Highly pathogenic avian influenza
"The 2016-2017 Epidemic"

Regionalisation in the European Union

Andrea Gavinelli, Head of Unit G3
Official controls and eradication of diseases in animals
European Commission
Directorate General for Health and Food Safety
Overview

1. The HPAI epidemic 2016/2017

2. EU strategy for HPAI control

3. Key elements for regionalisation
## HPAI outbreaks in poultry and captive birds and wild bird cases (01/10/2016-05/07/2017)

<table>
<thead>
<tr>
<th>Member State</th>
<th>Wild birds</th>
<th>Poultry</th>
<th>Captive birds</th>
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</thead>
<tbody>
<tr>
<td>GERMANY</td>
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<tr>
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<td><strong>Total</strong></td>
<td><strong>3029</strong></td>
<td><strong>1120</strong></td>
<td><strong>60</strong></td>
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</tbody>
</table>
Weekly epidemic curve for HPAI H5 outbreaks in poultry (01/10/2016 – 05/07/2017)
Weekly epidemic curve for HPAI H5 findings in wild birds (01/10/2016-06/07/2017)
Number of outbreaks in poultry, captive birds and detections in wild birds per Member State (1/10/2016 – 5/7/2017)
European Epidemic Curve (data as of 12/06/17)
Poultry production affected by size of farm

Compared to other epizootics the involvement of backyard poultry or captive birds was an important epidemiological feature.
Migration flows of ducks across Europe
Wild bird introduction pathways – H5N8 Europe 2016/17

Region 1: BG, EL, HU, RO
Region 2: HR, IT, South FR (<45 lat), ES
Region 3: DK, NL, North France (>45 lat), North DE (>50 lat), PL, SE, UK
Region 4: AT, CZ, South DE (<50 lat), SK
HPAI H5(N8) in the European Union

- HPAI H5 virus was detected in 23 Member States in wild birds, captive birds or poultry farms
- Virus was in most cases first detected in wild birds
- 1120 outbreaks confirmed in poultry
- ~700 thereof in commercial poultry
- Rare detection of re-assorted subtypes of European origin (H5N5, H5N1 and H5N6)
Key features of the 2016/17 HPAI epidemic (1)

- **Unprecedented!**
- Amplitude and geographical range
- **Heavy infection pressure** by wild birds & environment
- **Biosecurity challenge**
- Free range
- Farm structures
Key features (2)

• Mostly primary single point introductions in poultry
• **Mostly rapid containment** of poultry outbreaks
• Challenge in **high density poultry areas for lateral** spread
• In particular for domestic waterfowl not effectively confined
• **No disease in humans** also globally
EU policy on avian influenza (1)

- Harmonised EU legislation
- Preparedness and awareness
- Contingency planning
- Network of EU and national reference laboratories
- Enforcement of legislation
- Commission audits in Member States
- Risk assessment and scientific advice:
  - Animal health - European Food Safety Authority (EFSA)
  - Human health - European Centre for Disease Prevention and Control (ECDC)
EU policy on avian influenza (2)

- **Risk management** by the European Commission
- **Immediate information** to other countries and international institutions
- Adoption of **emergency measures**
- **Immediate implementation** of measures and trade restrictions
- **Critical assessment** of the epidemiological situation and measures
- **Constant review** of measures and zones
- **Technical support** by Veterinary emergency expert teams
- **Training** in Member States and third countries
- **Financial support** for Emergency measures and surveillance
HPAI Outbreak management (1)
Avian influenza Directive 2005/94/EC

**Member States:**
- restrictions on **suspect holding** notified by owner, keeper, veterinarian
- **official investigation** and **sampling** for laboratory tests
- **killing of poultry without delay**
- dispose of carcases and eggs under official supervision
- waste destroyed or treated
- **Cleansing and disinfection**
HPAI Outbreak management (2)

Establishment of a:

- **protection zone** of at least 3km radius
- **surveillance zone** of at least 10km radius around infected farm
- **movement restrictions** for live poultry, hatching eggs, meat and other poultry products
- **epidemiological investigations**
- **tracing on and tracing back** of direct or indirect contacts between farms, products
Criteria for establishing zones

- Outcome of epidemiological enquiry
- Geographical situation
- Natural and administrative boundaries
- Location, proximity of other holdings
- Role of wildlife
- Number of holdings and birds
- Movements
- Trade patterns
- Facilities, personnel to control movements
Example: Italy

Important risk factor for virus spread

**Density** of poultry holdings and heads of poultry kept
Additional tailormade measures

Preventive killing
• Upon suspicion, direct or indirect contacts
• To lower the susceptible population in the neighbourhood of the infected farm

Additional zoning
• Areas with a high density of holdings
• Further restricted zone adjacent to surveillance zone
• Temporary control zone around a suspect holding
• Temporary standstill for all poultry, poultry products movements (even for the whole territory of the MS)
Example: Italy HPAI H5N8 - 2017
Enlarged protection & surveillance zones

Example: Cloppenburg, Germany 2017
Zoning in bordering areas
Example: Austria and Slovakia
France: Further restricted zone
**EU Veterinary Control System**

### Prevention
- Biosecurity
- Animal identification
- Veterinary certification and movement control for intra-EU trade of livestock
- Veterinary certification and border controls for animals and products imported.

### Detection
- Surveillance
- Reference laboratories
- Health monitoring in high risk areas
- Animal Disease Notification System.

### Control
- Contingency planning
- Animal Disease Notification System
- Isolation of infected holdings
- Eradication
- EU support: Emergency team, vaccine banks, compensation, training.

### Transparency
- EU audits of Member State veterinary services
- Public information systems (RASFF, ADNS)
- Scientific consultations
- Notification.
Regionalisation in the EU: transparency of EU measures

- Clearly defined roles for Member States and Commission
- Rapid flow of information
- Urgent adoption of emergency measures
- Agreed with Member States
- Immediately applicable
- Published in the Official Journal of the European Union in 23 languages
Key elements for successful regionalisation are:

- Swift response
- Risk based / Proportionality
- Consistency/Predictability
- Transparency

Regionalisation is part of a comprehensive veterinary control system!
Thank you for your attention

More: Website DG Health and Food Safety
https://ec.europa.eu/food/animals_en