Residues of Pesticides in foodstuffs of animal origin: Monitoring programs in France

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French Ministry of Agriculture
AGENDA

Legal framework

Characteristics of the residue monitoring

French organization

Results and follow-up
LEGAL FRAMEWORK

Balances

Trade

Protection of the honest user of pesticide (GAP)

Food Safety

Animal health and welfare
**LEGAL FRAMEWORK**

**Monitoring in foodstuffs from animal origin**

- **Directive 96/23/EC** = measures to monitor certain substances and residues in live animal and animal products (= residue monitoring plans)
  - Establishes substances, species or products covered and sampling requested
  - Covers Member States and third countries

- **Directive 96/22/EC** = Ban on the use of hormones as growth promoters
• **Regulation 396/2005** = Establishes MRL for Pesticides.
• **Regulation 2377/90** = Establishes **Maximum Residue Limits** (MRLs) for substances and animal species (veterinary medicines)
LEGAL FRAMEWORK
Reg. 3962005 : new legal framework

• Why ? :
  – Complexity of present legislation :
    • 4 parents Council Directives
    • Complicated lists of MRLs, both at national and at Community level
    • Problem for the international market and for the importers
  – Lack of harmonisation
  – Role of EFSA (Reg. 178/2002)
• Regulation clear and transparent:
  – one list of MRLs (accessible database with information)
  – Information to consumers about risk arising from pesticides, results of national monitoring
• Clear procedure for application:
  – MS - EFSA- Commission),
  – Codex LMRs considered
• Complete harmonisation: no more trade problems, Import tolerance
Condition for the application of the regulation

- **Annex I** → **List of commodities** (Reg. 178/2006)
- **Annex II** → **EU MRLs** (existing MRLs)
- **Annex III** → **Temporary MRLs** (harmonisation of national MRLs)
- **Annex IV** → **List of active substances for which no MRLs are required** (low toxicity)

Will be developed later:
- **Annex V** → **Substances for which a default MRL applies**
- **Annex VI** → **Processing factors**
- **Annex VII** → **Fumigants**
LEGAL FRAMEWORK

Decision Making Process
General Scheme

1. Evaluation Report
2. Reasoned Opinion
3. Draft Decision

Commission Decision

MS

EFSA
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RESIDUE MONITORING
Directive 96/23

• Harmonized approach: Directive 96/23

• Coordination by the European Commission

• Member States Report on previous results and current plans

• Different national organizations
RESIDUE MONITORING
Animals and products concerned

- Bovines
- Poultry
- Sheep/goats
- Aquaculture
- Farmed game
- Wild game
- Horses (food)
- Milk
- Eggs
- Honey
RESIDUE MONITORING
Classification of substances

• **Forbidden substances (Group A)**
  - Hormones, Beta agonists, etc…
  - Forbidden veterinary products: Annexe IV LMR (chloramphenicol, dimetridazol)

• **Veterinary medicines (Groups B1, B2) with LMR**
  - Antibiotics (B1),
  - Antihelminthics, etc…

• **Contaminants (Group B3)**
  - PESTICIDES, dioxins,
  - Heavy metals...
## RESIDUE MONITORING
### Frequencies and level of the control

<table>
<thead>
<tr>
<th>Species</th>
<th>Number of controlled animals (% of annual production)</th>
<th>Group A</th>
<th>GROUP B</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bovine</td>
<td>0.4%</td>
<td>50% live animal 0.25%</td>
<td>0.15% (30% for groups B1)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>50% slaughterhouse</td>
<td></td>
</tr>
<tr>
<td>Porcine</td>
<td>0.05%</td>
<td>0.02%</td>
<td>0.03% (30% for group B1)</td>
</tr>
<tr>
<td>Sheep and Goat</td>
<td>0.05%</td>
<td>0.01%</td>
<td>0.04%</td>
</tr>
<tr>
<td>Equine</td>
<td>In relation to the problems identified</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Poultry (broiler chicken, turkeys)</td>
<td>1 per 200 tons of annual production (minimum : 100)</td>
<td>50% of samples</td>
<td>50% of samples (30% for group B1)</td>
</tr>
<tr>
<td>Aquaculture products</td>
<td>1 per 100 tons of annual production</td>
<td>33% of samples</td>
<td>67%</td>
</tr>
<tr>
<td>Milk except sheep and goat milk</td>
<td>1 per 15000 tons of annual production</td>
<td>70% for veterinary medicament and 30% for B3</td>
<td></td>
</tr>
<tr>
<td>Eggs</td>
<td>1 per 1000 tons (equivalent ton)</td>
<td>70% for groups A6, B1, B2b and 30% in relation to the problems identified (B3a)</td>
<td></td>
</tr>
<tr>
<td>Honey</td>
<td>10/300 tons (3000 tons) + 1/300 tons</td>
<td>50% for groups B1 and B2c and 40% for groups B3a, B3b, B3c</td>
<td></td>
</tr>
</tbody>
</table>
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Results and follow-up
FRENCH ORGANIZATION
Risk assessment-Risk management

Political decisions
Legal texts
Control coordination

Enforcement
Sampling
Investigation / Inspection

Scientific risk assessment

Ministry of Agriculture

Departmental Directions

French Food Safety Agency

Control confirmation
NRL, CRL

Laboratory for pesticide residues

Official laboratories
Elaboration of residue plan each year

- Determinate scope: group of residue (previous results,)
- Determinate number of samples for each department, each species each sub-groups of residue
  Target criteria: local production, number of slaughtered animals
FRENCH ORGANIZATION
Local implementation

- Departmental Directions for Veterinary Services
- Sampling (slaughterhouses etc...)
- Investigation (food production, farms etc...)
- Sanctions (prohibited substances etc...)

MINISTERE DE L'AGRICULTURE ET DE LA PÊCHE
FRENCH ORGANIZATION
Risk assessment

- 1998: clear separation between risk management and risk assessment
- French Food safety Agency:
  - Risk assessment
  - Scientific opinions
  - Studies on the basis of Residue monitoring plans
OFFICIAL LABORATORIES
Minimum requirements

- Suitable qualified staff, equipment, buildings and.
- Guaranty of confidentiality, impartiality and independence.
- Accreditation on NF EN ISO/CEI 17025 standard delivered by the COFRAC.
- Approval by General Division for Food.
- Permanent maintenance of their competences (trainings, participations in ring tests,...)
• **Pesticides**
  - AFSSA LERQAP Maisons-Alfort (foodstuffs of animal origin)
  - AFSSA Sofia (honey)
  - LNPV Angers (vegetable)
• Coordinate the work of designated laboratories, training, coordinate the standards
• Organize comparative tests
• Scientific and technical support for the government
• Confirm positive analysis detected by public laboratories
• Development and validation of method of analysis,
• Disseminate information supplied by CRL, knowledge of international standards and practical
• Maintain qualified staff and equipment
FRENCH ORGANIZATION
A single chain of command

a single chain of command

PARIS
Government and central administrations

Departments (100)
Departmental Directions of Veterinary Services

Border Inspection Post (13)
SPECIFIC TOOLS
System of information

• SIGAL : System of information for DGAI

  - Information Processing System connecting the departments to the laboratories and the general division for food (DGAI)

  - Base Data-Processing containing the requests for samples by plan and department

  - Daily monitoring of control plans realization
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### RESULTS AND FOLLOW-UP

#### Results in 2005

<table>
<thead>
<tr>
<th>Species</th>
<th>Nb of samples</th>
<th>% of Non compliance</th>
<th>Pesticide</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bovine</td>
<td>970</td>
<td>0.22</td>
<td>OP, OC, Pyret., PCB</td>
</tr>
<tr>
<td>Poultry</td>
<td>360</td>
<td>0</td>
<td>OC, Pyret., PCB</td>
</tr>
<tr>
<td>Rabbit</td>
<td>15</td>
<td>0</td>
<td>OC, Pyret., PCB</td>
</tr>
<tr>
<td>Game</td>
<td>50</td>
<td>0</td>
<td>OC, Pyret., PCB</td>
</tr>
<tr>
<td>Fish</td>
<td>130</td>
<td>1</td>
<td>OP, OC, Pyret., PCB</td>
</tr>
<tr>
<td>Milk</td>
<td>80</td>
<td>0</td>
<td>OP, OC, Pyret., PCB</td>
</tr>
<tr>
<td>Egg</td>
<td>110</td>
<td>1.1</td>
<td>OC, PCB</td>
</tr>
<tr>
<td>Honey</td>
<td>140</td>
<td>0</td>
<td>OC, amitraz, Pyret</td>
</tr>
</tbody>
</table>
RESULTS AND FOLLOW-UP
Follow up - Non compliance

If the result exceeds the maximum residue limit (MRL)

**Investigation on farm**

- Find the cause of non compliance (not respect of the latency).
- Checking the register of breeding.
- Recall of the obligations.
- Correct measurements to implement.
- Withdrawal of the market of the food products if new non compliant results.
- Targeting of the breeding for the plan of the year n+1.
RESULTS AND FOLLOW-UP
Three samples procedure

- Prohibited substances

- 1st sample for official laboratories

- 2nd sample for the animal’s owner:
  - Possibility for the animal’s owner to analyze his sample in an approved laboratory

- 3rd sample for the national authorities:
  - In case of different result between the 1st and 2nd sample, analysis of the 3rd sample by the National Reference Laboratory (NRL).
Surveillance plan

Positive results

Official random checks:
- Previous positive results
- Suspected fraud or use of illegal substances

Positive results

Intensified checks:
- Repeated positive results
- Detection or presence of prohibited substances

Positive results

• Investigation on the farm to detect unauthorised substances
• Check on animal’s feedingstuffs, drinking water
• Animals are impounded
• No leaving before results of analysis
• Animals are slaughtered and destroyed if results are positive
THANK YOU FOR YOUR ATTENTION