



# **Health Security**

## **2012 International Conference on Health and Security**

**Washington DC**  
**August 2012**

# Introduction

- Recent discussions between health & security sectors highlighted opportunities, collaborations & questions related to health security
- Opportunities & challenges greater than ever
- WHO perspectives on key issues

# Starting Point

- All countries face significant (health security) events with capacity to
  - Directly harm large numbers of people
  - Significantly reduce social & economic well-being
  - Potentially threaten national security
- Nature of threats, requirements to be prepared & respond & meet (public) expectations escalating in terms of difficulty

# Implications

- Health security (HS) aims to minimize health, social & economic consequences of certain events-risks-hazards & is where mandates of health & security converge
  - No single sector can address HS alone
- Given globalization & nature of modern HS risks, no country can protect itself alone regardless of strengths
  - "Stopping" modern threats at borders or "handling" them internally are outdated concepts



# Increasing Convergence

- These realities - and mutual acceptances of differences in core missions & "redlines" – formed basis for health & security engagement
  - WHO work with GHSI, BWC, GP .... etc
  - Recent visit of WHO Director General to White House
- Current focus on moving from conceptual to concrete



# Evolving Nature of Health Security Concerns

- Certain threats have received significant attention over years
  - Emergence of highly disruptive / dangerous infectious diseases
    - HIV, SARS, avian influenza, pandemic influenza, dengue, anthrax .....
  - Accidental release or exposures of radiation, chemicals .....
  - Contamination or outbreaks involving food or water
  - Potential acts of nuclear, chemical or bio-terrorism

# Evolving Nature of Health Security Concerns

- All remain priorities because all
  - Represent ongoing, credible risks
  - Have potential for large-scale harm, fear & disruption
  - Share many similar requirements to be prepared
- But other HS threats, of particular relevance to security sector, growing in prominence...
  - Antimicrobial drug resistance
  - Dual use research of concern



# Antimicrobial Drug Resistance (AMR)

- Stories about "superbugs" in newspapers from time to time
  - Most probably find them "interesting but nothing to do with me"
- In reality, no greater infectious disease-related danger
- World transitioning towards situation where health systems will not be able to treat many infections using antimicrobial drugs
  - Potential to affect every individual
  - Potential to significantly affect sectors



# AMR: Implications are enormous

- Fundamental for treating ill or injured people
  - Bacteria, parasites (malaria), viruses (HIV)
  - Surgical & invasive procedures
- Fundamental for public health control of infectious diseases
  - HIV, TB, malaria ...
- Scope of effort & amount of time to turn the tide
  - Global, multisectoral, years to decades



# Gonorrhoea: an example

- For decades treated by variety of oral antibiotics
- Now only one recommended antibiotic left
  - Resistance will develop
- Militaries composed of young, sexually active soldiers
  - How are they going to be protected?



# Surgery: an example

- Needs range from minimally invasive to massive emergency life-saving procedures
- Techniques better than ever
- Yet antibiotics remain essential safeguard
  - Consequences if that safeguard is lost?



# AMR: What is needed?

- Fundamental driver is worldwide misuse of antimicrobials in health systems, communities & agriculture
- Changing practices / culture will require massive effort to raise international awareness & political will
- Additional steps essential
  - Better surveillance, research, guidelines ....
  - New business models supporting sustainable & adequate research & different sales strategies



# Story with a History

- As a result of WWII & lessons from WWI, army actively targeted epidemic diseases as a risk
  - One outcome was decades developing & testing influenza vaccines
- Seminal work protecting force readiness
  - Also inestimable national & global benefits
- AMR stakes, challenges & potential benefits even greater
  - Collaborations underway
  - Urgent escalation needed

# Health Security: What is needed?

- In concept, requirements straight forward
  - Full understanding of scope & potential solutions
  - Credible information & ongoing assessment of threats
  - National capacities (legislation, plans, expertise, labs, regulatory agencies, communication capacities etc)
  - Preparedness planning
  - International frameworks providing legal / political / operational basis for countries to work effectively with each other



# Health Security: What is needed?

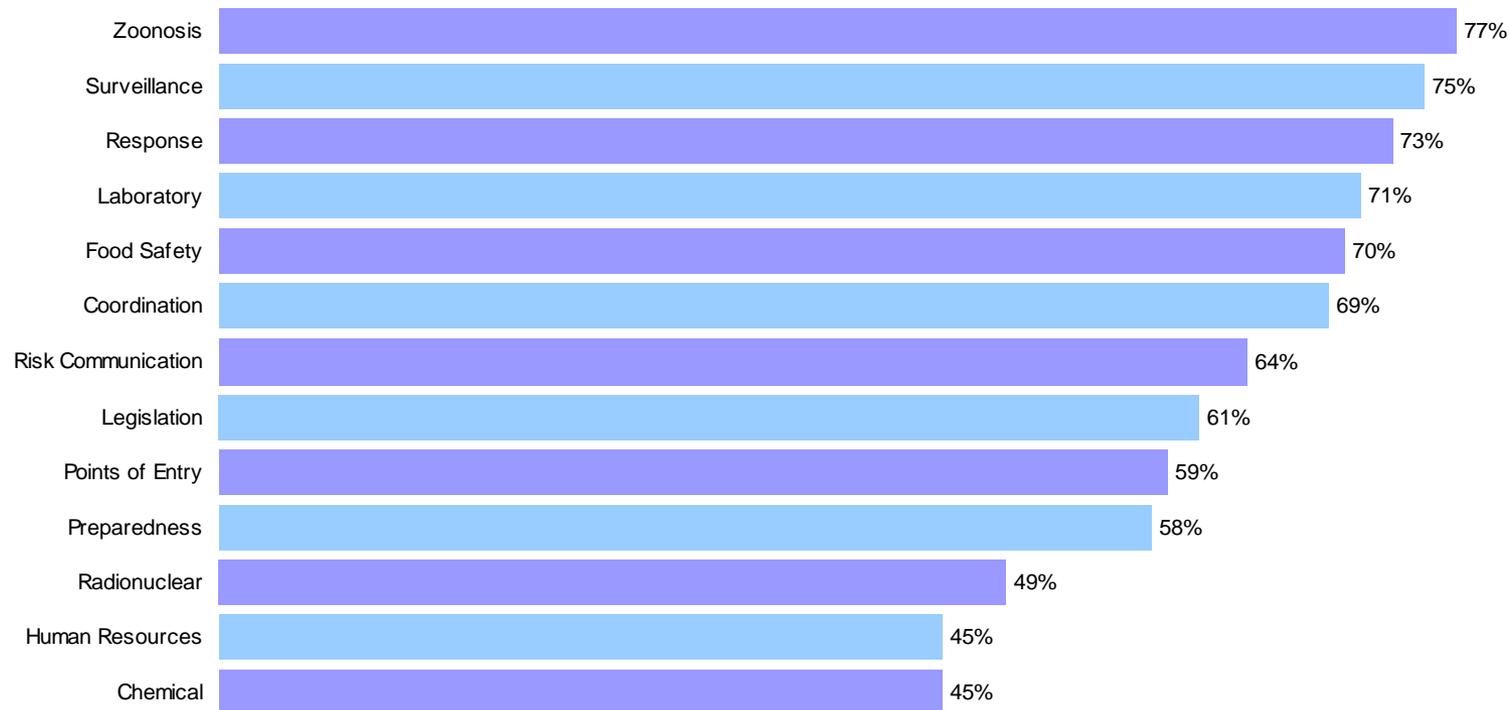
- In practice,
  - Many key processes in motion & much accomplished
  - But task remains herculean
- Three examples
  - International Health Regulations (IHR)
  - Pandemic Influenza Preparedness Framework (PIP F)
  - Dual use research of concern (DURC)

# Importance of International Health Regulations (IHR)

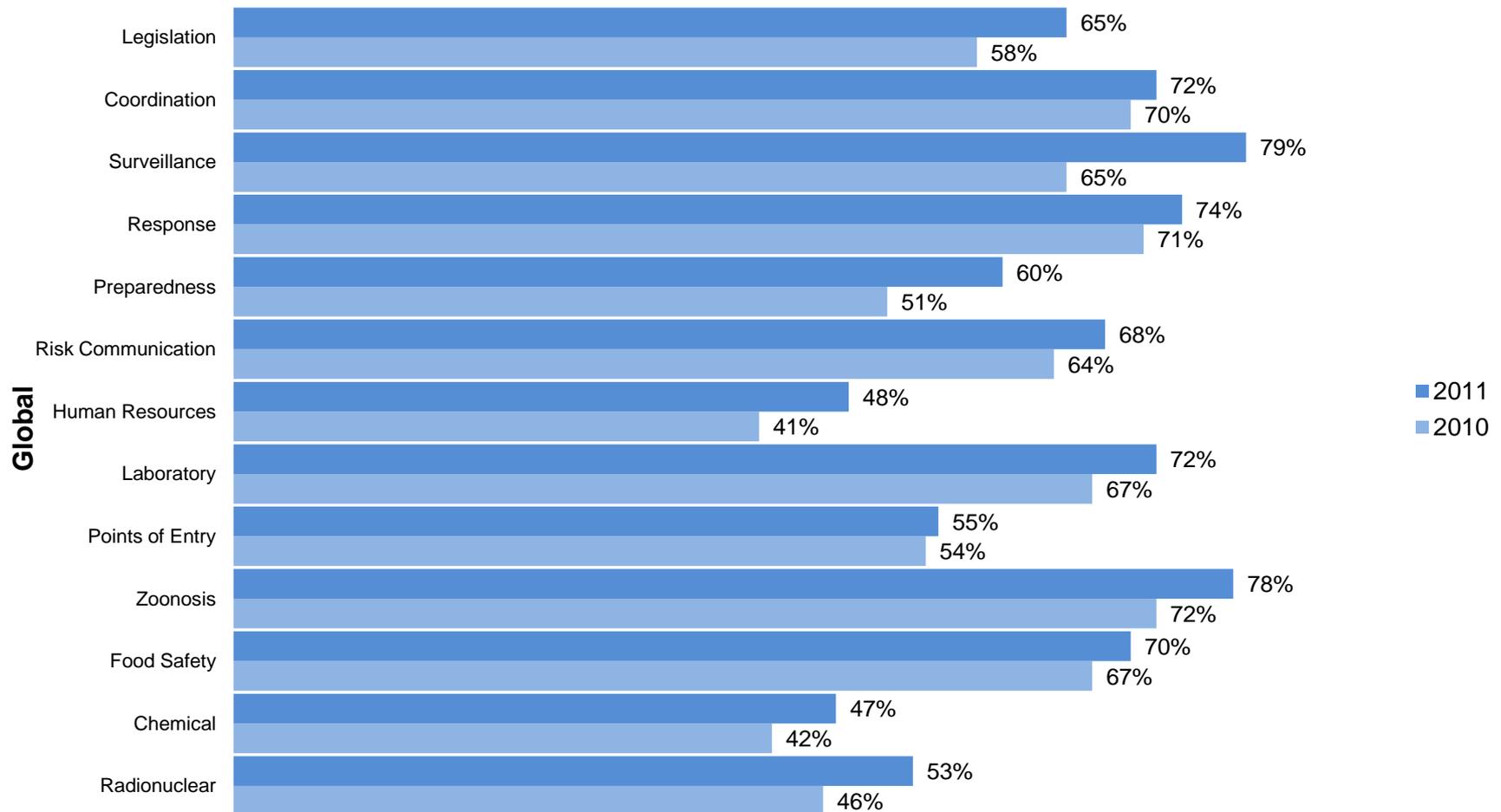
- Central, global, legally-binding agreement to help countries to respond better against HS threats
  - WHO functions as secretariat
  - Strengthening IHR implementation major current focus of security sector & WHO collaborations
- Single mechanism to report & access critical information
- Mechanism help establish "core capacities" in all countries

# State of IHR Implementation

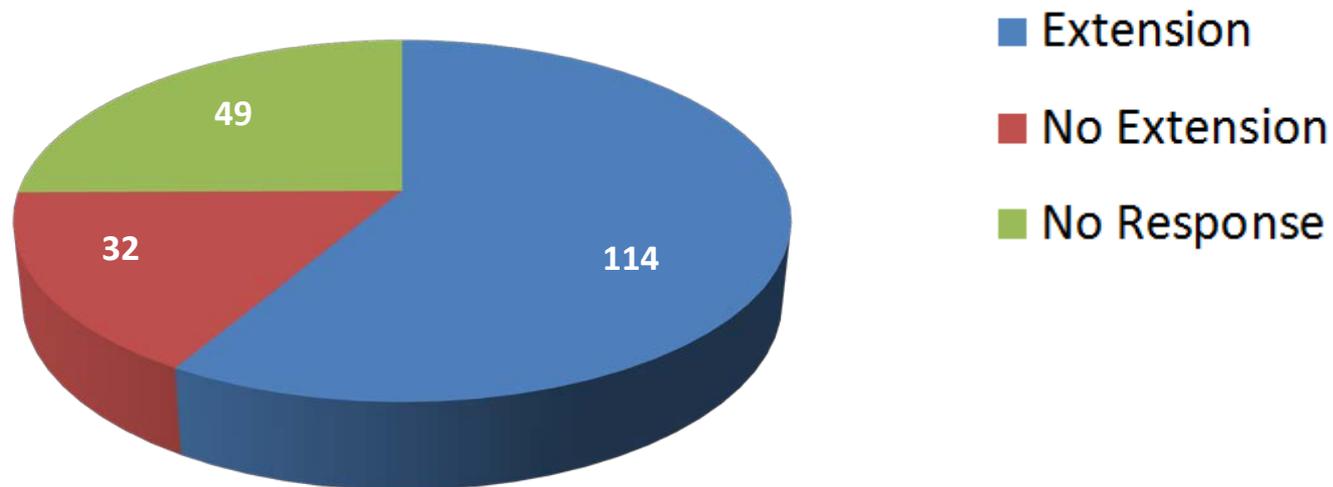
Status of IHR core capacities based on States Parties Report 2011  
(Total = 156 reports)



# Global comparison for 2010 and 2011 (for countries reporting in both years)



# Status of requests for extension (as of 5 July 2012)



# Pandemic Influenza Preparedness Framework (PIP F)

- International framework adopted in 2011
- 4 years negotiations reflecting deep concern about pandemic influenza but also differing perspectives
- One emphasized global security & sharing of flu viruses with potential to cause a pandemic
- Another emphasized equity & need for poor countries to have access to vaccines & other benefits

# PIP F

- Ultimately very successful negotiations
  - Full resumption of virus sharing
  - Specific roles & responsibilities for countries, private sector & WHO
  - Benefits & funds from industry to countries most in need
- Like IHR,
  - Landmark achievement & major cornerstone for strengthening health security
  - Will result in concrete improvements in (inter)national capacities
  - But implementation at risk

# Dual Use Research of Concern (DURC)

- Immediate controversy whether publication of 2 articles on H5N1 viruses represented scientific progress or national security risk
  - Divisive & public disagreements
- Reflected longer term unease spanning decades



# DURC: WHO perspectives

- WHO became involved after approached
  - Research an imperative for public health
  - Security / safety concerns valid & must be addressed
- Additional concerns
  - Delayed implementation of PIP F
  - Misperception issue relevant for only few countries
  - Future controversies could delay release of important findings or result in unwanted actions

# DURC

- WHO rapidly convened informal meeting
  - Researchers; global experts (eg NIH, CDC, WHO CC); Chair NSABB, developing countries, relevant medical journals & ethicist
- Results
  - Conveyed reality DURC an international concern
  - Helped move discussions from zero sum to how to feasibly accommodate critical perspectives
  - Identified lack of some critical mechanisms
    - E.g., how can security & researchers talk?
  - Basis for follow up process

# DURC: Next steps for WHO

- Work with countries & key organizations on next steps
- Meeting in first quarter 2013
  - Allow all groups to voice broader concerns & perspectives
  - Identify gaps in existing safety/security related mechanisms
  - Lay groundwork for international process to result in establishment of essential culture changes & mechanisms

# Conclusions

- Health security represents area where security & health sectors share compelling interests & priorities
  - More of an overlap than interface
  - Basis for long-term engagement & collaboration
- WHO in unique position to bring together global partners, provide leadership, guidance & coordination & facilitate technical assistance
  - Repeatedly demonstrated ability to deliver
- Significant engagement & support of security sector essential