

Global health security, with special emphasis on MERS- CoV and avian influenza A (H5N1)

**Agenda item 3(a)
62nd Session of the WHO Regional Committee for the
Eastern Mediterranean
5–9 October 2015, Kuwait**



Global health security threats

- **Current global health security threats**
 - Ebola virus disease in the African Region
 - Avian influenza A (H7N9) infection in the Western Pacific Region
 - MERS-CoV and avian influenza A (H5N1) infection in the Eastern Mediterranean Region
- **Implication of global health security**
 - Can cause social unrest and loss of economic opportunities
 - Interconnected world provides ground for international spread

Objectives

- Highlight the current health security threats in the Eastern Mediterranean Region
- Consider accelerated actions for Member States for prevention, detection and response
- Emphasize the shared responsibility of both Member States and WHO for global health

Global health security threats in the Eastern Mediterranean Region

- **Middle East respiratory syndrome coronavirus (MERS-CoV)**
 - Novel respiratory virus and zoonotic in origin
 - Amplification in health care settings
 - Important knowledge gaps on exposure and transmission risk factors
- **Avian influenza A (H5N1) in Egypt**
 - Novel influenza virus and zoonotic in origin
 - High mortality in patients where treatment is delayed
 - Important knowledge gaps on transmissibility of the virus

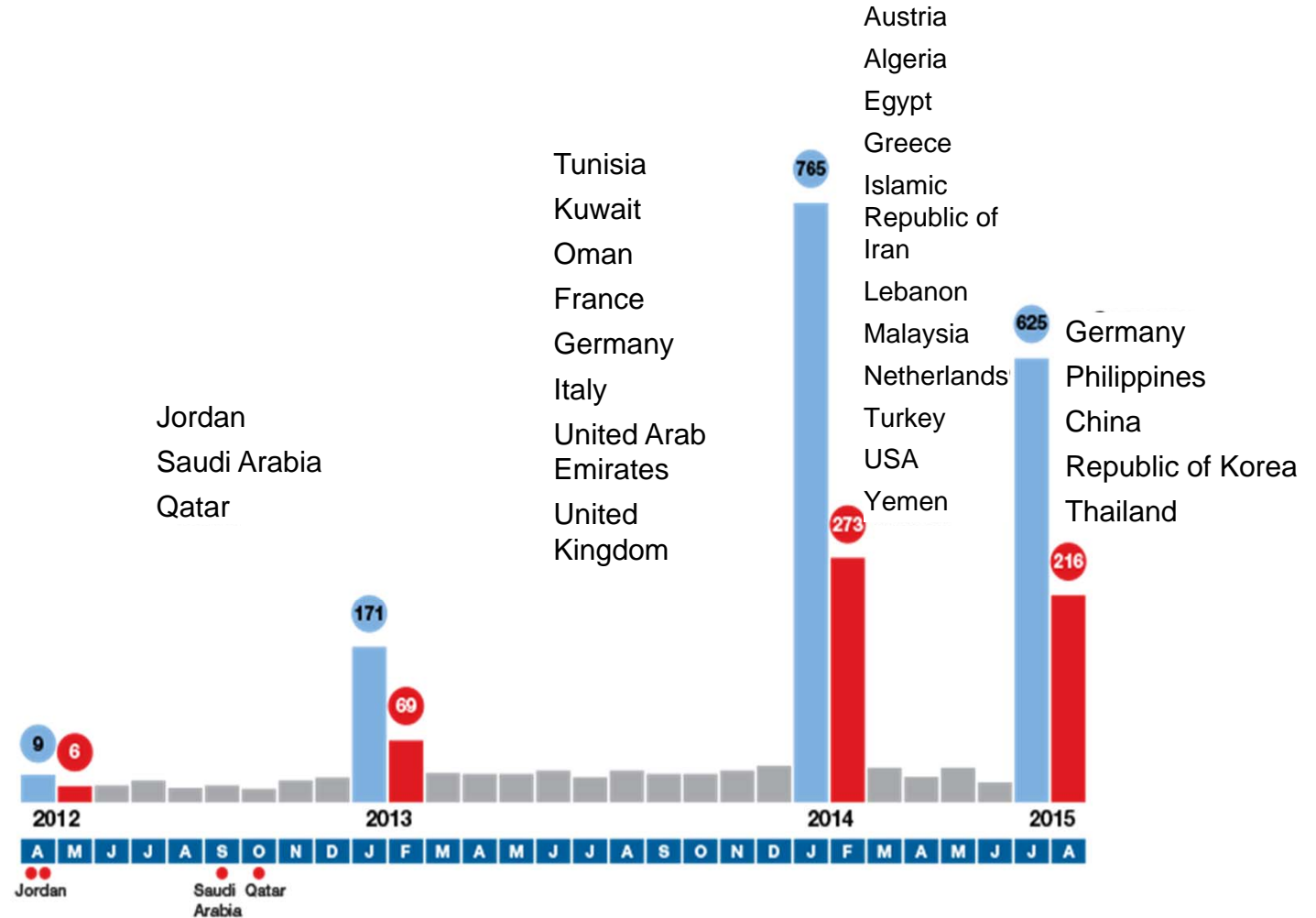
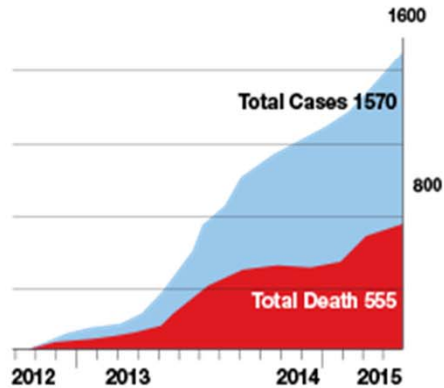
MERS: Global situation, April 2012 to 15 September 2015

Cumulative

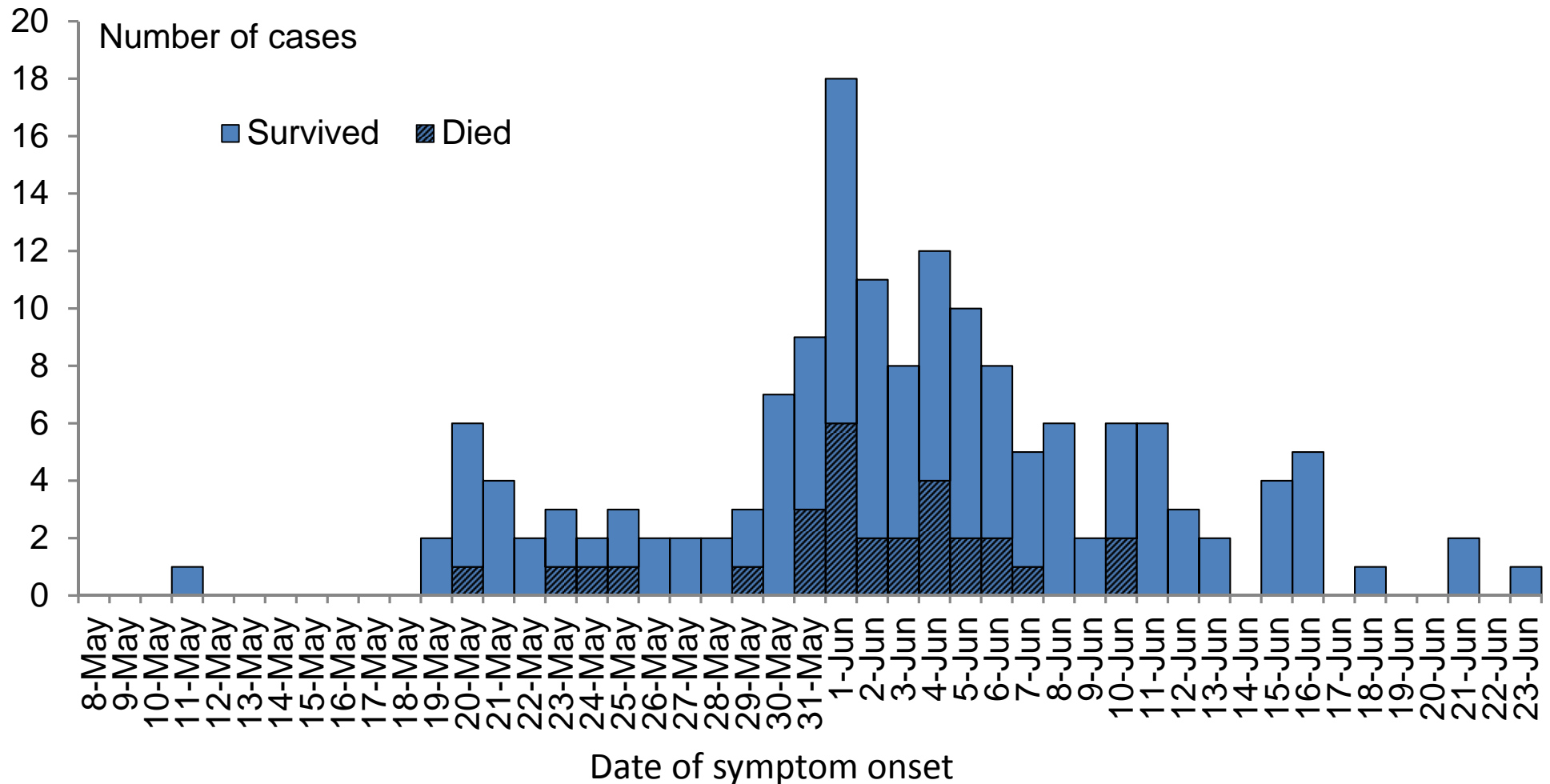
1570 Cases



555 Deaths



Epidemic curve of MERS cases reported from the Republic of Korea

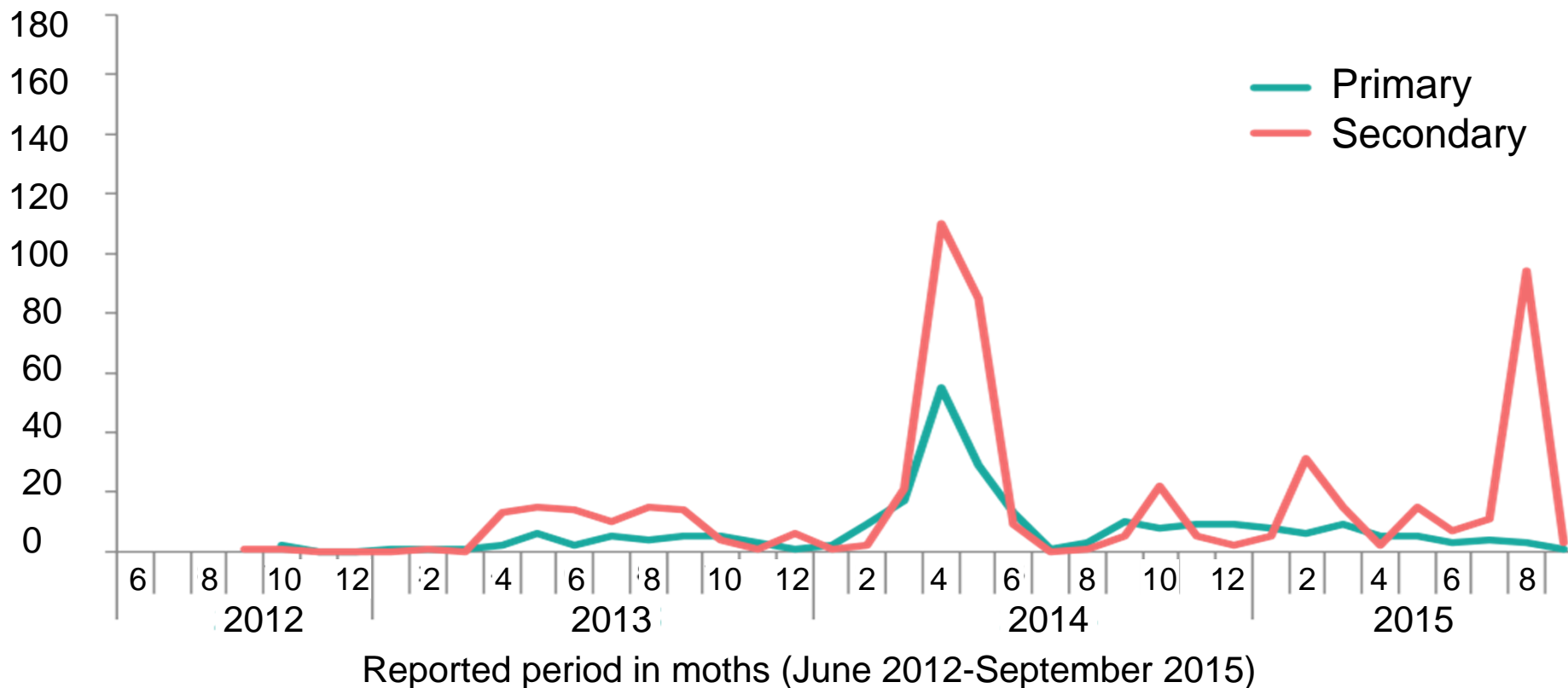


Epidemiological characteristics of MERS cases reported from January to September, 2013–2015

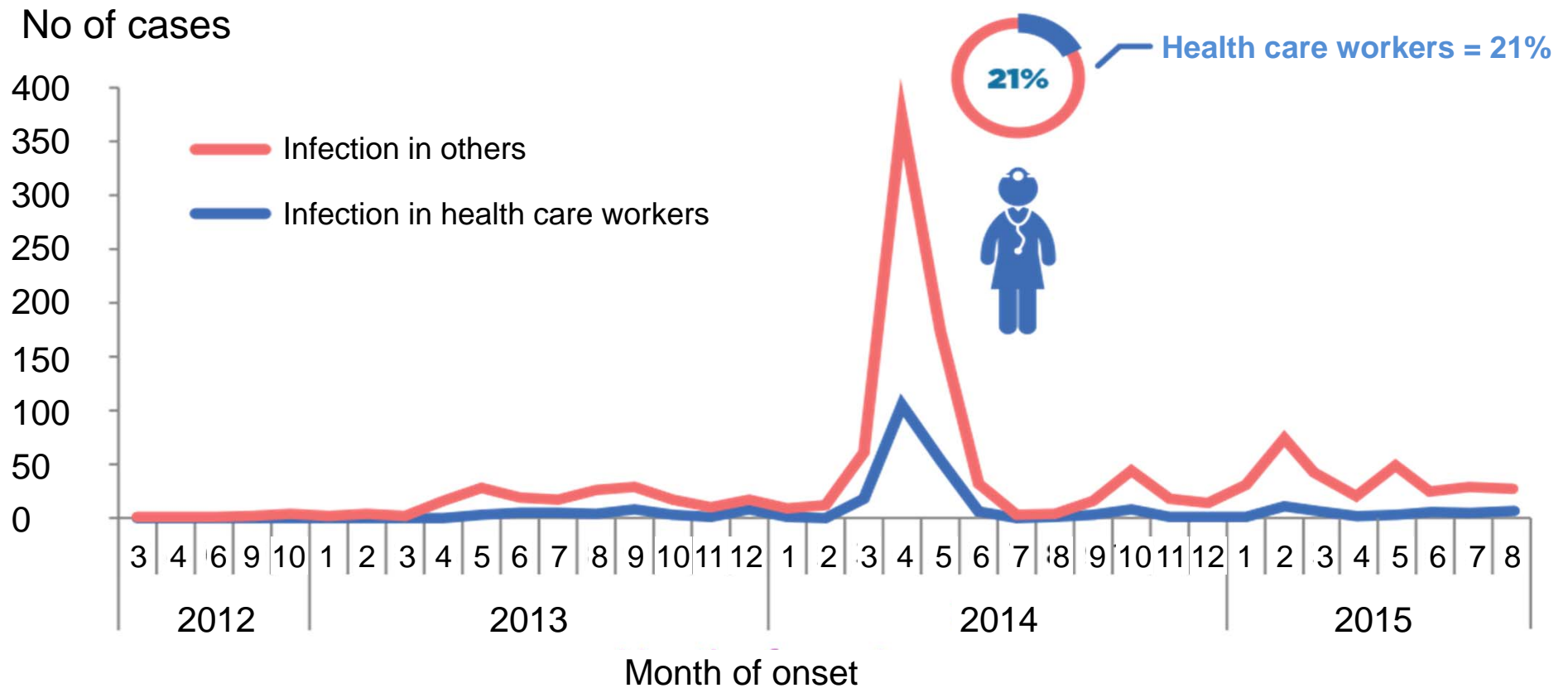
Characteristics	Jan–Sep 2013	Jan–Sep 2014	Jan–Sep 2015
Number	129	593	377
Median age in years	50	48	56
Percentage of males	60	62	69
Percentage of primary cases	21	23	12
Percentage of secondary cases	64	39	42
Unknown contact history (percentage)	15	35	21
Percentage of cases in health care workers	19	28	12
Percentage of fatal cases	49	40	41

MERS: Epidemic curve of cases reported from the Eastern Mediterranean Region, April 2012 to September 2015

No of reported cases



Reported cases of MERS in health care workers



Source: WHO

Current challenges

- Both the MERS-CoV and avian influenza A (H5N1) virus have pandemic risk
- Global knowledge on transmission risk factors of both MERS-CoV and avian influenza A (H5N1) virus remains limited
- Critical gaps for prevention, detection and response to emerging health threats identified for Ebola virus disease

Strategic actions for consideration

- Monitor and track the pandemic risk in real time
 - Establish/strengthen sentinel-based surveillance systems for severe acute respiratory infection in all countries
- Respond rapidly to every case(s) and cluster
 - Set up trained multidisciplinary rapid response teams in each country
- Prevent amplification of hospital outbreaks
 - Establish or strengthen infection prevention and control programmes in all countries
- Address critical knowledge gaps
 - Prioritize and conduct public health research and disseminate the research findings rapidly

Conclusion: the way forward

- Both the MERS-CoV and H5N1 virus have pandemic risk potential which remains unpredictable
- The Region needs to be better prepared to respond to sustained events resulting from these two major threats
- Member States and WHO need to act now as part of shared responsibilities to protect global health

Cholera outbreak in Iraq

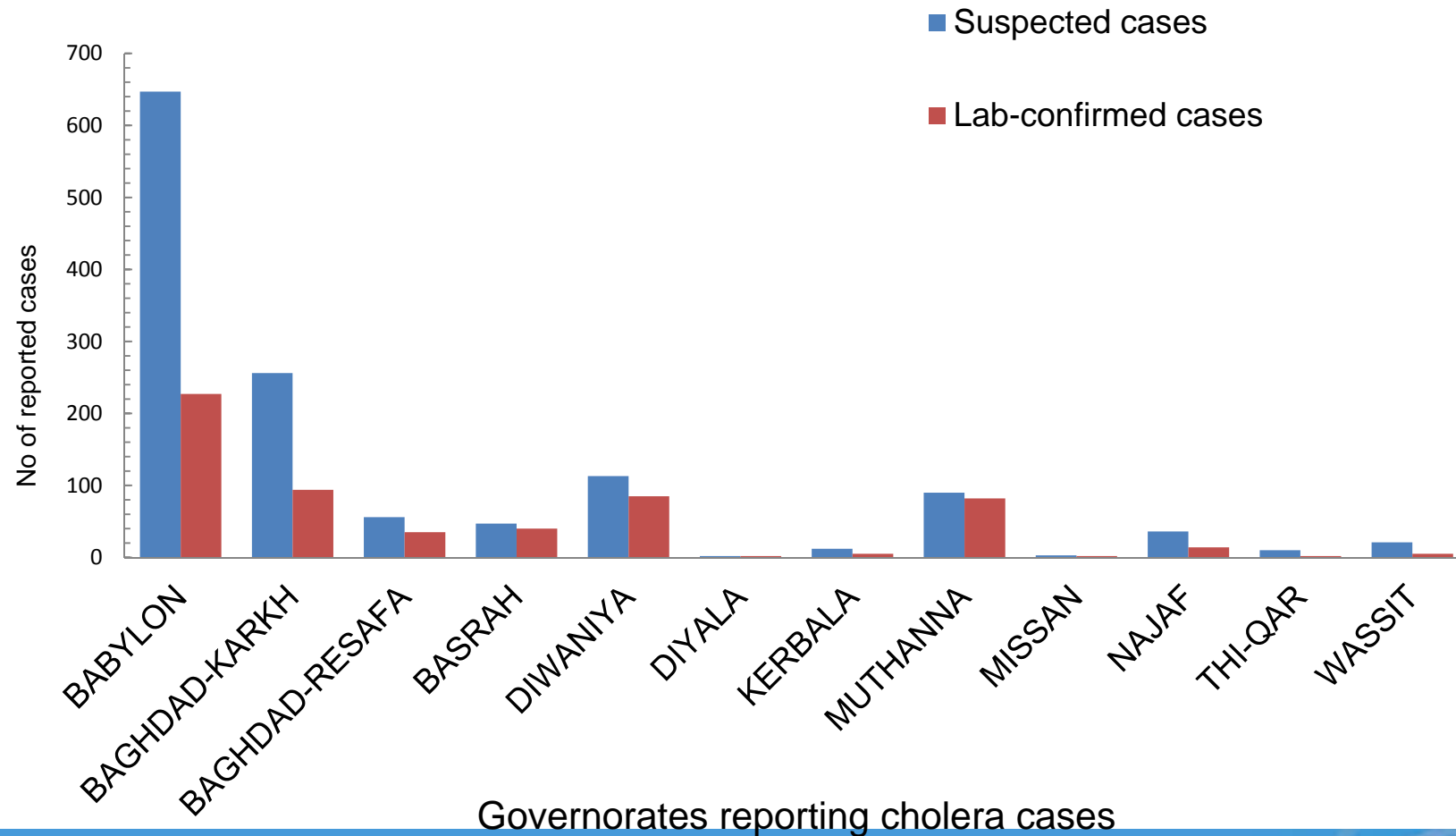
- **Outbreak**

- Total number of laboratory-confirmed cases: 827
- Over 1200 suspected cholera cases
- 12 out of 19 governorates have reported laboratory-confirmed cases

- **Humanitarian crisis**

- Over 153 000 Syrian refugees are in northern Iraq
- Over 1.2 million Iraqi people are displaced in the northern region of Iraq

Geographical distribution of suspected and laboratory-confirmed cases, 9–30 September 2015



Strategic actions for control in Iraq

- Standardizing cholera case management
- Enhancing surveillance and conducting active case-finding
- Prioritizing laboratory sample collection and testing
- Treating water at point of use
- Conducting social mobilization in high-risk areas
- Considering the use of oral cholera vaccines to limit geographical spread

Strategic actions for neighbouring countries of Iraq

- Enhancing surveillance for early detection of any suspected case
- Improving preparedness measures (stockpiling, health education and awareness measures, etc)
- Complying with the health requirements of IHR (2005)
 - No trade or travel embargo
 - No screening or quarantine of travellers coming from cholera-affected areas
 - No proof of vaccination for entry
 - No prophylactic administration of antibiotics