



# World Health Day 2015 7 April

## Food safety



World Health  
Organization

REGIONAL OFFICE FOR

Europe



Organisation  
mondiale de la Santé

BUREAU RÉGIONAL DE L'

Europe



Weltgesundheitsorganisation

REGIONALBÜRO FÜR

Europa



Всемирная организация  
здравоохранения

Европейское региональное бюро

# FAO/WHO World Declaration on Nutrition (1992)



“... access to nutritionally adequate and **safe** food is a right of each individual.”

**“Food safety is a hidden, and often overlooked, problem.”**

Dr Margaret Chan, WHO Director-General



# Foodborne disease – a serious public health challenge

- More than 200 diseases are spread through food.
- Foodborne diseases are caused by microorganisms (bacteria, viruses, fungi, prions, parasites) or chemicals, radioactivity or even physical agents.
- Foodborne and waterborne diarrhoeal diseases kill an estimated 2 million people annually, many whom are children.
- In 2013, in the EU/EEA alone, there were over 310 000 reported cases of bacterial foodborne disease, of which 322 people died.
- It is estimated that 3% of foodborne disease cases can lead to long-term health problems.
- Very severe consequences, some of which can be long term, including kidney and liver failure, brain and neural disorders, reactive arthritis, cancer, septicaemia and death, can be caused by contaminated food.

# “It must be something I ate”

- Foodborne diseases are very common, even in the most developed countries.
- Reported foodborne disease represents only the tip of the iceberg, and mild cases are often not reported.
- There are limitations to existing surveillance and reporting systems.
- WHO is working to:
  - Strengthen the surveillance systems through capacity-building
  - Improve estimates of the burden of foodborne diseases through the Foodborne Disease Burden Epidemiology Reference Group.

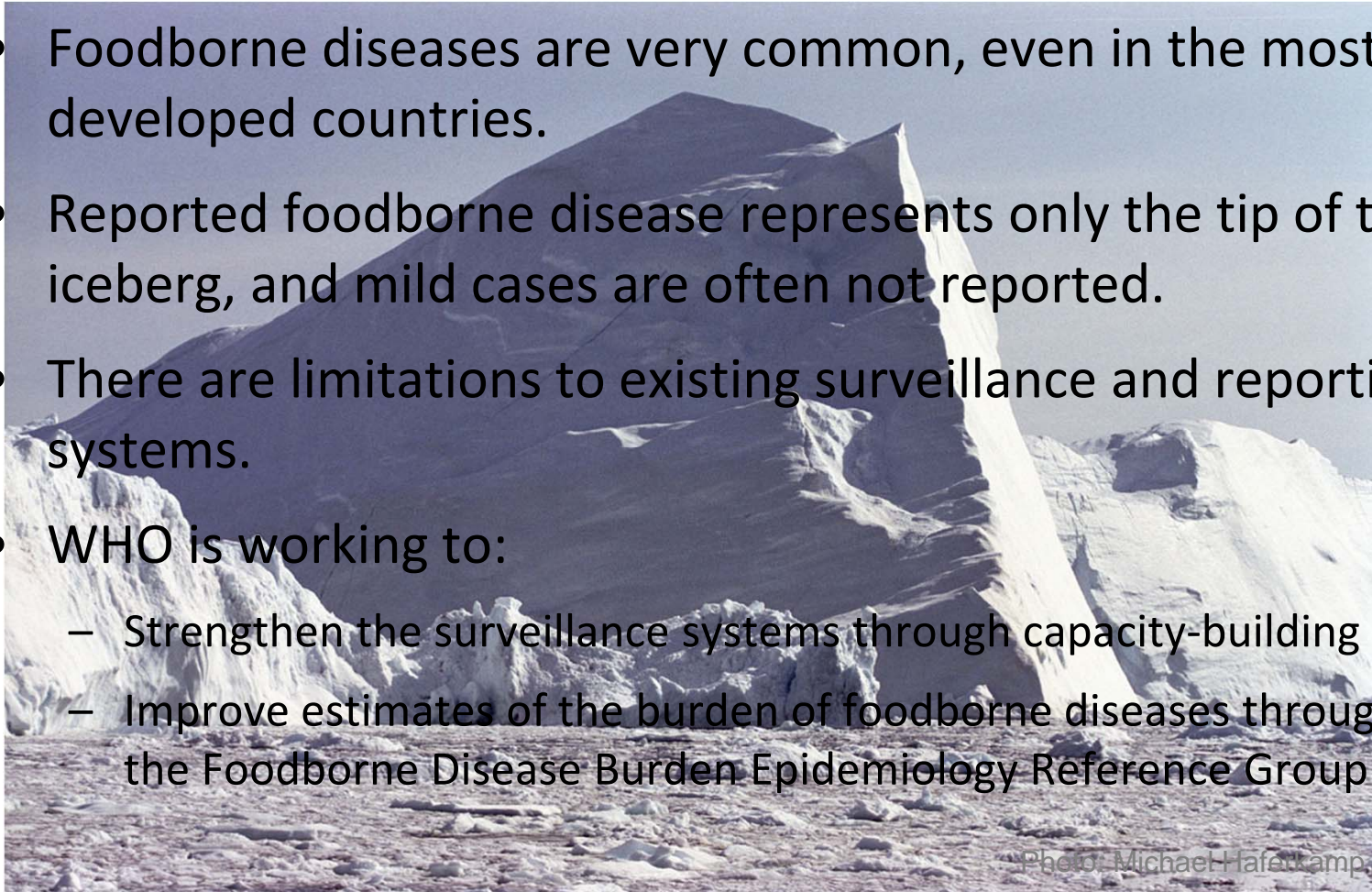
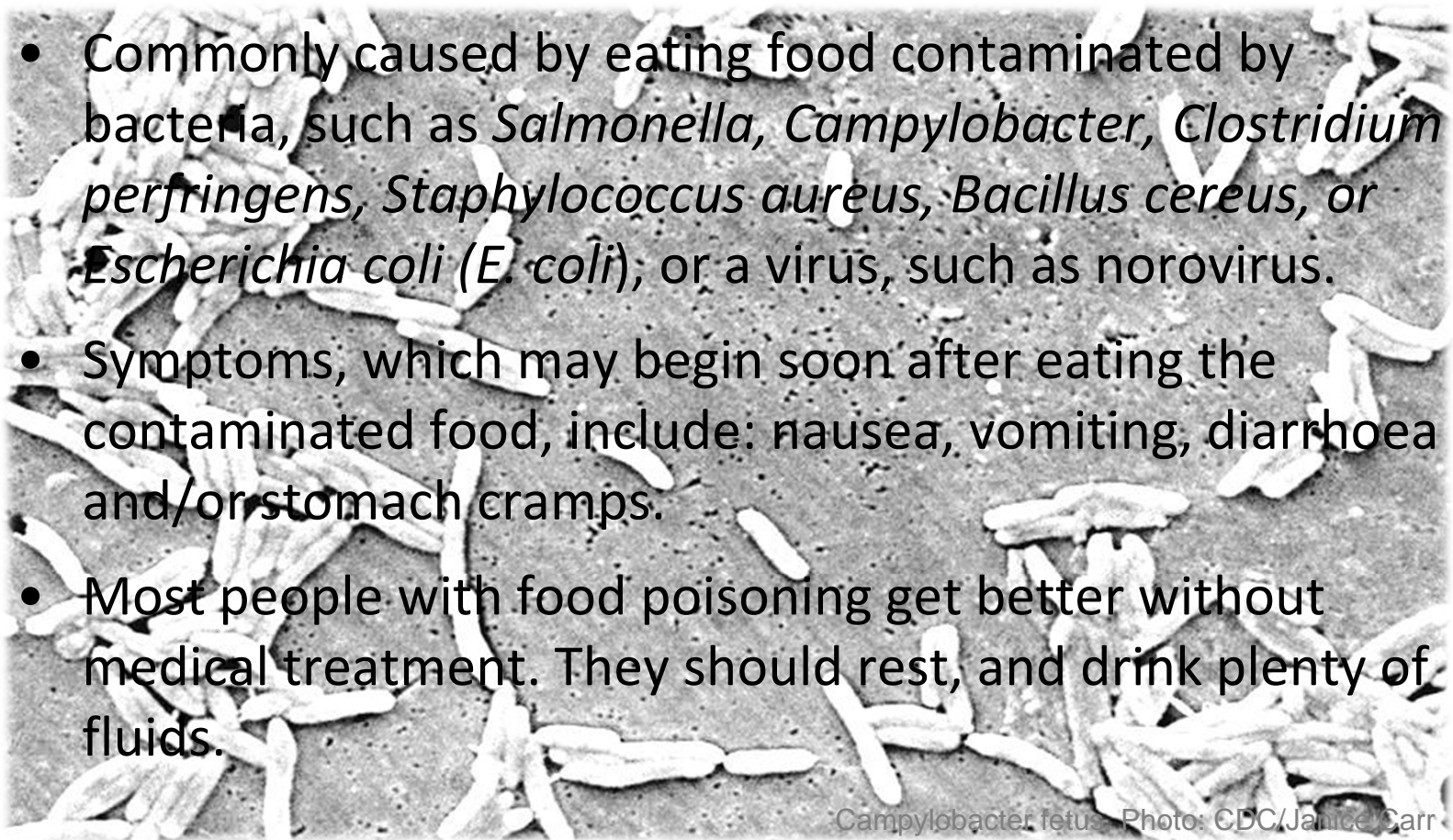


Photo: Michael Hafertkamp

# Acute foodborne disease – causes, symptoms, treatment



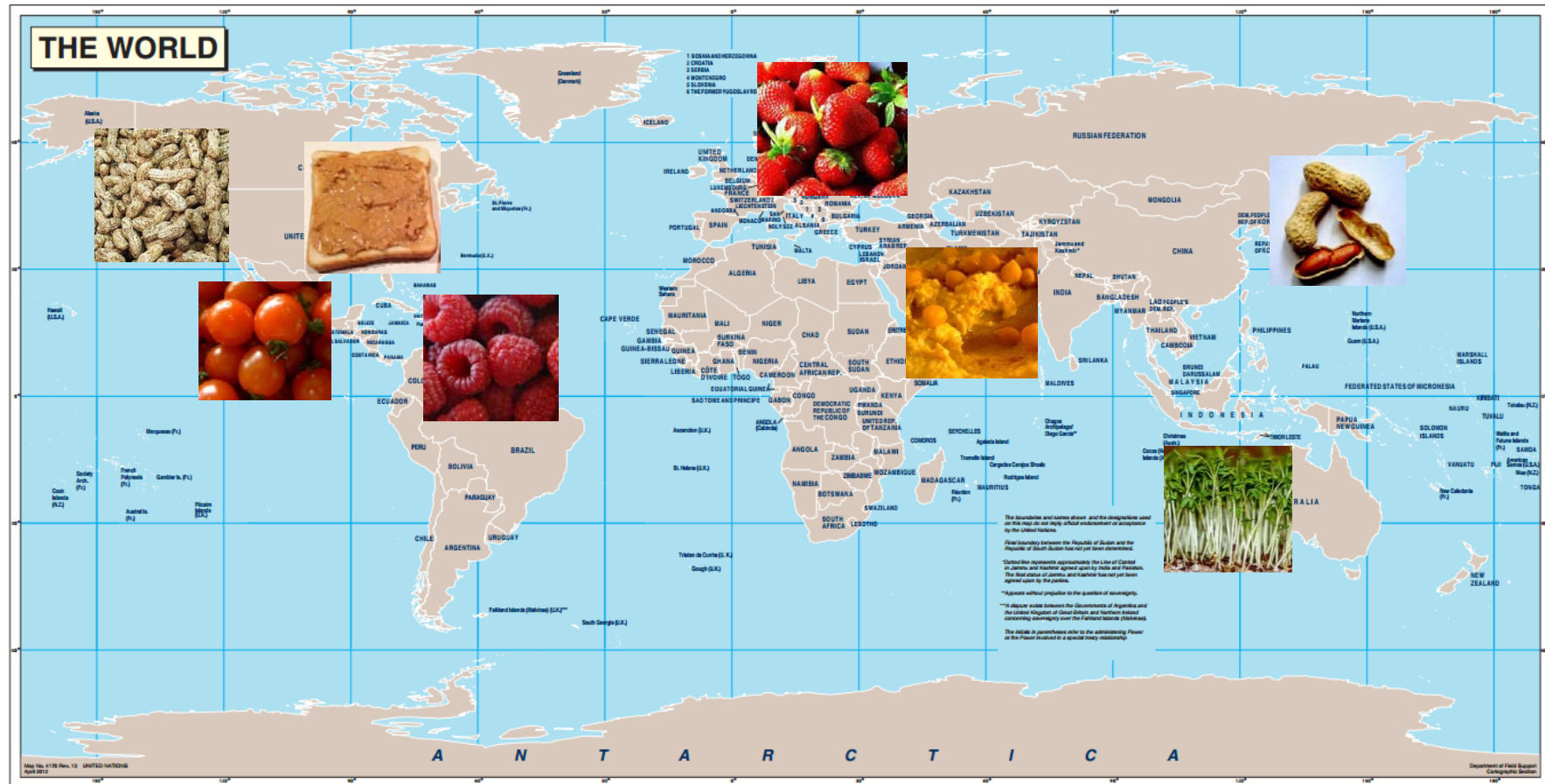
- Commonly caused by eating food contaminated by bacteria, such as *Salmonella*, *Campylobacter*, *Clostridium perfringens*, *Staphylococcus aureus*, *Bacillus cereus*, or *Escherichia coli* (*E. coli*); or a virus, such as norovirus.
- Symptoms, which may begin soon after eating the contaminated food, include: nausea, vomiting, diarrhoea and/or stomach cramps.
- Most people with food poisoning get better without medical treatment. They should rest, and drink plenty of fluids.

Campylobacter fetus. Photo: CDC/Jamie Carr

# Trends affecting food safety

- Globalized food/animal trade, travel and migration – long-distance transmission of pathogens and long and complex food chains.
- Changes in agriculture and food industry – intensification and industrialization of agriculture, new technologies, and handling infected animals during food production.
- Increasing vulnerability of humans – ageing population, people who are immunosuppressed, poverty, migration, emergencies and extreme weather events.
- Changing lifestyles – urbanization, eating food prepared outside the home, and consuming more raw food.

# Globalization: increasing risk of international food safety events



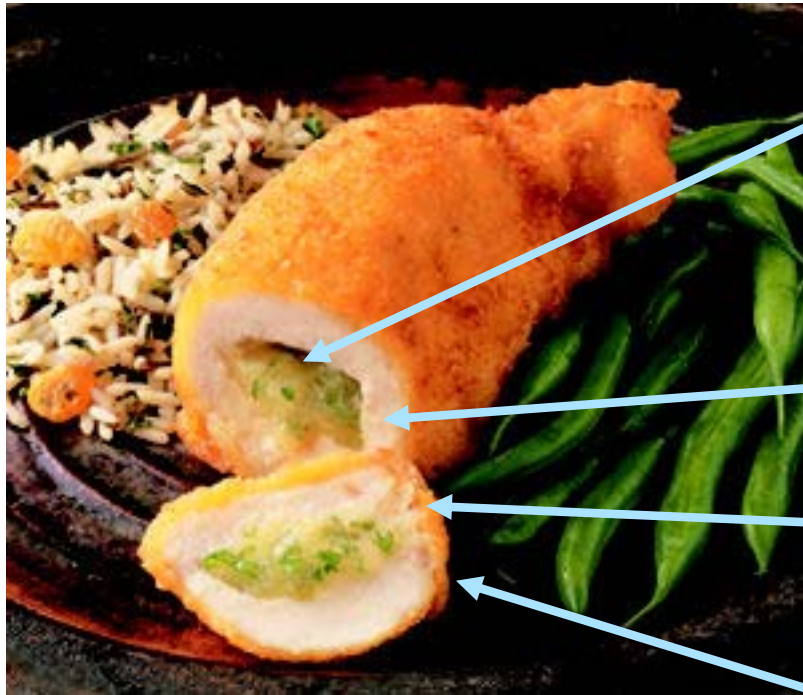


# Health and economic impact of 2011 – EHEC\* outbreak in Europe

- Linked to contaminated fenugreek sprouts.
- Cases reported in 14 countries in Europe and 2 in North America.
- Some 4000 reported cases, resulting in approximately 1000 cases of haemolytic uraemic syndrome.
- Led to 55 deaths.
- Caused US\$ 1.3 billion in losses to farmers and industries.
- EU member States received US\$ 236 million in emergency aid payments.

\* enterohaemorrhagic *E. coli*

# Globalization of trade: the world on your plate



Chicken Kiev

Salted butter – Ireland  
Garlic purée – China, Spain, USA  
Garlic salt – China, Spain, USA  
Lemon – USA  
Parsley – France, UK  
Pepper – Indonesia  
Water – Ireland

**Herb butter:**

**Chicken breast:** Chicken – Belgium, France, Ireland, UK, etc.

**Batter:** Flour – Belgium, France  
Water – Ireland

**Breadcrumbs:** Breadcrumbs – Ireland, UK  
Rapeseed oil – Australia, Eastern Europe, EU

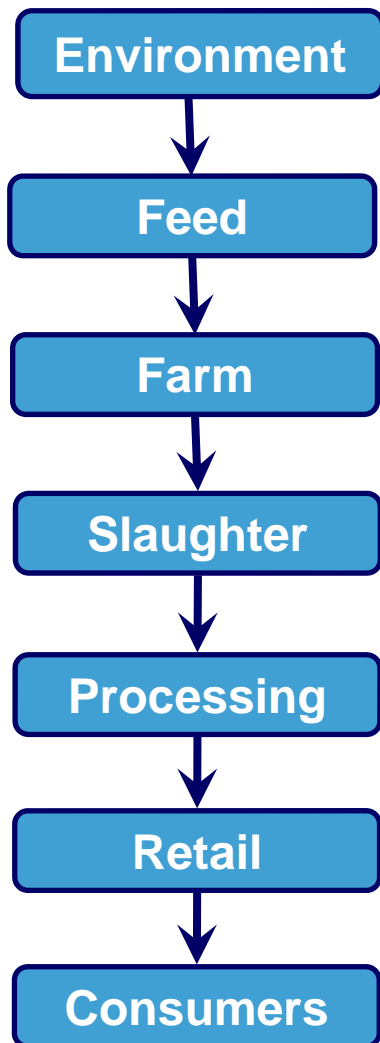
Courtesy: A. Reilly, Food Safety Authority of Ireland

# Food safety and control systems must adapt

“Today, the journey from where our food comes from to how it ends on our plate is longer and more complex than ever before. Food safety risks exist at every step. Our food safety and control systems must adapt and work together across sectors, along the entire food chain.”

Dr Zsuzsanna Jakab,  
WHO Regional Director for Europe



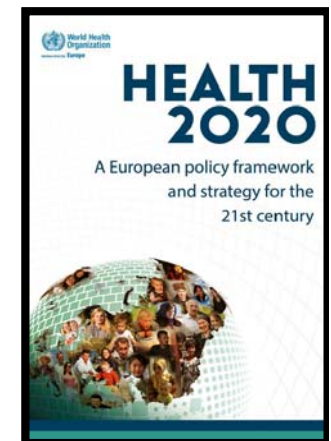


## A long and increasingly complex food chain

Food can be contaminated at any stage of the food chain.

“Ensuring safety throughout the increasingly complex food chain requires collaboration between the health sector, agriculture, food transport, food service establishments and the food industry.”

– Health 2020



# Intersectoral “wins” – agriculture and health

Working together, the health and agriculture sectors have the power to address avoidable **communicable** and **noncommunicable** disease and **antimicrobial resistance**, to support **sustainable development**, and to ensure that those living in urban and rural communities are able to access nutritious and **safe** food.



Photo: US Department of Agriculture

# How the agriculture sector can improve health through action on food safety

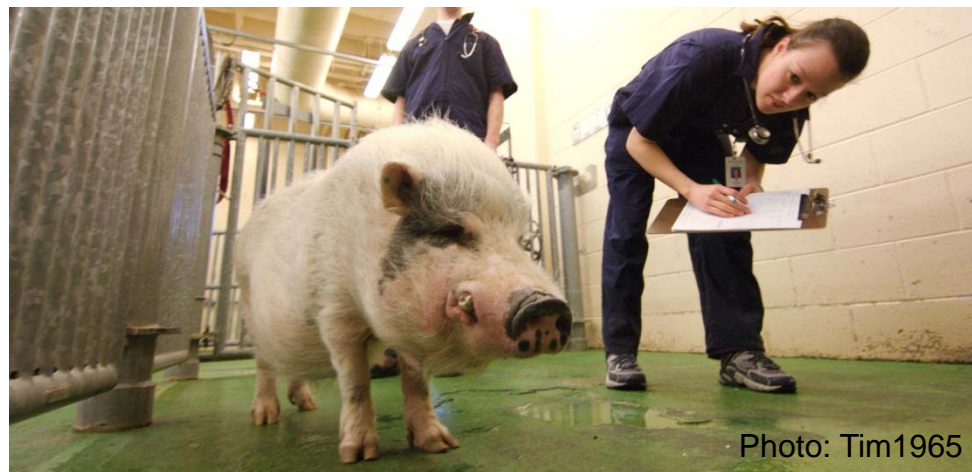
- Apply a holistic, risk-based, whole-food-chain approach.
- Ensure that foodborne diseases and zoonoses, as well as antimicrobial resistance, are addressed at their root.
- Establish relevant monitoring systems in the food chain.
- Ensure the hygienic production, processing and distribution of food.



Photo: SuperManu

# How the health sector can support agriculture through action on food safety

- Strengthen the surveillance of foodborne diseases in humans to enable the agriculture sector to better prevent and respond to major foodborne diseases.
- Apply a “One Health” approach to foodborne and zoonotic diseases, as well as antimicrobial resistance.



# 5 keys to growing safer fruits and vegetables

- Practise good personal hygiene.
- Protect fields from animal faecal contamination.
- Use treated faecal waste.
- Evaluate and manage risks from irrigation water.
- Keep harvest and storage equipment clean and dry.





# Case study – *Salmonella* in Europe



- *Salmonella* is one of the most common causes of foodborne illness, often spread through eggs.
- Over 85 000 cases of salmonellosis are reported in the EU each year, at a cost of up to €3 billion.
- Comprehensive *Salmonella* control programmes targeting poultry have led to a fall in human salmonellosis cases by 50% over 5 years (2004–2009) and by 19% from 2008–2012.
- Specific actions included: testing flocks for *Salmonella*, requiring sellers to source eggs from farmers under a national *Salmonella* control programme, and advising sellers and consumers to refrigerate eggs.



# From farm to plate, make food safe



**WORLD HEALTH DAY 2015**  
#safefood | [www.euro.who.int/whd2015](http://www.euro.who.int/whd2015)



# Overall goals of World Health Day 2015

- Spur governments to improve food safety through public awareness campaigns, and to highlight their ongoing action.
- Encourage consumers to ensure the food on their plate is safe.



# 5 keys to safer food



Key 1: Keep clean

Key 2: Separate raw and cooked food

Key 3: Cook thoroughly

Key 4: Keep food at safe temperatures

Key 5: Use safe water and safe raw materials.

Video:

<http://youtu.be/2ZLRWg0cbMQ>

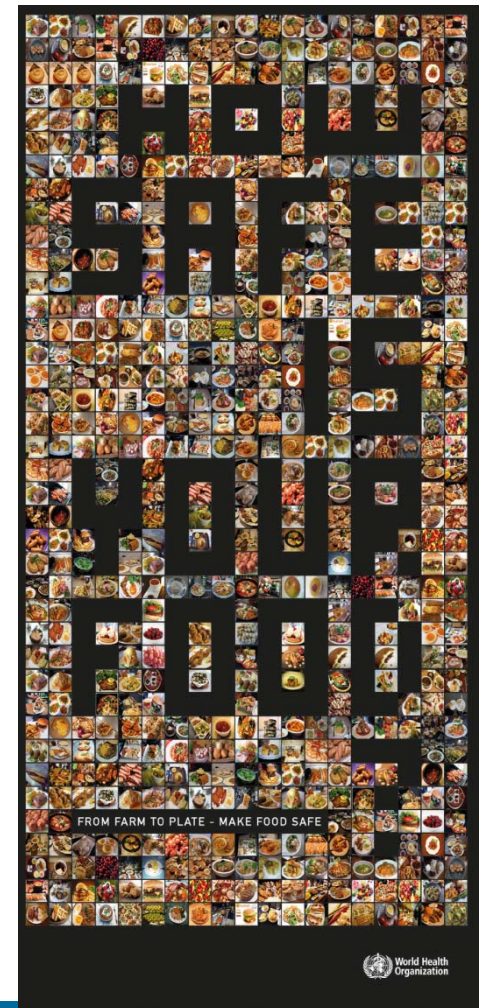
# Social media campaign

## #safefood

People will be invited to engage through Twitter, Instagram, Facebook, sharing an image of their own plate, and answering the questions “What is safe food?” and “How do you ensure your food is safe?”

## #safefoodchat

Twitter chat on 7 April 2015 with partners.



# Websites

- WHO/Europe World Health Day website:  
<http://www.euro.who.int/whd2015>
- Food safety in the European Region:  
<http://www.euro.who.int/foodsafety>
- World Health Day global site:  
<http://www.who.int/campaigns/world-health-day/2015/event/en/>