Improved methods for supervision and official controls in pig slaughterhouses

Ate Jelsma, DVM, Directorate Veterinary Affairs, Dutch Food and Consumer Product Safety Authority, the Netherlands
ate.jelsma@vwa.nl
Content presentation

1. Introduction

2. From past to present
   • What has already been done
   • What is currently going on

3. Continuous Control Monitoring (CCM), pilot

4. Conclusions
Introduction: Competent Authority

Food safety policy
• Ministry of Public Health
• Ministry of Economic Affairs, Agriculture & Innovation

Competent Authority (NVWA)

1. **199** Official Vets / **192** (85 fte) practitioners
2. Poultry p.m. inspection: Plant staff (since 2002): **100-200**
3. Red meat p.m. inspection (since 2006)
   • Official assistants (OA) delivered by independant organisation (KDS): **360** (290 fte)
   • OA’s work under full responsibility of CA
Introduction: Structure and organization in 2012 of NVWA

- Inspector General
  - Deputy Inspector General

- Director
  - Finance & Information Department
  - Strategy & Development Department

- Director
  - Office for Risk Assessment & Research

- Director
  - Customer services Division

- Chief Inspector
  - Veterinary & Imports Division

- Chief Inspector
  - Agriculture & Nature Division

- Chief Inspector
  - Consumer & Safety Division

- Director
  - Criminal Investigation Division
Introduction: key facts Dutch pig industry

- Animals: 12 mljn
- Farms: 7000
- Slaughterings: 14 milj
- Weight (tons): 1.3 milj
- Slaughterhouses: 14

Supply chain meat inspection:
1. Requirements Reg (EC) no. 1244/2007:
   - Private quality scheme IKB and additional information with FCI
   - Farm risk profile on M. Avium
   - Targeted testing on antibiotic residues
2. Situation today:
   - 4 slaughterhouses: 30.000 pigs a day
   - Reduced microbiological risks
   - Cost reduction and export accepted
Ongoing efforts

Pilot on small & medium poultry slaughterhouses
1. Risk based shift of tasks between OV’s and OA’s
2. Improved focus on (control of) Salmonella on top of legal EU-requirements (4 items)
3. Notified to EU and accepted may 2011; results end of 2012

a higher level of food safety?

Pilot calve slaughterhouses (pilot start first part of 2012)
1. FCI digital, better view on stream calves to the slaughterhouse?
2. More efficiency in ante mortem inspection?
Continous Control Monitoring (CCM)

What is CCM?
• Continous monitoring by FBO and automatical analysis of the data
• FBO has responsibility for the relevant risks and own system of analysis
• **Key Performance Indicators (KPI)** give information of the actual performance of the FBO
• Supervisor government has online acces to data & results analysis
• Supervisor is actively informed by alert system

• Developed for slaughterprocess of pig slaughterhouse
• Pilot will start february 2012 in one big pig slaughterhouse
CCM and Key Performance Indicators

Key Performance Indicators are key elements. Conditions are:

- Relation with the risk control of slaughterprocess
- Must be robust
- Must be continuously measurable
- Which samples, frequency, location has to be described
- Limits have to be described

- Two items are relevant for the development of Key Performance Indicators:
  - Hygiene <-> Food safety => Microbiological elements
  - Product Integrity => Animal byproducts (Reg (EC) no. 1069/2009)
CCM and Key Performance Indicators

Goal: To ensure the FBO performance is below action limits
Reg (EC) no. EU/2073

European context:

• Microbiological sampling of carcasses for Salmonella, Enterobacteriaceae and Aerobic colony count.

• On top of this European context in the pilot:
  • Higher frequency of the microbiological sampling of carcasses and stricter limits
  • Microbiological sampling in cutting area of “trimmings” of the same microbiological elements and Listeria monocytogenis
Trend enterobacteriacea on pig carcasses

Action taken bij FBO, report to CA

- EU 2073/2005
- Increased supervision
- FBO action limit

Log CFU/cm²

Time

Nov
Dec
Jan
CCM and signals

The supervisor can expect 3 different signals:

1. Adequaat: result under lowest limit
2. Attention: result between lowest and highest limit
3. Alert: result higher than highest limit

Alert gives additional information in relation to the European context

Action form:
1. Adequaat: no action is needed
2. Attention and Alert: action of FBO
3. Structural Attention or Alert: intervention of the supervisor
CCM Dashboard

**Data are not real historical data, neither do they show logical patterns. They are used for illustration purposes only.**
Supervision NVWA

Instruments for supervision NVWA

• Systemaudits: supervision on development and working method of own control system of FBO
• Systeminspections: different subjects
• TPM and EDP audit on CCM-servicedock
• CCM: daily information available related to Key Performance Indicators
• Reality checks: own checks and microbiological sampling by NVWA, related to the Key Performance Indicators
• Daily supervision, including analysis and conversations with the FBO

Ante- and post mortem don’t change!
Goal of pilot project

To reach at least the same level (or better) level of food safety and product integrity performance of FBO

- Develop a new way of supervision (not related to AM or PM)

- Get experiences with CCM: streamlining method

- Efficiency: reduction of hours of supervision; example pilot one 1 slaughterhouse. Additional 1 hour for CCM on top of daily supervision.

There is always an official veterinarian during slaughter.
Conclusions

Conclusions CCM and new way of supervision:
- Improved interplay between FBO with own responsibility and supervision by competent authority
- Improved efficiency by use of digital information in practice
- Adequate, attention and alert system gives relevant information

- Broader use of Key Performance Indicators has perspective within a modernised meat inspection for pig slaughterhouses
- Improved and a new way of (more effective/better) supervision by the competent authority
- Strengthening key role of official veterinarian in the slaughterhouse!
Thank you for your attention