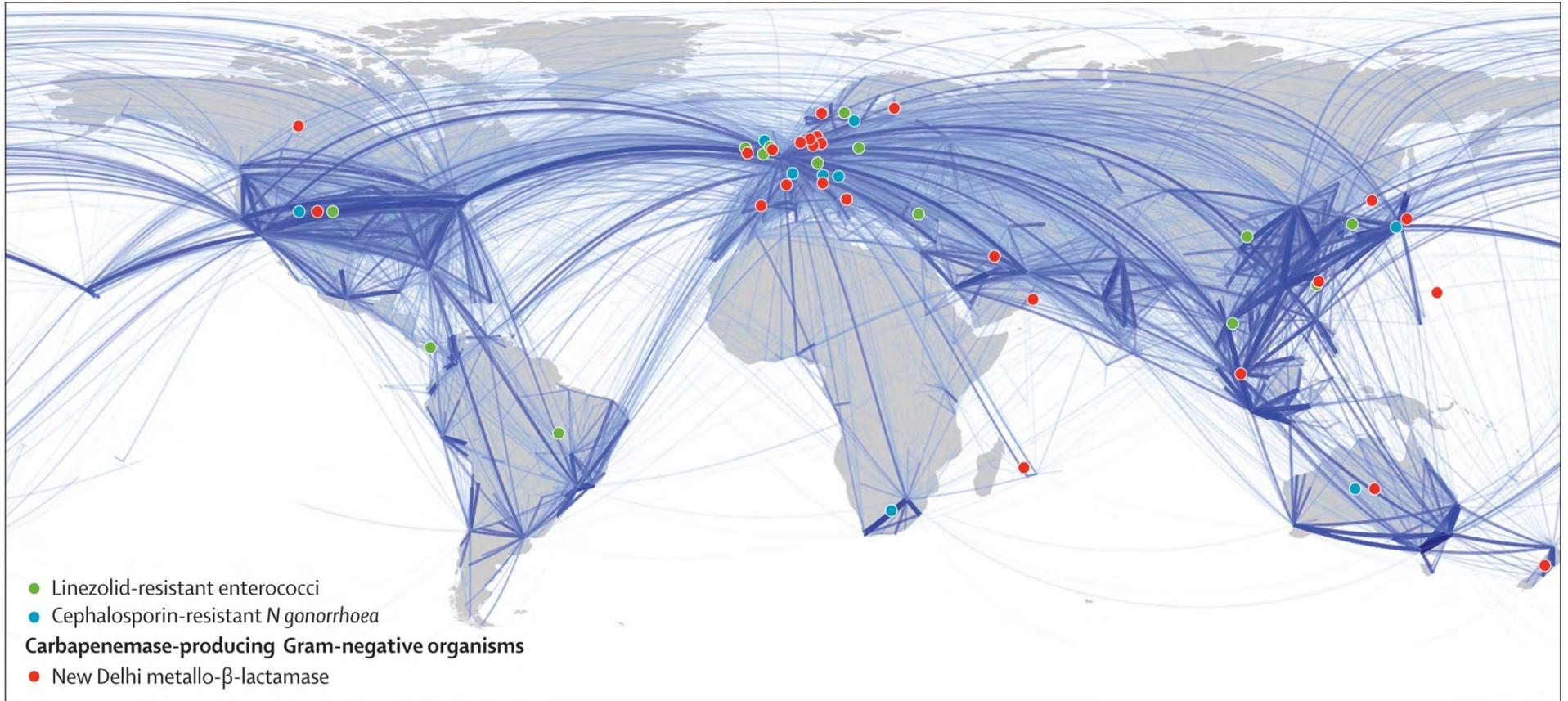
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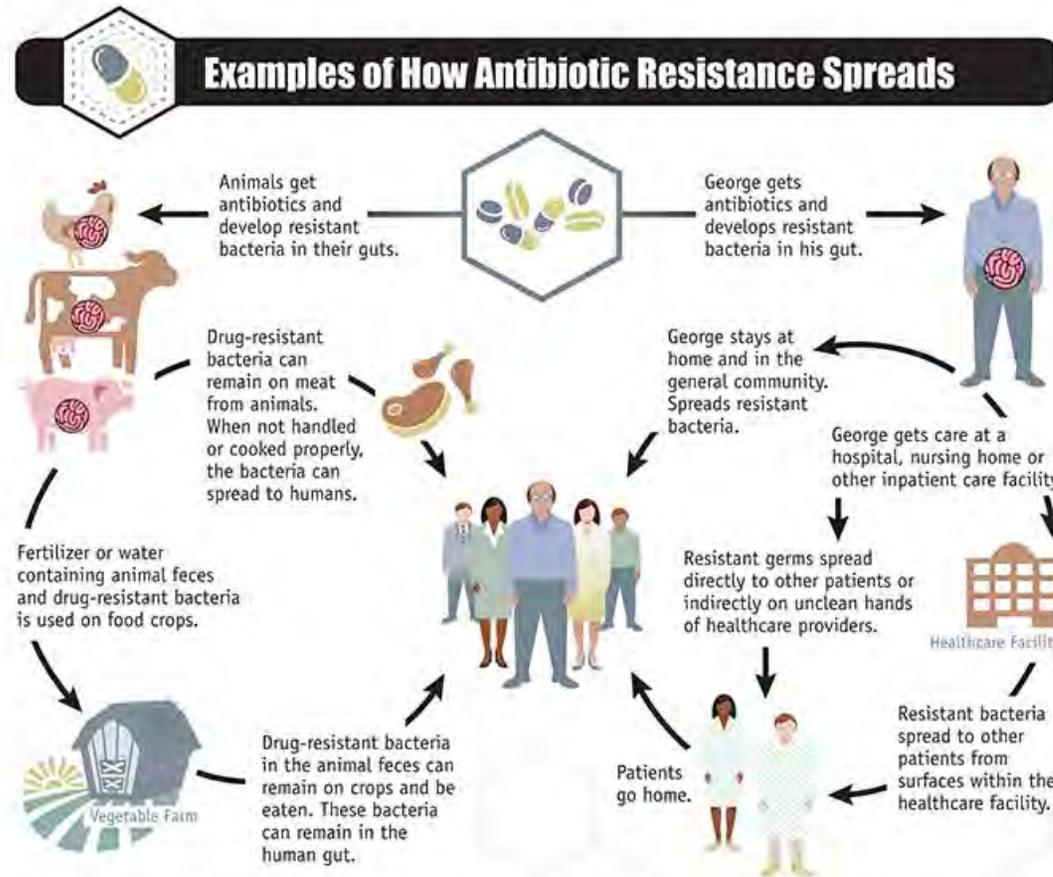
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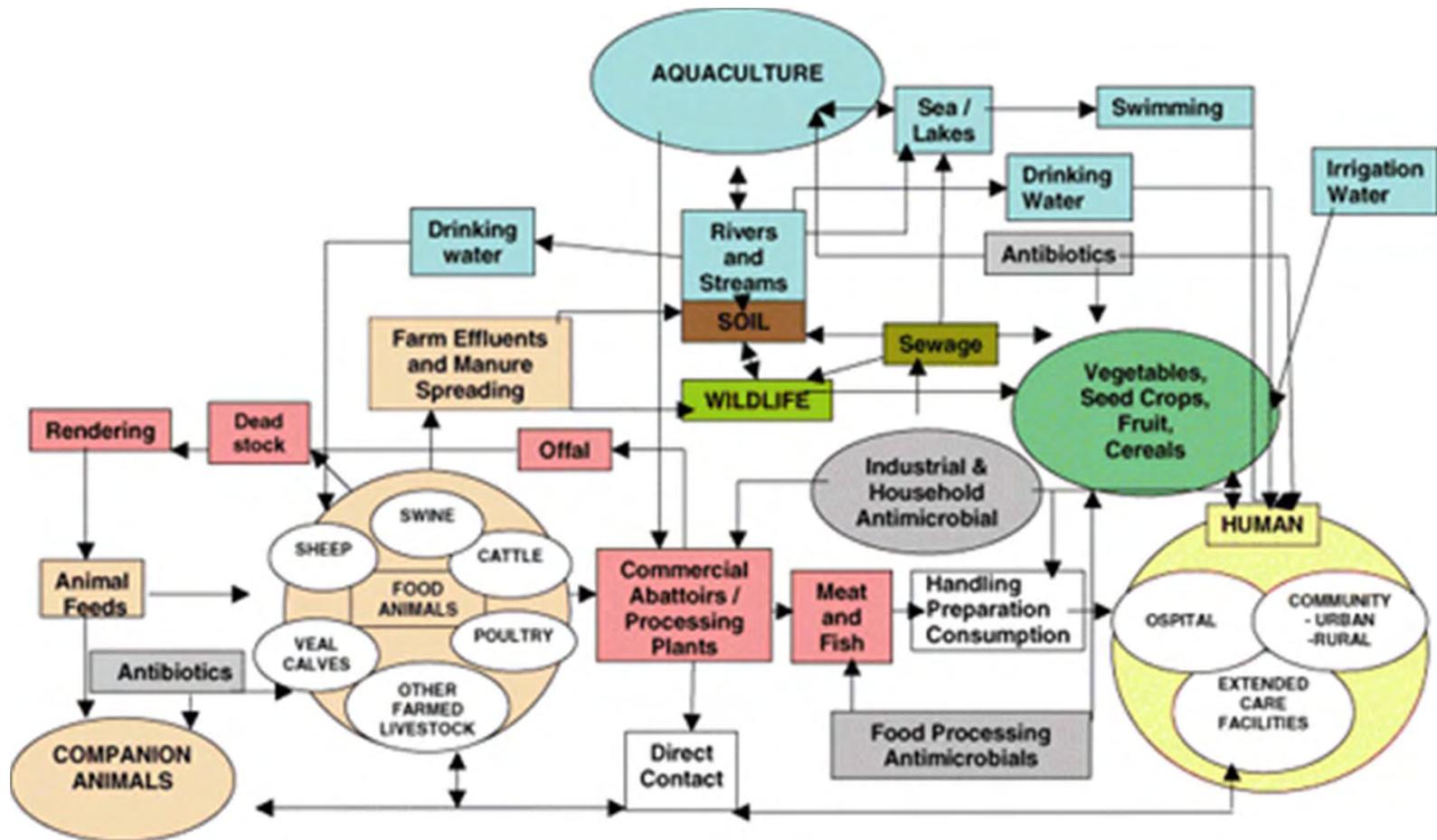


How Did We Get Here?



Simply using antibiotics creates resistance. These drugs should only be used to treat infections.

What Can We Do ????



Stewardship vs. Infection Control

- Stewardship
 - Making the wisest antibiotic choices for current and future patients
 - Reducing the production of resistant organisms
 - Preventing super-infections and adverse events
 - Improving the quality of patient care
- Infection Control
 - Monitoring epidemiology of infections
 - Preventing the spread of resistant organisms
 - Reducing adverse events related to infection
 - Improving the quality of patient care

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- Diagrammatic connections (double-headed arrows):
- Stewardship: Reducing the production of resistant organisms ↔ Infection Control: Preventing the spread of resistant organisms
 - Stewardship: Preventing super-infections and adverse events ↔ Infection Control: Reducing adverse events related to infection
 - Stewardship: Improving the quality of patient care ↔ Infection Control: Improving the quality of patient care

Our Common Goals

- Reducing production and spread of resistance
- Reducing adverse events for patients
- Reducing nosocomial infections
- Improving patient care
- Decreasing costs
- Improving patient flow

Our Different Approaches



Personal Protective Equipment

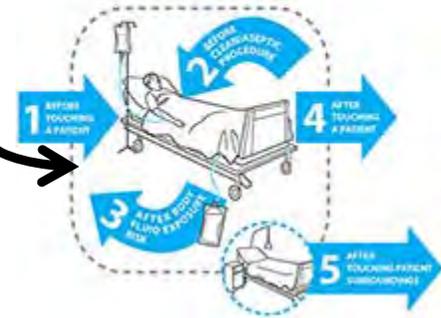
Hand Hygiene

Surveillance

Environmental Cleaning

Education

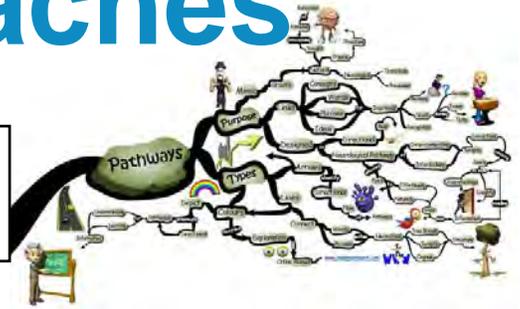
Your 5 Moments for Hand Hygiene



Our Different Approaches



Guidelines and Treatment pathways



Antibiotic restrictions



Audit and Feedback



Multi-disciplinary teamwork

Education



What does this look like?



Avoid Raw Pork



Where We Can Intervene

Decreased Selection

- Decreased use of selecting agents
 - antibacterials
- Decreased use of Antibiotics
 - Food Production
 - Courses of Therapy
 - Duration of Therapy
 - Spectrum of therapy
- Responsible Drug Disposal

Decreased Transmission

- Decreased exposure
 - Food withdrawal times
 - Farm environmental control
- Vaccinations
- Hand Washing
- Normal Hygiene Practices at home
- Advanced Hygiene in Health care

Decreased Use of Selecting Agents

Antibacterial Products

- More toxic
- Select for resistance
- Affect environment
- Offer little benefit
- Are more expensive
- Are heavily advertised
- Falsely allay fears



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**Regular
Soap**

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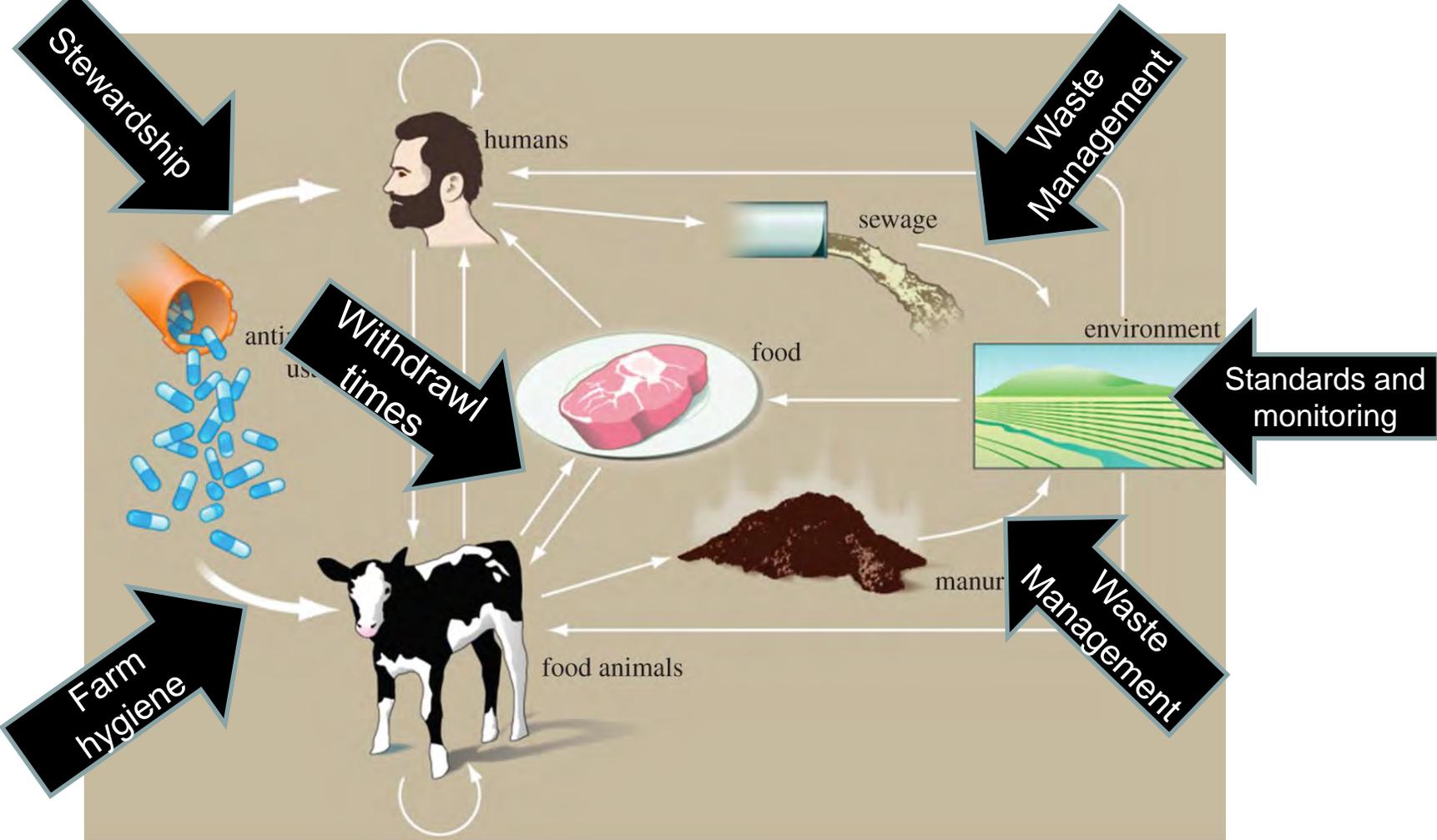
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Decreased Use of Antibiotics





Decreased use of antibiotics

Point

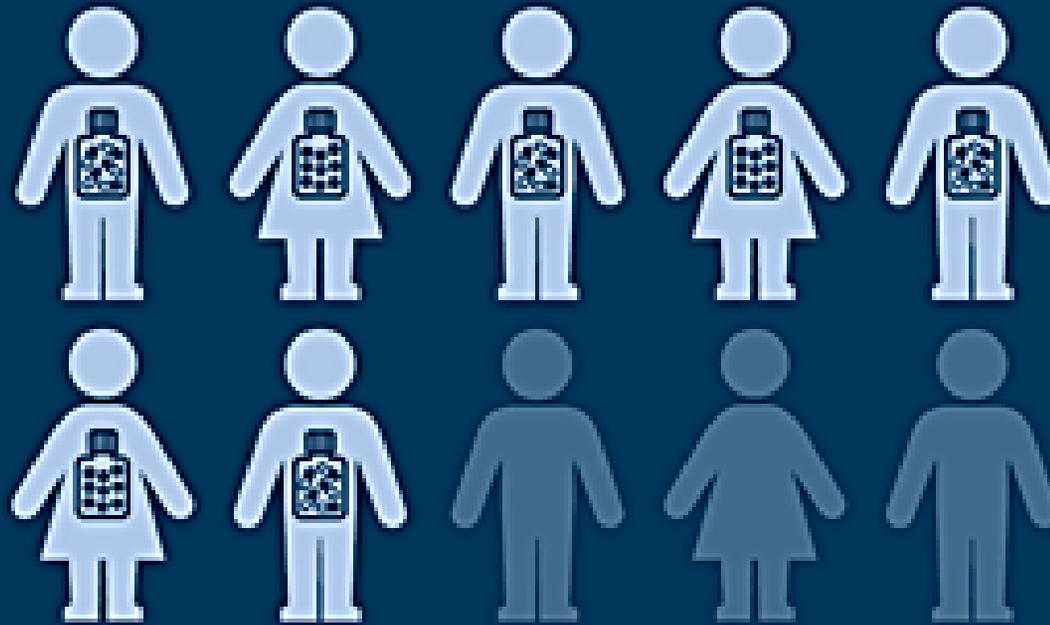
- Stop or significantly decrease agricultural use
- Decrease courses, duration or spectrum of therapy

Counter-point

- Decreased food supply, increasing cost
- Increased risk for patients
- Easier said than done

Solution:

Requires change in approach including better hygiene for animals, more oversight and better follow-up and support for prescribers



UP TO **70%** OF NURSING HOME RESIDENTS
RECEIVED **one or more** COURSES
OF SYSTEMIC ANTIBIOTICS IN A YEAR

Know The Latest Guidelines



- Prescribe the Narrowest Spectrum Drug for the Shortest period of time to treat infections
- Continuously re-evaluate prescriptions
- Make use of phone consultation and other support

Top 3 Conditions Not to Treat



- Chronic wounds
 - No matter how “icky” if not cellulitis

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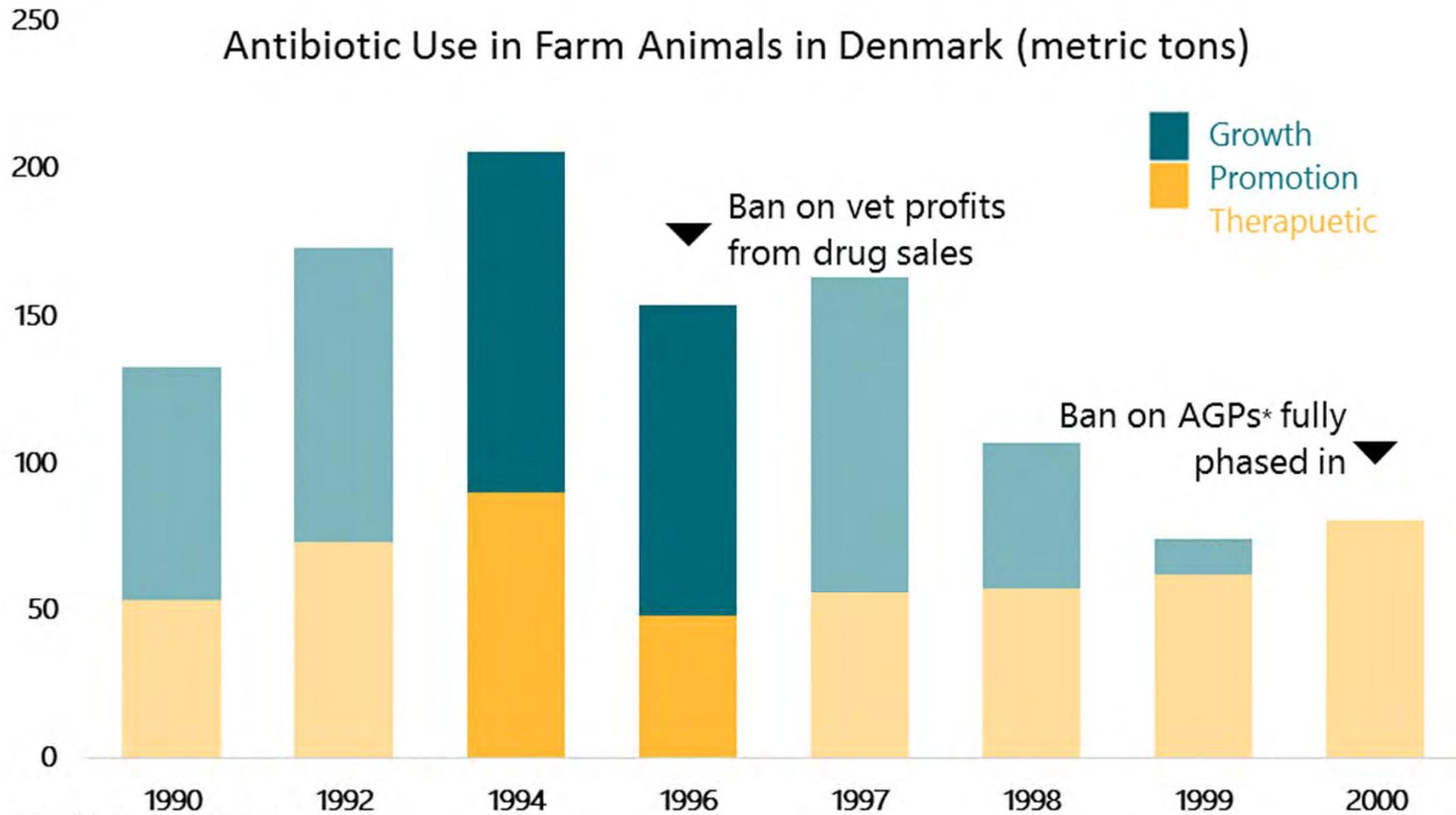
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Antibiotic Use in Farm Animals in Denmark (metric tons)



*Antibiotic Growth Promoters
Source: DANMAP, 2013.

Animal Husbandry



Farm Biosecurity



Educational Activity Kit

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Responsible Drug Disposal



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Vaccinate Eligible Patients

- Pneumococcus
- Meningococcus
- Influenza
- . . .

- Are all vaccines that can help prevent resistance



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Hand Washing



'Nuff said

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What Not to Do

- Scare patients
- Stigmatize patients
- Not address concerns
- Hospital grade cleaning
- PPE/precautions at home



What Not to Do

There is no point in insisting on this:



If your clients are doing this:



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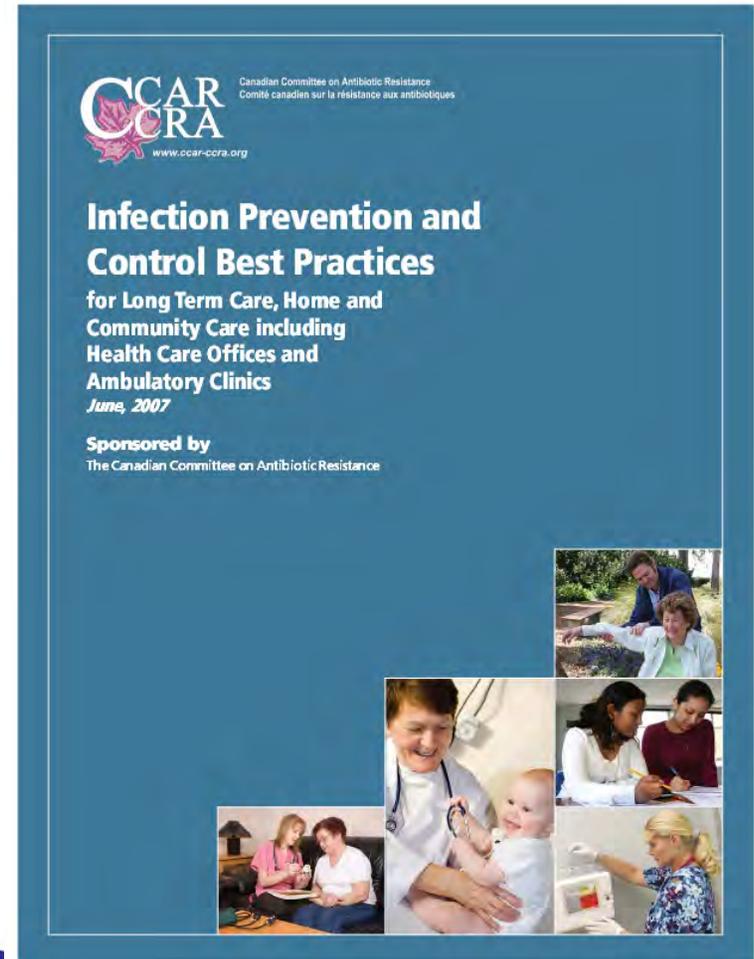
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Advanced Hygiene

- Guidelines for:
 - Office Practice
 - Long Term Care
 - Clinics
 - Home Health Care



What Else Can You Do?:

Be Active Politically

- Antimicrobials on farms
- Local initiatives to reduce antimicrobial use
- Teach at local schools etc. when possible

Make Changes in your Life

- Use regular soap at home
- Buy antibiotic free meat
- Dispose of pharmaceuticals responsibly

And remember

- Always
- Always
- **Always**



COOK YOUR CHICKEN

The End



Discussion

