

## **Module 06    Lecture 01**

# **Distribution and occurrence of foodborne illness**

# Surveillance of foodborne disease

## *This includes*

- ◆ **Getting reports of FBD**
- ◆ **Investigating outbreaks (including clinical laboratory analysis)**
- ◆ **Compiling and interpreting data**
- ◆ **Reporting to public health authorities, industry and public**

# Examples of major global existing and emerging pathogens

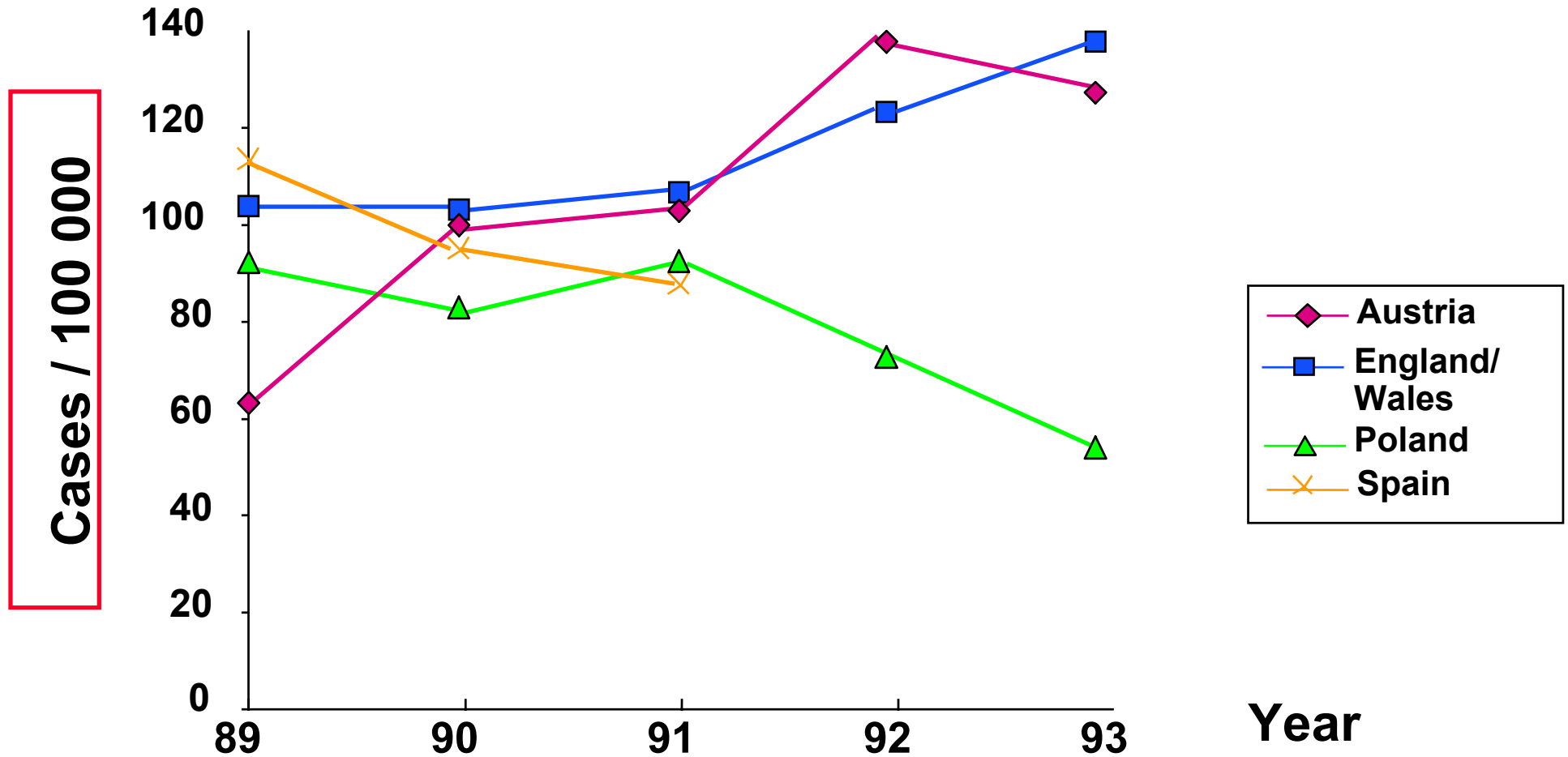
## ➤ *Major*

- ◆ *Salmonella*
- ◆ *Campylobacter*
- ◆ *Shigella*
- ◆ *V. cholerae*
- ◆ Trematodes

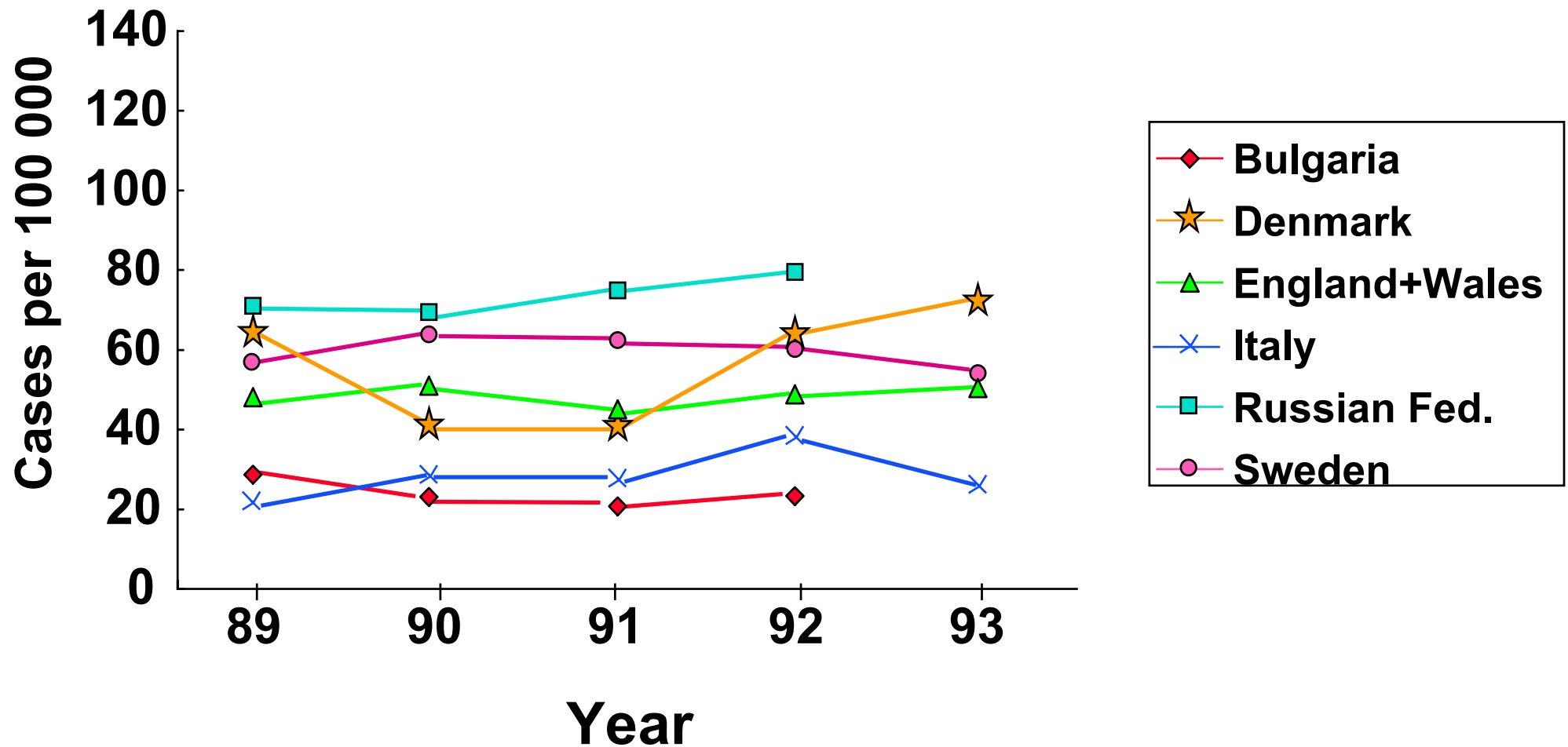
## ➤ *Emerging pathogens*

- ◆ *E. coli* (EHEC)
- ◆ *Aeromonas hydrophila*
- ◆ *Listeria monocytogenes*
- ◆ *Vibrio cholerae* 0139
- ◆ *Cryptosporidium*

# Incidence of FBD in some European countries



# Incidence of salmonellosis in Europe



# Cholera

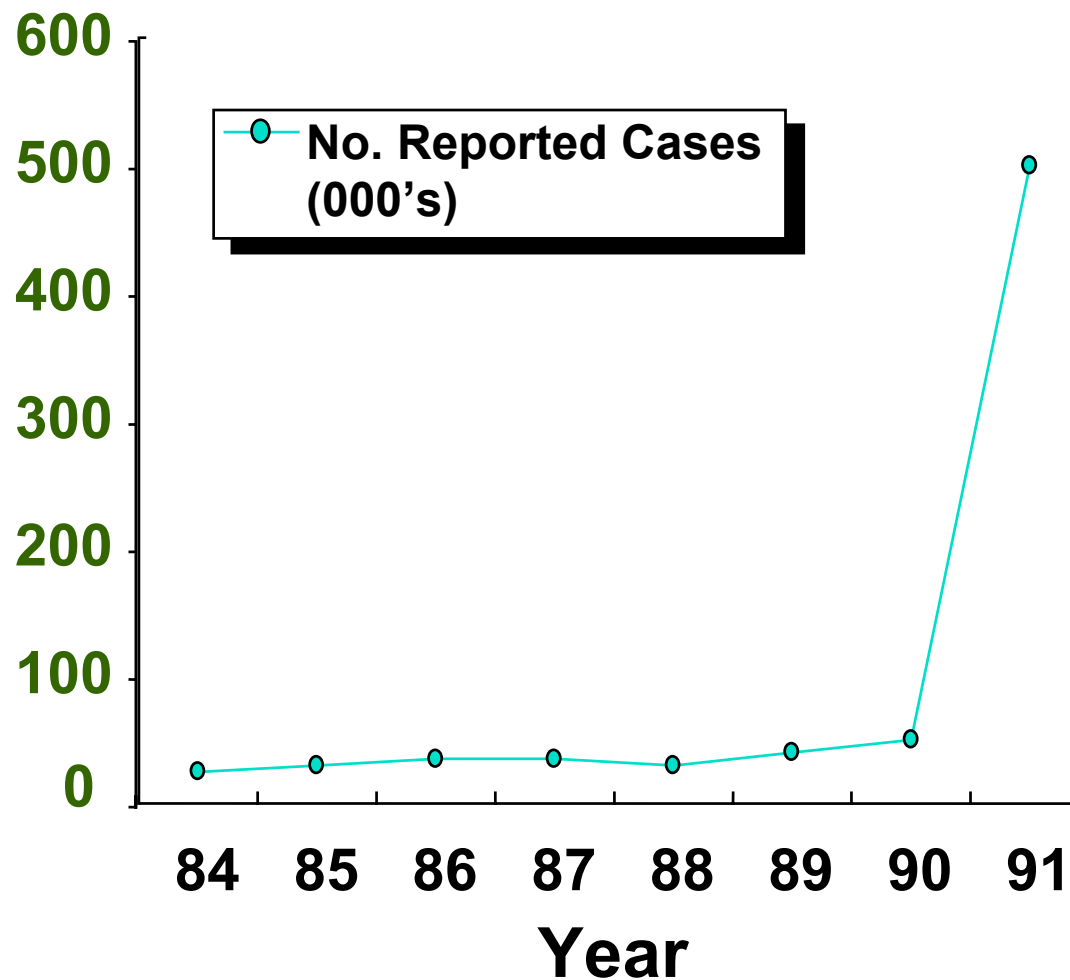
*Disease of poor communities,  
spreads fastest where there is*

- ◆ **Inadequate sewage disposal /  
untreated irrigation water**
- ◆ **No chlorination of water**
- ◆ **Poor personal hygiene**
- ◆ **Contaminated food**
- ◆ **Lack of knowledge of food hygiene**

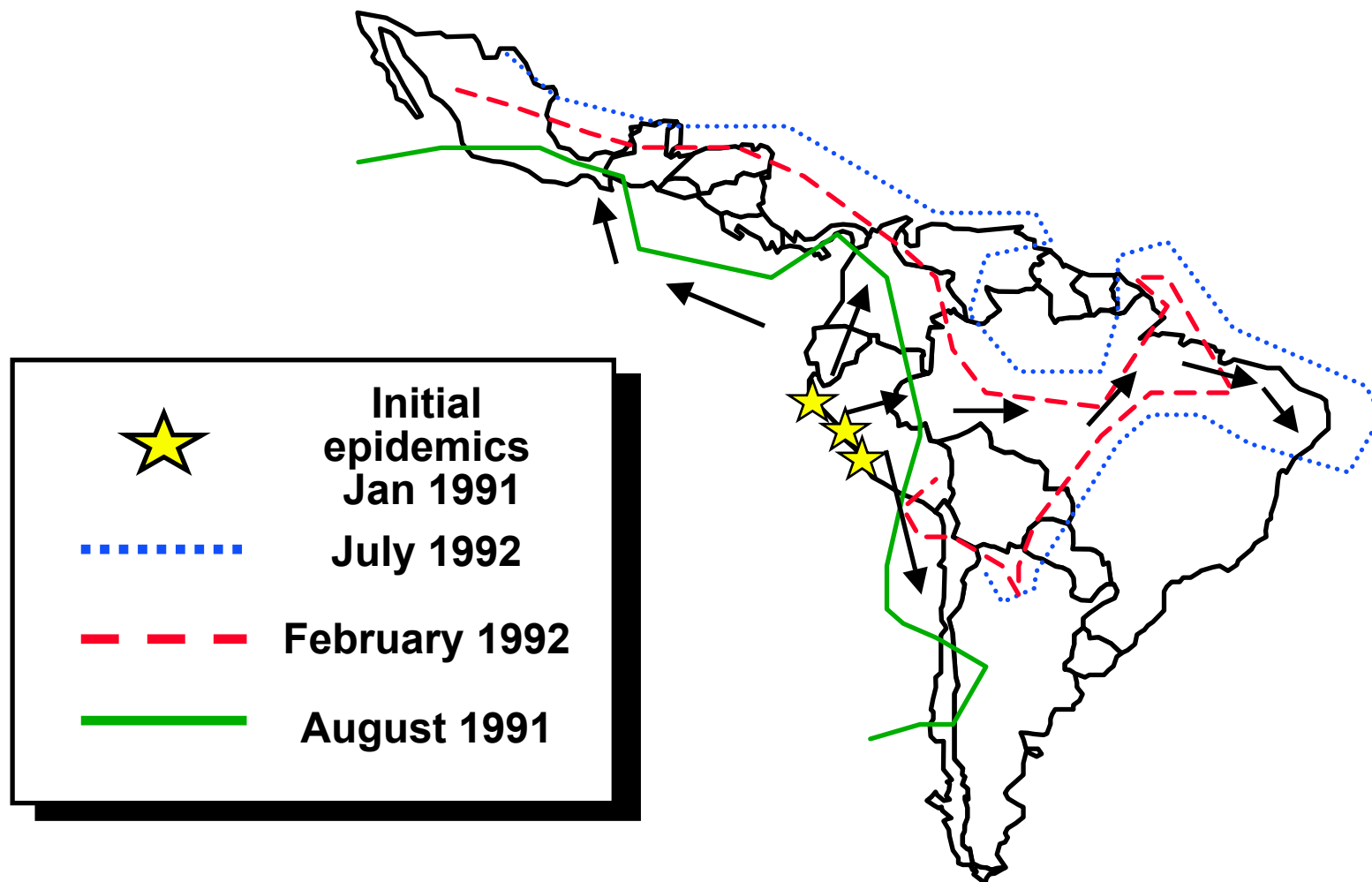
# Countries / areas reporting cholera 1961 - 93



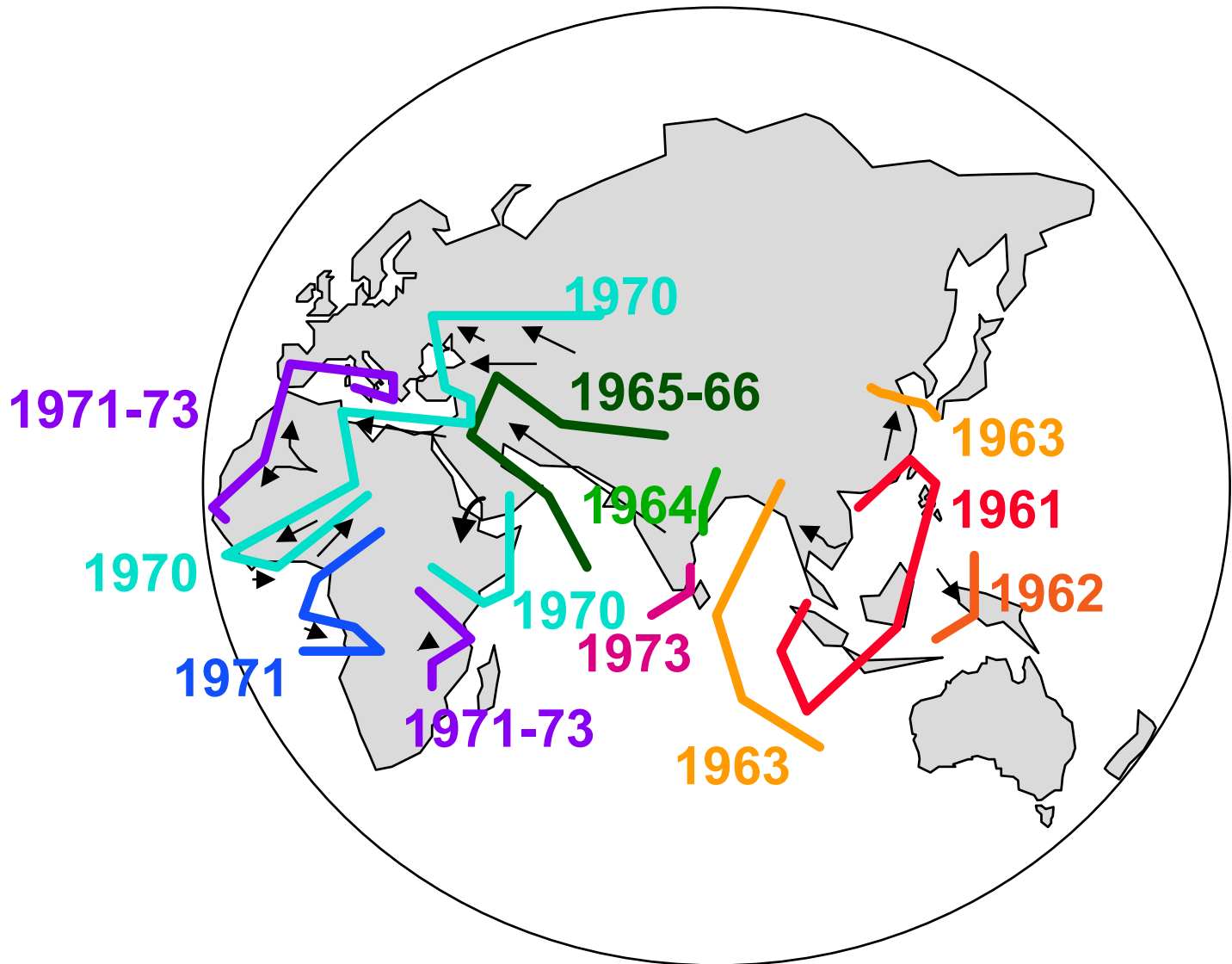
# Global cholera situation 1984 - 91



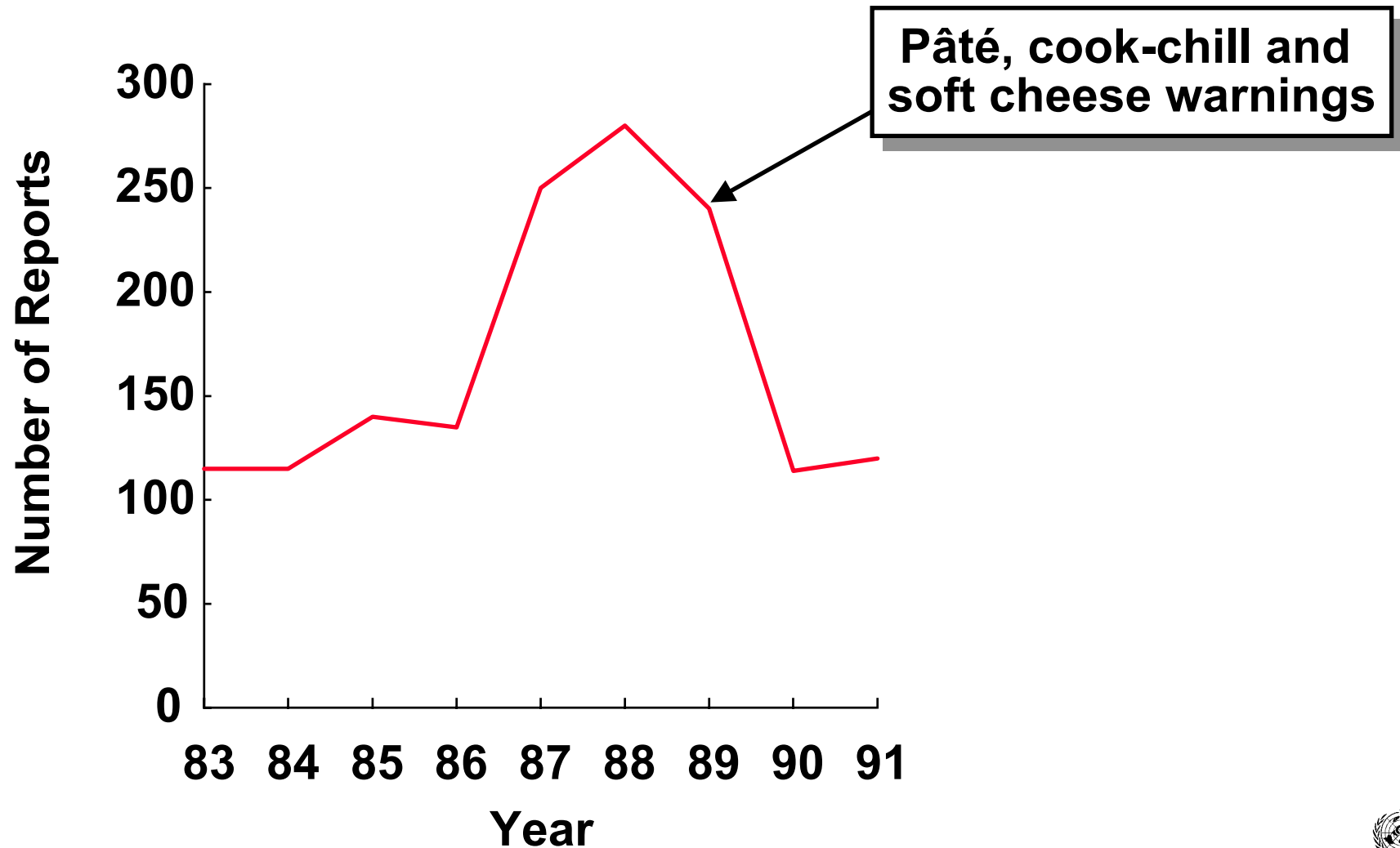
# Spread of epidemic cholera - Latin-America January 1991 - July 1992



# Global spread of cholera 1961-73



# Listeriosis - lab reports England, Wales and N. Ireland 1983-91



# **Distribution and occurrence of FBD - Key messages**

- **Surveillance of FBD and the factors contributing to it is important for finding control options.**
- **Campylobacter and Salmonella are the two main causes of FBD world-wide**
- **The incidence of Listeriosis is increasing in Europe**
- **Cholera is still a serious problem in developing countries**