

AHI1: The duty to report mandatory notifiable animal diseases			
Description: This indicator records the percentage of mandatory notifiable animal disease notifications in comparison with the total number of mandatory notifiable animal diseases (currently 73).			
Results:			
Year	Number of mandatory notifiable animal diseases reported	Percentage of mandatory notifiable animal diseases reported	Limit
2010	7	9,59%	Not applicable
2009	10	13,7%	Not applicable
2008	8	10,96%	Not applicable
2007	12	16,44%	Not applicable
Calculation of the indicator:			
<p>The list of all mandatory notifiable animal diseases is covered by Article 1 of the Royal Decree of 25 April 1998, which lists the animal diseases that fall under the application of chapter III of the Animal Health Law of 24 March 1987, with the exclusion of the list in article 1a (zoonoses). It covers a total of 73 diseases (including clinical IBR disease). The presence or absence of a disease for the year in question is recorded but not the number of outbreaks of each disease.</p> <p>Compared to 2007, there was a reduction of 33,33% in 2008. Compared to 2008, there was an increase of 25% in 2009. Compared to 2009, there was a reduction of 30% in 2010.</p>			
Interpretation: This indicator reflects the percentage of the various mandatory notifiable animal diseases that occur in Belgium annually in comparison with the total number of mandatory notifiable animal diseases. The reporting of a mandatory notifiable disease may possibly be due to the introduction of infectious diseases or may be the result of a higher degree of alertness (whether or not stimulated by media campaigns), leading to greater degree of vigilance with regard to the hazards and risks. Given that mandatory notification is an inherent part of the preventative approach, and is also essential for preventing the spread of animal diseases, an increase of the number of reported cases should therefore be considered as an indication of an improved vigilance with regard to the safeguarding of animal health.			
Part of the chain to which the indicator applies: Primary animal production			
Animal species: Bovines, pigs, poultry, sheep and goats (small ruminants), bees, solidungulates, rabbits, deer, fish, molluscs and crustaceans.			
Category: crisis prevention and management (reporting)			
Justification for the selection of this indicator: Mandatory notifiable disease are infectious diseases that cause socio-economic damage or that have a significant impact on public health, and which are of significance to the international trade of animals and animal products. The percentage of mandatory notifiable animal diseases reported each year is therefore an important indicator for animal health.			
Additional information: "Mandatory notifiable" means that suspected contamination must be reported immediately by the livestock holder or the veterinarian at the Provincial Control Unit of the FASFC. Once contamination has been confirmed through laboratory examinations, the outbreak must be reported by the authorities within 24 hours to the World Organisation for Animal Health (OIE) and to the European Union (EU). The OIE and the EU then disseminate information to other countries. The measures implemented to combat these diseases are aimed at eradicating or controlling a given disease.			
Legal framework:			
<ol style="list-style-type: none"> 1. Animal Health Law of 24 March 1987. 2. Royal Decree of 25 April 1988 listing the animal diseases that fall under the application of chapter III of the law of 24 March 1987 on animal health. 3. Royal Decree of 20 September 1883 containing the general administration regulation for the supervision of animal health policy. 			

Does the indicator meet the set criteria?:

- Measureable (availability of quantitative data)
- Independent (no overlap between respective indicators)
- Reliable (bias sensitivity)
- Availability of information contained in existing reports or documents
- Representative for animal health
- Representative of the food chain
- Clear wording
- Sustainable

Comments: A number of the diseases included in the list of mandatory notifiable animal diseases are endemic in Belgium. The reporting of these diseases is infrequent. For example: foot rot, PRRSV etc.

Explanatory notes to the results:

In 2007, 12 diseases were reported: rabies, trichinellosis, bluetongue, tuberculosis, scrapie, myxomatosis, infectious laryngotracheitis, Marek's disease, Newcastle disease, American foulbrood, VHS and clinical IBR.

In 2008, 8 diseases were reported: bluetongue, CEM, tuberculosis, avian influenza, pseudo-avian flu, American foulbrood, VHS, clinical IBR.

In 2009, 10 diseases were reported: CEM, tuberculosis, RHD, avian influenza, pseudo-avian flu, American foulbrood, European foulbrood, VHS, Koi carp herpes virus, clinical IBR.

In 2010, 7 diseases were reported: Brucellosis, CEM, infectious anaemia, Newcastle disease, VHS, Koi carp herpes virus, clinical IBR.

AHI 2: Self-checking for the primary animal production sector

Description: The percentage of performed key activities (see appendix 3) using a validated/certified self-checking system in the primary animal production sector, on an annual basis.

Results:

Year	Number of key activities performed	% of key activities performed with a validated/certified self-checking system	Limit
2010	88.419	15,09%	Not applicable
2009	72.934	6,46%	Not applicable
2008	71.137	0,95%	Not applicable
2007	63.689	0,17%	Not applicable

Calculation of the indicator: Compared to 2007, there was an increase of 394,12% in 2008. In 2009, there was an increase of 636,9% in comparison with 2008. Given that in 2007 and in 2008, the percentage of performed key activities performed with a validated/certified self-checking system was lower than 1%, and has as a consequence a minor impact on animal health, this indicator is neutralised in the barometer. Compared to 2009, there was an increase of 143,78% in 2010.

Interpretation: This indicator serves as a criterion for the percentage of key activities for which a validated/certified SCS (self-checking system) is available. A validated/certified SCS is an SCS that has been declared to be in conformity with the set requirements after investigation by a third party. The fact that a SCS is validated/certified has an added value and makes it more trustworthy with regard to its functioning. An increase of the percentage of key activities covered by a validated/certified self-checking system thus indirectly leads to a higher confidence level with regard to adequate preventive actions taken in order to ensure food safety.

Part of the chain to which the indicator applies: Primary animal production (excl. slaughterhouses and incl. fish markets)

Animal species: Calves, bovines, pigs, poultry, sheep and goats, bees, lagomorphs, solidungulates, fish, crustaceans and molluscs.

Category: Development of self-checking

Justification for the selection of this indicator: Self-checking is an important management tool in efforts towards achieving/maintaining a high level of preventive action to ensure animal health. During the validation/certification process, the SCS is put to the test in order to see whether or not it is in conformity with the set requirements. The level of key activities covered by a validated/certified SCS serves as an indication as to the presence of a properly functioning self-checking system.

Additional information: Self-checking stands for the entire set of measures that are taken by the operators in order to ensure that all products falling under their responsibility, and for all production, processing and distribution phases, are capable of:

- meeting the legal requirements regarding food safety
- meeting the legal requirements regarding product quality that falls under the competence of the FASFC;
- meeting the requirements regarding traceability and surveillance of the effective compliance of these requirements.

There is a sector guide that has been approved by the FASFC for self-checking in the primary animal production sector (G-037). On the basis of this sector guide, companies can have their SCS certified by a certification or inspection body (OCI) that has been recognised as such by the FASFC or they may request the FASFC to conduct this validation.

Legal framework: The validation/certification of the SCS does not represent a legal requirement. The legal framework regarding self-checking and the use of sector guides can be found in the statutory texts as listed below:

1. Regulation (EC) n° 178/2002 of the European Parliament and of the Council of 28 January 2002 laying down the general principles and requirements of food law, establishing the European Food Authority and laying down procedures in matters of food safety.
2. Regulation (EC) n° 852/2004 of the European Parliament and of the Council of 29 April 2004 on the hygiene of foodstuffs.
3. Royal Decree of 14 November, 2003 concerning self-checking, mandatory notification and traceability in the food chain.
4. Ministerial decree of 24 October 2005 on the alleviation of the application modalities for self-

<p>checking and traceability for particular enterprises in the food sector.</p> <p>5. Royal Decree of 27 April 2007 on the amendment of the Royal Decree of 14 November, 2003 concerning self-checking, mandatory notification and traceability in the food chain.</p>
<p>Does the indicator meet the set criteria? :</p> <ul style="list-style-type: none"> <input checked="" type="checkbox"/> Measureable (availability of quantitative data) <input checked="" type="checkbox"/> Independent (no overlap between respective indicators) <input checked="" type="checkbox"/> Reliable (bias sensitivity) <input checked="" type="checkbox"/> Availability of information contained in existing reports or documents <input checked="" type="checkbox"/> Representative for animal health <input type="checkbox"/> Representative of the food chain <input checked="" type="checkbox"/> Clear wording <input checked="" type="checkbox"/> Sustainable
<p>Comments: Operators may freely decide whether or not to have their self-checking system validated/certified. A key activity for which no validated/certified self-checking system is available, does not mean that the self-checking system is absent or that it does not function properly. However validation/certification by a third party creates added value and is more credible as it is done independently.</p>
<p>Explanatory notes to the results: /</p>
<p>Key Activities: In appendix 3 the activities are listed that have been selected as key activities of the activity tree structure. The number of key activities performed means the total number of key activities performed (see appendix 3) by all operators in the animal production sector in Belgium. In the activity tree, 35% of the activities in the primary animal production sector were selected as a key activity, which represents approximately 85% of effectively performed activities in the primary animal production sector.</p>

AHI3: Inspections of infrastructure, facilities and hygiene

Description: The percentage of inspections with regard to infrastructure, facilities and hygiene that received a favourable evaluation or favourable, with remarks. These inspections were carried out in the assembly centres, the vehicles, the pig holdings, calf holdings, trader premises, poultry farms, semen collection and storage centres and the embryo collection and production teams (bovines, horses, pigs, sheep and goats).

Results:

Year	Number of inspections of infrastructure, facilities and hygiene	% OK and OK subject to remarks	Limit
2010	3.687	98,12%	Not applicable
2009	3.255	98,63%	Not applicable
2008	2.901	98,47%	Not applicable
2007	2.303 ¹	98,20%	Not applicable

Calculation of the indicator: Compared to 2007, there was an increase of 0,27% in 2008. Compared to 2008, there was an increase of 0,16% in 2009. Compared to 2009, there was a decrease of 0,52% in 2010.

Interpretation: This indicator shows the extent to which the operators meet the legal requirements with regard to infrastructure, facilities and hygiene. An increase of this indicator increases the likelihood of an improvement of animal welfare and health.

Part of the chain to which the indicator applies: Primary animal production

Animal species: Bovines, sheep, goats, calves, pigs, poultry, horses, rabbits, ratites, deer, farmed game

Category: Control

Justification for the selection of this indicator: Good hygiene and appropriate infrastructure and facilities are the basic conditions for maintaining or improving animal health.

Additional information:

The aim of these inspections is to check whether the animals are housed in an adequate and hygienic manner. This solely concerns the controls carried out by the FASFC and not controls carried out within the framework of a set of specifications.

Legal framework:

1. Ministerial decree of 29/01/1998 implementing Article 3 of the Royal Decree of 8 August 1997 on the identification, registration and implementing rules of the epidemio-surveillance in bovines.
2. Royal decree of 23/01/1998 on the protection of calves kept for farming purposes.
3. Royal decree of 01/03/2000 on the protection of animals kept for farming purposes.
4. Royal Decree of 09/07/1999 on the protection of animals during transport and transporter registration conditions and the approval of traders, staging points and assembly centres.
5. Regulation (EC) n° 1/2005 of the Council of 22/12/2004 on the protection of animals during transport and related operations and amending directives 64/432/EEC and 93/119/EC and regulation (EC) n° 1255/97.
6. Ministerial decree of 27/06/2005 laying down the procedures for recording animal movements to traders, within the assembly centres, the staging points and at the transporters.
7. Royal Decree of 14/11/2003 concerning self-checking, mandatory notification and traceability in the food chain.
8. Ministerial decree of 20 July 1992 implementing articles 2, 6, 7 and 11 of the royal decree of 12 June 1970 on combating contagious poultry diseases and other farmyard animal diseases, including the placing of hatching eggs, day-old chicks and breeding poultry on the market, modified by the royal decree of 17 July 1992.
9. Royal decree of 12/06/1970 on combating contagious poultry diseases and other farmyard

<p>animal diseases including the placing of hatching eggs, day-old chicks and breeding poultry on the market.</p> <p>10. Ministerial decree of 03/04/2006 on temporary measures for combating avian influenza.</p> <p>11. Royal decree of 10/08/1998 establishing certain conditions for the health qualification of poultry.</p>
<p>Does the indicator meet the set criteria? :</p> <ul style="list-style-type: none"> <input checked="" type="checkbox"/> Measureable (availability of quantitative data) <input checked="" type="checkbox"/> Independent (no overlap between respective indicators) <input checked="" type="checkbox"/> Reliable (bias sensitivity) <input checked="" type="checkbox"/> Availability of information contained in existing reports or documents <input checked="" type="checkbox"/> Representative for animal health <input type="checkbox"/> Representative of the food chain <input checked="" type="checkbox"/> Clear wording <input checked="" type="checkbox"/> Sustainable
<p>Notes: The result of an inspection is determined on the basis of a checklist, whereby a fixed appraisal is given, in the form of a points score, for each item to be controlled and in accordance with its importance. As for the results of an inspection, there are 3 possibilities: either favourable, favourable with remarks or unfavourable. The latter will result in taking further measures or in the drawing up of a report.</p>
<p>Explanatory notes to the results: It is difficult to compare the results of 2008 with those of 2007, as the FASFC has been implementing a new evaluation system since September 2007. This system is based on the use of a checklist, by which a fixed appraisal is made, in the form of a points score, for each item to be controlled and in accordance with its importance. This new evaluation method is more stringent. Moreover, these controls are focused on establishments for which non-conformities had already been reported (systematic re-inspection).</p> <p>¹ In 2007, no infrastructure, facility or hygiene inspections were carried out at the semen collection and storage centres and at the embryo collection and production teams.</p>

AHI 4: Traceability inspections

Description: The percentage of inspections regarding traceability that received a favourable evaluation or favourable with remarks. These inspections are conducted at primary production level (cattle farms, pig farms, sheep, goat and deer farms, layer hen farms, poultry farms, hatcheries), at traders and assembly centres, during transport (identification and registration of animals), at the semen collection and storage centres and at the embryo collection and production teams.

Results:

Year	Number of inspections regarding traceability	% OK and OK with remarks	Limit
2010	6.968	94,90%	Not applicable
2009	6.763	95,39%	Not applicable
2008	6.066	94,85%	Not applicable
2007	6.720 ²	94,36%	Not applicable

Calculation of the indicator: Compared to 2007, there was an increase of 0,52% in 2008. Compared to 2008, there was an increase of 0,57% in 2009. Compared to 2009, there was a reduction of 0,51% in 2010.

Interpretation: This indicator measures the extent to which the operators have met the legal requirements concerning traceability. An increase of this indicator indicates the improved monitoring of animal health.

Part of the chain to which the indicator applies: Primary animal production, traders, assembly centres, transport, semen collection and storage centres and embryo collection and production teams.

Animal species: Bovines, sheep, goats, pigs, poultry, horses, deer.

Category: Control

Justification for the selection of this indicator: Traceability is an important aspect of safeguarding animal health and is crucial for ensuring efficient crisis management. Inspections with regard to traceability are important means of evaluating whether operators have an efficient traceability system in place.

Additional information: Traceability means the ability to trace and monitor products through the various production, processing and distribution phases.

Legal framework:

1. Regulation (EC) n° 178/2002 of the European Parliament and of the Council of 28 January 2002 laying down the general principles and requirements of food law, establishing the European Food Safety Authority and laying down procedures in matters of food safety.
2. Royal Decree of 14/11/2003 concerning self-checking, mandatory notification and traceability in the food chain.
3. Royal Decree of 27 April 2007 on the amendment of the Royal Decree of 14 November, 2003 concerning self-checking, mandatory notification and traceability in the food chain.

Does the indicator meet the set criteria? :

- Measureable (availability of quantitative data)
- Independent (no overlap between respective indicators)
- Reliable (bias sensitivity)
- Availability of information contained in existing reports or documents
- Representative for animal health
- Representative of the food chain
- Clear wording
- Sustainable

Notes: The result of an inspection is determined on the basis of a checklist, whereby a fixed appraisal is given, in the form of a points score, for each item to be controlled and in accordance with its importance. As for the results of an inspection, there are 3 possibilities: either favourable, favourable with remarks or unfavourable. The latter will result in taking further measures or in the drawing up of a report.

Explanatory notes to the results: It is difficult to compare the results of 2008 with those of 2007, as the FASFC has been implementing a new evaluation system since September 2007. This system is

based on the use of a checklist, by which a fixed appraisal is made, in the form of a points score, for each item to be controlled and in accordance with its importance. This new evaluation method is more stringent. Moreover, these controls are focused on establishments for which non-conformities had already been reported (systematic re-inspection).

² For 2007, the results for the semen collection and storage centres and teams and the embryo collection and production teams are not available.

AHI 5: Animal welfare inspections			
Description: The percentage of inspections regarding animal welfare that received a favourable evaluation or favourable with remarks. These inspections were conducted at agricultural holdings (including pig, calf and poultry farms), during the transport of slaughter animals to the slaughterhouse.			
Results:			
Year	Number of inspections concerning animal welfare	% OK and OK with remarks	Limit
2010	10.744	97,16%	Not applicable
2009	9.869	97,10%	Not applicable
2008	8.788	98,14%	Not applicable
2007	7.480	98,30%	Not applicable
Calculation of the indicator: Compared to 2007, there was a reduction of 0,16% in 2008. Compared to 2008, there was a reduction of 1,06% in 2009. Compared to 2009, there was an increase of 0,06% in 2010.			
Interpretation: This indicator measures the extent to which the operators have met the legal requirements concerning animal welfare. An increase of this indicator, i.e. the percentage of favourable inspections (including those deemed favourable with remarks) indicates a better compliance with the directives on animal welfare and as a consequence an indirect improvement of animal health.			
Part of the chain to which the indicator applies: Primary animal production (including the slaughterhouse)			
Animal species: Bovines, sheep, goats, calves, pigs, poultry, rabbits, horses, ratites, deer, farmed game			
Category: Control.			
Justification for the selection of this indicator: Animal welfare is a basic condition for maintaining or improving animal health.			
Additional information: Except in cases of force majeure, any act that causes the unnecessary death of animals or that causes animals to unnecessarily suffer mutilation, injury or pain is prohibited. This solely concerns the controls carried out by the FASFC.			
Legal framework:			
<ol style="list-style-type: none"> 1. Law of 14 August 1986 concerning the protection and welfare of animals. 2. Royal decree of 01/03/2000 on the protection of animals kept for farming purposes. 3. Royal Decree of 17/05/2001 on the permitted interventions on vertebrate animals for the utilitarian use of animals or to limit reproduction of the species. 4. Royal Decree of 16/01/1998 on the protection of animals at the time of slaughtering or killing. 5. Royal Decree of 11/02/1988 on certain kinds of slaughter according to a religious rite. 6. Royal decree of 23/01/1998 on the protection of calves kept for farming purposes. 7. Royal decree of 15/05/2003 on the protection of pigs kept for farming purposes. 8. Regulation (EC) n° 1/2005 of the Council of 22/12/2004 on the protection of animals during transport and related operations and amending directives 64/432/EEC and 93/119/EC and regulation (EC) n° 1255/97. 9. Royal Decree of 09/07/1999 on the protection of animals during transport, transporter registration conditions and the approval of traders, staging points and assembly centres. 10. Royal decree of 17/10/2005 laying down minimum standards for the protection of laying hens. 11. Regulation (EC) n° 853/2004 of the European Parliament and of the Council of 29 April 2004 laying down specific hygiene rules for products of animal origin. 8. Royal decree of 25/04/1994 implementing article 35, 10°, of the law of 14 August 1986 on the protection and welfare of animals. 			
Does the indicator meet the set criteria? :			
<input checked="" type="checkbox"/> Measureable (availability of quantitative data) <input checked="" type="checkbox"/> Independent (no overlap between respective indicators) <input checked="" type="checkbox"/> Reliable (bias sensitivity) <input checked="" type="checkbox"/> Availability of information contained in existing reports or documents <input checked="" type="checkbox"/> Representative for animal health <input type="checkbox"/> Representative of the food chain <input checked="" type="checkbox"/> Clear wording <input checked="" type="checkbox"/> Sustainable			

Notes: The result of an inspection is determined on the basis of a checklist, whereby a fixed appraisal is given, in the form of a points score, for each item to be controlled and in accordance with its importance. As for the results of an inspection, there are 3 possibilities: either favourable, favourable subject to remarks or unfavourable. The latter will result in taking further measures or in the drawing up of a report.

Explanatory notes to the results: It is difficult to compare the results of 2008 with those of 2007, as the FASFC has been implementing a new evaluation system since September 2007. This system is based on the use of a checklist, by which a fixed appraisal is made, in the form of a points score, for each item to be controlled and in accordance with its importance. This new evaluation method is more stringent. Moreover, these controls are focused on establishments for which non-conformities had already been reported (systematic re-inspection).

In 2010, 10.744 inspections at 5.744 operators were carried out. In 2009, 9.869 inspections at 4.964 operators were carried out. In 2008, 8.788 inspections at 3.753 operators were carried out. In 2007, 7.480 inspections at 2.934 operators were carried out.

AHI 6: The reporting of bovine abortions			
Description: The percentage of bovine abortions examined annually in relation to the total number of female bovine animals aged over 24 months.			
Results:			
Year	Number of females over 24 months	% of abortion examinations of female bovines aged over 24 months	Limit
2010	1.442.392	0,46%	Not applicable
2009	1.437.834	0,24%	Not applicable
2008	1.437.991	0,29%	Not applicable
2007	1.432.543	0,27%	Not applicable
Calculation of the indicator: Compared to 2007, there was an increase of 7,41% in 2008. In 2009, a decrease of 17,24% was recorded compared to 2008. Compared to 2009, there was an increase of 91,67% in 2010.			
Interpretation: Bovine abortions may be as a result of various diseases such as brucellosis, neosporosis, BVD (Bovine Viral Diarrhoea), Q fever, etc. This indicator constitutes a surveillance measure of bovine animal health. An increase of this indicator, i.e. the percentage of examinations, indicates greater awareness of the abortion issue and the requirement for post-abortion examination. Assuming that abortions are examined better following the introduction of the abortion protocol (end of 2009), an increase in abortions demonstrates a favourable development in the surveillance of bovine animal health (it is a preventative measure).			
Part of the chain to which the indicator applies: Primary animal production			
Animal species: Bovines			
Category: Control.			
Justification for the selection of this indicator: Bovine abortions may be as a result of various diseases such as brucellosis, neosporosis, BVD (Bovine Viral Diarrhoea), Q fever. The examination of these abortions constitutes an important element in the surveillance of animal health.			
Additional information: Once an abortion has been reported, an analysis of the mother's serum is carried out, as well as an analysis of the foetus and the afterbirth. These analyses are aimed at detecting brucellosis, leucosis, leptospirosis, Q fever, neosporosis, IBR (Infectious Bovine Rhinotracheitis), bluetongue, BVD (Bovine Viral Diarrhoea), <i>Listeria monocytogenes</i> , <i>Aspergillus fumigatus</i> and <i>Salmonella</i> spp. There are other causes for abortion, such as metabolic disruption and genetic abnormalities that cannot be verified through these examinations.			
Legal framework:			
1. Royal decree of 6 December 1978 concerning the prevention of bovine brucellosis.			
Does the indicator meet the set criteria? :			
<input checked="" type="checkbox"/> Measureable (availability of quantitative data) <input checked="" type="checkbox"/> Independent (no overlap between respective indicators) <input checked="" type="checkbox"/> Reliable (bias sensitivity) <input checked="" type="checkbox"/> Availability of information contained in existing reports or documents <input checked="" type="checkbox"/> Representative for animal health <input type="checkbox"/> Representative of the food chain <input checked="" type="checkbox"/> Clear wording <input checked="" type="checkbox"/> Sustainable			
Comments: /			
Explanatory notes to the results: In 2007, 2008, 2009 and 2010 respectively 3.926, 4.184, 3.504 and 6.654 analyses were carried out. Since the start of winter 2009-2010 (November 2010) screening, an abortion analysis promotion policy has been pursued. Consequently, it is difficult to compare the results of 2009 with those of 2010.			

AHI 7: Number of cells (number of somatic cells in milk)			
Description: The percentage of tank milk samples for which the number of cells is below or equal to 400.000/ml annually			
Results:			
Year	Number of samples	% conformity	Limit
2010	464.097	88,77%	≤400.000/ml
2009	491.654	88,74%	≤400.000/ml
2008	517.648	89,16%	≤400.000/ml
2007	544.551	89,14%	≤400.000/ml
2006	581.426	89,12%	≤400.000/ml
Calculation of the indicator: Compared to 2007, there was an increase of 0,02 % in 2008. Compared to 2008, there was a reduction of 0,47% in 2009. Compared to 2009, there was an increase of 0,03% in 2010.			
Interpretation: When the number of tank milk cells exceeds 400.000/ml, this clearly indicates the presence of mastitis at the dairy cow holding. An increase of this indicator, i.e. an increase in the number of samples for which the number of cells is below or equal to 400.000/ml, indicates an improvement in udder health.			
Part of the chain to which the indicator applies: Primary animal production			
Animal species: Bovines: dairy cows			
Category: Control			
Justification for the selection of this indicator: The number of cells above 400.000/ml is a clear indication of mastitis. Mastitis, or inflammation of the udder is an infection of the udder's glandular tissue. This constitutes one of the main economic diseases in bovines. Good udder health is essential for ensuring optimum milk production. As part of the reduction of antibiotic use in animal production, it is equally important to work towards ensuring the good udder health of dairy cows.			
Additional information: Mastitis or inflammation of the udder is an inflammation of the mammary gland caused by pathogenic microorganisms. There are two main forms of mastitis, clinical mastitis and subclinical mastitis. In the case of clinical mastitis, the udder is very inflamed. It can be recognised by abnormal milk (formation of flakes in the milk) and/or by a hard, warm or painful quarter. Subclinical means that there are no real clinical symptoms such as those mentioned above, but that the quality of the milk changes and production is reduced. An increase in the number of somatic cells (number of cells) in the milk is an important characteristic of this inflammatory reaction. When the number of cells reaches 250.000/ml, farmers are advised to take measures, since this is a clear sign that a significant proportion of the cows are infected with mammopathogenic germs. When the geometric mean of the results over the last 3 months repeatedly exceeds 400.000/ml, penalty points and a lower milk price are imposed on the farmer. In dairy cows, mastitis is a rather common disease, which has a considerable economic impact. The data used for this indicator originates from Melkcontrolecentrum (MCC) (Flanders) and from Comité du lait (Wallon).			
Legal framework:			
<ol style="list-style-type: none"> 1. Royal Decree of 2 December 2006 on the quality control of raw milk and the approval of interprofessional bodies 2. Ministerial decree of 1st February 2007 approving the document produced by the approved interprofessional bodies relating to the modalities for the quality control of raw cow's milk. 3. Flemish Government Ministerial Decree of 25 February 2009 on the control over the determination of the composition of milk supplied to buyers and on the payment by the buyers of the milk to the producer. 4. Flemish Government Decree of 7 September 2007 on organising the establishment and control of the composition of raw milk. 5. Walloon Government Decree of 29 January 2009 on milk composition control, the payment of the milk by the purchasers to the producers and the approval of the interprofessional bodies. 6. Walloon Government Ministerial Decree of 25 October 2010 on the approval of an interprofessional body for milk composition control and on the approval of the normative document on the control of the composition of cow's milk issued by the producers to the approved buyers. 7. 			
Does the indicator meet the set criteria? :			
<input checked="" type="checkbox"/> Measureable (availability of quantitative data)			

- Independent (no overlap between respective indicators)
- Reliable (bias sensitivity)
- Availability of information contained in existing reports or documents
- Representative for animal health
- Representative of the food chain
- Clear wording
- Sustainable

Comments: /

Explanatory notes to the results: /

AHI 8: Liver damage in pigs			
Description: The percentage of healthy pig livers (not rejected) annually in relation to the number of slaughter pigs slaughtered in Belgium.			
Results:			
Year	Number of slaughtered pigs	% non-rejected livers	Limit
2010	11.969.764	96,78%	Not applicable
2009	11.678.185	98,44%	Not applicable
2008	11.574.645	98,94%	Not applicable
2007	1.307.211 ³	99,20%	Not applicable
Calculation of the indicator: Compared to 2007, there was a reduction of 0,26% in 2008. Compared to 2008, there was a reduction of 0,51% in 2009. Compared to 2009, there was a reduction of 1,69% in 2010.			
Interpretation: A widespread parasitic infection leads to liver downgrading. An increase of this indicator, i.e. an increase in the number of non-rejected livers therefore indicates an improvement in animal health.			
Part of the chain to which the indicator applies: Processing			
Animal species: Pigs			
Category: Control			
Justification for the selection of this indicator: This indicator constitutes an important measurement of the presence of the parasite <i>Ascaris suum</i> in pigs.			
Additional information: <i>Ascaris suum</i> , or roundworm, is a nematode that causes ascariasis in pigs, which can also infect humans. This parasite is present worldwide and has a significant economic impact. The roundworm eggs have a thick wall and are very resistant to heat, dryness and disinfectants. They can survive up to 5 years outside of the pig on rough surfaces. Once the roundworm egg has been ingested orally by the pig, the larvae are released around the large intestine. They penetrate the intestinal wall, and reach the liver after a few days. The passage of the larvae through the liver causes migration damage, which is visible on the surface of the liver, typically in the form of white spots. These "white spots" present grounds for refusal at the slaughterhouse. Depending on the number of eggs ingested and the immune status of the pig, a relatively large number of lesions are visible. Then, the larvae move towards the lungs. Despite the formation of lesions, the presence of roundworm larvae in the lung tissue only leads to clinical symptoms in a few cases. Adverse effects mainly consist of making the lungs more sensitive to all types of viruses and bacteria.			
Legal Framework:			
1. Regulation (EC) n° 854/2004 of the European Parliament and of the Council of 29 April 2004 laying down specific rules for the organisation of official controls on products of animal origin intended for human consumption.			
Does the indicator meet the set criteria? :			
<input checked="" type="checkbox"/> Measureable (availability of quantitative data) <input checked="" type="checkbox"/> Independent (no overlap between respective indicators) <input checked="" type="checkbox"/> Reliable (bias sensitivity) <input checked="" type="checkbox"/> Availability of information contained in existing reports or documents <input checked="" type="checkbox"/> Representative for animal health <input type="checkbox"/> Representative of the food chain <input checked="" type="checkbox"/> Clear wording <input checked="" type="checkbox"/> Sustainable			
Comments: /			
Explanatory notes to the results: ³ For 2007, only data collected from November onwards was recorded. The data prior to this date was not deemed reliable as the FASFC was using another database at that time.			

AHIn9: Antibiotic resistance in indicator bacteria E. coli			
Description: The annual percentage of E. coli isolates from live animal sources, collected by the FASFC within the framework of indicator bacteria monitoring and sensitive to all of the antibiotics tested.			
Results:			
Year	Number of <i>E.Coli</i> isolates analysed	% sensitive	Limit
2010	Not available	Not available	Not applicable
Calculation of the indicator: Given that the monitoring programme for antibiotic resistance in indicator bacteria only began at the end of 2010, there is no data available. This indicator is therefore not taken into account in the 2007-2010 barometer.			
Interpretation: The percentage of E.Coli isolates that remain sensitive to all types of tested antibiotics constitute a measurement of the occurrence of antibiotic resistance and consequently the use of antibiotics. An increase of this indicator, i.e. an increase in the percentage of <i>E. coli</i> isolates sensitive to all types of antibiotics tested, constitute a sign of the reduction of antibiotic resistance and indirectly an improvement of animal health given that there is a reduced need to treat animals.			
Part of the chain to which the indicator applies: Primary animal production			
Animal species: calves (<7 months), pigs and broilers			
Category: Control			
Justification for the selection of this indicator: The presence of a resistance to antibiotics in the indicator bacteria constitutes a measurement of the use of antibiotics in the primary production and the general health status of animals.			
Additional information: Antibiotics are given to animals for therapeutic and disease prevention purposes. The use of antibiotics has caused selective pressure, which has thus made resistance a considerable problem in terms of animal health. Here antibiotics play a selection factor role, by suppressing the growth of sensitive germs and thereby permitting a better growth of resistant bacteria. In 2011 the knowledge centre on the Antimicrobial Consumption and Resistance in Animals (AMCRA) was set up.			
Legal Framework: The monitoring programme is neither based on legislation or on circulars. It is based on the 'Report from the Task Force on Zoonoses Data Collection including guidance for harmonised monitoring and reporting of antimicrobial resistance in commensal <i>Escherichia coli</i> and <i>Enterococcus spp.</i> from food animals' of the EFSA and on advice 10-2010 of the FASFC Scientific Committee.			
Does the indicator meet the set criteria? :			
<input checked="" type="checkbox"/> Measureable (availability of quantitative data) <input checked="" type="checkbox"/> Independent (no overlap between respective indicators) <input checked="" type="checkbox"/> Reliable (bias sensitivity) <input checked="" type="checkbox"/> Availability of information contained in existing reports or documents <input checked="" type="checkbox"/> Representative for animal health <input type="checkbox"/> Representative of the food chain <input checked="" type="checkbox"/> Clear wording <input checked="" type="checkbox"/> Sustainable			
Comments: The antibiotics analysed include cefotaxime, nalidixic acid, ciprofloxacin, ampicillin, tetracycline, chloramphenicol, gentamicin, streptomycin, trimethoprim and sulphonamides.			
Explanatory notes to the results: /			

AHIn10: Mortality in slaughter pigs			
Description: The annual percentage of slaughter pigs that have died and been disposed of at a destruction plant (Rendac).			
Results:			
Year	Number of slaughter pigs slaughtered in Belgium	% mortality	Limit
2010	11.688.855	3,40%	Not applicable
2009	11.285.996	3,58%	Not applicable
2008	11.171.775	4,07%	Not applicable
2007	9.500.456 ⁴	5,03%	Not applicable
Calculation of the indicator: Compared to 2007, a reduction of 19,09% was recorded in 2008. Compared to 2008, a reduction of 12,04% was recorded in 2009. Compared to 2009, a reduction of 5,03% was recorded in 2010.			
Interpretation: This indicator serves as a criterion for the mortality of slaughter pigs. A reduction of this indicator reflects an improvement in animal health.			
Part of the chain to which the indicator applies: Primary animal production			
Animal species: Pigs			
Category: Mortality			
Justification for the selection of this indicator: The death of animals constitutes a direct measurement of animal health.			
Additional information: Deceased animals must be transported to a destruction plant where the corpses are then processed. The data relating to the number of slaughter pigs was sourced from Rendac.			
Legal Framework:			
<ol style="list-style-type: none"> 1. Flemish Government Decree of 15 December 2006 on the collection and processing of animal waste. 2. Walloon Government Decree of 21 October 1993 relating to animal waste. 3. Government Decree of the Brussels-Capital Region of 28 November 2002 on the disposal of animal waste and animal waste processing facilities. 			
Does the indicator meet the set criteria? :			
<input checked="" type="checkbox"/> Measureable (availability of quantitative data) <input checked="" type="checkbox"/> Independent (no overlap between respective indicators) <input checked="" type="checkbox"/> Reliable (bias sensitivity) <input checked="" type="checkbox"/> Availability of information contained in existing reports or documents <input checked="" type="checkbox"/> Representative for the health status of animal production <input type="checkbox"/> Representative of the food chain <input checked="" type="checkbox"/> Clear interpretation <input checked="" type="checkbox"/> Sustainable			
Comments: This indicator doesn't cover mass mortality resulting from an incident (for example fire or ventilation failure). The sanitation that forms part of the official combat and prevention of animal diseases is neither taken into account in this indicator.			
Explanatory notes to the results: ⁴ For 2007, only data collected from November onwards was recorded. The information available before this date was not deemed reliable, as the FASFC was using a different database at that time.			

AHI 11: Mortality of small ruminants			
Description: The annual percentage of small ruminants (sheep and goats) that have died and been disposed of at a destruction plant (Rendac).			
Results:			
Year	Number of small ruminants at Belgian farms	% mortality	Limit
2010	260.296	11,27%	Not applicable
2009	272.633	11,33%	Not applicable
2008	254.003	12,82%	Not applicable
2007	267.561	21,54%	Not applicable
Calculation of the indicator: Compared to 2007, a reduction of 40,48% was recorded in 2008. Compared to 2008, a reduction of 11,62% was recorded in 2009. Compared to 2009, a reduction of 0,53% was recorded in 2010.			
Interpretation: This indicator serves as a criterion for the mortality of small ruminants. A drop in this indicator reflects an improvement in animal health.			
Part of the chain to which the indicator applies: Primary animal production			
Animal species: Small ruminants			
Category: Mortality			
Justification for the selection of this indicator: The death of animals constitutes a direct measurement of animal health.			
Additional information: Deceased animals must be evacuated to a destruction plant where the corpses are then processed. The data relating to the number of small ruminants was sourced from Rendac.			
Legal Framework:			
<ol style="list-style-type: none"> 1. Flemish Government Decree of 15 December 2006 on the collection and processing of animal waste. 2. Walloon Government Decree of 21 October 1993 relating to animal waste. 3. Government Decree of the Brussels-Capital Region of 28 November 2002 on the disposal of animal waste and animal waste processing facilities. 			
Does the indicator meet the set criteria? :			
<input checked="" type="checkbox"/> Measureable (availability of quantitative data) <input checked="" type="checkbox"/> Independent (no overlap between respective indicators) <input checked="" type="checkbox"/> Reliable (bias sensitivity) <input checked="" type="checkbox"/> Availability of information contained in existing reports or documents <input checked="" type="checkbox"/> Representative for animal health <input type="checkbox"/> Representative of the food chain <input checked="" type="checkbox"/> Clear wording <input checked="" type="checkbox"/> Sustainable			
Comments: This indicator doesn't cover mass mortality resulting from an incident (e.g. fire). The sanitation that forms part of the official combat and prevention of animal diseases is neither taken into account in this indicator.			
Explanatory notes to the results: The high mortality rates in 2007 were due to the Blue Tongue epidemic.			

AHIn12: Poultry carcasses declared non-compliant			
Description: The annual percentage of poultry carcasses declared non compliant during the slaughter process.			
Results:			
Year	Number of slaughtered poultry	% declared non-compliant	Limit
2010	312.527.133	0,82%	Not applicable
2009	291.838.791	0,81%	Not applicable
2008	273.426.460	0,76%	Not applicable
2007	28.894.56 ⁵	0,79%	Not applicable
Calculation of the indicator: Compared to 2007, a reduction of 3,8% was recorded in 2008. Compared to 2008, an increase of 6,58% was recorded in 2009. Compared to 2009, an increase of 1,23 % was recorded in 2010.			
Interpretation: This indicator serves as a criterion for the rejection of poultry carcasses during slaughtering due to health reasons. A drop in this indicator reflects an improvement in animal health.			
Part of the chain to which the indicator applies: Processing			
Animal species: Poultry			
Category: Control			
Justification for the selection of this indicator: The rejection of slaughter animals for health reasons constitutes a direct measurement of animal health.			
Additional information: An expert appraisal of the poultry carcasses is carried out during the slaughtering process. A carcass may be rejected on animal health grounds but also on the grounds of certain quality requirements or because the animal was already dead prior to commencing the slaughtering process.			
Legal Framework:			
<ol style="list-style-type: none"> 1. Regulation (EC) n° 853/2004 of the European Parliament and of the Council of 29 April 2004 laying down specific hygiene rules for products of animal origin. 2. Regulation (EC) n° 854/2004 of the European Parliament and of the Council of 29 April 2004 laying down specific rules for the organisation of official controls on products of animal origin intended for human consumption. 3. Commission Regulation (EC) n° 2074/2005/EC of 5 December 2005 laying down implementing measures for certain products under Regulation (EC) n° 853/2004 of the European Parliament and of the Council and for the organisation of official controls under Regulation (EC) n° 854/2004 of the European Parliament and of the Council and (EC) n° 882/2004 of the European Parliament and of the Council, derogating from Regulation (EC) n° 852/2004 of the European Parliament and of the Council and amending regulations (EC) n° 853/2004 and (EC) n° 854/2004. 4. Regulation (EC) n° 2073/2005 of the Commission of 15 November 2005 on microbiological criteria for foodstuffs. 5. Regulation (EC) n° 882/2004 of the European Parliament and of the Council of 29 April 2004 on the official controls performed to ensure the verification of compliance with feed and food law, animal health and animal welfare rules. 6. Law of 15 April 1965 on the inspection of and trade in fish, poultry, rabbits and game and modifying the Law of 5 September 1952 on the inspection of and trade in meat. 7. Royal Decree of 22 December, 2005 concerning food hygiene. 8. Royal Decree of 22 December, 2005 on the hygiene of food of animal origin. 9. 			
Does the indicator meet the set criteria? :			
<input checked="" type="checkbox"/> Measureable (availability of quantitative data) <input checked="" type="checkbox"/> Independent (no overlap between respective indicators) <input checked="" type="checkbox"/> Reliable (bias sensitivity) <input checked="" type="checkbox"/> Availability of information contained in existing reports or documents <input checked="" type="checkbox"/> Representative for animal health <input type="checkbox"/> Representative of the food chain <input checked="" type="checkbox"/> Clear wording <input checked="" type="checkbox"/> Sustainable			

Comments: All of the grounds for refusal have been incorporated into this indicator, namely:

- The presence of a systemic disease
- Animals suffering from a disease included in list A/(B) of the OIE (solely in 2007)
- Potential health risk or other grounds for refusal
- Positive for *Salmonella*
- Severely emaciated animal
- Signs of a systemic disease/severe emaciation
- Suspicion of a disease that has a negative impact on health
- The presence of blood likely to pose a threat
- Other problems during AM inspection
- Rules on animal welfare not respected: transport
- Death of the animal after its arrival at the slaughterhouse
- Death before slaughter/stillborn or unborn animal/<7days.
- The animal was dead during transport
- The offal was not subject to a PM inspection
- The meat contains foreign objects
- Microbiological criteria not met
- The feathers or skin are/is dirty

Explanatory notes to the results: ⁵ For 2007, only data collected from November onwards was recorded. The information available before this date was not deemed reliable, as the FASFC was using a different database at that time.

AHIn13: Mortality of veal calves			
Description: The percentage of veal calves that have died in relation to the number of all calves reared at the veal calf holdings.			
Results:			
Year	Number of calves at the veal calf farms	% mortality	Limit
2010	335.415	5,19%	Not applicable
2009	332.643	4,19%	Not applicable
2008	312.848	5,23%	Not applicable
2007	305.161	5,19%	Not applicable
Calculation of the indicator: Compared to 2007, there was an increase of 0,77% in 2008. Compared to 2007, there was a reduction of 19,89% in 2008. Compared to 2009, an increase of 23,69% was recorded in 2010.			
Interpretation: This indicator serves as a criterion for the mortality of veal calves. A reduction of this indicator reflects an improvement in animal health.			
Part of the chain to which the indicator applies: Primary animal production			
Animal species: Veal calves			
Category: Mortality			
Justification for the selection of this indicator: The death of animals constitutes a direct measurement of animal health.			
Additional information: The main causes of death in veal calves are respiratory disorders and digestive problems. The data relating to the number of deceased veal calves is sourced from the FASFC Sanitrace databank.			
Legal Framework:			
<ol style="list-style-type: none"> 1. Flemish Government Decree of 15 December 2006 on the collection and processing of animal waste. 2. Walloon Government Decree of 21 October 1993 relating to animal waste. 3. Government Decree of the Brussels-Capital Region of 28 November 2002 on the disposal of animal waste and animal waste processing facilities. 			
Does the indicator meet the set criteria? :			
<input checked="" type="checkbox"/> Measureable (availability of quantitative data) <input checked="" type="checkbox"/> Independent (no overlap between respective indicators) <input checked="" type="checkbox"/> Reliable (bias sensitivity) <input checked="" type="checkbox"/> Availability of information contained in existing reports or documents <input checked="" type="checkbox"/> Representative for animal health <input type="checkbox"/> Representative of the food chain <input checked="" type="checkbox"/> Clear wording <input checked="" type="checkbox"/> Sustainable			
Comments: /			
Explanatory notes to the results: /			