Technical Report

APPROVED: 26 February 2024
doi: 10.2903/sp.efsa.2024.EN-8669

Report for 2022 on the results from the monitoring of veterinary medicinal product residues and other substances in live animals and animal products

European Food Safety Authority,

Stefania Salvatore and Marta Vericat Ferrer

Abstract

The report summarises the monitoring data collected in 2022 on the presence of residues of veterinary medicinal products and certain substances in live animals and animal products in the EU Member States, Iceland and Norway. A total of 600,320 samples were reported to the European Commission. They consisted of 342,850 targeted samples and 3,892 suspect samples reported under Council Directive 96/23/EC, and of 2,772 samples collected at import and 250,806 samples collected in the framework of programmes developed under the national legislation. The majority of countries fulfilled the minimum requirements for sampling frequency laid down in Council Directive 96/23/EC and in Commission Decision 97/747/EC. Overall, the percentage of non-compliant samples in 2022 (0.18%) was comparable to the previous 13 years (0.17%-0.37%).

Key words: veterinary medicinal products, residue monitoring, Directive 96/23/EC, food safety

Requestor: European Commission

Question number: EFSA-Q-2023-00562

Correspondence: data.collection@efsa.europa.eu

Acknowledgements: EFSA wishes to thank the following EFSA staff for the support provided to this output: Luca Pasinato, Valentina Bocca, Elisa Fasanelli, Rubén Fuertes, Davide Gibin, Violetta Costanzo, Maria Pia Fabrile and the national members of the EFSA scientific Network on Chemical Monitoring data collection.

Suggested citation: EFSA (European Food Safety Authority), 2024. Report for 2022 on the results from the monitoring of veterinary medicinal product residues and other substances in live animals and animal products. EFSA supporting publication 2024:EN-8669 101 pp. doi: 10.2903/sp.efsa.2024.EN-8669

ISSN: 2397-8325

Summary

The present report summarises the monitoring data from 2022 on the presence of residues of veterinary medicinal products and certain substances in live animals and animal products in the EU Member States*[1], Iceland and Norway. For 2021 and 2022, the only United Kingdom data that were reported to EFSA were from Northern Ireland.

The presence of unauthorised substances, residues of veterinary medicinal products or chemical contaminants in food may pose a risk factor for public health. The EU legislative framework defines maximum limits permitted in food and monitoring programmes for the control of the presence of these substances in the food chain. Regulation (EU) No 37/2010 establishes maximum residue limits for residues of veterinary medicinal products in food-producing animals and animal products. Maximum residue levels for pesticides in or on food and feed of plant and animal origin are laid down in Regulation (EC) No 396/2005. Commission Regulation (EC) No 1881/2006 lays down the maximum levels for the presence of certain contaminants in animal products. Council Directive 96/23/EC lays down measures to monitor certain substances and residues thereof, mainly veterinary medicinal products, in live animals and animal products. Additionally, Commission Decision 97/747/EC lays down levels and frequencies of sampling for certain animal products.

In the framework of Article 31 of Regulation EC 178/2002, the European Commission (EC) requested the assistance of the European Food Safety Authority (EFSA) to collect data obtained by the Member States*, Iceland and Norway in accordance with Directive 96/23/EC.

In 2022, all countries, reported in the framework of the residue monitoring the results for 600,320 samples. A total of 342,850 targeted samples and 3892 suspect samples were reported under Council Directive 96/23/EC. Additionally, 250,806 samples collected in the framework of other programmes developed under the national legislation and 2772 samples checked at import, were reported. The data analysis presented in this report was focused on the targeted samples reported under Council Directive 96/23/EC. Samples collected through other sampling strategies (suspect, import or 'other') do not follow a designed monitoring plan; therefore, results on those samples were reported separately from the results on targeted samples.

The majority of countries fulfilled the requirements for sampling frequency laid down in Council Directive 96/23/EC and in Commission Decision 97/747/EC.

Overall, there were 919 (0.27%) non-compliant samples out of the 342,850 targeted samples in 2022.

For Group A, no non-compliant samples were reported for stilbenes and derivatives (A1). For antithyroid agents (A2), there were 0.2% non-compliant samples, for thiouracil (n=21) and 6-Methyl-2-thiouracil (n=2). In Group of steroids (A3), 0.31% of the samples were non-compliant; the non-compliant samples were found in bovines (0.28%), pigs (0.22%), poultry (0.40%) and

[1] *In accordance with the Agreement on the withdrawal of the United Kingdom of Great Britain and Northern Ireland from the European Union and the European Atomic Energy Community, and in particular Article 5(4) of the Windsor Framework (see Joint Declaration No 1/2023 of the Union and the United Kingdom in the Joint Committee established by the Agreement on the withdrawal of the United Kingdom of Great Britain and Northern Ireland from the European Union and the European Atomic Energy Community of 24 March 2023, OJ L 102, 17.4.2023, p.87) in conjunction with section 24 of Annex 2 to that Framework, for the purposes of this Regulation, references to Member States include the United Kingdom in respect of Northern Ireland.

sheep and goats (2.32%). In Group of resorcylic acid lactones (A4), 0.09% of the samples were non-compliant; the non-compliant samples were found in bovines (0.14%), horses (0.82%) and pigs (0.07%). For beta-agonists (A5), there were six non-compliant samples reported, three for clenbuterol and salbutamol, and two for ractopamine, all found in bovines. Prohibited substances (A6) were found in 0.02% of samples. Substances identified were chloramphenicol (n=8), semicarbazide (n=8), metronidazole (n=2), furaltadone (n=2) and nitrofurazone (n=1).

For Group B1 (antibacterials), 0.14% of the samples analysed under the Directive 96/23/EC monitoring were non-compliant. The highest frequency of non-compliant samples for antibacterials was found in honey (1.44%).

In Group B2 (other veterinary drugs), the highest proportion of non-compliant samples was found for non-steroidal anti-inflammatory drugs (NSAIDs) (B2e) (0.19%). These non-compliant samples were reported across the different species as follows; bovines (0.30%), horses (1.15%), milk (0.33%), pigs (0.05%) and sheep and goats (0.17%).

Instances of non-compliance for anthelmintics (B2a) were reported in bovines (0.04%), milk (0.06%), pigs (0.03%) and sheep and goats (0.20%).

For anticoccidials (B2b), 0.14% of the samples analysed were non-compliant and were reported across the different species as follows: eggs (0.49%), pigs (0.04%), poultry (0.12%) and rabbit meat (1.90%).

One non-compliant sample was reported for pyrethroids (B2c) in poultry (0.04%) and two non-compliant samples were reported for sedatives (B2d) in bovines (0.06%) and farmed games (11.11%). Non-compliant samples were reported for 'other pharmacologically active substances' (B2f), in bovines (0.19%), milk (0.05%), pigs (0.02%) and sheep and goats (0.12%).

In Group B3 (other substances and environmental contaminants), the 'chemical elements' (B3c) had the highest overall percentage of non-compliant samples (2.74%), with cadmium, copper, lead, total mercury and zinc being most frequently identified. Non-compliant samples were reported for organochlorine compounds (B3a) and organophosphorus compounds (B3b); 0.18% and 0.01%, respectively. For mycotoxins (B3d), non-compliant samples were reported for bovines (0.50%), horses (1.49%), milk (0.54%), pigs (0.23%) and poultry (0.06%), with those identified being zearalenone, aflatoxin M1, ochratoxin A, aflatoxin (sum of B1, B2, G1, G2), and aflatoxin B1. For dyes (B3e), non-compliant samples were reported for aquaculture (1.15%). The substances found were sum of malachite green and leucomalachite green, sum of brilliant green and leucobrilliant green and sum of crystal violet and leucocrystal violet. For 'others' (B3f), non-compliant samples were reported for aquaculture (0.21%), bovines (1.51%), wild game (20.00%), honey (1.94%), poultry (0.30%) and sheep and goats (0.48%). The substances identified were copper compounds, mercury compounds, sulphur dioxide and acetamiprid.

Overall, the percentage of non-compliant samples in 2022 (0.18%, considering any sampling strategy) was comparable to the previous 13 years (0.17%-0.37%).

The same overall pattern was observed for targeted samples in 2022 (0.27%) compared to the previous 5 years (0.24%-0.35%). Compared to the results from 2017, 2018, 2019, 2020 and 2021, in 2022 the frequency of non-compliant results was decreased for antithyroid agents (A2), while for steroids (A3) and resorcylic acid lactones (A4) the frequency of non-compliant results was higher than in 2020 and 2021, but lower compared to the previous years. The frequency of non-compliant results for beta-agonists (A5) was higher compared to all previous years and in

line with that of 2017. For prohibited substances (A6), compared to 2021 the frequency of non-compliance in 2022 was lower, although in line with that of 2020. Decreases compared to all previous years were noted for anthelmintics (B2a) while an opposite trend was found for sedatives (B2d) and 'others' (B3f). Compared to 2021, for antibacterials (B1) and 'other pharmacologically active substances' (B2f), the frequency of non-compliance was stable, while for anticoccidials (B2b), pyrethroids (B2c), organochlorine compounds (B3a), chemical elements (including metals) (B3c), mycotoxins (B3d) and dyes (B3e) the frequency of non-compliance was higher. Finally, a decrease compared to 2021 was found for non-steroidal anti-inflammatory drugs (NSAIDs) (B2e) and organophosphorus compounds (B3b).

Table of Contents

1 Introduction

1.1 Background and Terms of Reference as provided by the European Commission

1.1.1 Background

Council Directive 96/23/EC[2] requires the Member States to implement a national residue monitoring plan for specific groups of residues specified in its Annexes I and II, in accordance with the sampling strategy and sampling frequency laid down in Annexes III and IV. Member States must submit their monitoring data and resulting control measures no later than 31 March of the following year. Since 2018, this data has been collected by EFSA. Member States must also publish the outcome of the implementation of their plans.

The Commission has the obligation to make available to the public an annual report on the outcome of official controls in the Member States.

1.1.2 Terms of reference as provided by the European Commission

In the framework of Article 31 of Regulation (EC) No 178/2002, the Commission requests EFSA's assistance in the collection of the data obtained by the Member States in accordance with Directive 96/23/EC.

EFSA shall develop a data collection system allowing direct data submission by the Member States. This data collection system shall:

- collect information on all samples analysed in the framework of residue monitoring, and explore the possibility of its extension to all analyses concerning residues of veterinary medicinal products;
- allow the Member States to provide information on follow-up actions directly linked to the respective non-compliant results;
- allow differentiated access to the data for Commission services and Member States.

The data collection system should at least allow the extraction of:

- reports on the implementation of the residue monitoring plan. Each Member State shall be able to extract a report containing only their respective national data. The structure of the report shall be agreed with the Member States and Commission services;
- an annual compilation of the monitoring data of all Member States. EFSA shall annually extract such a compilation containing data submitted by the Member States for the past year. EFSA shall use the current format and level of detail as a basis for future compilations;

[2] Council Directive 96/23/EC on measures to monitor certain substances and residues thereof in live animals and animal products and repealing Directives 85/358/EEC and 86/469/EEC and Decisions 89/187/EEC and 91/664/EEC. OJ L 125, 23.5.1996, p. 10. This directive is no longer in force but the control data summarized om the present report are referring to the sampling year 2022, when this Directive was still applicable.

- a summary overview of the actions taken by the Member States as follow-up to non-compliant results. The Commission services shall be the only party that can extract such data for all Member States. The Member States shall be able to extract their own respective data. The structure of this overview shall be agreed with the Commission services.

EFSA shall present each annual compilation in the Standing Committee of the Food Chain and Animal Health two months after the last data submission by the Member States and collect comments from the Commission and the Member States. EFSA shall send the final annual compilation taking into account the comments received to the Commission services.

1.2 Additional information

The presence of unauthorised substances, residues of veterinary medicinal products or chemical contaminants in food may pose a risk factor for public health. The EU legislative framework defines maximum limits permitted in food and monitoring programmes for the control of the presence of these substances in the food chain.

Council Directive 96/23/EC on measures to monitor certain substances and residues thereof in live animals and animal products requires Member States to adopt and implement a national residue monitoring plan for the groups of residues detailed in its Annex I in accordance with the sampling rules referred to in Annex IV. The Directive lays down sampling levels and frequency for bovines, pigs, sheep and goats, equine animals, poultry and aquaculture, as well as the groups of substances to be monitored for each food commodity. Commission Decision 97/747/EC[3] lays down rules for levels and frequencies of sampling for milk, eggs, honey, rabbit meat and game.

National residue control plans should be targeted to take the following minimum criteria into account: species, gender, age, fattening system, all available background information and all evidence of misuse or abuse of substances. Additionally, suspect samples may also be taken as part of the residue controls.

The requirements for the analytical methods to be applied in the testing of official samples and the common criteria for the interpretation of analytical results are laid down in Commission Implementing Regulation (EU) 2021/808[4] of 12 August 2002 implementing Council Directive 96/23/EC.

Targeted samples are taken with the aim of detecting illegal treatment or controlling compliance with the maximum levels laid down in the relevant legislation. This means that, the national plans of each reporting country, target the groups of animals (species, gender, age) where the probability of finding residues is the highest. Conversely, the objective of random

[3] Commission Decision 97/747/EC fixing the levels and frequencies of sampling provided for by Council Directive 96/23/EC for the monitoring of certain substances and residues thereof in certain animal products. OJ L 303, 6.11.1997, p. 12–15.

[4] Commission Implementing Regulation (EU) 2021/808 of 22 March 2021 on the performance of analytical methods for residues of pharmacologically active substances used in food-producing animals and on the interpretation of results as well as on the methods to be used for sampling and repealing Decisions 2002/657/EC and 98/179/EC. OJ L 180, 21.5.2021, p. 84–109.

sampling is to collect significant data to evaluate, for example, consumer exposure to a specific substance.

Suspect samples are taken as a consequence of i) non-compliant results on samples taken in accordance with the monitoring plan, ii) possession or presence of prohibited substances at any point during manufacture, storage, distribution or sale through the food and feed production chain, or iii) suspicion or evidence of illegal treatment or non-compliance with the withdrawal period for an authorised medicinal veterinary product.

Residues of pharmacologically active substances mean active substances, excipients or degradation products and their metabolites, which remain in food.

Unauthorised substances mean substances that are not authorised as veterinary medicinal products or as a feed additive (for the exact definition, see Article 2(b) of Commission Delegated Regulation (EU) 2019/2090)[5].

Prohibited substances mean substances which are prohibited for use in food producing animals according to the European Union legislation (substances mentioned in Table 2 of the Annex to Commission Regulation (EU) No 37/2010; substances mentioned in Council Directive 96/22/EC).

Illegal treatment refers to the use of unauthorised substances or products or the use of substances or products authorised under EU legislation for purposes or under conditions other than those laid down in EU legislation or, where appropriate, in the various national legislation.

Withdrawal period represents the period necessary between the last administration of the veterinary medicinal product to animals under body conditions of use and the production of foodstuffs from such animals, in order to ensure that such foodstuffs do not contain residues in quantities harmful to public health.

Non-compliant result is a result equal to or above the decision limit for confirmation as defined in Article 5 of Commission Implementing Regulation (EU) 2021/808.

Non-compliant sample is a sample that has been analysed for the presence of one or more substances and failed to comply with the legal provisions for at least one substance. Thus, a sample can be non-compliant for one or more substances.

Maximum residue limit (MRL) is the maximum concentration of residue resulting from the use of a veterinary medicinal product which may be accepted by the Community to be legally permitted or recognised as acceptable in or on a food. For veterinary medicinal products, MRLs are established according to the procedures laid down in Regulation (EC) No 470/2009[6] of the

[5] Commission Delegated Regulation (EU) 2019/2090 of 19 June 2019 supplementing Regulation (EU) 2017/625 of the European Parliament and Council regarding cases of suspected or established non-compliance with Union rules applicable to the use or residues of pharmacologically active substances authorised in veterinary medicinal products or as feed additives or with Union rules applicable to the use or residues of prohibited or unauthorised pharmacologically active substances. OJ L 317, 9.12.2019, p. 28–37.

[6] Regulation (EC) No 470/2009 of the European Parliament and of the Council of 6 May 2009 laying down Community procedures for the establishment of residue limits of pharmacologically active substances in foodstuffs of animal origin, repealing Council Regulation (EEC) No 2377/90 and amending Directive 2001/82/EC of the European Parliament and of

European Parliament and of the Council of 6 May 2009. Pharmacologically active substances and their classification regarding maximum residue limits are set out in Commission Regulation (EU) No 37/2010[7] of 22 December 2009. In addition, Commission Directive No 2009/8/EC[8] lays down maximum levels of unavoidable carry-over of coccidiostats or histomonostats in non-target feed and Commission Regulation (EC) No 124/2009[9] lays down maximum levels for the presence of coccidiostats or histomonostats in food resulting from the unavoidable carry-over of these substances in non-target feed.

For pesticides, maximum residue levels (MRLs) are laid down in Regulation (EC) No 396/2005[10]. Some substances (e.g. carbamates, pyrethroids, organophosphorus compounds) are recognised both as veterinary medicinal products and pesticides and therefore they might have different MRLs in the corresponding legislation.

Maximum levels for contaminants are laid down in Commission Regulation (EC) No 1881/2006[11]. For contaminants where no EU maximum levels had been fixed at the time when data included in this report were collected, national tolerance levels were applied.

Reference Points for Actions (RPAs) – according to Commission Regulation (EU) 2019/1871[12], RPAs correspond to the lowest level which can analytically be achieved by the official control laboratories, designated in accordance with Article 37 of Regulation (EU) 2017/625[13] of the European Parliament and of the Council. Commission may establish RPAs for

---

the Council and Regulation (EC) No 726/2004 of the European Parliament and of the Council. OJ L 152, 16.6.2009, p. 11–22.

[7] Commission Regulation (EC) No 37/2010 of 22 December 2009 on pharmacologically active substances and their classification regarding maximum residue limits in foodstuffs of animal origin. OJ L 15, 20.1.2010, p. 1–72.

[8] Commission Directive 2009/8/EC of 10 February 2009 amending Annex I to Directive 202/32/EC of the European Parliament and of the Council as regards maximum levels of unavoidable carry-over of coccidiostats or histomonostats in non-target feed. OJ L 40, 11.2.2009, p. 19–25.

[9] Commission Regulation (EC) No 124/2009 of 10 February 2009 setting maximum levels for the presence of coccidiostats or histomonostats in food resulting from the unavoidable carry-over of these substances in non-target feed. OJ L 40, 11.2.2009, p. 7–11.

[10] Regulation (EC) 396/2005 of the European Parliament and of the Council of 23 February 2005 on maximum residue levels of pesticides in or on food and feed of plant and animal origin and amending Council Directive 91/414/EEC. OJ L 70, 16.3.2005, p. 1–16.

[11] Commission Regulation (EC) No 1881/2006 setting maximum levels for certain contaminants in foodstuffs. OJ L 364, 20.12.2006, p. 5–24.

[12] Commission Regulation (EU) 2019/1871 of 7 November 2019 on reference points for action for non-allowed pharmacologically active substances present in food of animal origin and repealing Decision 2005/34/EC. OJ L 289 8.11.2019, p. 41-46.

[13] Regulation (EU) 2017/625 of the European Parliament and of the Council of 15 March 2017 on official controls and other official activities performed to ensure the application of food and feed law, rules on animal health and welfare, plant health and plant protection products, mending Regulations (EC) No 999/2001, (EC) No 396/2005, (EC) No 1069/2009, (EC) No 1107/2009, (EU) No 1151/2012, (EU) No 652/2014, (EU) 2016/429 and (EU) 2016/2031 of the European Parliament and of the Council, Council Regulations (EC) No 1/2005 and (EC) No 1099/2009 and Council Directives 98/58/EC, 1999/74/EC, 2007/43/EC, 2008/119/EC and2008/120/EC, and repealing Regulations (EC) No 854/2004 and (EC) No 882/2004 of the European Parliament and of the Council, Council Directives 89/608/EEC, 89/662/EEC, 90/425/EEC, 91/496/EEC, 96/23/EC, 96/93/EC and 97/78/EC and Council Decision92/438/EEC (Official Controls Regulation). OJ L 95, 7.4.2017, p. 1-142.

residues of pharmacologically active substances in food of animal origin, for which no maximum residue limit has been laid down. RPAs should apply to food of animal origin imported from third countries and to food of animal origin produced in the Union.

1.3 Objectives

The present report summarises the monitoring data from 2022 submitted by the EU Member States*[14], Iceland and Norway to the EFSA. For 2021 and 2022, the only United Kingdom data that were reported to EFSA were from Northern Ireland. Data analysis was mainly focused on data submitted under Directive 96/23/EC and aimed to provide an overview on:

- production volume and number of samples collected in each EU Member State*, Iceland and Norway. These data were used to check whether the countries had fulfilled the minimum requirements on sampling frequency as stated in Directive 96/23/EC and Commission Decision 97/747/EC.
- number of samples analysed in each animal species or food commodity for substance groups and subgroups as defined in Annex I to Directive 96/23/EC (see Appendix E);
- summary of non-compliant results per animal species or food commodity and substance group;
- identification of main substances contributing to non-compliant results within a group;
- overall distribution of non-compliant samples in the substance groups.

2 Data and Methodologies

Data used in this report have been collected from EU Member States*, Iceland and Norway, under Directive 96/23/EC. The samples included in the monitoring were taken from the production process of animals and primary products of animal origin (live animals, their excrements, body fluids and tissues, animal products, animal feed and drinking water). Each country assigns the coordination of the national monitoring plan to a central public department or body which is also in charge of the data collection at national level (Article 4 of Directive 96/23/EC) and reporting the results to EFSA.

The samples taken in 2022 were reported using Standard Sample Description Version 2.0 format (EFSA 2013). This standard can be used to report the results of laboratory tests performed on samples of food, feed, animals and plants. Specific requirements for reporting the results of laboratory tests for veterinary medicinal products are described in (EFSA 2022b) and (EFSA 2022a). The standard allows results for all marker residues analysed for in a sample of animals or animal products to be reported. The following information is recorded:

[14] *In accordance with the Agreement on the withdrawal of the United Kingdom of Great Britain and Northern Ireland from the European Union and the European Atomic Energy Community, and in particular Article 5(4) of the Windsor Framework (see Joint Declaration No 1/2023 of the Union and the United Kingdom in the Joint Committee established by the Agreement on the withdrawal of the United Kingdom of Great Britain and Northern Ireland from the European Union and the European Atomic Energy Community of 24 March 2023, OJ L 102, 17.4.2023, p.87) in conjunction with section 24 of Annex 2 to that Framework, for the purposes of this Regulation, references to Member States include the United Kingdom in respect of Northern Ireland.

Sampling event: one or more tissues taken from an animal at a specific location and at a specific point in time (e.g. kidney and muscle samples taken from a single pig carcass at slaughter). The sampling event requires the sampling point and sampling strategy to be recorded. The sampling strategy can be targeted, suspect, import or other. In this report, any reference to 'samples' should be understood as 'sample events'.

Sample taken: The sample taken is described using EFSA FoodEx2 classification (e.g. beef liver or chicken eggs) (EFSA 2015). These samples are then categorised as bovines, pigs, sheep & goats, horses, poultry, rabbit, farmed game, wild game, aquaculture, milk, eggs and honey. Samples of game birds such as quail, partridge and pheasant are classified in the poultry category, unless they are reported as 'wild or gathered or hunted'; in the latter case, the samples have been classified in the wild game category. Due to this approach, which differ from the classification methodology followed by some countries, discrepancies might be noted between the National Plans submitted to the EC and the results included in this report.

The country where the sample was taken, the date of sampling and the country of origin are also recorded.

Analytical method: Both screening and confirmatory tests can be reported. CCβ – i.e. the detection capability - is reported for screening tests and CCα the decision limit is reported for confirmatory tests.

Marker residue: The results for all residues, both above and below the limits of detection and covered by the scope of a laboratory method, are reported. An analysis hierarchy groups the residues according to the substance groups described in Annex I of Directive 96/23/EC.

Non-compliant results: Each result is classified as compliant or non-compliant by the reporting country. Additional information on investigation outcomes in the case of non-compliant results is also recorded, where available. In cases where the control results have been reported for the 'Multicomponent/Sum' residue definition (e.g. for the marker residue 'Sum of enrofloxacin and ciprofloxacin') in addition to the single components' results (e.g.in cases where the results were also reported for enrofloxacin and/or for ciprofloxacin), the non-compliant results at sample event level have been totalled considering only the sum-results to avoid double-counting.

The data was submitted in XML format to the EFSA data collection framework. Automatic data quality checks were performed as described in (EFSA 2022b). Each reporting country was provided with the opportunity to validate their data submission by examining and confirming the content of an ad-hoc National report, which summarises the data that had been submitted.

Production volumes: The number of animals for bovines, pigs, sheep and goats, and horses, and in tonnes for poultry, rabbit, farmed game, wild game, aquaculture, milk, eggs and honey were obtained from the Directorate General for Health and Food Safety (DG SANTE) based on data submitted by MS. This information was used to verify whether the minimum sampling frequencies had been fulfilled.

The reported data is aggregated counting the number of distinct sampling events (**samples analysed**), the number of sampling events where one or more results are non-compliant (**non-compliant samples**) and the number of non-compliant results (**non-compliant results**) by reporting country, animal category/product, marker residue and substance group. Since more than one result can be non-compliant in a sample the sum of non-compliant results might be higher than the sum of non-compliant samples. The percent non-compliant samples were

calculated with non-compliant samples as the nominator and samples analysed as the denominator. Using the current approach, the percent non-compliant samples may in some cases be higher, as in the previous approach samples which had not been tested for a specific residue may have been included in the denominator. The percentage of non-compliance is estimated for each substance group and within each substance group. Also, binomial 95% confidence intervals with Wilson approximation are produced in order to account for the uncertainty around the point estimates, considering the number of samples that were tested for each of the substances and animal/product combinations, reflecting potential ranges in which the non-compliance level could be (see Figures 1 to 4). The resulting confidence intervals could be used to highlight the potential upper bounds for non-compliance observed.

The data used in the preparation of this report were extracted from the EFSA database on 3rd December 2022 and are reflective of the database during this time-period.

The data analysis was performed using Python™ software.

3 Results

3.1 Overall assessment

The aim of this assessment is to give an overview of the total number of samples analysed for the individual substance groups and to summarise the non-compliant samples for the major substance overall for all reporting countries. Further details on the non-compliant samples found in each animal/product category are presented in Sections 3.2 to 3.13.

In 2022, 600,320 samples were reported by all countries, for analysis of substances and residues covered by Directive 96/23/EC. Out of this, 342,850 were targeted samples collected in conformity with the specifications of the National Residue Control Plans (NRCPs) for 2022. Additionally, 3892 suspect samples were reported as follow-up of non-compliant targeted samples or suspicion of illegal treatment or non-compliance with the withdrawal period. Apart from the data submitted in accordance to NRCPs, reporting countries submitted in total 250,806 samples collected in the framework of other programmes developed under the national legislation. A relatively limited number of data were reported for samples checked at import (n = 2772). This is because the control of samples at import is more linked to the third country monitoring than to the residue monitoring in EU; thus, reporting countries report those results to the EC (using other tools e.g. the Trade Control and Expert System (TRACES) and the Rapid Alert System for Food and Feed (RASFF)).

Of the total targeted samples, 54.85% were analysed for substances having an anabolic effect and unauthorised substances (group A) and 66.73% for veterinary drugs and contaminants (group B)[15]. Of the 342,850 targeted samples, 919 were non-compliant (0.18%) (1368 non-compliant results at residue definition level). The percentage of non-compliant samples calculated from the total number of samples analysed for substances in that category was: 0.1% for substances having an anabolic effect and unauthorised substances (A), 0.14% for antibacterials (B1), 0.13% for the 'other veterinary drugs' (B2) and 0.89% for 'other substances and environmental contaminants' (B3). A wider confidence interval-that indicates higher

[15] Some samples were analysed for substances in both groups therefore the sum of percentages is higher than 100.

uncertainty on the estimated proportion was observed for group B3 residue results, in particular for dyes (B3e) followed by chemical elements (including metals) (B3c). (Table 1, Figure 1).

Table 1: Number of targeted samples analysed, non-compliant samples and non-compliant results in all species and product categories

Substance Group[(a)]	Samples analysed[(b)]	% Samples analysed	Non-compliant samples[(c)]	% Non-compliant samples[(d)]	Non-compliant results[(e)]
A	188,060	54.85	193	0.10	230
A1	20,219	5.90	0	-	0
A2	10,245	2.99	21	0.20	23
A3	41,416	12.08	127	0.31	143
A4	19,434	5.67	18	0.09	35
A5	33,129	9.66	6	0.02	8
A6	96,766	28.22	21	0.02	21
B	228,792	66.73	742	0.32	1138
B1	98,851	28.83	143	0.14	187
B2	114,268	33.33	143	0.13	164
B2a	31,743	9.26	13	0.04	14
B2b	37,639	10.98	51	0.14	67
B2c	10,901	3.18	1	0.01	1
B2d	8290	2.42	2	0.02	2
B2e	27,205	7.93	51	0.19	55
B2f	29,145	8.50	25	0.09	25
B3	51,217	14.94	456	0.89	787
B3a	21,302	6.21	39	0.18	285
B3b	12,904	3.76	1	0.01	1
B3c	12,649	3.69	346	2.74	398
B3d	9383	2.74	30	0.32	30
B3e	1736	0.51	20	1.15	20
B3f	6436	1.88	37	0.57	53
Total	342,850	100.00	919	0.27	1368

(a): as detailed in Appendix E;

(b): number of samples analysed for one or more substances of the respective group;

(c): number of non-compliant samples for one or more substances in the respective group;

Substance Group[a]	Samples analysed[b]	% Samples analysed	Non-compliant samples[c]	% Non-compliant samples[d]	Non-compliant results[e]

(d): '-' indicates that all samples were compliant;

(e): number of non-compliant results; one sample can be non-compliant for more substances therefore the number of non-compliant results can be higher than the number of non-compliant samples of the same group.

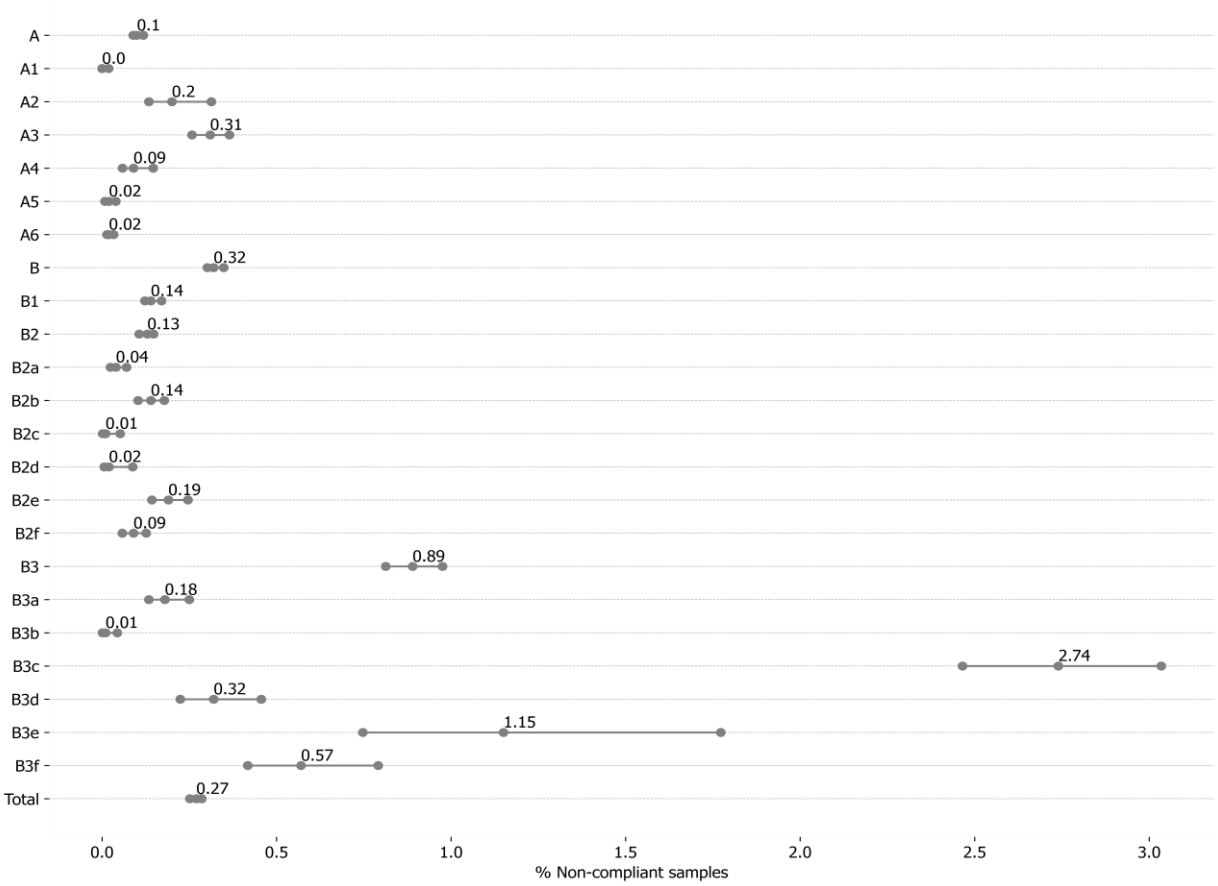


Figure 1: Percentage of non-compliant targeted samples (with confidence intervals) in each substance group

3.1.1 Hormones

Directive 96/22/EC[16] prohibits the use of hormones in food producing animals except for well-defined therapeutic and zootechnical purposes and under strict veterinary control.

This group includes also synthetic, hormonally active substances such as stilbenes and their derivatives (A1), antithyroid agents (A2), steroids (A3) and resorcylic acid lactones (A4).

Of all the targeted samples analysed for the category 'hormones' in all animal/product categories (91,314 samples) there were 166 non-compliant samples (0.18%) (201 non-compliant results).

[16] Council Directive 96/22/EC of 29 April 1996 concerning the prohibition on the use in stockfarming of certain substances having a hormonal or thyrostatic action and of ß-agonists, and repealing Directives 81/602/EEC, 88/146/EEC and 88/299/EEC. OJ L 125, 23.5.1996, p. 3–9.

The number of targeted samples analysed for stilbenes and derivatives (A1) in all animal/product categories together, was 20,219 and no non-compliant samples were reported for this group.

Antithyroid agents (A2) were analysed in 10,245 targeted samples of which 21 samples were non-compliant (0.2%) (23 non-compliant results). All non-compliant samples in Group A2 were for thiouracil and 6-methyl-2-thiouracil and were found in bovines (n=23; 0.56%). In 2020 all the A2 non-conform results were also reported for the same residue, but the non-compliance rate observed was higher than in 2021 (0.34%).

For steroids (A3), of the 41,416 samples analysed in all animal species and product categories, 127 samples were non-compliant (0.31%) (143 non-compliant results). The non-compliant samples were found in bovines (n=62; 0.28%), pigs (n = 25; 0.22%), poultry (n=24; 0.40%) and sheep and goats (n=16; 2.32%).

For resorcylic acid lactones (A4), of 19,434 samples analysed in all animal species and product categories, 18 were found non-compliant (0.09%) (35 non-compliant results). The non-compliant samples were found for bovines (n=13; 0.14%), horses (n=1; 0.82%) and pigs (n=4; 0.07%).

3.1.2 Beta-agonists

Directive 96/22/EC prohibits the use of beta-agonists in food producing animals except for well-defined therapeutic purposes and under strict veterinary control. In 2022, 33,129 targeted samples were analysed for beta-agonists, with 6 non-compliant samples three for salbutamol and clenbuterol, and two for ractopamine in bovines.

3.1.3 Prohibited substances

This group (A6) includes substances listed in Commission Regulation (EU) No 37/2010 under prohibited substances for which MRLs cannot be established. These substances are not allowed to be administered to food-producing animals. Examples of substances belonging to this group are chloramphenicol, nitrofurans and nitroimidazoles.

In the framework of the 2022 residue monitoring, 96,766 targeted samples were analysed for prohibited substances and 21 samples (0.02%) were non-compliant (21 non-compliant results). Altogether, there were 8 non-compliant results for chloramphenicol and semicarbazide, 2 for furaltadone and metronidazole, and 1 for nitrofurazone (Table 2).

The distribution of the non-compliant results, by individual substance and country, are presented in Appendix A.

Table 2: Overview on the non-compliant results for prohibited substances (A6)

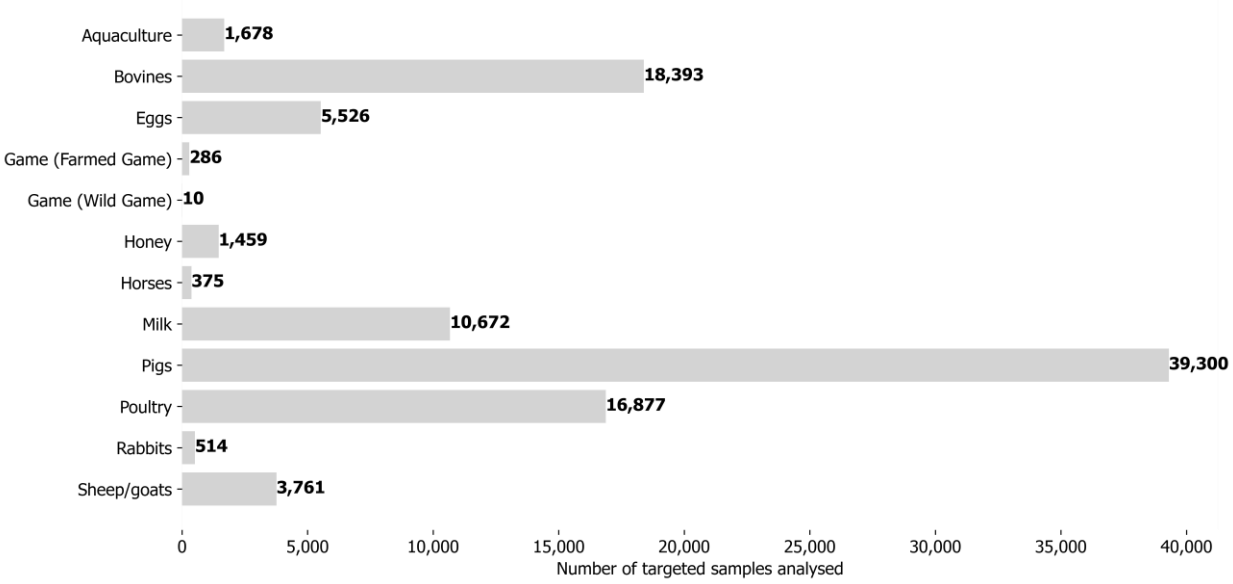
Residue Definition	Species/Product	Country reporting non-compliant results at residue definition level	Number of non-compliant results
Chloramphenicol	Pigs	Czechia	2
Chloramphenicol	Pigs	Latvia	1
Chloramphenicol	Pigs	Netherlands	1
Chloramphenicol	Pigs	Poland	1

Residue Definition	Species/Product	Country reporting non-compliant results at residue definition level	Number of non-compliant results
Chloramphenicol	Poultry	France	2
Chloramphenicol	Rabbits	Latvia	1
Furaltadone	Poultry	Portugal	2
Metronidazole	Poultry	Germany	1
Metronidazole	Poultry	Poland	1
Nitrofurazone	Bovines	Poland	1
SEM (semicarbazide)	Bovines	Ireland	6
SEM (semicarbazide)	Milk	Croatia	2

3.1.4 Antibacterials

The group of antibacterials (B1) includes antibiotics (e.g. beta-lactams, tetracyclines, macrolides, aminoglycosides) but also sulphonamides and quinolones. The total number of analyses carried out in 2022 for antimicrobials in targeted samples was 98,851 of which 143 (0.14%) were non-compliant (187 non-compliant results) (Table 1). The highest frequency of non-compliant samples for antibacterials was observed in honey (1.44%) (Figure 2).

More details on the number of samples analysed and the non-compliant samples found in each category are given in Sections 3.2 to 3.13 and in Appendix A.



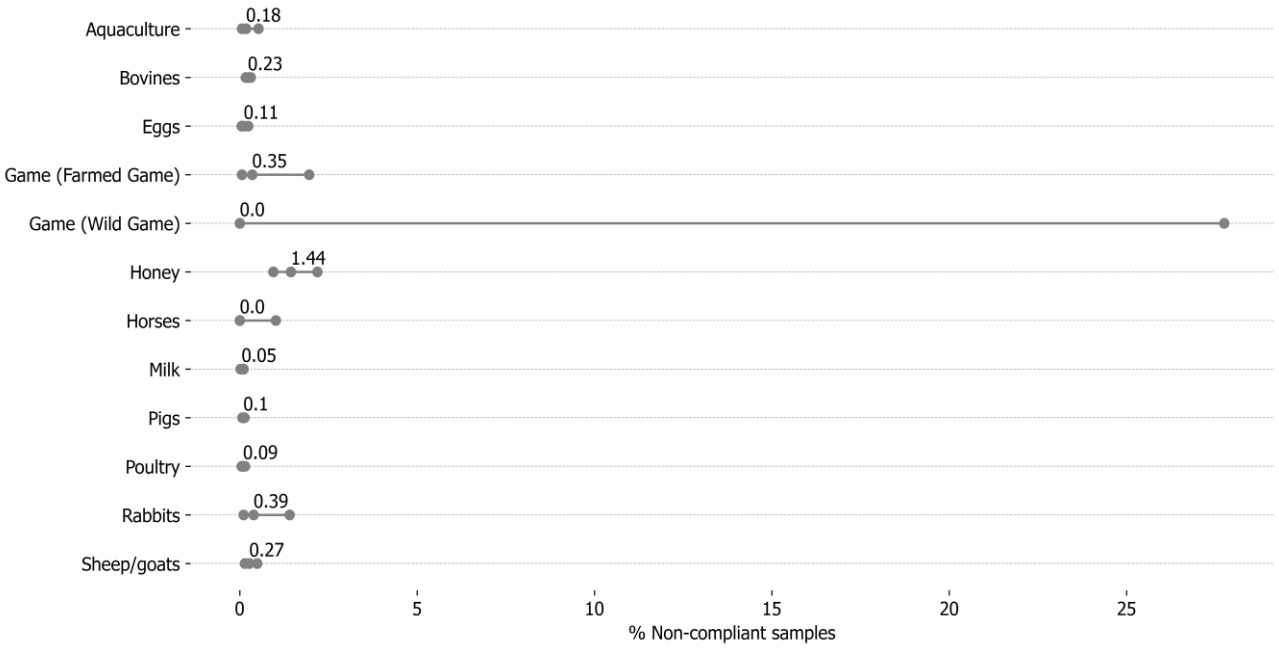


Figure 2: Number of targeted samples analysed and percentage of non-compliant samples (with confidence intervals) for antibacterials (B1) in animal/product categories

3.1.5 Other veterinary drugs

The group 'other veterinary drugs' (B2) includes a variety of veterinary medicinal products classified according to their pharmacological action in:

- anthelmintics (B2a);
- anticoccidials (B2b);
- carbamates and pyrethroids (B2c);
- sedatives (B2d);
- non-steroidal anti-inflammatory drugs (NSAIDs) (B2e), and
- other pharmacologically active substances (B2f).

In the 2022 monitoring, 114,268 targeted samples were analysed for substances in Group B2 and 143 samples (0.13%) were non-compliant. The total number of targeted samples analysed for each subgroup in Group B2, and the percentage of non-compliant samples is presented in Figure 3. It is important to note that the frequency of analyses for substances in the B2 subgroups follows a different pattern in each species, depending on their animal specific therapeutic application. An overview of the number of samples analysed and the percentage of non-compliant samples for the B2 subgroups in the specific animal/product category is presented in Table 3.

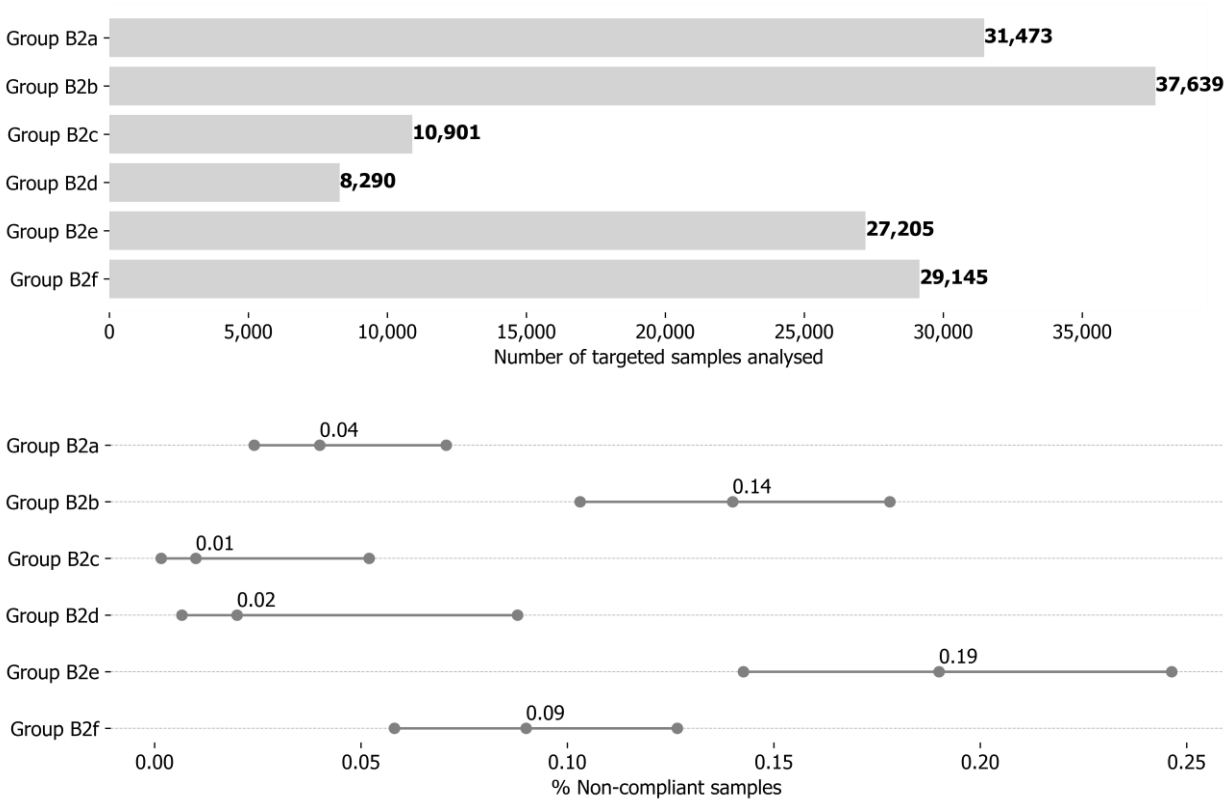


Figure 3: Number of targeted samples analysed within Group 'other veterinary drugs' (B2) and the percentage of non-compliant samples (with confidence intervals)

Table 3: Number of targeted samples analysed for B2 subgroups in different animal categories and the frequency of non-compliant samples (percentage from the total number of samples analysed in each animal category)

Product groups	B2a % NC	B2a Samples	B2b % NC	B2b Samples	B2c % NC	B2c Samples	B2d % NC	B2d Samples	B2e % NC	B2e Samples	B2f % NC	B2f Samples
Aquaculture	-	837	-	326	-	474	-	52	-	15	-	411
Bovines	0.04	5025	-	4037	-	1814	0.06	1638	0.30	6889	0.19	10,948
Eggs	-	1729	0.49	5682	-	926	-	48	-	124	-	1232
Game (Farmed Game)	-	263	-	134	-	150	11.11	9	-	114	-	221
Game (Wild Game)	-	37	-	1	-	29	-	1	-	3	-	1
Honey	-	372	-	106	-	946	-	0	-	14	-	792
Horses	-	147	-	104	-	102	-	107	1.15	349	-	185
Milk	0.06	6831	-	2697	-	808	-	82	0.33	6076	0.05	1944
Pigs	0.03	10,362	0.04	11,140	-	2563	-	5972	0.05	10,441	0.02	9696
Poultry	-	3770	0.12	12,527	0.04	2442	-	87	-	2535	-	2831

Product groups	B2a % NC	B2a Samples	B2b % NC	B2b Samples	B2c % NC	B2c Samples	B2d % NC	B2d Samples	B2e % NC	B2e Samples	B2f % NC	B2f Samples
Rabbits	-	110	1.90	210	-	86	-	1	-	70	-	58
Sheep/goats	0.20	1990	-	675	-	561	-	293	0.17	575	0.12	826

%NC: Percentage of non-compliant samples.

'-': indicates that all samples were compliant.

Regarding the number of samples analysed in each B2 subgroup, the highest proportion of non-compliant samples (0.19%), with the highest uncertainty, was found for non-steroidal anti-inflammatory drugs (B2e), non-compliant samples were reported in bovines (0.30%), horses (1.15%), milk (0.33%), pigs (0.05%) and poultry (0.17%).

For anthelmintics (B2a), non-compliant samples were reported in bovines (0.04%), milk (0.06%), pigs (0.03%) and sheep and goats (0.20%).

Non-compliant samples for anticoccidials (B2b) were reported in eggs (0.49%), pigs (0.04%), poultry (0.12%) and rabbit meat (1.90%).

One non-compliant sample was reported for pyrethroids (B2c) in Poultry (0.04%) and two non-compliant samples were reported for sedatives (B2d) in bovines (0.06%) and farmed game (11.11%).

For 'other pharmacologically active substances' (B2f), non-compliant samples were observed for bovines (0.19%), milk (0.05%), pigs (0.02%) and sheep and goats (0.12%): 25 non-compliant results were reported by eight countries and the substances identified were dexamethasone, 17β-boldenone glucuronide and prednisolone (Table 4).

Table 4: Overview on other pharmacologically active substances non-compliant results (B2f)

Residue Definition	Species/Product	Country reporting non-compliant results at residue definition level	Number of non-compliant results
17β-Boldenone Glucuronide	Pigs	Netherlands	2
Dexamethasone	Bovines	France	3
Dexamethasone	Bovines	Germany	10
Dexamethasone	Bovines	Italy	3
Dexamethasone	Bovines	Malta	1
Dexamethasone	Bovines	Northern Ireland	2
Dexamethasone	Bovines	Poland	1
Dexamethasone	Milk	Croatia	1
Dexamethasone	Sheep/goats	Netherlands	1
Prednisolone	Bovines	Germany	1

3.1.6 Other substances and environmental contaminants

The group 'other substances and environmental contaminants' (B3) includes the following subcategories:

- organochlorine compounds including PCBs (B3a);
- organophosphorus compounds (B3b);
- chemical elements (B3c);
- mycotoxins (B3d);
- dyes (B3e), and
- others (B3f).

In the 2022, 51,217 samples were analysed for substances in group B3 of which 456 samples were non-compliant (0.89%) (787 non-compliant results). The total number of targeted samples analysed for each subgroup in group B3 and the percentage of non-compliant samples is presented in Figure 4. Similar to group B2, the frequency of analyses for certain B3 subgroups is highly variable with the targeted animal/product category. While chemical contaminants (B3c) are analysed in all animal/product categories, dyes (B3e) are analysed only in aquaculture products. An overview of the number of samples analysed and the percentage of non-compliant samples for the B3 subgroups in the specific animal group and animal product category is presented in Table 5.

The highest percentage of non-compliant samples was found for almost all species in the subgroup B3c 'chemical elements' (2.74%). Similar to previous years, cadmium, copper, lead, total mercury and zinc being most frequently identified as responsible for non-compliance. Copper compounds are also the most frequently quantified pesticides in food products (EFSA 2022c).

Instances of non-compliance for organochlorine compounds (B3a) and organophosphorus compounds (B3b) were 0.18% and 0.01%, respectively. The occurrence of organochlorine compounds in products of animal origin arises mainly from these persistent residues in the environment (e.g. in soil) that are e.g. taken-up by vegetables crops fed to animals. To be noted that environmental organochlorinated contaminants due past uses as pesticides (e.g. DDT) constituted the main findings in animal products also in the context of pesticide monitoring activities carried out in Europe in 2019 and previous years in the frame of the pesticide residues Regulation (EC) 396/2005 (EFSA 2022c). Organophosphorus compounds are also used as plant protection products and their residues in animals/products of animal origin may arise from plant-based feed.

There were non-compliant samples reported in subgroup B3d mycotoxins (n = 30; 0.32%), for bovines (0.50%), horses (1.49%), milk (0.54%), pigs (0.23%) and poultry (0.06%). Those identified being zearalenone, aflatoxin M1, ochratoxin A, aflatoxin (sum of B1, B2, G1, G2), and aflatoxin B1.

Dyes (B3e) were reported in aquaculture (20 non-compliant samples; 1.15%). Substances found were sum of malachite green and leucomalachite green, sum of brilliant green and leucobrilliant green and sum of crystal violet and leucocrystal violet. The percentage of non-compliant samples was triplicated compared to the previous year.

There were non-compliant samples reported in subgroup B3f 'others' (n = 37; 0.57%), aquaculture (0.21%), bovines (1.51%), wild game (20.00%), honey (1.94%), poultry (0.30%) and sheep and goats (0.48%). Those identified being copper compounds, mercury compounds, sulphur dioxide and acetamiprid.

The highest uncertainty of the estimated proportions of non-compliant samples were observed for chemical elements (B3c) followed by dyes (B3e).

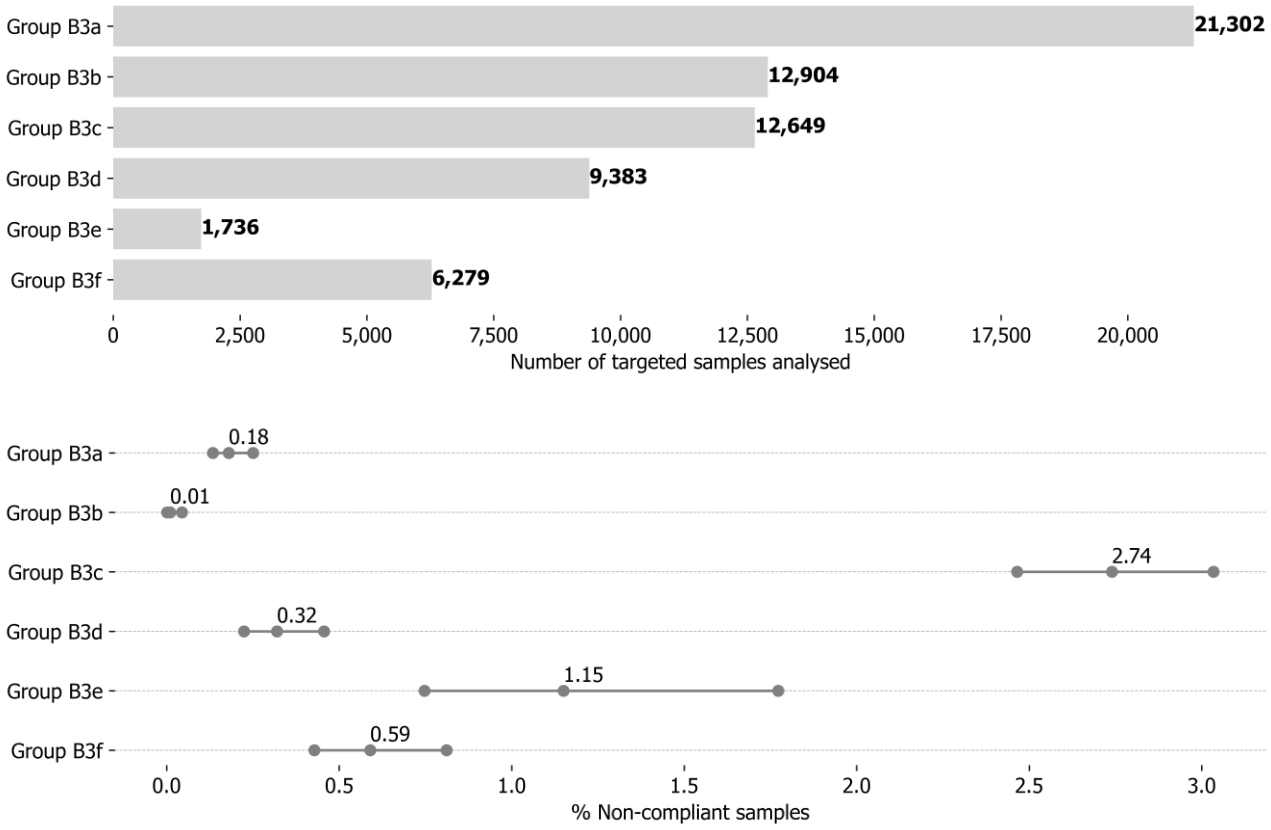


Figure 4: Number of targeted samples analysed within Group 'other substances and environmental contaminants' (B3) and the percentage of non-compliant samples (with confidence intervals)

Table 5: Number of targeted samples analysed for B3 subgroups in different animal and product categories and the frequency of non-compliant samples (percentage from the total number of samples analysed in each animal/product category)

Group	B3a % NC	B3a Samples	B3b % NC	B3b Samples	B3c % NC	B3c Samples	B3d % NC	B3d Samples	B3e % NC	B3e Samples	B3f % NC	B3f Samples
Aquaculture	0.88	1020	-	438	0.15	674	-	393	1.15	1736	0.21	974
Bovines	0.06	4732	-	2371	4.74	2553	0.50	2382	-	0	1.51	662
Eggs	0.07	1416	-	1174	-	110	-	4	-	0	-	1229
Game (Farmed Game)	0.50	200	-	183	5.28	341	-	15	-	0	-	103
Game (Wild Game)	7.14	196	-	27	6.17	1750	-	0	-	0	20.00	30
Honey	-	813	0.12	824	2.99	468	-	5	-	0	1.94	773
Horses	-	129	-	73	4.41	363	1.49	67	-	0	-	34
Milk	0.44	1370	-	2275	-	647	0.54	1670	-	0	-	360
Pigs	-	6286	-	3129	0.69	3638	0.23	3039	-	0	-	860
Poultry	0.08	3946	-	1672	1.05	1531	0.06	1544	-	0	0.30	1010
Rabbits	-	79	-	47	1.61	62	-	20	-	0	-	36
Sheep/goats	0.18	1115	-	691	5.08	512	-	244	-	0	0.48	208

%NC: Percentage of non-compliant samples.

More details on the number of samples analysed and non-compliant samples in each category are given in the Sections 3.2 to 3.13 and in Appendix A.

3.1.7 Multi-year comparison

As this is the sixth year that the monitoring data were reported to EFSA using the SSD (Version 2.0) format (see Section on Data and Methodologies), comparisons have been performed only between the results from 2017, 2018, 2019, 2020, 2021 and 2022. Detailed comparisons with those from earlier years have not been performed due to differences in the reporting and calculation methods. It is important to note that this analysis is based on data that were partially aggregated. In addition, the number of samples analysed for each substance and animal/product category was not necessarily the same over the 6-year period. Furthermore, this is the fourth year that the results data from Iceland and Norway have been included in the annual report. Moreover, for 2021 and 2022, the only United Kingdom data that were reported to EFSA were from Northern Ireland[17]. Therefore, this analysis should be regarded as having a certain degree of uncertainty when it comes to results comparability over the time.

[17] *In accordance with the Agreement on the withdrawal of the United Kingdom of Great Britain and Northern Ireland from the European Union and the European Atomic Energy Community, and in particular Article 5(4) of the Windsor Framework (see Joint Declaration No 1/2023 of the Union and the United Kingdom in the Joint Committee established

The purpose of this exercise was to check whether major variations of the proportion of non-compliant samples occurred at substance group level overall. When such variations are noted, a more in-depth analysis of the monitoring plans per species, country and pattern of substances analysed has to be carried out in order to identify the trigger for the differences observed and in consequence to take corrective measures.

Overall, the percentage of non-compliant samples in 2022 (0.18%) was comparable to the previous 13 years (0.17%-0.37%). A decrease was observed for the number of reported samples, 600,320 in 2022 compared to 621,205 in 2021.

For targeted samples in 2022 the percentage of non-compliant (0.27%) was also comparable to the previous 5 years (0.24%-0.35%). Compared to the results from 2017, 2018, 2019, 2020 and 2021, in 2022 the frequency of non-compliant results was decreased for antithyroid agents (A2), while for steroids (A3) and resorcylic acid lactones (A4) the frequency of non-compliant results was higher than in 2020 and 2021, but lower compared to the previous years. The frequency of non-compliant results for beta-agonists (A5) was higher compared to all previous years and in line with that of 2017. For prohibited substances (A6), compared to 2021 the frequency of non-compliance in 2022 was lower, although in line with that of 2020. Decreases compared to all previous years were noted for anthelmintics (B2a) while an opposite trend was found for sedatives (B2d) and 'others' (B3f). Compared to 2021, for antibacterials (B1) and 'other pharmacologically active substances' (B2f), the frequency of non-compliance was stable, while for anticoccidials (B2b), pyrethroids (B2c), organochlorine compounds (B3a), chemical elements (including metals) (B3c), mycotoxins (B3d) and dyes (B3e) the frequency of non-compliance was higher. Finally, a decrease compared to 2021 was found for non-steroidal anti-inflammatory drugs (NSAIDs) (B2e) and organophosphorus compounds (B3b). (see Figure 5).

by the Agreement on the withdrawal of the United Kingdom of Great Britain and Northern Ireland from the European Union and the European Atomic Energy Community of 24 March 2023, OJ L 102, 17.4.2023, p.87) in conjunction with section 24 of Annex 2 to that Framework, for the purposes of this Regulation, references to Member States include the United Kingdom in respect of Northern Ireland.

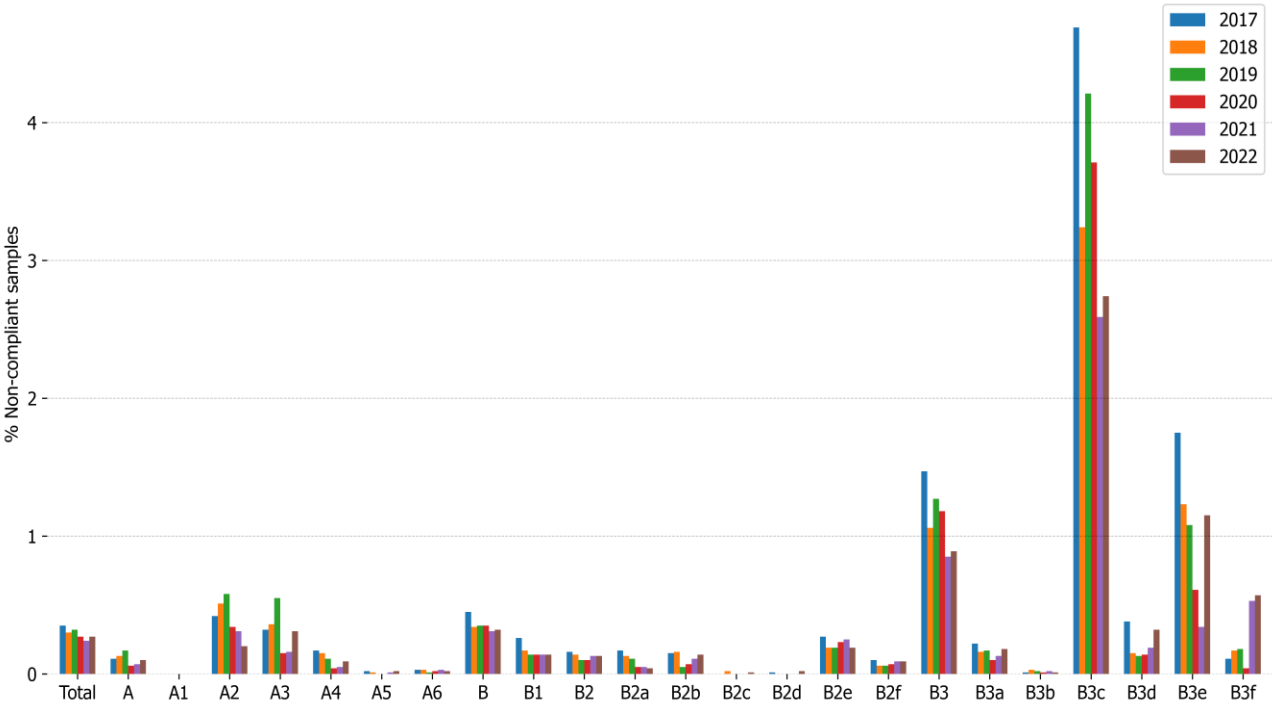


Figure 5: Percentage of non-compliant samples reported in relation to the total number of targeted samples analysed for the respective group in 2017 - 2022 (substance groups are detailed in Appendix E)

Year	Total	A	A1	A2	A3	A4	A5	A6	B	B1	B2	B2a	B2b	B2c	B2d	B2e	B2f	B3	B3a	B3b	B3c	B3d	B3e	B3f
2017	0.35	0.11	0	0.42	0.32	0.17	0.02	0.03	0.45	0.26	0.16	0.17	0.15	0.00	0.01	0.27	0.10	1.47	0.22	0.01	4.69	0.38	1.75	0.11
2018	0.30	0.13	0	0.51	0.36	0.15	0.01	0.03	0.34	0.17	0.14	0.13	0.16	0.02	0.00	0.19	0.06	1.06	0.16	0.03	3.24	0.15	1.23	0.17
2019	0.32	0.17	0	0.58	0.55	0.11	0.00	0.01	0.35	0.14	0.10	0.11	0.05	0.00	0.00	0.19	0.06	1.27	0.17	0.02	4.21	0.13	1.08	0.18
2020	0.27	0.06	0	0.34	0.15	0.04	0.00	0.02	0.35	0.14	0.10	0.05	0.07	0.00	0.00	0.23	0.07	1.18	0.10	0.01	3.71	0.14	0.61	0.04
2021	0.24	0.07	0	0.31	0.16	0.05	0.01	0.03	0.31	0.14	0.13	0.05	0.11	0.00	0.00	0.25	0.09	0.85	0.13	0.02	2.59	0.19	0.34	0.53
2022	0.27	0.10	0	0.20	0.31	0.09	0.02	0.02	0.32	0.14	0.13	0.04	0.14	0.01	0.02	0.19	0.09	0.89	0.18	0.01	2.74	0.32	1.15	0.57

3.2 Bovines

Council Directive 96/23/EC requires that the minimum number of bovine animals to be controlled each year for all kinds of residues and substances is 0.4% of the bovine animals slaughtered the previous year. Overall, the minimum requirements for the number of samples were fulfilled in 2022 (Table 6).

Table 6: Production of bovines and number of targeted samples over 2007–2022

Year	Production (animals)	Targeted samples	% Animals tested[(a)]	Minimum 96/23/EC
2007 (EU 27)	27,087,367	129,201	0.47	

Year	Production (animals)	Targeted samples	% Animals tested[a]	Minimum 96/23/EC
2008 (EU 27)	26,898,702	122,648	0.48	0.4
2009 (EU 27)	26,677,946	127,897	0.48	
2010 (EU 27)	26,267,917	128,130	0.48	
2011 (EU 27)	26,566,593	126,540	0.48	
2012 (EU 27)	25,759,645	130,554	0.49	
2013 (EU 28)	25,481,237	126,307	0.49	
2014 (EU 28)	25,315,582	125,552	0.49	
2015 (EU 28)	25,463,018	127,187	0.50	
2016 (MS 27)[b]	21,414,980	109,881	0.53	
2016 (EU 28)	26,099,292			
2017 (EU 28)	26,394,612	102,647	0.39	
2018 (EU 28)	26,688,499	100,784	0.38	
2018 (EU 27, IS, NO)[c]	26,814,009			
2019 (EU 27, IS, NO)[c]	26,913,406	106,651	0.40	
2020 (EU 27, IS, NO)[d]	24,118,545	94,421	0.39	
2021 (EU 27, IS, NO, XI)[e]	24,084,091	97,702	0.41	
2022 (EU 27, IS, NO, XI)[e]	23,824,213	94,355	0.40	

(a): in relation to the production of the previous year;

(b): data from France were not available for inclusion in the 2016 results report;

(c): data from Malta were not available for inclusion in the 2019 results report; IS: Iceland; NO: Norway;

(d): data from the United Kingdom were not included in the 2020 results report, because the United Kingdom was an EU MS, but it became a third country on 1 February 2020. IS: Iceland; NO: Norway

(e): data from the United Kingdom (Northern Ireland) are taken into account for 2021 and 2022. In accordance with the Agreement on the withdrawal of the United Kingdom of Great Britain and Northern Ireland from the European Union and the European Atomic Energy Community, and in particular Article 5(4) of the Windsor Framework in conjunction with section 24 of Annex 2 to that Framework. IS: Iceland; NO: Norway; XI: UK (Northern Ireland).

Table 7: Production volume and number of targeted samples collected in bovines

Country	Production data (animals)[a]	Number of samples	% Animals tested
Austria	627,273	3683	0.59
Belgium	785,546	3022	0.38
Bulgaria	28,915	119	0.41
Croatia	169,763	732	0.43
Cyprus	19,825	132	0.67
Czechia	252,583	1394	0.55
Denmark	450,187	1824	0.41
Estonia	35,278	173	0.49
Finland	261,237	1153	0.44
France	4,507,818	15,945	0.35
Germany	3,267,892	13,288	0.41

Country	Production data (animals)[a]	Number of samples	% Animals tested
Greece	144,476	402	0.28
Hungary	106,764	269	0.25
Iceland	22,949	96	0.42
Ireland	1,807,019	6867	0.38
Italy	2,733,899	11,348	0.42
Latvia	67,780	263	0.39
Lithuania	151,515	681	0.45
Luxembourg	28,602	123	0.43
Malta	3808	157	4.12
Netherlands	2,026,000	7361	0.36
Norway	295,681	1463	0.49
Poland	1,960,625	6749	0.34
Portugal	421,893	1227	0.29
Romania	195,871	815	0.42
Slovakia	26,198	368	1.40
Slovenia	123,961	519	0.42
Spain	2,422,405	10,105	0.42
Sweden	434,450	1585	0.36
United Kingdom (Northern Ireland)	444,000	2492	0.56
Total	**23,824,213**	**94,355**	**0.40**

(a): The production data, taken from the 2022 Residue Control Plan, may pertain to the years 2020, 2021 or 2022;

The distribution of samples analysed non-compliant samples and non-compliant results in bovines are presented in Table 8. Of the 94,355 samples analysed in this category, 330 (0.35%) were non-compliant (389 non-compliant results). The non-compliant samples were reported by 21 countries.

Table 8: Number of samples analysed, non-compliant samples and non-compliant results in bovines

Substance Group[a]	Samples analysed[b]	% Samples analysed	Non-compliant samples[c]	% Non-compliant samples[d]	Non-compliant results[e]
A	62,842	66.60	107	0.17	133
A1	9742	10.32	0	0.00	0
A2	5309	5.63	19	0.36	21
A3	22,382	23.72	62	0.28	70
A4	9499	10.07	13	0.14	27
A5	17,143	18.17	6	0.03	8
A6	18,644	19.76	7	0.04	7
B	49,446	52.40	233	0.47	256

Substance Group[a]	Samples analysed[b]	% Samples analysed	Non-compliant samples[c]	% Non-compliant samples[d]	Non-compliant results[e]
B1	18,393	19.49	42	0.23	51
B2	25,780	27.32	45	0.17	48
B2a	5056	5.36	2	0.04	2
B2b	4037	4.28	0	-	0
B2c	1814	1.92	0	-	0
B2d	1638	1.74	1	0.06	1
B2e	6889	7.30	21	0.30	24
B2f	10,948	11.60	21	0.19	21
B3	10,552	11.18	146	1.38	157
B3a	4732	5.02	3	0.06	3
B3b	2371	2.51	0	-	0
B3c	2553	2.71	121	4.74	132
B3d	2382	2.52	12	0.50	12
B3e[f]					
B3f	738	0.78	10	1.36	10
Total	**94,355**	**100.00**	**330**	**0.35**	**389**

(a): as detailed in Appendix E;

(b): number of samples analysed for one or more substances of the respective group;

(c): number of non-compliant samples for one or more substances in the respective group;

(d): '-' indicates that all samples were compliant;

(e): number of non-compliant results; one sample can be non-compliant for more substances therefore the number of non-compliant results can be higher than the number of non-compliant samples of the same group;

(f): B3e subgroup not analysed since not applicable.

There were no non-compliant samples reported in Group A1, B2b, B2c and B3b.

In Group A2, seven countries reported a total of 19 non-compliant samples (21 non-compliant results), all reported for thiouracil and 6-methyl-2-thiouracil.

In Group A3, a total of 62 non-compliant samples (70 non-compliant results) were reported by seven countries. Among the substances identified, the highest number of non-compliant results were noted for nandrolone (n=18).

In Group A4, there were 13 non-compliant samples and 27 non-compliant results for beta and alpha zearalenol, beta and alpha zearalanol and zearalanone, by six countries.

In Group A5, a total of six non-compliant samples (eight non-compliant results) were reported by two countries, three for clenbuterol and salbutamol, and two for ractopamine.

In Group A6, a total of seven non-compliant samples (seven non-compliant results) were reported by two countries. The substances identified were semicarbazide (n=6) and nitrofurazone (n=1).

For antibacterials (B1), 12 countries reported a total of 42 non-compliant samples (51 non-compliant results).

In Group B2, there were two non-compliant samples (two non-compliant results) for anthelmintics (B2a), reported by two countries, one non-compliant sample (one non-compliant result) for sedatives (B2d) reported by one country, 21 non-compliant samples (24 non-compliant results) reported by five countries for non-steroidal anti-inflammatory drugs (NSAIDs) (B2e). Meloxicam was the most frequently reported substance in B2e (n = 14 non-compliant results). For 'other pharmacologically active substances' (B2f), there were 21 non-compliant samples (21 non-compliant results) reported by six countries.

In Group B3, there were 121 non-compliant samples and 132 results for chemical elements (including heavy metals) (B3c), three sample and three results for organochlorine compounds, including PCBs (B3a), 12 samples and 12 results for mycotoxins (B3d) and 10 samples and 10 results for 'others' (B3f).

A detailed presentation on the specific substances identified and the number of non-compliant results reported by each country is given in Appendix A.

3.3 Pigs

Council Directive 96/23/EC requires that the minimum number of pigs that have to be controlled each year for all kinds of residues and substances is 0.05% of the pigs slaughtered the previous year. Overall, the minimum requirements for the number of samples to be taken were fulfilled in 2022 (Table 9).

Table 9: Production of pigs and number of targeted samples over 2007–2022

Year	Production (animals)	Targeted samples	% Animals tested[(a)]	Minimum 96/23/EC
2007 (EU 27)	241,501,638	144,378	0.06	
2008 (EU 27)	244,965,996	137,281	0.06	
2009 (EU 27)	242,260,526	138,137	0.06	
2010 (EU 27)	245,149,546	136,792	0.06	
2011 (EU 27)	249,082,904	133,255	0.05	
2012 (EU 27)	246,691,569	135,745	0.05	
2013 (EU 28)	243,680,241	131,565	0.05	
2014 (EU 28)	244,508,972	135,129	0.06	
2015 (EU 28)	251,197,203	130,012	0.05	0.05
2016 (MS 27)[(b)]	229,090,419	121,953	0.05	
2016 (EU 28)	252,921,158			
2017 (EU 28)	252,107,558	125,810	0.05	
2018 (EU 28)	260,530,951	120,434	0.05	
2018 (EU 27, IS, NO)[(c)]	257,079,739			
2019 (EU 27, IS, NO)[(c)]	256,267,449	120,944	0.05	
2020 (EU 27, IS, NO)[(d)]	245,193,720	115,818	0.05	
2021 (EU 27, IS, NO, XI)[(e)]	246,322,598	122,058	0.05	

Year	Production (animals)	Targeted samples	% Animals tested[a]	Minimum 96/23/EC
2022 (EU 27, IS, NO, XI)[e]	249,473,889	120,882	0.05	

(a): in relation to the production of the previous year;

(b): data from France were not available for inclusion in the 2016 results report;

(c): data from Malta were not available for inclusion in the 2019 results report; IS: Iceland; NO: Norway;

(d): data from the United Kingdom were not included in the 2020 results report, because the United Kingdom was an EU MS, but it became a third country on 1 February 2020. IS: Iceland; NO: Norway

(e): data from the United Kingdom (Northern Ireland) are taken into account for 2021 and 2022. In accordance with the Agreement on the withdrawal of the United Kingdom of Great Britain and Northern Ireland from the European Union and the European Atomic Energy Community, and in particular Article 5(4) of the Windsor Framework in conjunction with section 24 of Annex 2 to that Framework. IS: Iceland; NO: Norway; XI: UK (Northern Ireland).

Table 10: Production volume and number of targeted samples collected in pigs

Country	Production data (animals)[a]	Number of samples	% Animals tested
Austria	5,115,428	3198	0.06
Belgium	11,182,027	3497	0.03
Bulgaria	1,140,417	471	0.04
Croatia	1,106,127	592	0.05
Cyprus	589,377	358	0.06
Czechia	2,324,232	1901	0.08
Denmark	18,398,800	9212	0.05
Estonia	559,461	509	0.09
Finland	1,919,209	1399	0.07
France	23,364,043	9648	0.04
Germany	52,303,189	26,529	0.05
Greece	1,211,203	431	0.04
Hungary	4,546,225	1544	0.03
Iceland	77,916	42	0.05
Ireland	3,655,826	1410	0.04
Italy	11,222,509	5914	0.05
Latvia	410,567	197	0.05
Lithuania	943,353	522	0.06
Luxembourg	144,276	60	0.04
Malta	53,970	173	0.32
Netherlands	15,884,483	8448	0.05
Norway	1,625,295	818	0.05
Poland	21,376,122	9429	0.04
Portugal	5,510,068	2236	0.04
Romania	3,714,912	1858	0.05
Slovakia	647,442	410	0.06
Slovenia	242,584	160	0.07

Country	Production data (animals)[a]	Number of samples	% Animals tested
Spain	56,130,028	27,437	0.05
Sweden	2,622,800	1317	0.05
United Kingdom (Northern Ireland)	1,452,000	1162	0.08
Total	**249,473,889**	**120,882**	**0.05**

(a): The production data, taken from the 2022 Residue Control Plan, may pertain to the years 2020, 2021 or 2022;

The distribution of samples analysed, non-compliant samples and non-compliant results in pigs are presented in Table 11. Of the 120,882 samples analysed in this category, 115 (0.1%) were non-compliant (139 non-compliant results). The non-compliant samples were reported by 16 countries.

Table 11: Number of samples analysed, non-compliant samples and non-compliant results in pigs

Substance Group[a]	Samples analysed[b]	% Samples analysed	Non-compliant samples[c]	% Non-compliant samples[d]	Non-compliant results[e]
A	64,975	53.75	36	0.06	43
A1	6300	5.21	0	-	0
A2	3542	2.93	2	0.06	2
A3	11,293	9.34	25	0.22	30
A4	5671	4.69	4	0.07	6
A5	10,276	8.50	0	-	0
A6	36,115	29.88	5	0.01	5
B	84,099	69.57	84	0.10	96
B1	39,300	32.51	38	0.10	48
B2	41,345	34.20	14	0.03	15
B2a	10,474	8.66	3	0.03	4
B2b	11,140	9.22	4	0.04	4
B2c	2563	2.12	0	-	0
B2d	5972	4.94	0	-	0
B2e	10,441	8.64	5	0.05	5
B2f	9696	8.02	2	0.02	2
B3	14,065	11.64	32	0.23	33
B3a	6286	5.20	0	-	0
B3b	3129	2.59	0	-	0
B3c	3638	3.01	25	0.69	26
B3d	3039	2.51	7	0.23	7
B3e[f]					
B3f	874	0.72	0	-	0
Total	**120,882**	**100.00**	**115**	**0.10**	**139**

Substance Group[a]	Samples analysed[b]	% Samples analysed	Non-compliant samples[c]	% Non-compliant samples[d]	Non-compliant results[e]

(a): as detailed in Appendix E;

(b): number of samples analysed for one or more substances of the respective group;

(c): number of non-compliant samples for one or more substances in the respective group;

(d): '-' indicates that all samples were compliant;

(e): number of non-compliant results; one sample can be non-compliant for more substances therefore the number of non-compliant results can be higher than the number of non-compliant samples of the same group;

(f): B3e subgroup not analysed since not applicable.

There were no non-compliant samples reported in Group A1, A5, B2c, B2d, B3a, B3b and B3f.

In Group A2, two non-compliant samples and two non-compliant results were reported for antithyroid agents (A2), for thiouracil, by one country. In Group A3, 25 non-compliant samples and 30 non-compliant results were reported for steroids (A3) for boldenone, boldenone-alpha, epinandrolone, oestradiol-17-beta, nandrolone and normethandrolone, by five countries. In Group A4, 4 non-compliant samples and 6 results were reported for zearalenol alpha and beta by two countries. In Group A6, four countries reported 5 non-compliant samples and 5 non-compliant results all for chloramphenicol.

For antibacterials (B1), eight countries reported a total of 38 non-compliant samples (48 non-compliant results).

In Group B2, there were 3 non-compliant samples (4 non-compliant results) for anthelmintics (B2a), 4 non-compliant samples (4 non-compliant residues) for anticoccidials (B2b), 5 non-compliant samples and residues were reported for non-steroidal anti-inflammatory drugs (NSAIDs) (B2e) and 2 non-compliant samples (2 non-compliant results) were reported for 'other pharmacologically active substances' (B2f).

In Group B3, there were 25 non-compliant samples (26 non-compliant results) for chemical elements (B3c), reported by three countries. In addition, 7 non-compliant results (7 samples) were reported by four countries for B3d for zearalenone, ochratoxin A and aflatoxin B1.

The specific substances identified, and the number of non-compliant results reported by each country, are presented in Appendix A.

3.4 Sheep and goats

Council Directive 96/23/EC requires that the minimum number of sheep and goats that have to be controlled each year for all kinds of results and substances is 0.05% of the sheep and goats slaughtered the previous year. The minimum requirements for the number of samples were fulfilled in 2022, overall (Table 12).

Table 12: Production of sheep and goats and number of targeted samples over 2007–2022

Year	Production (animals)	Targeted samples	% Animals tested[a]	Minimum 96/23/EC
2007 (EU 27)	40,935,665	26,599	0.06	

Year	Production (animals)	Targeted samples	% Animals tested[a]	Minimum 96/23/EC
2008 (EU 27)	41,435,268	24,320	0.06	0.05
2009 (EU 27)	39,584,954	26,265	0.06	
2010 (EU 27)	36,121,283	23,894	0.06	
2011 (EU 27)	37,217,484	23,112	0.06	
2012 (EU 27)	36,558,080	23,441	0.06	
2013 (EU 28)	35,831,474	22,761	0.06	
2014 (EU 28)	36,188,624	26,218	0.07	
2015 (EU 28)	31,554,480	21,420	0.06	
2016 (MS 27)[b]	26,783,426	16,846	0.06	
2016 (EU 28)	31,274,756			
2017 (EU 28)	31,160,255	16,348	0.05	
2018 (EU 28)	32,094,485	15,927	0.05	
2018 (EU 27, IS, NO)[c]	34,092,932			
2019 (EU 27, IS, NO)[c]	34,546,310	18,257	0.05	
2020 (EU 27, IS, NO)[d]	19,947,609	10,465	0.05	
2021 (EU 27, IS, NO, XI)[e]	20,216,377	12,285	0.06	
2022 (EU 27, IS, NO, XI)[e]	19,762,015	11,048	0.06	

(a): in relation to the production of the previous year;

(b): data from France were not available for inclusion in the 2016 results report;

(c): data from Malta were not available for inclusion in the 2019 results report; IS: Iceland; NO: Norway;

(d): data from the United Kingdom were not included in the 2020 results report, because the United Kingdom was an EU MS, but it became a third country on 1 February 2020. IS: Iceland; NO: Norway

(e): data from the United Kingdom (Northern Ireland) are taken into account for 2021 and 2022. In accordance with the Agreement on the withdrawal of the United Kingdom of Great Britain and Northern Ireland from the European Union and the European Atomic Energy Community, and in particular Article 5(4) of the Windsor Framework in conjunction with section 24 of Annex 2 to that Framework. IS: Iceland; NO: Norway; XI: UK (Northern Ireland).

Table 13: Production volume and number of targeted samples collected in sheep and goats

Country	Production data (animals)[a]	Number of samples	% Animals tested
Austria	178,283	378	0.21
Belgium	138,239	143	0.10
Bulgaria	143,430	46	0.03
Croatia	95,415	63	0.07
Cyprus	299,109	177	0.06
Czechia	11,724	76	0.65
Denmark	76,435	57	0.07
Estonia	9168	21	0.23
Finland	63,354	46	0.07
France	4,374,610	2036	0.05
Germany	1,213,356	624	0.05

Country	Production data (animals)[a]	Number of samples	% Animals tested
Greece	457,326	257	0.06
Hungary	51,598	17	0.03
Iceland	514,474	265	0.05
Ireland	3,031,851	1496	0.05
Italy	999,252	486	0.05
Latvia	25,436	12	0.05
Lithuania	14,223	25	0.18
Luxembourg	2659	12	0.45
Malta	7279	106	1.46
Netherlands	798,886	450	0.06
Norway	1,240,503	870	0.07
Poland	70,856	93	0.13
Portugal	873,221	309	0.04
Romania	516,687	228	0.04
Slovakia	38,500	114	0.30
Slovenia	12,032	42	0.35
Spain	3,318,569	1742	0.05
Sweden	250,540	121	0.05
United Kingdom (Northern Ireland)	935,000	736	0.08
Total	**19,762,015**	**11,048**	**0.06**

(a): The production data, taken from the 2022 Residue Control Plan, may pertain to the years 2020, 2021 or 2022;

The distribution of samples analysed non-compliant samples and non-compliant results in sheep and goats is presented in Table 14. Of the 11,048 samples analysed in this category, 61 (0.55%) were non-compliant (146 non-compliant results). The non-compliant samples were reported by 13 countries.

Table 14: Number of samples analysed, non-compliant samples and non-compliant results in sheep and goats

Substance Group[a]	Samples analysed[b]	% Samples analysed	Non-compliant samples[c]	% Non-compliant samples[d]	Non-compliant results[e]
A	3772	34.14	16	0.42	17
A1	343	3.10	0	-	0
A2	197	1.78	0	-	0
A3	689	6.24	16	2.32	17
A4	369	3.34	0	-	0
A5	486	4.40	0	-	0
A6	2300	20.82	0	-	0
B	9196	83.24	45	0.49	129

Substance Group[a]	Samples analysed[b]	% Samples analysed	Non-compliant samples[c]	% Non-compliant samples[d]	Non-compliant results[e]
B1	3761	34.04	10	0.27	12
B2	4100	37.11	6	0.15	6
B2a	2013	18.22	4	0.20	4
B2b	675	6.11	0	-	0
B2c	561	5.08	0	-	0
B2d	293	2.65	0	-	0
B2e	575	5.20	1	0.17	1
B2f	826	7.48	1	0.12	1
B3	2167	19.61	29	1.34	111
B3a	1115	10.09	2	0.18	82
B3b	691	6.25	0	0.00	0
B3c	512	4.63	26	5.08	28
B3d	244	2.21	0	-	0
B3e[f]					
B3f	236	2.14	1	0.42	1
Total	**11,048**	**100.00**	**61**	**0.55**	**146**

(a): as detailed in Appendix E;

(b): number of samples analysed for one or more substances of the respective group;

(c): number of non-compliant samples for one or more substances in the respective group;

(d): '-' indicates that all samples were compliant;

(e): number of non-compliant results; one sample can be non-compliant for more substances therefore the number of non-compliant results can be higher than the number of non-compliant samples of the same group;

(f): B3e subgroup not analysed since not applicable.

There were no non-compliant samples reported in Group A1, A2, A4-A6, B2b, B2d, B3b, and B3d.

In Group A, 16 non-compliant samples and 17 non-compliant results for steroids (A3), were reported (epinandrolone (n = 9), boldenone-alpha (n = 5), boldenone (n = 2) and nandrolone (n = 1)), by six countries.

For antibacterials (B1), six countries reported a total of 10 non-compliant samples and 12 non-compliant results in total. The substance with the highest number of non-compliant results was sum of oxytetracycline and its 4-epimer (n = 3).

In Group B2, four non-compliant samples and four results were reported for anthelmintics (B2a), by three countries, for non-steroidal anti-inflammatory drugs (NSAIDs) (B2e) and for 'other pharmacologically active substances' (B2f) one non-compliant sample and result respectively was reported by one country.

In Group B3, 26 non-compliant samples and 28 non-compliant results were reported, for heavy metals (B3c) by five countries. For organochlorine compounds, including PCBs (B3a), there were

two non-compliant samples and 82 non-compliant results and for 'others' (B3f) was reported one non-compliant sample and one non-compliant result.

A detailed presentation on the specific substances identified and the number of non-compliant results reported by each country is given in Appendix A.

3.5 Horses

For horses, Council Directive 96/23/EC requires that the number of samples is to be determined by each country in relation to the identified problems. The number of targeted samples taken overall in 2022, was lower than last year, as well as the percentage of animal tested (Table 15). The percentage of targeted samples taken in each country for the reported horse production is presented in Table 16.

Table 15: Production of horses and number of targeted samples over 2007–2022

Year	Production (animals)	Targeted samples	% Animals tested[(a)]	Minimum 96/23/EC
2007 (EU 27)	312,969	3115	1.16	Not specified
2008 (EU 27)	386,302	2545	0.81	
2009 (EU 27)	264,538	3000	0.78	
2010 (EU 27)	258,362	3094	1.17	
2011 (EU 27)	249,403	3309	1.28	
2012 (EU 27)	272,286	3850	1.54	
2013 (EU 28)	284,035	4453	1.63	
2014 (EU 28)	215,629	4112	1.45	
2015 (EU 28)	190,540	3749	1.74	
2016 (MS 27)[(b)]	177,309	3320	1.90	
2016 (EU 28)	191,678			
2017 (EU 28)	186,330	3232	1.69	
2018 (EU 28)	174,721	3137	1.68	
2018 (EU 27, IS, NO)[(c)]	182,545			
2019 (EU 27, IS, NO)[(c)]	189,134	3248	1.78	
2020 (EU 27, IS, NO)[(d)]	186,504	2640	1.42	
2021 (EU 27, IS, NO, XI)[(e)]	167,951	2490	1.48	
2022 (EU 27, IS, NO, XI)[(e)]	153,599	2123	1.38	

(a): in relation to the production of the previous year;

(b): data from France were not available for inclusion in the 2016 results report;

(c): data from Malta were not available for inclusion in the 2019 results report; IS: Iceland; NO: Norway;

(d): data from the United Kingdom were not included in the 2020 results report, because the United Kingdom was an EU MS, but it became a third country on 1 February 2020. IS: Iceland; NO: Norway

(e): data from the United Kingdom (Northern Ireland) are taken into account for 2021 and 2022. In accordance with the Agreement on the withdrawal of the United Kingdom of Great Britain and Northern Ireland from the European Union and the European Atomic Energy Community, and in particular Article 5(4) of the Windsor Framework in conjunction with section 24 of Annex 2 to that Framework. IS: Iceland; NO: Norway; XI: UK (Northern Ireland).

Table 16: Production volume and number of targeted samples collected in horses

Country	Production data (animals)[(a)]	Number of samples	% Animals tested
Austria	419	55	13.13
Belgium	3811	173	4.54
Bulgaria	373	21	5.63
Croatia	620	38	6.13
Cyprus	0		
Czechia	86	33	38.37
Denmark	811	68	8.38
Estonia	9	1	11.11
Finland	834	59	7.07
France	6138	293	4.77
Germany	3625	75	2.07
Greece	0		
Hungary	212	21	9.91
Iceland	7469	36	0.48
Ireland	1822	117	6.42
Italy	33,101	317	0.96
Latvia	45	8	17.78
Lithuania	444	18	4.05
Luxembourg	0		
Malta	0	1	
Netherlands	1668	52	3.12
Norway	57	12	21.05
Poland	19,958	272	1.36
Portugal	651	23	3.53
Romania	31,801	168	0.53
Slovakia	0		
Slovenia	1057	45	4.26
Spain	37,058	103	0.28
Sweden	1530	114	7.45
United Kingdom (Northern Ireland)	0		
Total	**153,599**	**2123**	**1.38**

(a): The production data, taken from the 2022 Residue Control Plan, may pertain to the years 2020, 2021 or 2022;

The distribution of samples analysed, non-compliant samples and non-compliant results in horses is presented in Table 17. Of the 2123 samples analysed in this category, 21 samples (0.99%) were non-compliant (27 non-compliant results). The non-compliant samples were reported by nine countries.

Table 17: Number of samples analysed, non-compliant samples and non-compliant results in horses

Substance Group[a]	Samples analysed[b]	% Samples analysed	Non-compliant samples[c]	% Non-compliant samples[d]	Non-compliant results[e]
A	668	31.46	1	0.15	2
A1	97	4.57	0	-	0
A2	50	2.36	0	-	0
A3	178	8.38	0	-	0
A4	122	5.75	1	0.82	2
A5	89	4.19	0	-	0
A6	294	13.85	0	-	0
B	1731	81.54	21	1.21	25
B1	375	17.66	0	-	0
B2	876	41.26	4	0.46	5
B2a	149	7.02	0	-	0
B2b	104	4.90	0	-	0
B2c	102	4.80	0	-	0
B2d	107	5.04	0	-	0
B2e	349	16.44	4	1.15	5
B2f	185	8.71	0	-	0
B3	589	27.74	17	2.89	20
B3a	129	6.08	0	-	0
B3b	73	3.44	0	-	0
B3c	363	17.10	16	4.41	19
B3d	67	3.16	1	1.49	1
B3e[f]					
B3f	37	1.74	0	-	0
Total	**2,123**	**100.00**	**21**	**0.99**	**27**

(a): as detailed in Appendix E;

(b): number of samples analysed for one or more substances of the respective group;

(c): number of non-compliant samples for one or more substances in the respective group;

(d): '-' indicates that all samples were compliant;

(e): number of non-compliant results; one sample can be non-compliant for more substances therefore the number of non-compliant results can be higher than the number of non-compliant samples of the same group;

(f): B3e subgroup not analysed since not applicable.

In Group A, there was one non-compliant sample and two non-compliant results for zearalenol alpha and beta (A4).

In Group B2, four non-compliant samples and five non-compliant results were reported for NSAIDs (B2e) by three countries.

In Group B3, 16 non-compliant samples and 19 non-compliant results were reported for the chemical compounds subgroup B3c by five countries, while one non-compliant sample and result was reported for mycotoxins (B3d) by one country.

A detailed presentation on the specific substances identified and the number of non-compliant results reported by each country is given in Appendix A.

3.6 Poultry

According to Directive 96/23/EC, the minimum number of samples for each category of poultry must be one per 200 t of annual production, with a minimum of 100 samples for each group of substances where annual production in the category concerned is over 5,000 t. Overall, the minimum requirement of one sample analysed per 200 t production was not achieved in 2022 (Table 18).

The percentage of targeted samples taken in each country for the reported production of poultry is given in Table 19.

Table 18: Production of poultry and number of targeted samples over 2007–2022

Year	Production (t)	Targeted samples	Samples tested/ 200 t[(a)]	Minimum 96/23/EC
2007 (EU 27)	10,912,500	62,101	1.15	1/200 t
2008 (EU 27)	12,421,566	60,406	1.11	
2009 (EU 27)	11,383,434	61,989	1.00	
2010 (EU 27)	11,804,262	61,259	1.08	
2011 (EU 27)	12,417,108	65,942	1.12	
2012 (EU 27)	12,845,333	68,770	1.11	
2013 (EU 28)	12,930,555	71,186	1.11	
2014 (EU 28)	12,909,837	72,486	1.12	
2015 (EU 28)	13,394,013	71,223	1.10	
2016 (MS 27)[(b)]	12,239,495	64,501	1.10	
2016 (EU 28)	13,906,572			
2017 (EU 28)	14,320,889	67,630	0.97	
2018 (EU 28)	14,683,847	69,096	0.96	
2018 (EU 27, IS, NO)[(c)]	14,789,918			
2019 (EU 27, IS, NO)[(c)]	15,186,857	73,088	0.99	
2020 (EU 27, IS, NO)[(d)]	13,266,022	61,848	0.93	
2021 (EU 27, IS, NO, XI)[(e)]	13,641,992	67,118	0.98	
2022 (EU 27, IS, NO, XI)[(e)]	14,194,183	64,831	0.91	

(a): in relation to the production of the previous year;

(b): data from France were not available for inclusion in the 2016 results report;

(c): data from Malta were not available for inclusion in the 2019 results report; IS: Iceland; NO: Norway;

(d): data from the United Kingdom were not included in the 2020 results report, because the United Kingdom was an EU MS, but it became a third country on 1 February 2020. IS: Iceland; NO: Norway

Year	Production (t)	Targeted samples	Samples tested/ 200 t[(a)]	Minimum 96/23/EC

(e): data from the United Kingdom (Northern Ireland) are taken into account for 2021 and 2022. In accordance with the Agreement on the withdrawal of the United Kingdom of Great Britain and Northern Ireland from the European Union and the European Atomic Energy Community, and in particular Article 5(4) of the Windsor Framework in conjunction with section 24 of Annex 2 to that Framework. IS: Iceland; NO: Norway; XI: UK (Northern Ireland).

Table 19: Production volume and number of targeted samples collected in poultry

Country	Production data (t)[(a)]	Number of samples	Samples tested/200 t
Austria	146,569	958	1.31
Belgium	388,246	1468	0.76
Bulgaria	110,469	355	0.64
Croatia	59,657	362	1.21
Cyprus	23,657	227	1.92
Czechia	168,956	989	1.17
Denmark	156,467	792	1.01
Estonia	22,068	199	1.80
Finland	141,000	646	0.92
France	1,612,832	7246	0.90
Germany	1,589,504	8923	1.12
Greece	251,437	734	0.58
Hungary	529,381	1831	0.69
Iceland	9244	247	5.34
Ireland	211,367	1101	1.04
Italy	1,389,900	7129	1.03
Latvia	37,500	183	0.98
Lithuania	81,338	426	1.05
Luxembourg	360	4	2.22
Malta	4005	135	6.74
Netherlands	1,001,274	5109	1.02
Norway	106,995	711	1.33
Poland	2,281,621	9707	0.85
Portugal	346,726	1612	0.93
Romania	522,205	2721	1.04
Slovakia	106,507	673	1.26
Slovenia	64,054	337	1.05
Spain	1,707,996	8038	0.94
Sweden	175,860	870	0.99
United Kingdom (Northern Ireland)	214,940	1098	1.02
Total	**13,462,136**	**64,831**	**0.96**

(a): The production data, taken from the 2022 Residue Control Plan, may pertain to the years 2020, 2021 or 2022

The distribution of samples analysed, non-compliant samples and non-compliant results in poultry are presented in Table 20. Of the 64,831 samples analysed in this category, 81 (0.12%) were non-compliant (100 non-compliant results). The non-compliant samples were reported by 16 countries.

Table 20: Number of samples analysed, non-compliant samples and non-compliant results in poultry

Substance Group[(a)]	Samples analysed[(b)]	% Samples analysed	Non-compliant samples[(c)]	% Non-compliant samples[(d)]	Non-compliant results[(e)]
A	38,247	58.99	30	0.08	32
A1	3314	5.11	0	-	0
A2	1087	1.68	0	-	0
A3	6000	9.25	24	0.40	26
A4	3393	5.23	0	-	0
A5	4476	6.90	0	-	0
A6	23,503	36.25	6	0.03	6
B	40,548	62.54	51	0.13	68
B1	16,877	26.03	15	0.09	15
B2	20,238	31.22	16	0.08	22
B2a	3850	5.94	0	-	0
B2b	12,527	19.32	15	0.12	21
B2c	2442	3.77	1	0.04	1
B2d	87	0.13	0	-	0
B2e	2535	3.91	0	-	0
B2f	2831	4.37	0	-	0
B3	7763	11.97	20	0.26	31
B3a	3946	6.09	3	0.08	3
B3b	1672	2.58	0	-	0
B3c	1531	2.36	16	1.05	22
B3d	1544	2.38	1	0.06	1
B3e[(f)]					
B3f	1036	1.60	3	0.29	5
Total	**64,831**	**100.00**	**81**	**0.12**	**100**

(a): as detailed in Appendix E;

(b): number of samples analysed for one or more substances of the respective group;

(c): number of non-compliant samples for one or more substances in the respective group;

(d): '-' indicates that all samples were compliant;

(e): number of non-compliant results; one sample can be non-compliant for more substances therefore the number of non-compliant results can be higher than the number of non-compliant samples of the same group;

(f): B3e subgroup not analysed since not applicable.

In Group A, there were 24 non-compliant samples and 26 non-compliant results for steroids (A3) reported by one country and six non-compliant samples and results, for Group A6 (chloramphenicol, furaltadone and metronidazole) were reported by four countries.

For antibacterials (B1), six countries reported a total of 15 non-compliant samples and results.

In Group B2, 15 non-compliant samples and 21 non-compliant results were reported for anticoccidials (B2b) reported by six countries, and one non-compliant sample and result was reported for pyrethroids (B2c).

In Group B3, three non-compliant samples and results were reported for organochlorine compounds (B3a) by three countries, 16 non-compliant samples and 22 non-compliant results were reported under chemical elements (B3c) (copper, cadmium, lead and zinc) by five countries, one non-compliant sample and result was reported for mycotoxins (B3d), and 3 non-compliant samples and 5 non-compliant results were reported for 'others' (B3f) by one country.

The specific substances identified and the number of non-compliant results reported by each country are presented in Appendix A.

3.7 Aquaculture

Directive 96/23/EC specifies that the minimum number of samples to be collected each year must be at least one per 100 tonnes of annual production. Overall, the minimum requirements for the number of samples to be taken were not fulfilled in 2022, with the percentage of samples analysed lower than 50% of the overall target minimum sampling frequency (Table 21). The production volume and the number of samples analysed in each country, are given in Table 22.

Table 21: Production of aquaculture and number of targeted samples over 2007–2022

Year	Production (t)	Targeted samples	Samples tested/ 100 t[(a)]	Minimum 96/23/EC
2007 (EU 27)	602,555	9257	1.50	1/100 t
2008 (EU 27)	644,875	8751	1.40	
2009 (EU 27)	627,109	8606	1.30	
2010 (EU 27)	622,032	8668	1.40	
2011 (EU 27)	655,772	8241	1.30	
2012 (EU 27)	631,117	8264	1.30	
2013 (EU 28)	614,191	7971	1.30	
2014 (EU 28)	608,658	7236	1.20	
2015 (EU 28)	633,541	7246	1.20	
2016 (MS 27)[(b)]	603,868	6735	1.10	
2016 (EU 28)	645,068			
2017 (EU 28)	668,766	6500	1.00	
2018 (EU 28)	692,821	6482	0.97	
2018 (EU 27, IS)[(c)]	709,535			
2019 (EU 27, IS)[(c)]	713,932	6759	0.95	
2020 (EU 27, IS, NO)[(d)]	1,868,224	8177	0.44	

Year	Production (t)	Targeted samples	Samples tested/ 100 t[(a)]	Minimum 96/23/EC
2021 (EU 27, IS, NO, XI)[(e)]	2,011,995	8394	0.42	
2022 (EU 27, IS, NO, XI)[(e)]	2,060,900	8808	0.43	

(a): in relation to the production of the previous year;

(b): data from France were not available for inclusion in the 2016 results report;

(c): data from Malta were not available for inclusion in the 2019 results report; IS: Iceland; NO: Norway;

(d): data from the United Kingdom were not included in the 2020 results report, because the United Kingdom was an EU MS, but it became a third country on 1 February 2020. IS: Iceland; NO: Norway

(e): data from the United Kingdom (Northern Ireland) are taken into account for 2021 and 2022. In accordance with the Agreement on the withdrawal of the United Kingdom of Great Britain and Northern Ireland from the European Union and the European Atomic Energy Community, and in particular Article 5(4) of the Windsor Framework in conjunction with section 24 of Annex 2 to that Framework. IS: Iceland; NO: Norway; XI: UK (Northern Ireland).

Table 22: Production volume and number of targeted samples collected in aquaculture

Country	Production data (t)[(a)]	Number of samples	Samples tested/100 t
Austria	4250	192	4.52
Belgium	2000	2	0.10
Bulgaria	9449	62	0.66
Croatia	21,254	231	1.09
Cyprus	7948	79	0.99
Czechia	20,400	254	1.25
Denmark	36,311	367	1.01
Estonia	1040	23	2.21
Finland	15,296	169	1.10
France	46,273	405	0.88
Germany	18,714	274	1.46
Greece	111,896	642	0.57
Hungary	9905	50	0.50
Iceland	53,136	540	1.02
Ireland	13,785	138	1.00
Italy	55,200	634	1.15
Latvia	727	9	1.24
Lithuania	3976	59	1.48
Luxembourg	0		
Malta	3213	35	1.09
Netherlands	5337	62	1.16
Norway	1,477,110	3,008	0.20
Poland	44,820	525	1.17
Portugal	14,336	145	1.01
Romania	6924	87	1.26
Slovakia	2070	150	7.25

Country	Production data (t)[a]	Number of samples	Samples tested/100 t
Slovenia	1674	33	1.97
Spain	62,866	541	0.86
Sweden	9864	79	0.80
United Kingdom (Northern Ireland)	1126	13	1.15
Total	**2,060,900**	**8808**	**0.43**

(a): The production data, taken from the 2022 Residue Control Plan, may pertain to the years 2020, 2021 or 2022

The distribution of samples analysed, non-compliant samples and non-compliant results in aquaculture are presented in Table 23. Of the 8808 samples analysed for aquaculture, 35 samples (0.4%) and 35 results were non-compliant. The non-compliant samples were reported by 10 countries.

Table 23: Number of samples analysed, non-compliant samples and non-compliant results in aquaculture

Substance Group[a]	Samples analysed[b]	% Samples analysed	Non-compliant samples[c]	% Non-compliant samples	Non-compliant results[d]
A	3151	35.77	0	-	0
A1	353	4.01	0	-	0
A2	8	0.09	0	-	0
A3	730	8.29	0	-	0
A4	309	3.51	0	-	0
A5	273	3.10	0	-	0
A6	2119	24.06	0	-	0
B	6587	74.78	35	0.53	35
B1	1678	19.05	3	0.18	3
B2	1,552	17.62	0	-	0
B2a	844	9.58	0	-	0
B2b	326	3.70	0	-	0
B2c	474	5.38	0	-	0
B2d	52	0.59	0	-	0
B2e	15	0.17	0	-	0
B2f	411	4.67	0	-	0
B3	4296	48.77	32	0.74	32
B3a	1020	11.58	9	0.88	9
B3b	438	4.97	0	-	0
B3c	674	7.65	1	0.15	1
B3d	393	4.46	0	-	0
B3e	1736	19.71	20	1.15	20
B3f	974	11.06	2	0.21	2

Substance Group[a]	Samples analysed[b]	% Samples analysed	Non-compliant samples[c]	% Non-compliant samples	Non-compliant results[d]
Total	**8808**	**100.00**	**35**	**0.40**	**35**

(a): as detailed in Appendix E;

(b): number of samples analysed for one or more substances of the respective group;

(c): number of non-compliant samples for one or more substances in the respective group;

(d): number of non-compliant results; one sample can be non-compliant for more substances therefore the number of non-compliant results can be higher than the number of non-compliant samples of the same group;

For Group A, B2, B3b and B3d, no non-compliant samples and results were reported.

In Group B1, three non-compliant samples and results were reported by three countries. In Group B3, 20 non-compliant samples and 20 non-compliant results, were reported for dyes (B3e) ('sum of brilliant green and leucobrilliant green', 'sum of crystal violet and leucocrystal violet' and 'sum of malachite green and leucomalachite green'), by six countries. Nine non-compliant samples and results were reported for organochlorine compounds (B3a) by two countries, one non-compliant sample and result was reported under chemical elements (B3c), and two non-compliant samples and residues were reported for 'others' (B3f).

The specific substances identified, and the number of non-compliant results reported by each country are presented in Appendix A.

3.8 Milk

Commission Decision 97/747/EC lays down that the annual number of samples taken should be one per 15,000 tonnes of annual milk production, with a minimum of 300 samples. Overall, the minimum requirements for the number of samples to be taken, were fulfilled in 2022 (Table 24) and by the majority of countries.

The production volume and the number of samples analysed in each country are given in Table 25.

Table 24: Production of milk and number of targeted samples over 2007–2022

Year	Production (t)	Targeted samples	Samples tested/ 15,000 t[a]	Minimum 96/23/EC
2007 (EU 27)	142,461,705	51,571	5.30	1/15,000 t
2008 (EU 27)	145,006,173	53,333	5.60	
2009 (EU 27)	141,669,974	54,063	5.60	
2010 (EU 27)	144,705,166	30,372	3.20	
2011 (EU 27)	143,022,677	29,592	3.10	
2012 (EU 27)	149,086,701	30,748	3.20	
2013 (EU 28)	146,446,811	29,788	3.00	
2014 (EU 28)	147,794,431	29,533	3.00	
2015 (EU 28)	150,637,679	26,705	2.70	
2016 (MS 27)[b]	121,134,877	23,934	2.90	
2016 (EU 28)	145,701,788			

Year	Production (t)	Targeted samples	Samples tested/ 15,000 t[(a)]	Minimum 96/23/EC
2017 (EU 28)	154,860,990	19,451	2.00	
2018 (EU 28)	156,201,391	19,059	1.80	
2018 (EU 27, IS, NO)[(c)]	157,828,758			
2019 (EU 27, IS, NO)[(c)]	162,530,463	19,107	1.80	
2020 (EU 27, IS, NO)[(d)]	147,037,054	18,869	1.92	
2021 (EU 27, IS, NO, XI)[(e)]	150,026,157	20,407	2.04	
2022 (EU 27, IS, NO, XI)[(e)]	155,036,722	20,974	2.03	

(a): in relation to the production of the previous year;

(b): data from France were not available for inclusion in the 2016 results report;

(c): data from Malta were not available for inclusion in the 2019 results report; IS: Iceland; NO: Norway;

(d): data from the United Kingdom were not included in the 2020 results report, because the United Kingdom was an EU MS, but it became a third country on 1 February 2020. IS: Iceland; NO: Norway

(e): data from the United Kingdom (Northern Ireland) are taken into account for 2021 and 2022. In accordance with the Agreement on the withdrawal of the United Kingdom of Great Britain and Northern Ireland from the European Union and the European Atomic Energy Community, and in particular Article 5(4) of the Windsor Framework in conjunction with section 24 of Annex 2 to that Framework. IS: Iceland; NO: Norway; XI: UK (Northern Ireland).

Table 25: Production volume and number of targeted samples collected in milk

Country	Production data (t)[(a)]	Number of samples	Samples tested/15,000 t
Austria	3,417,151	354	1.55
Belgium	4,288,000		
Bulgaria	601,023	291	7.26
Croatia	597,000	358	8.99
Cyprus	289,424	509	26.38
Czechia	3,274,244	352	1.61
Denmark	6,113,356	413	1.01
Estonia	848,059	424	7.50
Finland	2,205,728	327	2.22
France	24,743,943	1539	0.93
Germany	32,078,707	2121	0.99
Greece	2,027,730	570	4.22
Hungary	1,105,974	342	4.64
Iceland	153,293	308	30.14
Ireland	9,700,370	1392	2.15
Italy	12,622,149	1181	1.40
Latvia	990,000	585	8.86
Lithuania	1,491,676	785	7.89
Luxembourg	434,000	280	9.68
Malta	42,527	362	127.68
Netherlands	14,424,310	1486	1.55

Country	Production data (t)[a]	Number of samples	Samples tested/15,000 t
Norway	1,537,316	327	3.19
Poland	14,457,502	2397	2.49
Portugal	2,102,577	308	2.20
Romania	1,067,110	387	5.44
Slovakia	1,186,414	863	10.91
Slovenia	509,451	371	10.92
Spain	7,409,554	800	1.62
Sweden	2,772,740	305	1.65
United Kingdom (Northern Ireland)	2,545,394	1237	7.29
Total	**150,748,722**	**20,974**	**2.09**

(a): The production data, taken from the 2022 Residue Control Plan, may pertain to the years 2020, 2021 or 2022;

The distribution of samples analysed, non-compliant samples and non-compliant results in milk are presented in Table 26. Of the 20,974 milk samples analysed, 47 (0.22%) were non-compliant (203 non-compliant results). The non-compliant samples were reported by 14 countries.

Table 26: Number of samples analysed, non-compliant samples and non-compliant results in milk

Substance Group[a]	Samples analysed[b]	% Samples analysed	Non-compliant samples[c]	% Non-compliant samples[d]	Non-compliant results[e]
A	7667	36.55	2	0.03	2
A1	0	0.00	0	-	0
A2	19	0.09	0	-	0
A3	53	0.25	0	-	0
A4	0	0.00	0	-	0
A5	79	0.38	0	-	0
A6	7543	35.96	2	0.03	2
B	19,254	91.80	45	0.23	201
B1	10,672	50.88	5	0.05	5
B2	10,965	52.28	25	0.23	25
B2a	6831	32.57	4	0.06	4
B2b	2697	12.86	0	-	0
B2c	808	3.85	0	-	0
B2d	82	0.39	0	-	0
B2e	6076	28.97	20	0.33	20
B2f	1944	9.27	1	0.05	1
B3	5201	24.80	15	0.29	171
B3a	1370	6.53	6	0.44	162
B3b	2275	10.85	0	-	0

Substance Group[a]	Samples analysed[b]	% Samples analysed	Non-compliant samples[c]	% Non-compliant samples[d]	Non-compliant results[e]
B3c	647	3.08	0	-	0
B3d	1670	7.96	9	0.54	9
B3e[f]					
B3f	360	1.72	0	-	0
Total	**20,974**	**100.00**	**47**	**0.22**	**203**

(a): as detailed in Appendix E;

(b): number of samples analysed for one or more substances of the respective group;

(c): number of non-compliant samples for one or more substances in the respective group;

(d): '-' indicates that all samples were compliant;

(e): number of non-compliant results; one sample can be non-compliant for more substances therefore the number of non-compliant results can be higher than the number of non-compliant samples of the same group;

(f): B3e subgroup not analysed since not applicable.

In Group A, there were two non-compliant samples and two non-compliant results reported in Group A6 (semicarbazide), by one country.

For antibacterials (B1), five countries reported a total of five non-compliant samples and results.

In Group B2, there were four non-compliant samples and results for anthelmintics (B2a), 20 non-compliant samples and results for NSAIDs (B2e) and one non-compliant sample and result for 'other pharmacologically active substances' (B2f), reported by two, seven and one countries, respectively.

In Group B3, there were six non-compliant samples and 162 non-compliant results for organochlorine compounds (B3a) reported by one country, and nine non-compliant samples and results for mycotoxins (B3d), relating to aflatoxin M1, reported by five countries.

More information on the specific substances identified and the number of non-compliant results reported by each country is given in Appendix A.

3.9 Eggs

The number of samples to be taken each year must be at least equal to one per 1000 tonnes of annual egg production, with a minimum of 200 samples. Overall, the minimum requirements for the number of samples to be taken were fulfilled in 2022 (Table 27). The production volume and the number of samples analysed in each country are given in Table 28.

Table 27: Production of eggs and number of targeted samples over 2007–2022

Year	Production (t)	Targeted samples	Samples tested/ 1000 t[a]	Minimum 96/23/EC
2007 (EU 27)	6,114,369	13,685	2.30	1/1,000 t
2008 (EU 27)	6,021,476	10,859	1.80	
2009 (EU 27)	6,137,732	13,031	2.20	
2010 (EU 27)	6,101,039	12,715	2.10	

Year	Production (t)	Targeted samples	Samples tested/ 1000 t[a]	Minimum 96/23/EC
2011 (EU 27)	6,136,691	12,248	2.00	
2012 (EU 27)	6,070,174	12,596	2.10	
2013 (EU 28)	6,070,334	13,323	2.20	
2014 (EU 28)	6,271,679	13,391	2.20	
2015 (EU 28)	6,255,410	13,158	2.10	
2016 (MS 27)[b]	5,424,380	12,700	2.40	
2016 (EU 28)	6,312,403			
2017 (EU 28)	6,416,551	9,944	1.60	
2018 (EU 28)	6,609,833	10,924	1.70	
2018 (EU 27, IS, NO)[c]	6,680,277			
2019 (EU 27, IS, NO)[c]	6,733,188	11,444	1.71	
2020 (EU 27, IS, NO)[d]	6,018,192	11,215	1.86	
2021 (EU 27, IS, NO, XI)[e]	6,068,071	12,675	2.09	
2022 (EU 27, IS, NO, XI)[e]	6,137,292	12,035	1.96	

(a): in relation to the production of the previous year;

(b): data from France were not available for inclusion in the 2016 results report;

(c): data from Malta were not available for inclusion in the 2019 results report; IS: Iceland; NO: Norway;

(d): data from the United Kingdom were not included in the 2020 results report, because the United Kingdom was an EU MS, but it became a third country on 1 February 2020. IS: Iceland; NO: Norway

(e): data from the United Kingdom (Northern Ireland) are taken into account for 2021 and 2022. In accordance with the Agreement on the withdrawal of the United Kingdom of Great Britain and Northern Ireland from the European Union and the European Atomic Energy Community, and in particular Article 5(4) of the Windsor Framework in conjunction with section 24 of Annex 2 to that Framework. IS: Iceland; NO: Norway; XI: UK (Northern Ireland).

Table 28: Production volume and number of targeted samples collected in eggs

Country	Production data (t)[a]	Number of samples	Samples tested/1000 t
Austria	121,578	226	1.86
Belgium	153,200		
Bulgaria	56,613	122	2.15
Croatia	33,005	217	6.57
Cyprus	10,063	201	19.97
Czechia	91,248	265	2.90
Denmark	73,775	202	2.74
Estonia	10,036	200	19.93
Finland	77,540	201	2.59
France	866,147	1478	1.71
Germany	894,100	965	1.08
Greece	114,146	64	0.56
Hungary	59,836	106	1.77

Country	Production data (t)[a]	Number of samples	Samples tested/1000 t
Iceland	5680	252	44.37
Ireland	58,402	401	6.87
Italy	778,000	882	1.13
Latvia	48,060	195	4.06
Lithuania	48,466	629	12.98
Luxembourg	2000	120	60.00
Malta	5645	201	35.61
Netherlands	598,138	496	0.83
Norway	74,461	186	2.50
Poland	509,860	769	1.51
Portugal	146,234	314	2.15
Romania	126,489	481	3.80
Slovakia	38,504	418	10.86
Slovenia	27,368	234	8.55
Spain	861,022	849	0.99
Sweden	129,740	201	1.55
United Kingdom (Northern Ireland)	117,936	1160	9.84
Total	**5,984,092**	**12,035**	**2.01**

(a): The production data, taken from the 2022 Residue Control Plan, may pertain to the years 2020, 2021 or 2022;

The distribution of samples analysed, non-compliant samples and non-compliant results in eggs is presented in Table 29. Of the 12,035 egg samples analysed, 35 (0.29%) were non-compliant (52 non-compliant results). The non-compliant samples were reported by 14 countries.

Table 29: Number of samples analysed, non-compliant samples and non-compliant results in eggs

Substance Group[a]	Samples analysed[b]	% Samples analysed	Non-compliant samples[c]	% Non-compliant samples[d]	Non-compliant results[e]
A	4903	40.74	0	-	0
A1	0	0.00	0	-	0
A2	0	0.00	0	-	0
A3	0	0.00	0	-	0
A4	0	0.00	0	-	0
A5	0	0.00	0	-	0
A6	4903	40.74	0	-	0
B	10,859	90.23	35	0.32	52
B1	5526	45.92	6	0.11	7
B2	7055	58.62	28	0.40	38
B2a	1742	14.47	0	-	0

Substance Group[a]	Samples analysed[b]	% Samples analysed	Non-compliant samples[c]	% Non-compliant samples[d]	Non-compliant results[e]
B2b	5682	47.21	28	0.49	38
B2c	926	7.69	0	-	0
B2d	48	0.40	0	-	0
B2e	124	1.03	0	-	0
B2f	1232	10.24	0	-	0
B3	2513	20.88	1	0.04	7
B3a	1416	11.77	1	0.07	7
B3b	1174	9.75	0	-	0
B3c	110	0.91	0	-	0
B3d	4	0.03	0	-	0
B3e[f]					
B3f	1229	10.21	0	-	0
Total	**12,035**	**100.00**	**35**	**0.29**	**52**

(a): as detailed in Appendix E;

(b): number of samples analysed for one or more substances of the respective group;

(c): number of non-compliant samples for one or more substances in the respective group;

(d): '-' indicates that all samples were compliant;

(e): number of non-compliant results; one sample can be non-compliant for more substances therefore the number of non-compliant results can be higher than the number of non-compliant samples of the same group;

(f): B3e subgroup not analysed since not applicable.

Directive 96/23/EC, Annex II requires the monitoring in Group A, of the results of prohibited substances (A6) only. For this group non-compliant samples were not reported.

For antibacterials (B1), six non-compliant samples (seven non-compliant results) were reported by four countries.

In Group B2, 28 non-compliant samples (38 non-compliant results) were reported for anticoccidials (B2b), by 12 countries.

In Group B3, one non-compliant sample and seven non-compliant results, were reported for organochlorine compounds, including PCBs (B3a), by one country.

More details on the specific substances identified and the number of non-compliant results reported by each country are given in Appendix A.

3.10 Rabbit meat

The number of samples to be taken each year must at least 10 per 300 tonnes of annual production (dead weight) for the first 3000 tonnes, plus one sample for each additional 300 tonnes. The rate between the total targeted samples reported and the minimum number of samples that should be collected for the reported production, as specified in Commission Decision 97/747/EC, was calculated.

Table 30: Production of rabbit meat and number of targeted samples over 2007–2022

Year	Production (t)	Targeted samples
2007 (EU 27)	189,932	4480
2008 (EU 27)	187,389	3625
2009 (EU 27)	199,655	3691
2010 (EU 27)	172,353	3885
2011 (EU 27)	176,315	3737
2012 (EU 27)	173,626	3471
2013 (EU 28)	164,664	2796
2014 (EU 28)	156,204	2762
2015 (EU 28)	162,216	2509
2016 (MS 27)[(a)]	117,239	1772
2016 (EU 28)	159,527	
2017 (EU 28)	148,112	1717
2018 (EU 28)	143,917	1654
2018 (EU 27, IS, NO)[(b)]	143,844	
2019 (EU 27, IS, NO)[(b)]	134,904	1552
2020 (EU 27, IS, NO)[(c)]	135,416	1495
2021 (EU 27, IS, NO, XI)[(d)]	128,354	1464
2022 (EU 27, IS, NO, XI)[(d)]	124,605	1384

(a): data from France were not available for inclusion in the 2016 results report;

(b): the 2019 results data from Malta were not available for inclusion in this report; IS: Iceland; NO: Norway

(c): data from the United Kingdom were not included in the 2020 results report, because the United Kingdom was an EU MS, but it became a third country on 1 February 2020. IS: Iceland; NO: Norway

(d): data from the United Kingdom (Northern Ireland) are taken into account for 2021 and 2022. In accordance with the agreement on the withdrawal of the United Kingdom from the EU, and in particular with the Protocol on Ireland/Northern Ireland, the EU requirements on data sampling are also applicable to Northern Ireland. IS: Iceland; NO: Norway; XI: UK (Northern Ireland).

To calculate the total number of samples that should be collected, two different equations were applied depending on the production volume, as follows:

a) For countries with production above 3,000 t:

Total samples required = {(10/300 × 3,000) + [(Production reported in tonnes −3,000) × (1/300)]}

b) For countries with production below 3,000 t:

Total samples required = Production reported in t × (10/300)

Countries with a rate 'samples tested/required' equal to 1.0 or above completely fulfilled the requirements for sampling frequency. Countries with a value below 1.0 did not.

Production volume and number of targeted samples for each country are presented in Table 31.

Table 31: Production volume and number of targeted samples collected in rabbit meat

Country	Production data (t)[(a)]	Number of samples	Samples tested/required
Austria	0.0		NA
Belgium	3,671.0	77	0.75
Bulgaria	5.0	5	30
Croatia	1.0	10	300
Cyprus	118.0	44	11.19
Czechia	1,046.0	46	1.32
Denmark	9.0	11	36.67
Estonia	1.4	1	21.43
Finland	0.0		NA
France	29,653.0	177	0.94
Germany	322.0	31	2.89
Greece	1140.0	49	1.29
Hungary	6547.0	96	0.86
Iceland	0.0		NA
Ireland	0.0		NA
Italy	25,224.0	218	1.25
Latvia	66.0	11	5
Lithuania	81.2	20	7.39
Luxembourg	8.0	9	33.75
Malta	80.0	52	19.5
Netherlands	0.0		NA
Norway	0.0		NA
Poland	5918.0	95	0.87
Portugal	5296.0	51	0.47
Romania	4.0	15	112.5
Slovakia	10.0	77	231
Slovenia	5.5	21	114.55
Spain	45,396.0	268	1.11
Sweden	3.0		
United Kingdom (Northern Ireland)	0.0		NA
Total	**124,602.1**	**1,384**	

(a): The production data, taken from the 2022 Residue Control Plan, may pertain to the years 2020, 2021 or 2022;

The distribution of samples analysed, non-compliant samples and non-compliant results in rabbit meat are presented in Table 32. Of the 1384 samples analysed for rabbits, eight (0.58%) were non-compliant (nine non-compliant results). The non-compliant samples were reported by six countries.

Table 32: Number of samples analysed, non-compliant samples and non-compliant results in rabbit meat

Substance Group[a]	Samples analysed[b]	% Samples analysed	Non-compliant samples[c]	% Non-compliant samples[d]	Non-compliant results[e]
A	547	39.52	1	0.18	1
A1	37	2.67	0	-	0
A2	16	1.16	0	-	0
A3	52	3.76	0	-	0
A4	37	2.67	0	-	0
A5	55	3.97	0	-	0
A6	401	28.97	1	0.25	1
B	1048	75.72	7	0.67	8
B1	514	37.14	2	0.39	3
B2	473	34.18	4	0.85	4
B2a	112	8.09	0	-	0
B2b	210	15.17	4	1.90	4
B2c	86	6.21	0	-	0
B2d	1	0.07	0	-	0
B2e	70	5.06	0	-	0
B2f	58	4.19	0	-	0
B3	163	11.78	1	0.61	1
B3a	79	5.71	0	-	0
B3b	47	3.40	0	-	0
B3c	62	4.48	1	1.61	1
B3d	20	1.45	0	-	0
B3e[f]					
B3f	36	2.60	0	-	0
Total	**1384**	**100.00**	**8**	**0.58**	**9**

(a): as detailed in Appendix E;

(b): number of samples analysed for one or more substances of the respective group;

(c): number of non-compliant samples for one or more substances in the respective group;

(d): '-' indicates that all samples were compliant;

(e): number of non-compliant results; one sample can be non-compliant for more substances therefore the number of non-compliant results can be higher than the number of non-compliant samples of the same group;

(f): B3e subgroup not analysed since not applicable.

In Group A, there was one non-compliant sample and result for Group A6 (chloramphenicol).

In Group B, there were two non-compliant samples and three non-compliant results reported for antibacterials (B1) (amoxycillin, apramycin and sulfadimethoxine) by two countries, four non-compliant samples and results for anticoccidials (B2b) by three countries, and one non-compliant sample and result reported for chemical elements (including metals) (B3c).

More details on the specific substances identified and the number of non-compliant results reported by each country are given in Appendix A.

3.11 Farmed game

European Commission Decision 97/747/EC requires that the number of samples to be taken each year to be at least 100. The minimum number of samples was set as a provisional rule to be reviewed in light of the information provided by the reporting countries on their production figures. For farmed game, a total of 1426 targeted samples were collected in 2022 (Tables 33 and 34).

Table 33: Production of farmed game and number of targeted samples over 2007–2022

Year	Production (t)	Targeted samples
2007 (EU 27)	40,895	2286
2008 (EU 27)	18,485	1959
2009 (EU 27)	84,482	1975
2010 (EU 27)	25,449	2157
2011 (EU 27)	24,991	2575
2012 (EU 27)	25,348	2334
2013 (EU 28)	26,356	2072
2014 (EU 28)	24,379	1918
2015 (EU 28)	22,044	1785
2016 (MS 27)[a]	12,976	1607
2016 (EU 28)	46,623	
2017 (EU 28)	229,431	1635
2018 (EU 28)	12,293	1594
2018 (EU 27, IS, NO)[b]	14,370	
2019 (EU 27, IS, NO)[b]	17,984	1175
2020 (EU 27, IS, NO)[c]	15,521	1283
2021 (EU 27, IS, NO, XI)[d]	14,544	1456
2022 (EU 27, IS, NO, XI)[d]	13,961	1426

(a): data from France were not available for inclusion in the 2016 results report;

(b): the 2019 results data from Malta were not available for inclusion in this report; IS: Iceland; NO: Norway

(c): data from the United Kingdom were not included in the 2020 results report, because the United Kingdom was an EU MS, but it became a third country on 1 February 2020. IS: Iceland; NO: Norway

(d): data from the United Kingdom (Northern Ireland) are taken into account for 2021 and 2022. In accordance with the Agreement on the withdrawal of the United Kingdom of Great Britain and Northern Ireland from the European Union and the European Atomic Energy Community, and in particular Article 5(4) of the Windsor Framework in conjunction with section 24 of Annex 2 to that Framework. IS: Iceland; NO: Norway; XI: UK (Northern Ireland).

Table 34: Production volume and number of targeted samples collected in farmed game

Country	Production data (t)[(a)]	Number of samples
Austria	3437.00	113
Belgium	44.00	60
Bulgaria	0.00	
Croatia	10.00	16
Cyprus	4.00	
Czechia	120.00	93
Denmark	22.00	30
Estonia	0.00	
Finland	3000.00	123
France	126.00	75
Germany	1620.00	115
Greece	57.00	5
Hungary	57.00	68
Iceland	0.00	
Ireland	4.70	12
Italy	2160.00	19
Latvia	417.00	14
Lithuania	9.33	28
Luxembourg	0.00	
Malta	0.00	
Netherlands	95.00	17
Norway	1441.00	370
Poland	24.00	29
Portugal	0.00	1
Romania	59.00	63
Slovakia	0.00	76
Slovenia	2.30	9
Spain	0.00	5
Sweden	1252.00	85
United Kingdom (Northern Ireland)	0.00	
Total	**13,957.33**	**1426**

(a): The production data, taken from the 2022 Residue Control Plan, may pertain to the years 2020, 2021 or 2022;

The distribution of samples analysed, non-compliant samples and non-compliant results in farmed game are presented in Table 35. Of the 1426 samples analysed for farmed game, 21 (1.47%) were non-compliant (21 non-compliant results). The non-compliant samples were reported by four countries.

Table 35: Number of samples analysed, non-compliant samples and non-compliant results in farmed game

Substance Group[a]	Samples analysed[b]	% Samples analysed	Non-compliant samples[c]	% Non-compliant samples[d]	Non-compliant results[e]
A	344	24.12	0	-	0
A1	33	2.31	0	-	0
A2	14	0.98	0	-	0
A3	37	2.59	0	-	0
A4	34	2.38	0	-	0
A5	54	3.79	0	-	0
A6	202	14.17	0	-	0
B	1241	87.03	21	1.69	21
B1	286	20.06	1	0.35	1
B2	626	43.90	1	0.16	1
B2a	263	18.44	0	-	0
B2b	134	9.40	0	-	0
B2c	150	10.52	0	-	0
B2d	9	0.63	1	11.11	1
B2e	114	7.99	0	-	0
B2f	221	15.50	0	-	0
B3	582	40.81	19	3.26	19
B3a	200	14.03	1	0.50	1
B3b	183	12.83	0	-	0
B3c	341	23.91	18	5.28	18
B3d	15	1.05	0	-	0
B3e[f]					
B3f	103	7.22	0	0.00	0
Total	**1426**	**100.00**	**21**	**1.47**	**21**

(a): as detailed in Appendix E;

(b): number of samples analysed for one or more substances of the respective group;

(c): number of non-compliant samples for one or more substances in the respective group;

(d): '-' indicates that all samples were compliant;

(e): number of non-compliant results; one sample can be non-compliant for more substances therefore the number of non-compliant results can be higher than the number of non-compliant samples of the same group;

(f): B3e subgroup not analysed since not applicable.

No non-compliant samples were reported in Group A.

In Group B, there was one non-compliant sample and result reported for antibacterials (B1), sedatives (B2d) and organochlorine compounds, including PCBs (B3a).

For chemical elements (B3c), 18 non-compliant samples and 18 non-compliant results were reported (cadmium, copper and lead), by three countries.

More details on the specific substances identified and the number of non-compliant results reported by each country are given in Appendix A.

3.12 Wild game

European Commission Decision 97/747/EC requires that the number of samples to be taken each year to be at least 100 samples. Samples must be taken to analyse results of chemical elements. For wild game, a total of 1928 targeted samples were collected in 2022 (Tables 36 and 37).

Table 36: Production of wild game and number of targeted samples over 2007–2022

Year	Production (t)	Targeted samples
2007 (EU 27)	270,704	2360
2008 (EU 27)	316,541	2443
2009 (EU 27)	252,328	2488
2010 (EU 27)	147,097	2395
2011 (EU 27)	263,860	2674
2012 (EU 27)	209,607	2600
2013 (EU 28)	204,013	2694
2014 (EU 28)	180,307	2601
2015 (EU 28)	201,794	2480
2016 (MS 27)[a]	172,090	2468
2016 (EU 28)	3,394,896	
2017 (EU 28)	469,359	1760
2018 (EU 28)	390,891	1781
2018 (EU 27, IS, NO)[b]	397,393	
2019 (EU 27, IS, NO)[b]	6,407,975	2443
2020 (EU 27, IS, NO)[c]	6,407,528	2257
2021 (EU 27, IS, NO, XI)[d]	389,836	2322
2021 (EU 27, IS, NO, XI)[d]	494,660	1928

(a): data from France were not available for inclusion in the 2016 results report;

(b): the 2019 results data from Malta were not available for inclusion in this report; IS: Iceland; NO: Norway

(c): data from the United Kingdom were not included in the 2020 results report, because the United Kingdom was an EU MS, but it became a third country on 1 February 2020. IS: Iceland; NO: Norway

(d): data from the United Kingdom (Northern Ireland) are taken into account for 2021 and 2022. In accordance with the Agreement on the withdrawal of the United Kingdom of Great Britain and Northern Ireland from the European Union and the European Atomic Energy Community, and in particular Article 5(4) of the Windsor Framework in conjunction with section 24 of Annex 2 to that Framework. IS: Iceland; NO: Norway; XI: UK (Northern Ireland).

Table 37: Production volume and number of targeted samples collected in wild game

Country	Production data (tons)[(a)]	Number of samples
Austria	9387.00	145
Belgium	2465.00	
Bulgaria	71.00	81
Croatia	10.00	10
Cyprus	0.00	20
Czechia	21,781.00	157
Denmark	522.00	8
Estonia	499.00	98
Finland	100.00	
France	84,998.00	82
Germany	104,771.00	94
Greece	2.00	19
Hungary	7023.00	
Iceland	0.00	8
Ireland	282.10	73
Italy	6051.00	102
Latvia	202.00	101
Lithuania	119.58	2
Luxembourg	450.00	100
Malta	0.00	
Netherlands	580.00	103
Norway	7237.00	42
Poland	23,955.00	206
Portugal	10.00	45
Romania	41.00	7
Slovakia	9282.00	139
Slovenia	2091.00	102
Spain	210,985.00	98
Sweden	1745.00	86
United Kingdom (Northern Ireland)	0.00	
Total	**485,071.68**	**1928**

(a): The production data, taken from the 2022 Residue Control Plan, may pertain to the years 2020, 2021 or 2022;

The distribution of samples analysed non-compliant samples and non-compliant results in wild game are presented in Table 38. Of the 1928 samples analysed for wild game, 123 (6.38%) were non-compliant (150 non-compliant results). The non-compliant samples were reported by 11 countries.

Table 38: Number of samples analysed, non-compliant samples and non-compliant results in wild game

Substance Group[a]	Samples analysed[b]	% Samples analysed	Non-compliant samples[c]	% Non-compliant samples[d]	Non-compliant results[e]
A	8	0.41	0	-	0
A1	0	0.00	0	-	0
A2	3	0.16	0	-	0
A3	1	0.05	0	-	0
A4	0	0.00	0	-	0
A5	1	0.05	0	-	0
A6	4	0.21	0	-	0
B	1923	99.74	123	6.40	150
B1	10	0.52	0	-	0
B2	68	3.53	0	-	0
B2a	37	1.92	0	-	0
B2b	1	0.05	0	-	0
B2c	29	1.50	0	-	0
B2d	1	0.05	0	-	0
B2e	3	0.16	0	-	0
B2f	1	0.05	0	-	0
B3	1876	97.30	123	6.56	150
B3a	196	10.17	14	7.14	18
B3b	27	1.40	0	-	0
B3c	1750	90.77	108	6.17	121
B3d	0	0.00	0	-	0
B3e[f]					
B3f	30	1.56	6	20.00	11
Total	**1928**	**100.00**	**123**	**6.38**	**150**

(a): as detailed in Appendix E;

(b): number of samples analysed for one or more substances of the respective group;

(c): number of non-compliant samples for one or more substances in the respective group;

(d): '-' indicates that all samples were compliant;

(e): number of non-compliant results; one sample can be non-compliant for more substances therefore the number of non-compliant results can be higher than the number of non-compliant samples of the same group;

(f): B3e subgroup not analysed since not applicable.

The vast majority of the non-compliant samples (n = 108) (and results n = 121) were reported for metals (B3c) (61 results for cadmium; 46 results for lead; nine results for total mercury and five for zinc) reported by 11 countries, 14 non-compliant samples and 18 non-compliant results were recorded for organochlorine compounds (B3a) by three countries and six non-compliant samples and 11 non-compliant results were reported for 'others' (B3f) by one country.

3.13 Honey

The number of samples to be taken must be at least 10 per 300 tonnes of annual production for the first 3000 tonnes, plus one sample for each additional 300 tonnes. In order to check the fulfilment of this requirement the same equations were applied as described in Section 3.10.

Where the rate between the total targeted samples reported and the number of samples to be collected for the reported production is equal to 1.0 or higher, the requirements for sampling frequency were completely fulfilled. Countries with a value below 1.0 did not.

In 2022, 3056 targeted samples were collected for honey (Table 39). Production volume and number of targeted samples broken down by country are presented in Table 40.

Table 39: Production of honey and number of targeted samples over 2007–2022

Year	Production (t)	Targeted samples
2007 (EU 27)	188,945	5850
2008 (EU 27)	158,694	5257
2009 (EU 27)	162,213	4826
2010 (EU 27)	191,501	4720
2011 (EU 27)	215,141	4684
2012 (EU 27)	215,101	4820
2013 (EU 28)	205,466	4612
2014 (EU 28)	200,808	4294
2015 (EU 28)	193,347	4203
2016 (MS 27)[a]	222,048	3545
2016 (EU 28)	236,720	
2017 (EU 28)	216,244	3619
2018 (EU 28)	229,009	3645
2018 (EU 27, IS, NO)[b]	230,194	
2019 (EU 27, IS, NO)[b]	273,240	3926
2020 (EU 27, IS, NO)[c]	266,211	3301
2021 (EU 27, IS, NO, XI)[d]	225,463	3266
2022 (EU 27, IS, NO, XI)[d]	231,289	3056

(a): data from France were not available for inclusion in the 2016 results report;

(b): the 2019 results data from Malta were not available for inclusion in this report; IS: Iceland; NO: Norway

(c): data from the United Kingdom were not included in the 2020 results report, because the United Kingdom was an EU MS, but it became a third country on 1 February 2020. IS: Iceland; NO: Norway

(d): data from the United Kingdom (Northern Ireland) are taken into account for 2021 and 2022. In accordance with the Agreement on the withdrawal of the United Kingdom of Great Britain and Northern Ireland from the European Union and the European Atomic Energy Community, and in particular Article 5(4) of the Windsor Framework in conjunction with section 24 of Annex 2 to that Framework. IS: Iceland; NO: Norway; XI: UK (Northern Ireland).

Table 40: Production volume and number of targeted samples collected in honey

Country	Production data (t)[(a)]	Number of samples	Samples tested/required
Austria	3600	181	1.77
Belgium	2500		
Bulgaria	5617	54	0.5
Croatia	2200	107	1.46
Cyprus	309	53	5.15
Czechia	5500	126	1.16
Denmark	2445	87	1.07
Estonia	1117	28	0.75
Finland	2590	76	0.88
France	31,791	119	0.61
Germany	29,249	222	1.18
Greece	22,590	231	1.4
Hungary	16,842	108	0.74
Iceland	0		NA
Ireland	114	68	17.89
Italy	18,500	197	1.3
Latvia	1679	49	0.88
Lithuania	6033	66	0.6
Luxembourg	150	26	5.2
Malta	15	12	24
Netherlands	1730	24	0.42
Norway	1550	72	1.39
Poland	14,409	312	2.26
Portugal	9817	98	0.8
Romania	12,164	146	1.12
Slovakia	4000	241	2.33
Slovenia	1293	69	1.6
Spain	30,512	178	0.93
Sweden	2949	97	0.99
United Kingdom (Northern Ireland)	24	9	11.25
Total	**228,789**	**3056**	

(a): The production data, taken from the 2022 Residue Control Plan, may pertain to the years 2020, 2021 or 2022;

The distribution of samples analysed, non-compliant samples and non-compliant results in honey are presented in Table 41. Of the 3056 samples analysed for honey, 42 (1.37%) were non-compliant (97 non-compliant results). The non-compliant samples were reported by 10 countries.

Table 41: Number of samples analysed, non-compliant samples and non-compliant results in honey

Substance Group[a]	Samples analysed[b]	% Samples analysed	Non-compliant samples[c]	% Non-compliant samples[d]	Non-compliant results[e]
A	936	30.63	0	-	0
A1	0	0.00	0	-	0
A2	0	0.00	0	-	0
A3	1	0.03	0	-	0
A4	0	0.00	0	-	0
A5	197	6.45	0	-	0
A6	738	24.15	0	-	0
B	2860	93.59	42	1.47	97
B1	1459	47.74	21	1.44	42
B2	1190	38.94	0	-	0
B2a	372	12.17	0	-	0
B2b	106	3.47	0	-	0
B2c	946	30.96	0	-	0
B2d	0	0.00	0	-	0
B2e	14	0.46	0	-	0
B2f	792	25.92	0	-	0
B3	1450	47.45	21	1.45	55
B3a	813	26.60	0	-	0
B3b	824	26.96	1	0.12	1
B3c	468	15.31	14	2.99	30
B3d	5	0.16	0	-	0
B3e[f]					
B3f	783	25.62	15	1.92	24
Total	**3056**	**100.00**	**42**	**1.37**	**97**

(a): as detailed in Appendix E;

(b): number of samples analysed for one or more substances of the respective group;

(c): number of non-compliant samples for one or more substances in the respective group;

(d): '-' indicates that all samples were compliant;

(e): number of non-compliant results; one sample can be non-compliant for more substances therefore the number of non-compliant results can be higher than the number of non-compliant samples of the same group;

(f): B3e subgroup not analysed since not applicable.

No non-compliant samples were reported in Group A.

For antibacterials (B1), 21 non-compliant samples (42 non-compliant results) were reported by six countries. One non-compliant sample and result was reported for organophosphorus compounds (B3b), 14 non-compliant samples and 30 non-compliant results were reported for chemical elements (B3c) (nine for cadmium and zinc, eight for lead and four for copper) by three

countries and 15 non-compliant samples and 24 non-compliant results were reported for 'others' (B3f).

More details on the specific substances identified and the number of non-compliant results reported by each country are given in Appendix A.

3.14 Suspect, import and other samples

In addition to the targeted samples collected in conformity with the specification of the NRCP for 2022, results were reported on samples collected through sampling strategies other than targeted. According to Directive 96/23/EC in case of infringements of maximum residue limits when animals or animal products are placed on the market, intensified checks on the animals and products from the farm and/or establishment in question must be carried out by the competent authorities. Also, in the event of possession or presence of prohibited substances at any point during manufacture, storage, distribution or sale through the food and feed production chain, or suspicion or evidence of illegal treatment or non-compliance with the withdrawal period for an authorised medicinal veterinary product the competent authorities have to apply special measures including repeated sampling in the farm or establishment concerned. Thus, these samples are not representative for the assessment of the residue situation in the reporting countries and therefore they are reported separately in the residue database as 'suspect samples', as part of the follow-up measures taken in case of infringements.

In 2022, 3892 suspect samples were reported of which 111 (0.03%) were non-compliant. It is to note that the number of non-compliant results reported from suspect sampling, does not accurately reflect the residue situation of a country. The suspect samples are mainly taken as follow-up of non-compliance of targeted samples or evidence of possession and use of prohibited substances. In addition, the sampling procedure applied in case of suspicion might be different among countries. An overview on the number of suspect samples analysed for the different animal species/product categories and the frequency of non-compliant samples is presented in Table 42. Further details on the substances identified and country which reported non-compliant results are given in Appendix B.

Table 42: Number of suspect, import and other samples analysed and frequency of non-compliant samples and in all species and product categories

Product Group	Suspect samples total	Suspect samples non-compliant	Import samples total	Import samples non-compliant	Other samples total	Other samples non-compliant
Aquaculture	294	18	1690	5	174	0
Bovines	2589	45	226	0	18,314	24
Eggs	76	5	31	0	238	0
Game	0	0	0	0	0	0
Game (Wild	4	0	3	0	31	5
Honey	33	8	256	1	209	2
Horses	31	1	20	1	101	1
Milk	382	14	14	0	910	3
Pigs	319	0	87	0	225,614	32
Poultry	83	18	344	0	266	2

Product Group	Suspect samples total	Suspect samples non-compliant	Import samples total	Import samples non-compliant	Other samples total	Other samples non-compliant
Rabbits	7	0	3	0	104	1
Sheep/goats	74	2	91	0	4826	2
Total	**3892**	**111**	**2765**	**7**	**250,787**	**72**
Percentage		**0.03**		**0**		**0**

Apart from the data submitted in accordance to NRCPs, a certain amount of results on samples checked at import are reported (n = 2765). As the control of samples at import is linked to the third country monitoring to protect public health in EU, those results are reported to the EC using the TRACES and RASFF tools. Therefore, those data may not be representative of the overall situation of residue control at import. An overview on the number of import samples analysed for the different animal species/product categories and the frequency of non-compliant samples is presented in Table 42. Further details on the substances identified and countries which reported non-compliant results are given in Appendix C.

In total, 250,787 samples were collected in the framework of other monitoring programmes developed under the national legislation. An overview on the number of 'other' samples analysed for the different animal species/product categories and the frequency of non-compliant samples is presented in Table 42. Further details on the substances identified and countries which reported non-compliant results are given in Appendix D.

4 Conclusions

- In 2022, European Union (EU) Member States*[18], Iceland and Norway reported in the framework of the residue monitoring the results for 600,320 samples. For 2021 and 2022, the only United Kingdom data that were reported to EFSA were from Northern Ireland.
- A total of 342,850 targeted samples and 3892 suspect samples were reported under Council Directive 96/23/EC. Additionally, 250,806 samples collected in the framework of other programmes developed under the national legislation and 2772 samples checked at import, were reported in 2022.
- The majority of countries fulfilled the requirements for sampling frequency laid down in Council Directive 96/23/EC and in Commission Decision 97/747/EC.
- Overall, there were 0.27% non-compliant samples out of the 342,850 targeted samples in 2022.
- No non-compliant targeted samples were reported for stilbenes and derivatives (A1) in any of the animal product groups tested.
- For antithyroid agents (A2), there were 0.2% non-compliant targeted samples, for thiouracil (n=21) and 6-Methyl-2-thiouracil (n=2).
- In Group of steroids (A3), 0.31% of the targeted samples were non-compliant; the non-compliant samples were found in bovines (0.28%), pigs (0.22%), poultry (0.40%) and sheep and goats (2.32%).
- In Group of resorcylic acid lactones (A4), 0.09% of the targeted samples were non-compliant; the non-compliant samples were found in bovines (0.14%), horses (0.82%) and pigs (0.07%).
- For beta-agonists (A5), there were six non-compliant targeted samples reported, three for clenbuterol and salbutamol, and two for ractopamine, all found in bovines.
- Prohibited substances (A6) were found in 0.02% of targeted samples. Substances identified were chloramphenicol (n = 8), semicarbazide (n=8), metronidazole (n = 2), furaltadone (n = 2) and nitrofurazone (n = 1).
- For antibacterials (B1), 0.14% of the targeted samples analysed under the Directive 96/23/EC monitoring were non-compliant. The highest frequency of non-compliant samples for antibacterials was found in honey (1.44%).
- In Group B2 (other veterinary drugs), the highest proportion of non-compliant targeted samples was found for non-steroidal anti-inflammatory drugs (NSAIDs) (B2e) (0.19%). For NSAIDs, the non-compliant samples were reported across the different species as

[18] *In accordance with the Agreement on the withdrawal of the United Kingdom of Great Britain and Northern Ireland from the European Union and the European Atomic Energy Community, and in particular Article 5(4) of the Windsor Framework (see Joint Declaration No 1/2023 of the Union and the United Kingdom in the Joint Committee established by the Agreement on the withdrawal of the United Kingdom of Great Britain and Northern Ireland from the European Union and the European Atomic Energy Community of 24 March 2023, OJ L 102, 17.4.2023, p.87) in conjunction with section 24 of Annex 2 to that Framework, for the purposes of this Regulation, references to Member States include the United Kingdom in respect of Northern Ireland.

follows; bovines (0.30%), horses (1.15%), milk (0.33%), pigs (0.05%) and sheep and goats (0.17%).

- Instances of non-compliance targeted samples for anthelmintics (B2a) were reported in bovines (0.04%), milk (0.06%), pigs (0.03%) and sheep and goats (0.20%).
- For anticoccidials (B2b), 0.14% of the targeted samples analysed were non-compliant and were reported across the different species as follows: eggs (0.49%), pigs (0.04%), poultry (0.12%) and rabbit meat (1.90%).
- One non-compliant targeted sample was reported for pyrethroids (B2c) in poultry (0.04%) and two non-compliant samples were reported for sedatives (B2d) in bovines (0.06%) and farmed games (11.11%).
- Non-compliant targeted samples were reported for 'other pharmacologically active substances' (B2f), in bovines (0.19%), milk (0.05%), pigs (0.02%) and sheep and goats (0.12%).
- In Group B3 (other substances and environmental contaminants), the 'chemical elements' (B3c) had the highest overall percentage of non-compliant targeted samples (2.74%), with cadmium, copper, lead, total mercury and zinc being most frequently identified.
- Non-compliant targeted samples were reported for organochlorine compounds (B3a) and organophosphorus compounds (B3b); 0.18% and 0.01%, respectively.
- For mycotoxins (B3d), non-compliant targeted samples were reported for bovines (0.50%), horses (1.49%), milk (0.54%), pigs (0.23%) and poultry (0.06%), with those identified being zearalenone, aflatoxin M1, ochratoxin A, aflatoxin (sum of B1, B2, G1, G2), and aflatoxin B1.
- For dyes (B3e), non-compliant targeted samples were reported for aquaculture (1.15%). The substances found were sum of malachite green and leucomalachite green, sum of brilliant green and leucobrilliant green and sum of crystal violet and leucocrystal violet.
- For 'others' (B3f), non-compliant targeted samples were reported for aquaculture (0.21%), bovines (1.51%), wild game (20.00%), honey (1.94%), poultry (0.30%) and sheep and goats (0.48%). The substances identified were copper compounds, mercury compounds, sulphur dioxide and acetamiprid.
- Overall, for all the sampling strategies the percentage of non-compliant samples in 2022 (0.18%, considering any sampling strategy) was comparable to the previous 13 years (0.17%-0.37%). The same overall pattern was observed for targeted samples in 2022 (0.27%) compared to the previous 5 years (0.24%-0.35%).
- Compared to the results from 2017 to 2021, in 2022 the frequency of non-compliant targeted results was decreased for antithyroid agents (A2), while for steroids (A3) and resorcylic acid lactones (A4) the frequency of non-compliant results was higher than in 2020 and 2021, but lower compared to the previous years. The frequency of non-compliant results for beta-agonists (A5) was higher compared to all previous years and in line with that of 2017. For prohibited substances (A6), compared to 2021 the frequency on non-compliance in 2022 was lower, although in line with that of 2020.

- Decreases compared to all previous years were noted for targeted samples for anthelmintics (B2a) while an opposite trend was found for sedatives (B2d) and 'others' (B3f).
- Compared to 2021, for antibacterials (B1) and 'other pharmacologically active substances' (B2f), the frequency on non-compliance in targeted samples was stable, while for anticoccidials (B2b), pyrethroids (B2c), organochlorine compounds (B3a), chemical elements (including metals) (B3c), mycotoxins (B3d) and dyes (B3e) the frequency on non-compliance was higher. Finally, a decrease compared to 2021 was found for non-steroidal anti-inflammatory drugs (NSAIDs) (B2e) and organophosphorus compounds (B3b).

5 Abbreviations

AMOZ	5-methylmorpholino-3-amino-2-oxazolidone
AOZ	3-amino-2-oxazolidone
DG SANTE	Directorate General for Health and Food Safety
EC	European Commission
IS	Iceland
MRL	Maximum Residue Limit
MS	Member States
NO	Norway
NRCPs	National Residue Control Plans
NSAIDs	Non-Steroidal Anti-Inflammatory Drugs
RASFF	Rapid Alert System for Food and Feed
RPAs	Reference Points of Actions
SEM	Semicarbazide
TRACES	Trade Control and Expert System

6 References

EFSA (European Food Safety Authority), 2013. Standard Sample Description Ver. 2.0. *EFSA Journal* 11 (10): 3424. https://doi.org/10.2903/j.efsa.2013.3424.

EFSA (European Food Safety Authority), 2015. The Food Classification and Description System FoodEx 2 (Revision 2). *EFSA Supporting Publications* 12 (5): 804E. https://doi.org/10.2903/sp.efsa.2015.EN-804.

EFSA (European Food Safety Authority), 2022a. Chemical Monitoring Reporting Guidance: 2022 Data Collection. *EFSA Supporting Publications* 19 (1): 7132E. https://doi.org/10.2903/sp.efsa.2022.EN-7132.

EFSA (European Food Safety Authority), 2022b. Chemical Monitoring Reporting Guideline (SSD2) (Version 7). *EFSA Supporting Publications*. https://doi.org/10.5281/zenodo.6207310.

EFSA (European Food Safety Authority), 2022c. The 2021 European Union Report on Pesticide Residues in Food. *EFSA Journal 2023;21(4):7939*. https://doi.org/10.2903/j.efsa.2023.7939.

Appendix A List of non-compliant results: targeted sampling

Category	Group	Substance	Country	Samples analysed	Non-compliant results	% Non-compliant[(a)]
Aquaculture	Group B1	Sum of oxytetracycline and its 4-epimer	Spain	147	1	0.68
Aquaculture	Group B1	Trimethoprim	Germany	55	1	1.82
Aquaculture	Group B1	Trimethoprim	Italy	26	1	3.85
Aquaculture	**Group B1**	**Sub-total for Group B1**	**3**		**3**	
Aquaculture	Group B3a	DDT (sum of p,p'-DDT, o,p'-DDT, p-p'-DDE and p,p'-TDE (DDD) expressed as DDT)	Romania	8	4	50.00
Aquaculture	Group B3a	DDT (sum of p,p'-DDT, o,p'-DDT, p-p'-DDE and p,p'-TDE (DDD) expressed as DDT)	Sweden	23	5	21.74
Aquaculture	**Group B3a**	**Sub-total for Group B3a**	**2**		**9**	
Aquaculture	Group B3c	Total mercury	Malta	5	1	20.00
Aquaculture	**Group B3c**	**Sub-total for Group B3c**	**1**		**1**	
Aquaculture	Group B3e	Sum of Brilliant Green and Leucobrilliant Green	Germany	272	1	0.37
Aquaculture	Group B3e	Sum of crystal violet and leucocrystal violet	Slovakia	85	1	1.18
Aquaculture	Group B3e	Sum of malachite green and leucomalachite green	Bulgaria	10	1	10.00
Aquaculture	Group B3e	Sum of malachite green and leucomalachite green	Czechia	85	1	1.18
Aquaculture	Group B3e	Sum of malachite green and leucomalachite green	Germany	272	3	1.10
Aquaculture	Group B3e	Sum of malachite green and leucomalachite green	Italy	251	6	2.39
Aquaculture	Group B3e	Sum of malachite green and leucomalachite green	Poland	265	4	1.51

Category	Group	Substance	Country	Samples analysed	Non-compliant results	% Non-compliant[a]
Aquaculture	Group B3e	Sum of malachite green and leucomalachite green	Slovakia	85	3	3.53
Aquaculture	**Group B3e**	**Sub-total for Group B3e**	**6**		**20**	
Aquaculture	Group B3f	Sulphur dioxide	Malta	11	2	18.18
Aquaculture	**Group B3f**	**Sub-total for Group B3f**	**1**		**2**	
Aquaculture		**Total for Aquaculture**			**35**	
Bovines	Group A2	6-Methyl-2-thiouracil	Portugal	139	2	1.44
Bovines	Group A2	Thiouracil	Cyprus	3	1	33.33
Bovines	Group A2	Thiouracil	Greece	40	3	7.50
Bovines	Group A2	Thiouracil	Ireland	261	4	1.53
Bovines	Group A2	Thiouracil	Lithuania	25	2	8.00
Bovines	Group A2	Thiouracil	Netherlands	254	5	1.97
Bovines	Group A2	Thiouracil	Poland	336	1	0.30
Bovines	Group A2	Thiouracil	Portugal	139	3	2.16
Bovines	**Group A2**	**Sub-total for Group A2**	**7**		**21**	
Bovines	Group A3	Boldenone	Austria	307	2	0.65
Bovines	Group A3	Boldenone-Alpha	Austria	308	3	0.97
Bovines	Group A3	Epinandrolone (19-Norepitestosterone)	Poland	249	11	4.42
Bovines	Group A3	Oestradiol-17-Beta	Italy	139	1	0.72
Bovines	Group A3	Oestradiol-17-Beta	Latvia	16	1	6.25
Bovines	Group A3	Oestradiol-17-Beta	Lithuania	58	2	3.45
Bovines	Group A3	Oestradiol-17-Beta	Northern Ireland		4	
Bovines	Group A3	Oestradiol-17-Beta	Poland	297	1	0.34
Bovines	Group A3	Nandrolone	Northern Ireland		18	
Bovines	Group A3	Norethandrolon	Lithuania	95	2	2.11
Bovines	Group A3	Progesterone	Lithuania	18	6	33.33
Bovines	Group A3	Progesterone-17-Alpha-Hydroxy	Lithuania	6	3	50.00
Bovines	Group A3	Testosterone-17-Beta	Croatia	24	5	20.83

Category	Group	Substance	Country	Samples analysed	Non-compliant results	% Non-compliant[a]
Bovines	Group A3	Testosterone-17-Beta	Lithuania	63	7	11.11
Bovines	Group A3	Testosterone-17-Beta	Northern Ireland		4	
Bovines	**Group A3**	**Sub-total for Group A3**	**7**		**70**	
Bovines	Group A4	Alpha-Zearalanol (Zeranol)	France	2564	1	0.04
Bovines	Group A4	Alpha-Zearalanol (Zeranol)	Latvia	17	3	17.65
Bovines	Group A4	Beta Zearalanol (Taleranol)	France	2220	1	0.05
Bovines	Group A4	Beta Zearalanol (Taleranol)	Latvia	17	3	17.65
Bovines	Group A4	Beta Zearalanol (Taleranol)	Romania	131	1	0.76
Bovines	Group A4	Beta Zearalanol (Taleranol)	Spain	664	1	0.15
Bovines	Group A4	Zearalanone	Croatia	60	1	1.67
Bovines	Group A4	Zearalenol alpha	Latvia	9	3	33.33
Bovines	Group A4	Zearalenol alpha	Romania	27	2	7.41
Bovines	Group A4	Zearalenol beta	Austria	157	1	0.64
Bovines	Group A4	Zearalenol beta	Latvia	9	4	44.44
Bovines	Group A4	Zearalenol beta	Romania	27	4	14.81
Bovines	Group A4	Zearalenol beta	Spain	392	2	0.51
Bovines	**Group A4**	**Sub-total for Group A4**	**6**		**27**	
Bovines	Group A5	Clenbuterol	Portugal	382	3	0.79
Bovines	Group A5	Ractopamine	Portugal	382	2	0.52
Bovines	Group A5	Salbutamol (albuterol)	Ireland	1076	1	0.09
Bovines	Group A5	Salbutamol (albuterol)	Portugal	315	2	0.63
Bovines	**Group A5**	**Sub-total for Group A5**	**2**		**8**	
Bovines	Group A6	Nitrofurazone	Poland	146	1	0.68
Bovines	Group A6	SEM (semicarbazide)	Ireland	326	6	1.84
Bovines	**Group A6**	**Sub-total for Group A6**	**2**		**7**	
Bovines	Group B1	Amoxycillin	Croatia	130	1	0.77

Category	Group	Substance	Country	Samples analysed	Non-compliant results	% Non-compliant[a]
Bovines	Group B1	Amoxycillin	France	1816	1	0.06
Bovines	Group B1	Benzylpenicillin (Penicillin G)	Czechia	292	2	0.68
Bovines	Group B1	Benzylpenicillin (Penicillin G)	France	1816	2	0.11
Bovines	Group B1	Benzylpenicillin (Penicillin G)	Netherlands	1672	1	0.06
Bovines	Group B1	Dihydrostreptomycin	Croatia	130	1	0.77
Bovines	Group B1	Dihydrostreptomycin	Cyprus	36	1	2.78
Bovines	Group B1	Dihydrostreptomycin	Czechia	209	1	0.48
Bovines	Group B1	Dihydrostreptomycin	France	1815	8	0.44
Bovines	Group B1	Dihydrostreptomycin	Poland	1704	1	0.06
Bovines	Group B1	Flumequine	France	1816	1	0.06
Bovines	Group B1	Lincomycin	Italy	418	1	0.24
Bovines	Group B1	Neomycin	Poland	970	1	0.10
Bovines	Group B1	Sulfadiazine	Ireland	984	1	0.10
Bovines	Group B1	Sulfadimidine	Cyprus	36	1	2.78
Bovines	Group B1	Sulfadimidine	France	1812	1	0.06
Bovines	Group B1	Sulfadimidine	Italy	919	1	0.11
Bovines	Group B1	Sulfamethazin (sulfadimidin)	Ireland	984	1	0.10
Bovines	Group B1	Sulfonamides	Cyprus	1	1	100.00
Bovines	Group B1	Sum of enrofloxacin and ciprofloxacin	Poland	1710	1	0.06
Bovines	Group B1	Sum of enrofloxacin and ciprofloxacin	Spain	1516	2	0.13
Bovines	Group B1	Sum of florfenicol and its metabolites measured as florfenicol-amine	France	1816	2	0.11
Bovines	Group B1	Sum of florfenicol and its metabolites measured as florfenicol-amine	Spain	574	1	0.17
Bovines	Group B1	Sum of oxytetracycline and its 4-epimer	France	1806	3	0.17
Bovines	Group B1	Sum of oxytetracycline and its 4-epimer	Italy	785	1	0.13

Category	Group	Substance	Country	Samples analysed	Non-compliant results	% Non-compliant[a]
Bovines	Group B1	Sum of oxytetracycline and its 4-epimer	Netherlands	1672	2	0.12
Bovines	Group B1	Sum of oxytetracycline and its 4-epimer	Poland	1725	1	0.06
Bovines	Group B1	Sum of oxytetracycline and its 4-epimer	Romania	30	1	3.33
Bovines	Group B1	Sum of spiramycin and neospiramycin	France	1813	1	0.06
Bovines	Group B1	Thiamphenicol	Spain	525	1	0.19
Bovines	Group B1	Tilmicosin	France	1816	1	0.06
Bovines	Group B1	Tilmicosin	Malta	90	1	1.11
Bovines	Group B1	Tilmicosin	Portugal	194	1	0.52
Bovines	Group B1	Tulathromycin	France	1815	4	0.22
Bovines	**Group B1**	**Sub-total for Group B1**	**12**		**51**	
Bovines	Group B2a	Ivermectin	France	385	1	0.26
Bovines	Group B2a	Ivermectin	Northern Ireland		1	
Bovines	**Group B2a**	**Sub-total for Group B2a**	**2**		**2**	
Bovines	Group B2d	Xylazine	Romania	20	1	5.00
Bovines	**Group B2d**	**Sub-total for Group B2d**	**1**		**1**	
Bovines	Group B2e	Antipyrin-4-Methylamino	Germany	380	1	0.26
Bovines	Group B2e	Diclofen (Diclofenac)	Germany	730	1	0.14
Bovines	Group B2e	Diclofen (Diclofenac)	Spain	18	1	5.56
Bovines	Group B2e	Ketoprofen	Germany	2356	3	0.13
Bovines	Group B2e	Meloxicam	Germany	2821	14	0.50
Bovines	Group B2e	Naproxen	Austria	100	1	1.00
Bovines	Group B2e	Phenylbutazone	Northern Ireland		1	
Bovines	Group B2e	Phenylbutazone	Spain	77	1	1.30
Bovines	Group B2e	Tolfenamic acid	France	902	1	0.11
Bovines	**Group B2e**	**Sub-total for Group B2e**	**5**		**24**	
Bovines	Group B2f	Dexamethasone	France	706	3	0.42

Category	Group	Substance	Country	Samples analysed	Non-compliant results	% Non-compliant[a]
Bovines	Group B2f	Dexamethasone	Germany	1091	10	0.92
Bovines	Group B2f	Dexamethasone	Italy	1789	3	0.17
Bovines	Group B2f	Dexamethasone	Malta	7	1	14.29
Bovines	Group B2f	Dexamethasone	Northern Ireland		2	
Bovines	Group B2f	Dexamethasone	Poland	140	1	0.71
Bovines	Group B2f	Prednisolone	Germany	1168	1	0.09
Bovines	**Group B2f**	**Sub-total for Group B2f**	**6**		**21**	
Bovines	Group B3a	Hexachlorocyclohexane (HCH), alpha-isomer	Spain	194	1	0.52
Bovines	Group B3a	Non-dioxin-like PCBs	Slovakia	10	1	10.00
Bovines	Group B3a	Sum of 6 PCB indicators	Germany	243	1	0.41
Bovines	**Group B3a**	**Sub-total for Group B3a**	**3**		**3**	
Bovines	Group B3c	Cadmium (Cd)	Croatia	15	3	20.00
Bovines	Group B3c	Cadmium (Cd)	Czechia	70	4	5.71
Bovines	Group B3c	Cadmium (Cd)	France	677	4	0.59
Bovines	Group B3c	Cadmium (Cd)	Germany	281	8	2.85
Bovines	Group B3c	Cadmium (Cd)	Netherlands	153	11	7.19
Bovines	Group B3c	Cadmium (Cd)	Slovenia	8	1	12.50
Bovines	Group B3c	Cadmium (Cd)	Spain	181	3	1.66
Bovines	Group B3c	Copper (Cu)	Austria	232	6	2.59
Bovines	Group B3c	Copper (Cu)	Germany	281	75	26.69
Bovines	Group B3c	Copper (Cu)	Slovenia	10	2	20.00
Bovines	Group B3c	Lead (Pb)	France	677	1	0.15
Bovines	Group B3c	Lead (Pb)	Germany	281	3	1.07
Bovines	Group B3c	Lead (Pb)	Netherlands	153	4	2.61
Bovines	Group B3c	Lead (Pb)	Poland	210	2	0.95
Bovines	Group B3c	Lead (Pb)	Spain	149	3	2.01
Bovines	Group B3c	Total mercury	Germany	276	1	0.36
Bovines	Group B3c	Total mercury	Netherlands	153	1	0.65
Bovines	**Group B3c**	**Sub-total for Group B3c**	**9**		**132**	

Category	Group	Substance	Country	Samples analysed	Non-compliant results	% Non-compliant[a]
Bovines	Group B3d	Zearalenone	Austria	157	1	0.64
Bovines	Group B3d	Zearalenone	Czechia	51	1	1.96
Bovines	Group B3d	Zearalenone	Latvia	10	3	30.00
Bovines	Group B3d	Zearalenone	Romania	27	5	18.52
Bovines	Group B3d	Zearalenone	Spain	204	2	0.98
Bovines	**Group B3d**	**Sub-total for Group B3d**	**5**		**12**	
Bovines	Group B3f	Copper compounds (Copper)	Denmark	23	10	43.48
Bovines	**Group B3f**	**Sub-total for Group B3f**	**1**		**10**	
Bovines		**Total for Bovines**			**389**	
Eggs	Group B1	Doxycycline	Croatia	150	1	0.67
Eggs	Group B1	Doxycycline	Poland	347	1	0.29
Eggs	Group B1	Doxycycline	Spain	424	1	0.24
Eggs	Group B1	Sulfadiazine	Spain	459	2	0.44
Eggs	Group B1	Sum of enrofloxacin and ciprofloxacin	Bulgaria	1	1	100.00
Eggs	Group B1	Trimethoprim	Spain	402	1	0.25
Eggs	**Group B1**	**Sub-total for Group B1**	**4**		**7**	
Eggs	Group B2b	Diclazuril	Croatia	177	3	1.69
Eggs	Group B2b	Diclazuril	Poland	264	1	0.38
Eggs	Group B2b	Diclazuril	Portugal	139	1	0.72
Eggs	Group B2b	Lasalocid A sodium	Cyprus	50	1	2.00
Eggs	Group B2b	Maduramicin ammonium	Croatia	177	1	0.56
Eggs	Group B2b	Monensin	Poland	264	1	0.38
Eggs	Group B2b	Monensin	Slovakia	133	1	0.75
Eggs	Group B2b	Monensin sodium	Germany	214	1	0.47
Eggs	Group B2b	Narasin	Denmark	140	1	0.71
Eggs	Group B2b	Narasin	Malta	140	1	0.71
Eggs	Group B2b	Narasin	Portugal	139	2	1.44
Eggs	Group B2b	Narasin	Slovakia	133	2	1.50
Eggs	Group B2b	Narasin	Sweden	154	1	0.65

Category	Group	Substance	Country	Samples analysed	Non-compliant results	% Non-compliant[a]
Eggs	Group B2b	Nicarbazin	Malta	140	3	2.14
Eggs	Group B2b	Nicarbazin	Portugal	139	1	0.72
Eggs	Group B2b	Nicarbazin	Slovakia	133	2	1.50
Eggs	Group B2b	Nicarbazin	Slovenia	191	1	0.52
Eggs	Group B2b	Salinomycin	Denmark	140	1	0.71
Eggs	Group B2b	Salinomycin	Latvia	139	1	0.72
Eggs	Group B2b	Salinomycin	Poland	264	1	0.38
Eggs	Group B2b	Salinomycin	Portugal	139	1	0.72
Eggs	Group B2b	Salinomycin	Slovenia	191	2	1.05
Eggs	Group B2b	Salinomycin sodium	Cyprus	50	1	2.00
Eggs	Group B2b	Salinomycin sodium	Latvia	1	1	100.00
Eggs	Group B2b	Salinomycin sodium	Malta	140	4	2.86
Eggs	Group B2b	Salinomycin sodium	Romania	136	1	0.74
Eggs	Group B2b	Toltrazurilsulfon	Latvia	139	1	0.72
Eggs	**Group B2b**	**Sub-total for Group B2b**	**12**		**38**	
Eggs	Group B3a	Sum of 6 PCB indicators	Germany	163	1	0.61
Eggs	Group B3a	TEQ Dioxins and dioxin-like PCBs MB	Germany	124	1	0.81
Eggs	Group B3a	TEQ dioxins (PCDD and PCDF) LB	Germany	94	1	1.06
Eggs	Group B3a	TEQ dioxins (PCDD and PCDF) MB	Germany	124	1	0.81
Eggs	Group B3a	TEQ dioxins (PCDD and PCDF) UB	Germany	158	1	0.63
Eggs	Group B3a	TEQ dioxins and dioxin-like PCBs LB	Germany	94	1	1.06
Eggs	Group B3a	TEQ dioxins and dioxin-like PCBs UB	Germany	158	1	0.63
Eggs	**Group B3a**	**Sub-total for Group B3a**	**1**		**7**	
Eggs		**Total for Eggs**			**52**	
Game (Farmed Game)	Group B1	Sum of oxytetracycline and its 4-epimer	Austria	25	1	4.00
Game (Farmed Game)	**Group B1**	**Sub-total for Group B1**	**1**		**1**	

Category	Group	Substance	Country	Samples analysed	Non-compliant results	% Non-compliant[(a)]
Game (Farmed Game)	Group B2d	Xylazine	Austria	4	1	25.00
Game (Farmed Game)	**Group B2d**	**Sub-total for Group B2d**	**1**		**1**	
Game (Farmed Game)	Group B3a	Hexachlorobenzene	Sweden	12	1	8.33
Game (Farmed Game)	**Group B3a**	**Sub-total for Group B3a**	**1**		**1**	
Game (Farmed Game)	Group B3c	Cadmium (Cd)	Finland	29	13	44.83
Game (Farmed Game)	Group B3c	Copper (Cu)	Germany	30	4	13.33
Game (Farmed Game)	Group B3c	Lead (Pb)	Austria	19	1	5.26
Game (Farmed Game)	**Group B3c**	**Sub-total for Group B3c**	**3**		**18**	
Game (Farmed Game)		**Total for Game (Farmed Game)**			**21**	
Game (Wild Game)	Group B3a	Aldrin and Dieldrin (Aldrin and dieldrin combined expressed as dieldrin)	Germany	79	1	1.27
Game (Wild Game)	Group B3a	DDT (sum of p,p'-DDT, o,p'-DDT, p-p'-DDE and p,p'-TDE (DDD) expressed as DDT)	Germany	79	10	12.66
Game (Wild Game)	Group B3a	DDT (sum of p,p'-DDT, o,p'-DDT, p-p'-DDE and p,p'-TDE (DDD) expressed as DDT)	Slovakia	26	3	11.54
Game (Wild Game)	Group B3a	Heptachlor (sum of heptachlor and heptachlor epoxide expressed as heptachlor)	Germany	79	1	1.27
Game (Wild Game)	Group B3a	Hexachlorobenzene	Germany	79	2	2.53
Game (Wild Game)	Group B3a	Sum of 6 PCB indicators	Czechia	34	1	2.94
Game (Wild Game)	**Group B3a**	**Sub-total for Group B3a**	**3**		**18**	
Game (Wild Game)	Group B3c	Cadmium (Cd)	Denmark	6	5	83.33
Game (Wild Game)	Group B3c	Cadmium (Cd)	France	64	9	14.06
Game (Wild Game)	Group B3c	Cadmium (Cd)	Latvia	100	29	29.00
Game (Wild Game)	Group B3c	Cadmium (Cd)	Poland	184	8	4.35

Category	Group	Substance	Country	Samples analysed	Non-compliant results	% Non-compliant[a]
Game (Wild Game)	Group B3c	Cadmium (Cd)	Spain	98	10	10.20
Game (Wild Game)	Group B3c	Lead (Pb)	Austria	132	6	4.55
Game (Wild Game)	Group B3c	Lead (Pb)	Croatia	10	2	20.00
Game (Wild Game)	Group B3c	Lead (Pb)	Czechia	99	2	2.02
Game (Wild Game)	Group B3c	Lead (Pb)	Denmark	6	5	83.33
Game (Wild Game)	Group B3c	Lead (Pb)	France	64	15	23.44
Game (Wild Game)	Group B3c	Lead (Pb)	Latvia	100	5	5.00
Game (Wild Game)	Group B3c	Lead (Pb)	Poland	184	6	3.26
Game (Wild Game)	Group B3c	Lead (Pb)	Slovakia	105	1	0.95
Game (Wild Game)	Group B3c	Lead (Pb)	Sweden	86	4	4.65
Game (Wild Game)	Group B3c	Total mercury	Germany	83	7	8.43
Game (Wild Game)	Group B3c	Total mercury	Slovakia	105	2	1.90
Game (Wild Game)	Group B3c	Zinc (Zn)	Denmark	6	5	83.33
Game (Wild Game)	**Group B3c**	**Sub-total for Group B3c**	**11**		**121**	
Game (Wild Game)	Group B3f	Copper compounds (Copper)	Denmark	6	6	100.00
Game (Wild Game)	Group B3f	Mercury compounds (sum of mercury compounds expressed as mercury)	Denmark	6	5	83.33
Game (Wild Game)	**Group B3f**	**Sub-total for Group B3f**	**1**		**11**	
Game (Wild Game)		**Total for Game (Wild Game)**			**150**	
Honey	Group B1	Erythromycin	Croatia	56	2	3.57
Honey	Group B1	Streptomycin	Croatia	56	2	3.57
Honey	Group B1	Sulfacetamide	Poland	234	7	2.99
Honey	Group B1	Sulfachlorpyrazine	Poland	202	2	0.99
Honey	Group B1	Sulfadiazine	Greece	81	1	1.23
Honey	Group B1	Sulfadiazine	Spain	57	1	1.75
Honey	Group B1	Sulfadimethoxine	Poland	235	1	0.43
Honey	Group B1	Sulfadimethoxine	Slovenia	16	1	6.25
Honey	Group B1	Sulfamerazine	Poland	235	1	0.43
Honey	Group B1	Sulfamethazin (sulfadimidin)	Poland	235	9	3.83

Category	Group	Substance	Country	Samples analysed	Non-compliant results	% Non-compliant[a]
Honey	Group B1	Sulfamonomethoxine	Greece	81	2	2.47
Honey	Group B1	Sulfathiazole	Greece	81	1	1.23
Honey	Group B1	Sulfathiazole	Poland	235	9	3.83
Honey	Group B1	Sum of enrofloxacin and ciprofloxacin	Bulgaria	28	1	3.57
Honey	Group B1	Sum of oxytetracycline and its 4-epimer	Greece	81	1	1.23
Honey	Group B1	Tylon (Tylosin, Tylosin A)	Poland	203	1	0.49
Honey	**Group B1**	**Sub-total for Group B1**	**6**		**42**	
Honey	Group B3b	Glyphosate	Austria	25	1	4.00
Honey	**Group B3b**	**Sub-total for Group B3b**	**1**		**1**	
Honey	Group B3c	Cadmium (Cd)	Denmark	15	9	60.00
Honey	Group B3c	Copper (Cu)	Germany	32	4	12.50
Honey	Group B3c	Lead (Pb)	Czechia	17	1	5.88
Honey	Group B3c	Lead (Pb)	Denmark	15	7	46.67
Honey	Group B3c	Zinc (Zn)	Denmark	15	9	60.00
Honey	**Group B3c**	**Sub-total for Group B3c**	**3**		**30**	
Honey	Group B3f	Acetamiprid	Germany	135	1	0.74
Honey	Group B3f	Copper compounds (Copper)	Denmark	15	14	93.33
Honey	Group B3f	Mercury compounds (sum of mercury compounds expressed as mercury)	Denmark	15	9	60.00
Honey	**Group B3f**	**Sub-total for Group B3f**	**2**		**24**	
Honey		**Total for Honey**			**97**	
Horses	Group A4	Zearalenol alpha	Romania	17	1	5.88
Horses	Group A4	Zearalenol beta	Romania	17	1	5.88
Horses	**Group A4**	**Sub-total for Group A4**	**1**		**2**	
Horses	Group B2e	Diclofen (Diclofenac)	Ireland	48	2	4.17
Horses	Group B2e	Flunixin	Austria	17	1	5.88

Category	Group	Substance	Country	Samples analysed	Non-compliant results	% Non-compliant[a]
Horses	Group B2e	Oxyphenbutazone Anhydrate	Germany	16	1	6.25
Horses	Group B2e	Phenylbutazone	Germany	21	1	4.76
Horses	**Group B2e**	**Sub-total for Group B2e**	**3**		**5**	
Horses	Group B3c	Cadmium (Cd)	Czechia	2	1	50.00
Horses	Group B3c	Cadmium (Cd)	France	58	3	5.17
Horses	Group B3c	Cadmium (Cd)	Netherlands	3	1	33.33
Horses	Group B3c	Cadmium (Cd)	Slovenia	6	5	83.33
Horses	Group B3c	Cadmium (Cd)	Spain	17	6	35.29
Horses	Group B3c	Lead (Pb)	Spain	17	3	17.65
Horses	**Group B3c**	**Sub-total for Group B3c**	**5**		**19**	
Horses	Group B3d	Zearalenone	Romania	17	1	5.88
Horses	**Group B3d**	**Sub-total for Group B3d**	**1**		**1**	
Horses		**Total for Horses**			**27**	
Milk	Group A6	SEM (semicarbazide)	Croatia	115	2	1.74
Milk	**Group A6**	**Sub-total for Group A6**	**1**		**2**	
Milk	Group B1	Aminosidin (Paromycin, Paromomycin)	Cyprus	83	1	1.20
Milk	Group B1	Benzylpenicillin (Penicillin G)	Malta	240	1	0.42
Milk	Group B1	Benzylpenicillin (Penicillin G)	Poland	1905	1	0.05
Milk	Group B1	Cloxacillin	Croatia	280	1	0.36
Milk	Group B1	Sum of florfenicol and its metabolites measured as florfenicol-amine	Italy	190	1	0.53
Milk	**Group B1**	**Sub-total for Group B1**	**5**		**5**	
Milk	Group B2a	Closantel	Northern Ireland		1	
Milk	Group B2a	Ivermectin	Ireland	468	1	0.21
Milk	Group B2a	Levamisole	Ireland	467	2	0.43
Milk	**Group B2a**	**Sub-total for Group B2a**	**2**		**4**	

Category	Group	Substance	Country	Samples analysed	Non-compliant results	% Non-compliant[a]
Milk	Group B2e	Acetaminophen (Paracetamol)	Netherlands	646	1	0.15
Milk	Group B2e	Diclofen (Diclofenac)	Croatia	141	1	0.71
Milk	Group B2e	Diclofen (Diclofenac)	France	957	1	0.10
Milk	Group B2e	Diclofen (Diclofenac)	Germany	1570	4	0.25
Milk	Group B2e	Diclofen (Diclofenac)	Malta	210	3	1.43
Milk	Group B2e	Diclofen (Diclofenac)	Norway	206	1	0.49
Milk	Group B2e	Diclofen (Diclofenac)	Poland	36	1	2.78
Milk	Group B2e	Salicylic acid	Netherlands	646	8	1.24
Milk	**Group B2e**	**Sub-total for Group B2e**	**7**		**20**	
Milk	Group B2f	Dexamethasone	Croatia	15	1	6.67
Milk	**Group B2f**	**Sub-total for Group B2f**	**1**		**1**	
Milk	Group B3a	1,2,3,4,6,7,8-HpCDD	France	104	6	5.77
Milk	Group B3a	1,2,3,4,6,7,8-HpCDF	France	104	6	5.77
Milk	Group B3a	1,2,3,4,7,8,9-HpCDF	France	104	3	2.88
Milk	Group B3a	1,2,3,4,7,8-HxCDD	France	104	6	5.77
Milk	Group B3a	1,2,3,4,7,8-HxCDF	France	104	6	5.77
Milk	Group B3a	1,2,3,6,7,8-HxCDD	France	104	6	5.77
Milk	Group B3a	1,2,3,6,7,8-HxCDF	France	104	6	5.77
Milk	Group B3a	1,2,3,7,8,9-HxCDD	France	104	6	5.77
Milk	Group B3a	1,2,3,7,8,9-HxCDF	France	104	6	5.77
Milk	Group B3a	1,2,3,7,8-PeCDD	France	104	6	5.77
Milk	Group B3a	1,2,3,7,8-PeCDF	France	104	2	1.92
Milk	Group B3a	2,3,4,6,7,8-HxCDF	France	104	6	5.77
Milk	Group B3a	2,3,4,7,8-PeCDF	France	104	6	5.77
Milk	Group B3a	2,3,7,8-TCDD	France	104	3	2.88
Milk	Group B3a	2,3,7,8-TCDF	France	104	3	2.88
Milk	Group B3a	Non-dioxin-like PCBs LB	France	208	6	2.88
Milk	Group B3a	Non-dioxin-like PCBs MB	France	208	6	2.88
Milk	Group B3a	Non-dioxin-like PCBs UB	France	208	2	0.96

Category	Group	Substance	Country	Samples analysed	Non-compliant results	% Non-compliant[(a)]
Milk	Group B3a	OCDD	France	104	6	5.77
Milk	Group B3a	OCDF	France	104	5	4.81
Milk	Group B3a	PCB-126	France	104	6	5.77
Milk	Group B3a	PCB-169	France	104	6	5.77
Milk	Group B3a	PCB-77	France	104	6	5.77
Milk	Group B3a	PCB-81	France	104	6	5.77
Milk	Group B3a	TEQ Dioxin-like PCBs LB	France	104	6	5.77
Milk	Group B3a	TEQ Dioxin-like PCBs MB	France	104	6	5.77
Milk	Group B3a	TEQ Dioxin-like PCBs UB	France	104	6	5.77
Milk	Group B3a	TEQ dioxins (PCDD and PCDF) MB	France	104	6	5.77
Milk	Group B3a	TEQ dioxins and dioxin-like PCBs LB	France	104	6	5.77
Milk	Group B3a	TEQ dioxins and dioxin-like PCBs UB	France	104	6	5.77
Milk	**Group B3a**	**Sub-total for Group B3a**	**1**		**162**	
Milk	Group B3d	Aflatoxin M1	Bulgaria	27	2	7.41
Milk	Group B3d	Aflatoxin M1	Croatia	59	2	3.39
Milk	Group B3d	Aflatoxin M1	Finland	99	1	1.01
Milk	Group B3d	Aflatoxin M1	Greece	91	3	3.30
Milk	Group B3d	Aflatoxin M1	Italy	307	1	0.33
Milk	**Group B3d**	**Sub-total for Group B3d**	**5**		**9**	
Milk		**Total for Milk**			**203**	
Pigs	Group A2	Thiouracil	Cyprus	6	2	33.33
Pigs	**Group A2**	**Sub-total for Group A2**	**1**		**2**	
Pigs	Group A3	Boldenone	Austria	148	2	1.35
Pigs	Group A3	Boldenone	France	243	3	1.23
Pigs	Group A3	Boldenone-Alpha	Austria	148	1	0.68
Pigs	Group A3	Epinandrolone (19-Norepitestosterone)	Slovakia	14	1	7.14
Pigs	Group A3	Oestradiol-17-Beta	Netherlands	332	1	0.30

Category	Group	Substance	Country	Samples analysed	Non-compliant results	% Non-compliant[a]
Pigs	Group A3	Nandrolone	Austria	148	1	0.68
Pigs	Group A3	Nandrolone	Netherlands	359	2	0.56
Pigs	Group A3	Nandrolone	Poland	748	6	0.80
Pigs	Group A3	Normethandrolone	France	235	13	5.53
Pigs	**Group A3**	**Sub-total for Group A3**	**5**		**30**	
Pigs	Group A4	Zearalenol alpha	Romania	52	3	5.77
Pigs	Group A4	Zearalenol alpha	Spain	288	1	0.35
Pigs	Group A4	Zearalenol beta	Romania	52	2	3.85
Pigs	**Group A4**	**Sub-total for Group A4**	**2**		**6**	
Pigs	Group A6	Chloramphenicol	Czechia	181	2	1.10
Pigs	Group A6	Chloramphenicol	Latvia	31	1	3.23
Pigs	Group A6	Chloramphenicol	Netherlands	444	1	0.23
Pigs	Group A6	Chloramphenicol	Poland	84	1	1.19
Pigs	**Group A6**	**Sub-total for Group A6**	**4**		**5**	
Pigs	Group B1	Benzylpenicillin (Penicillin G)	Czechia	531	3	0.56
Pigs	Group B1	Benzylpenicillin (Penicillin G)	Netherlands	2765	2	0.07
Pigs	Group B1	Dihydrostreptomycin	Poland	3250	1	0.03
Pigs	Group B1	Doxycycline	Poland	3347	6	0.18
Pigs	Group B1	Doxycycline	Spain	4678	3	0.06
Pigs	Group B1	Erythromycin	Spain	7702	3	0.04
Pigs	Group B1	Lincomycin	Spain	4287	5	0.12
Pigs	Group B1	Sulfadiazine	Cyprus	120	1	0.83
Pigs	Group B1	Sulfadimethoxine	France	1707	2	0.12
Pigs	Group B1	Sulfadimethoxine	Italy	1314	1	0.08
Pigs	Group B1	Sulfadimidine	Cyprus	120	2	1.67
Pigs	Group B1	Sulfamethoxazole	Netherlands	11	1	9.09
Pigs	Group B1	Sulfamethoxypyridazine	France	1707	1	0.06
Pigs	Group B1	Sulfonamides	Cyprus	7	3	42.86
Pigs	Group B1	Sulfonamides	Italy	1101	1	0.09

Category	Group	Substance	Country	Samples analysed	Non-compliant results	% Non-compliant[a]
Pigs	Group B1	Sum of florfenicol and its metabolites measured as florfenicol-amine	Spain	317	1	0.32
Pigs	Group B1	Sum of oxytetracycline and its 4-epimer	Cyprus	116	1	0.86
Pigs	Group B1	Sum of oxytetracycline and its 4-epimer	Italy	714	1	0.14
Pigs	Group B1	Sum of oxytetracycline and its 4-epimer	Netherlands	2769	4	0.14
Pigs	Group B1	Sum of oxytetracycline and its 4-epimer	Sweden	339	1	0.29
Pigs	Group B1	Tiamulin	Cyprus	120	1	0.83
Pigs	Group B1	Trimethoprim	Netherlands	2758	2	0.07
Pigs	Group B1	Tulathromycin	France	1707	2	0.12
Pigs	**Group B1**	**Sub-total for Group B1**	**8**		**48**	
Pigs	Group B2a	Emamectin	Portugal	96	1	1.04
Pigs	Group B2a	Eprinomectin	Portugal	32	1	3.12
Pigs	Group B2a	Levamisole	Netherlands	3	1	33.33
Pigs	Group B2a	Sum of flubendazole and (2-amino 1H-benzimidazol-5-yl) (4fluorophenyl) methanone	Netherlands	5	1	20.00
Pigs	**Group B2a**	**Sub-total for Group B2a**	**2**		**4**	
Pigs	Group B2b	Toltrazurilsulfon	Spain	932	4	0.43
Pigs	**Group B2b**	**Sub-total for Group B2b**	**1**		**4**	
Pigs	Group B2e	Antipyrin-4-Formylamino	Belgium	25	1	4.00
Pigs	Group B2e	Diclofen (Diclofenac)	Austria	46	2	4.35
Pigs	Group B2e	Diclofen (Diclofenac)	Germany	848	2	0.24
Pigs	**Group B2e**	**Sub-total for Group B2e**	**3**		**5**	
Pigs	Group B2f	17β-Boldenone Glucuronide	Netherlands	11	2	18.18
Pigs	**Group B2f**	**Sub-total for Group B2f**	**1**		**2**	

Category	Group	Substance	Country	Samples analysed	Non-compliant results	% Non-compliant[(a)]
Pigs	Group B3c	Cadmium (Cd)	Germany	1256	1	0.08
Pigs	Group B3c	Copper (Cu)	Austria	72	8	11.11
Pigs	Group B3c	Copper (Cu)	Germany	1256	12	0.96
Pigs	Group B3c	Lead (Pb)	France	482	2	0.41
Pigs	Group B3c	Total mercury	Germany	1211	3	0.25
Pigs	**Group B3c**	**Sub-total for Group B3c**	**3**		**26**	
Pigs	Group B3d	Aflatoxin B1	Italy	9	1	11.11
Pigs	Group B3d	Ochratoxin A	Austria	40	1	2.50
Pigs	Group B3d	Ochratoxin A	Greece	41	1	2.44
Pigs	Group B3d	Zearalenone	Romania	52	4	7.69
Pigs	**Group B3d**	**Sub-total for Group B3d**	**4**		**7**	
Pigs		**Total for Pigs**			**139**	
Poultry	Group A3	Boldenone	France	450	2	0.44
Poultry	Group A3	Normethandrolone	France	449	24	5.35
Poultry	**Group A3**	**Sub-total for Group A3**	**1**		**26**	
Poultry	Group A6	Chloramphenicol	France	1043	2	0.19
Poultry	Group A6	Furaltadone	Portugal	173	2	1.16
Poultry	Group A6	Metronidazole	Germany	3434	1	0.03
Poultry	Group A6	Metronidazole	Poland	320	1	0.31
Poultry	**Group A6**	**Sub-total for Group A6**	**4**		**6**	
Poultry	Group B1	Doxycycline	Germany	1888	1	0.05
Poultry	Group B1	Doxycycline	Greece	126	1	0.79
Poultry	Group B1	Doxycycline	Netherlands	1418	2	0.14
Poultry	Group B1	Doxycycline	Poland	2784	4	0.14
Poultry	Group B1	Doxycycline	Spain	1367	1	0.07
Poultry	Group B1	Sum of enrofloxacin and ciprofloxacin	Germany	1887	1	0.05
Poultry	Group B1	Sum of enrofloxacin and ciprofloxacin	Poland	2741	2	0.07
Poultry	Group B1	Sum of enrofloxacin and ciprofloxacin	Romania	269	1	0.37

Category	Group	Substance	Country	Samples analysed	Non-compliant results	% Non-compliant[a]
Poultry	Group B1	Sum of enrofloxacin and ciprofloxacin	Spain	1704	1	0.06
Poultry	Group B1	Tilmicosin	Poland	2149	1	0.05
Poultry	**Group B1**	**Sub-total for Group B1**	**6**		**15**	
Poultry	Group B2b	Decoquinate	Croatia	34	1	2.94
Poultry	Group B2b	Monensin	Northern Ireland		1	
Poultry	Group B2b	Monensin	Poland	962	2	0.21
Poultry	Group B2b	Monensin sodium	Czechia	101	2	1.98
Poultry	Group B2b	Monensin sodium	Hungary	19	1	5.26
Poultry	Group B2b	Monensin sodium	Malta	60	2	3.33
Poultry	Group B2b	Narasin	Czechia	101	2	1.98
Poultry	Group B2b	Narasin	Hungary	28	1	3.57
Poultry	Group B2b	Narasin	Malta	60	1	1.67
Poultry	Group B2b	Nicarbazin	Hungary	29	1	3.45
Poultry	Group B2b	Nicarbazin	Malta	60	2	3.33
Poultry	Group B2b	Salinomycin sodium	Czechia	101	1	0.99
Poultry	Group B2b	Salinomycin sodium	Hungary	10	1	10.00
Poultry	Group B2b	Salinomycin sodium	Malta	60	3	5.00
Poultry	**Group B2b**	**Sub-total for Group B2b**	**6**		**21**	
Poultry	Group B2c	Cyromazine	Ireland	212	1	0.47
Poultry	**Group B2c**	**Sub-total for Group B2c**	**1**		**1**	
Poultry	Group B3a	Lindane (Gamma-isomer of hexachlorocyclohexane (HCH))	Spain	311	1	0.32
Poultry	Group B3a	Sum of 6 PCB indicators	Germany	151	1	0.66
Poultry	Group B3a	TEQ Dioxin-like PCBs UB	Denmark	17	1	5.88
Poultry	**Group B3a**	**Sub-total for Group B3a**	**3**		**3**	
Poultry	Group B3c	Cadmium (Cd)	Denmark	31	3	9.68
Poultry	Group B3c	Cadmium (Cd)	France	245	2	0.82
Poultry	Group B3c	Cadmium (Cd)	Germany	158	1	0.63

Category	Group	Substance	Country	Samples analysed	Non-compliant results	% Non-compliant[a]
Poultry	Group B3c	Cadmium (Cd)	Spain	118	1	0.85
Poultry	Group B3c	Copper (Cu)	Germany	173	3	1.73
Poultry	Group B3c	Copper (Cu)	Netherlands	130	6	4.62
Poultry	Group B3c	Lead (Pb)	Denmark	31	3	9.68
Poultry	Group B3c	Zinc (Zn)	Denmark	31	3	9.68
Poultry	**Group B3c**	**Sub-total for Group B3c**	**5**		**22**	
Poultry	Group B3d	Aflatoxin (sum of B1, B2, G1, G2)	Italy	16	1	6.25
Poultry	**Group B3d**	**Sub-total for Group B3d**	**1**		**1**	
Poultry	Group B3f	Copper compounds (Copper)	Denmark	31	3	9.68
Poultry	Group B3f	Mercury compounds (sum of mercury compounds expressed as mercury)	Denmark	31	2	6.45
Poultry	**Group B3f**	**Sub-total for Group B3f**	**1**		**5**	
Poultry		**Total for Poultry**			**100**	
Rabbits	Group A6	Chloramphenicol	Latvia	1	1	100.00
Rabbits	**Group A6**	**Sub-total for Group A6**	**1**		**1**	
Rabbits	Group B1	Amoxycillin	Malta	13	1	7.69
Rabbits	Group B1	Apramycin	Malta	13	1	7.69
Rabbits	Group B1	Sulfadimethoxine	France	80	1	1.25
Rabbits	**Group B1**	**Sub-total for Group B1**	**2**		**3**	
Rabbits	Group B2b	Diclazuril	Slovakia	17	1	5.88
Rabbits	Group B2b	Monensin sodium	Malta	8	1	12.50
Rabbits	Group B2b	Narasin	Malta	16	1	6.25
Rabbits	Group B2b	Salinomycin	Czechia	5	1	20.00
Rabbits	**Group B2b**	**Sub-total for Group B2b**	**3**		**4**	
Rabbits	Group B3c	Cadmium (Cd)	Spain	11	1	9.09
Rabbits	**Group B3c**	**Sub-total for Group B3c**	**1**		**1**	
Rabbits		**Total for Rabbits**			**9**	

Category	Group	Substance	Country	Samples analysed	Non-compliant results	% Non-compliant[a]
Sheep/goats	Group A3	Boldenone	Malta	8	1	12.50
Sheep/goats	Group A3	Boldenone	Spain	6	1	16.67
Sheep/goats	Group A3	Boldenone-Alpha	Northern Ireland		5	
Sheep/goats	Group A3	Epinandrolone (19-Norepitestosterone)	Austria	35	3	8.57
Sheep/goats	Group A3	Epinandrolone (19-Norepitestosterone)	France	72	5	6.94
Sheep/goats	Group A3	Epinandrolone (19-Norepitestosterone)	Slovakia	2	1	50.00
Sheep/goats	Group A3	Nandrolone	Spain	10	1	10.00
Sheep/goats	**Group A3**	**Sub-total for Group A3**	**6**		**17**	
Sheep/goats	Group B1	Dihydrostreptomycin	Greece	86	1	1.16
Sheep/goats	Group B1	Dihydrostreptomycin	Malta	20	1	5.00
Sheep/goats	Group B1	Gamithromycin	France	583	2	0.34
Sheep/goats	Group B1	Sulfadiazine	Cyprus	51	1	1.96
Sheep/goats	Group B1	Sulfadiazine	Spain	348	1	0.29
Sheep/goats	Group B1	Sulfadimethoxine	France	582	1	0.17
Sheep/goats	Group B1	Sulfonamides	Cyprus	1	1	100.00
Sheep/goats	Group B1	Sum of enrofloxacin and ciprofloxacin	Spain	540	1	0.19
Sheep/goats	Group B1	Sum of oxytetracycline and its 4-epimer	Greece	86	2	2.33
Sheep/goats	Group B1	Sum of oxytetracycline and its 4-epimer	Ireland	353	1	0.28
Sheep/goats	**Group B1**	**Sub-total for Group B1**	**6**		**12**	
Sheep/goats	Group B2a	Closantel	Germany	16	1	6.25
Sheep/goats	Group B2a	Closantel	Northern Ireland		1	
Sheep/goats	Group B2a	Ivermectin	Ireland	453	1	0.22
Sheep/goats	Group B2a	Levamisole	Ireland	453	1	0.22
Sheep/goats	**Group B2a**	**Sub-total for Group B2a**	**3**		**4**	
Sheep/goats	Group B2e	Ketoprofen	Austria	24	1	4.17
Sheep/goats	**Group B2e**	**Sub-total for Group B2e**	**1**		**1**	

Category	Group	Substance	Country	Samples analysed	Non-compliant results	% Non-compliant[a]
Sheep/goats	Group B2f	Dexamethasone	Netherlands	9	1	11.11
Sheep/goats	**Group B2f**	**Sub-total for Group B2f**	**1**		**1**	
Sheep/goats	Group B3a	1,2,3,4,6,7,8-HpCDD	France	167	4	2.40
Sheep/goats	Group B3a	1,2,3,4,6,7,8-HpCDF	France	167	3	1.80
Sheep/goats	Group B3a	1,2,3,4,7,8-HxCDF	France	167	4	2.40
Sheep/goats	Group B3a	1,2,3,6,7,8-HxCDD	France	167	3	1.80
Sheep/goats	Group B3a	1,2,3,6,7,8-HxCDF	France	167	1	0.60
Sheep/goats	Group B3a	2,3,4,7,8-PeCDF	France	167	4	2.40
Sheep/goats	Group B3a	Non-dioxin-like PCBs LB	France	335	4	1.19
Sheep/goats	Group B3a	Non-dioxin-like PCBs MB	France	335	4	1.19
Sheep/goats	Group B3a	Non-dioxin-like PCBs UB	France	335	2	0.60
Sheep/goats	Group B3a	OCDD	France	167	2	1.20
Sheep/goats	Group B3a	PCB-101	France	2	2	100.00
Sheep/goats	Group B3a	PCB-126	France	167	4	2.40
Sheep/goats	Group B3a	PCB-138	France	3	2	66.67
Sheep/goats	Group B3a	PCB-153	France	3	2	66.67
Sheep/goats	Group B3a	PCB-169	France	167	4	2.40
Sheep/goats	Group B3a	PCB-180	France	3	2	66.67
Sheep/goats	Group B3a	PCB-28	France	2	2	100.00
Sheep/goats	Group B3a	PCB-52	France	3	2	66.67
Sheep/goats	Group B3a	PCB-77	France	167	4	2.40
Sheep/goats	Group B3a	PCB-81	France	167	4	2.40
Sheep/goats	Group B3a	TEQ Dioxin-like PCBs LB	France	168	4	2.38
Sheep/goats	Group B3a	TEQ Dioxin-like PCBs MB	France	168	4	2.38
Sheep/goats	Group B3a	TEQ Dioxin-like PCBs UB	France	168	4	2.38
Sheep/goats	Group B3a	TEQ dioxins (PCDD and PCDF) MB	France	168	4	2.38
Sheep/goats	Group B3a	TEQ dioxins and dioxin-like PCBs LB	France	168	4	2.38

Category	Group	Substance	Country	Samples analysed	Non-compliant results	% Non-compliant[(a)]
Sheep/goats	Group B3a	TEQ dioxins and dioxin-like PCBs UB	France	168	3	1.79
Sheep/goats	**Group B3a**	**Sub-total for Group B3a**	**1**		**82**	
Sheep/goats	Group B3c	Cadmium (Cd)	Croatia	4	1	25.00
Sheep/goats	Group B3c	Cadmium (Cd)	France	73	3	4.11
Sheep/goats	Group B3c	Cadmium (Cd)	Netherlands	12	1	8.33
Sheep/goats	Group B3c	Cadmium (Cd)	Slovakia	8	1	12.50
Sheep/goats	Group B3c	Copper (Cu)	Germany	47	15	31.91
Sheep/goats	Group B3c	Lead (Pb)	France	73	1	1.37
Sheep/goats	Group B3c	Lead (Pb)	Germany	47	3	6.38
Sheep/goats	Group B3c	Lead (Pb)	Netherlands	12	1	8.33
Sheep/goats	Group B3c	Total mercury	Germany	47	2	4.26
Sheep/goats	**Group B3c**	**Sub-total for Group B3c**	**5**		**28**	
Sheep/goats	Group B3f	Copper compounds (Copper)	Denmark	4	1	25.00
Sheep/goats	**Group B3f**	**Sub-total for Group B3f**	**1**		**1**	
Sheep/goats		**Total for Sheep/goats**			**146**	

(a): the % of non-compliant samples is calculated as ratio between the number of non-compliant results over the total number of samples, therefore it can result in a value higher than 100%.

Appendix B List of non-compliant results: suspect sampling

Category	Group	Substance	Country	Samples analysed	Non-compliant results	% Non-compliant[(a)]
Aquaculture	Group B1	Trimethoprim	Italy	6	4	66.67
Aquaculture	**Group B1**	**Sub-total for Group B1**	**1**		**4**	
Aquaculture	Group B3a	DDT (sum of p,p'-DDT, o,p'-DDT, p-p'-DDE and p,p'-TDE (DDD) expressed as DDT)	Romania	4	1	25.00
Aquaculture	**Group B3a**	**Sub-total for Group B3a**	**1**		**1**	
Aquaculture	Group B3e	Sum of malachite green and leucomalachite green	Denmark	63	1	1.59
Aquaculture	Group B3e	Sum of malachite green and leucomalachite green	Germany	35	8	22.86
Aquaculture	Group B3e	Sum of malachite green and leucomalachite green	Slovakia	5	3	60.00
Aquaculture	**Group B3e**	**Sub-total for Group B3e**	**3**		**12**	
Aquaculture	Group B3f	Sulphur dioxide	Malta	2	1	50.00
Aquaculture	**Group B3f**	**Sub-total for Group B3f**	**1**		**1**	
Aquaculture		**Total for Aquaculture**			**18**	
Bovines	Group A2	6-Methyl-2-thiouracil	Portugal	18	4	22.22
Bovines	Group A2	Thiouracil	Portugal	18	1	5.56
Bovines	**Group A2**	**Sub-total for Group A2**	**1**		**5**	
Bovines	Group A5	Clenbuterol	Portugal	41	4	9.76
Bovines	Group A5	Salbutamol (albuterol)	Portugal	41	11	26.83
Bovines	**Group A5**	**Sub-total for Group A5**	**1**		**15**	
Bovines	Group B1	Amoxycillin	Ireland	868	1	0.12
Bovines	Group B1	Benzylpenicillin (Penicillin G)	Austria	455	1	0.22
Bovines	Group B1	Benzylpenicillin (Penicillin G)	Ireland	868	1	0.12
Bovines	Group B1	Dihydrostreptomycin	Austria	455	1	0.22

Category	Group	Substance	Country	Samples analysed	Non-compliant results	% Non-compliant[a]
Bovines	Group B1	Dihydrostreptomycin	Spain	228	1	0.44
Bovines	Group B1	Sulfadimidine	Italy	77	2	2.60
Bovines	Group B1	Sulfamethazin (sulfadimidin)	Ireland	868	1	0.12
Bovines	Group B1	Sulfapyridin	Italy	66	1	1.52
Bovines	Group B1	Sulfonamides	Denmark	2	1	50.00
Bovines	Group B1	Sulfonamides	Italy	56	2	3.57
Bovines	Group B1	Sum of florfenicol and its metabolites measured as florfenicol-amine	Italy	60	1	1.67
Bovines	Group B1	Sum of oxytetracycline and its 4-epimer	Ireland	871	2	0.23
Bovines	Group B1	Sum of oxytetracycline and its 4-epimer	Italy	85	3	3.53
Bovines	Group B1	Sum of spiramycin and neospiramycin	Italy	85	1	1.18
Bovines	Group B1	Tulathromycin	Austria	453	1	0.22
Bovines	Group B1	Tulathromycin	Italy	63	4	6.35
Bovines	**Group B1**	**Sub-total for Group B1**	**5**		**24**	
Bovines	Group B2f	Beclomethasone	Spain	207	1	0.48
Bovines	Group B2f	Dexamethasone	Italy	240	1	0.42
Bovines	Group B2f	Dexamethasone	Northern Ireland		3	
Bovines	Group B2f	Dexamethasone	Spain	216	1	0.46
Bovines	**Group B2f**	**Sub-total for Group B2f**	**3**		**6**	
Bovines	Group B3c	Copper (Cu)	Germany	4	1	25.00
Bovines	Group B3c	Lead (Pb)	Germany	3	2	66.67
Bovines	**Group B3c**	**Sub-total for Group B3c**	**1**		**3**	
Bovines		**Total for Bovines**			**53**	
Eggs	Group B1	Sulfadiazine	Spain	54	4	7.41
Eggs	Group B1	Trimethoprim	Spain	54	2	3.70
Eggs	**Group B1**	**Sub-total for Group B1**	**1**		**6**	

Category	Group	Substance	Country	Samples analysed	Non-compliant results	% Non-compliant[a]
Eggs	Group B2b	Narasin	Croatia	1	1	100.00
Eggs	Group B2b	Nicarbazin	Croatia	1	1	100.00
Eggs	**Group B2b**	**Sub-total for Group B2b**	**1**		**2**	
Eggs		**Total for Eggs**			**8**	
Honey	Group B1	Sulfacetamide	Poland	15	3	20.00
Honey	Group B1	Sulfadimethoxine	Poland	2	1	50.00
Honey	Group B1	Sulfamethazin (sulfadimidin)	Poland	16	7	43.75
Honey	Group B1	Sulfathiazole	Poland	16	7	43.75
Honey	**Group B1**	**Sub-total for Group B1**	**1**		**18**	
Honey		**Total for Honey**			**18**	
Horses	Group A4	Zearalenol alpha	Romania	1	1	100.00
Horses	Group A4	Zearalenol beta	Romania	1	1	100.00
Horses	**Group A4**	**Sub-total for Group A4**	**1**		**2**	
Horses	Group B3d	Zearalenone	Romania	1	1	100.00
Horses	**Group B3d**	**Sub-total for Group B3d**	**1**		**1**	
Horses		**Total for Horses**			**3**	
Milk	Group A6	SEM (semicarbazide)	Poland	1	1	100.00
Milk	**Group A6**	**Sub-total for Group A6**	**1**		**1**	
Milk	Group B1	Cloxacillin	Austria	17	2	11.76
Milk	Group B1	Sum of oxytetracycline and its 4-epimer	Italy	65	1	1.54
Milk	**Group B1**	**Sub-total for Group B1**	**2**		**3**	
Milk	Group B3d	Aflatoxin M1	Bulgaria	3	1	33.33
Milk	Group B3d	Aflatoxin M1	Greece	15	3	20.00
Milk	Group B3d	Aflatoxin M1	Italy	60	6	10.00
Milk	**Group B3d**	**Sub-total for Group B3d**	**3**		**10**	
Milk		**Total for Milk**			**14**	
Poultry	Group A6	Furaltadone	Portugal	4	1	25.00

Category	Group	Substance	Country	Samples analysed	Non-compliant results	% Non-compliant[(a)]
Poultry	Group A6	Metronidazole	Poland	17	3	17.65
Poultry	**Group A6**	**Sub-total for Group A6**	**2**		**4**	
Poultry	Group B1	Doxycycline	Netherlands	2	2	100.00
Poultry	Group B1	Sulfadiazine	Spain	11	4	36.36
Poultry	Group B1	Trimethoprim	Spain	11	2	18.18
Poultry	**Group B1**	**Sub-total for Group B1**	**2**		**8**	
Poultry	Group B2b	Monensin	Croatia	1	1	100.00
Poultry	Group B2b	Salinomycin sodium	Malta	9	1	11.11
Poultry	**Group B2b**	**Sub-total for Group B2b**	**2**		**2**	
Poultry	Group B3c	Cadmium (Cd)	Germany	5	2	40.00
Poultry	Group B3c	Copper (Cu)	Germany	10	5	50.00
Poultry	**Group B3c**	**Sub-total for Group B3c**	**1**		**7**	
Poultry		**Total for Poultry**			**21**	
Sheep/goats	Group A3	Boldenone-Alpha	Austria	3	1	33.33
Sheep/goats	**Group A3**	**Sub-total for Group A3**	**1**		**1**	
Sheep/goats	Group B3c	Total mercury	Germany	1	1	100.00
Sheep/goats	**Group B3c**	**Sub-total for Group B3c**	**1**		**1**	
Sheep/goats		**Total for Sheep/goats**			**2**	

(a): the % of non-compliant samples is calculated as ratio between the number of non-compliant results over the total number of samples, therefore it can result in a value higher than 100%.

Appendix C List of non-compliant results: import sampling

Category	Group	Substance	Country	Samples analysed	Non-compliant results	% Non-compliant[(a)]
Aquaculture	Group A6	SEM (semicarbazide)	Netherlands	1	1	100.00
Aquaculture	**Group A6**	**Sub-total for Group A6**	**1**		**1**	
Aquaculture	Group B3c	Cadmium (Cd)	Germany	106	1	0.94
Aquaculture	Group B3c	Cadmium (Cd)	Greece	117	1	0.85
Aquaculture	Group B3c	Total mercury	Germany	131	1	0.76
Aquaculture	Group B3c	Total mercury	Portugal	35	1	2.86
Aquaculture	**Group B3c**	**Sub-total for Group B3c**	**3**		**4**	
Aquaculture		**Total for Aquaculture**			**5**	
Honey	Group B1	Sum of enrofloxacin and ciprofloxacin	Germany	30	1	3.33
Honey	Group B1	Trimethoprim	Germany	28	1	3.57
Honey	**Group B1**	**Sub-total for Group B1**	**1**		**2**	
Honey		**Total for Honey**			**2**	
Horses	Group B2e	Salicylic acid	Netherlands	7	1	14.29
Horses	**Group B2e**	**Sub-total for Group B2e**	**1**		**1**	
Horses		**Total for Horses**			**1**	

(a): the % of non-compliant samples is calculated as ratio between the number of non-compliant results over the total number of samples, therefore it can result in a value higher than 100%.

Appendix D List of non-compliant results: other sampling

Category	Group	Substance	Country	Samples analysed	Non-compliant results	% Non-compliant[(a)]
Bovines	Group B1	Amoxycillin	Germany	53	3	5.66
Bovines	Group B1	Benzylpenicillin (Penicillin G)	Germany	17,436	7	0.04
Bovines	Group B1	Gentamicin	Germany	35	1	2.86
Bovines	Group B1	Marbofloxacin	Germany	17,436	2	0.01
Bovines	Group B1	Sum of chlortetracyclin and its 4-epimer	Germany	17,437	2	0.01
Bovines	Group B1	Sum of enrofloxacin and ciprofloxacin	Germany	17,437	4	0.02
Bovines	Group B1	Sum of oxytetracycline and its 4-epimer	Germany	17,437	6	0.03
Bovines	Group B1	Sum of tetracycline and its 4-epimer	Germany	17,438	1	0.01
Bovines	Group B1	Tulathromycin	Germany	17,439	5	0.03
Bovines	**Group B1**	**Sub-total for Group B1**	**1**		**31**	
Bovines	Group B2e	Meloxicam	Germany	51	7	13.73
Bovines	**Group B2e**	**Sub-total for Group B2e**	**1**		**7**	
Bovines	Group B2f	Dexamethasone	Germany	38	2	5.26
Bovines	**Group B2f**	**Sub-total for Group B2f**	**1**		**2**	
Bovines		**Total for Bovines**			**40**	
Game (Wild Game)	Group B3c	Lead (Pb)	France	14	6	42.86
Game (Wild Game)	**Group B3c**	**Sub-total for Group B3c**	**1**		**6**	
Game (Wild Game)		**Total for Game (Wild Game)**			**6**	
Honey	Group B3b	Glyphosate	Lithuania	26	1	3.85
Honey	**Group B3b**	**Sub-total for Group B3b**	**1**		**1**	
Honey	Group B3f	Acetamiprid	Italy	71	1	1.41
Honey	**Group B3f**	**Sub-total for Group B3f**	**1**		**1**	
Honey		**Total for Honey**			**2**	
Horses	Group B1	Sulfonamides	Germany	2	2	100.00

Category	Group	Substance	Country	Samples analysed	Non-compliant results	% Non-compliant[a]
Horses	Group B1	Trimethoprim	Germany	2	2	100.00
Horses	**Group B1**	**Sub-total for Group B1**	**1**		**4**	
Horses		**Total for Horses**			**4**	
Milk	Group B3d	Aflatoxin M1	Italy	508	3	0.59
Milk	**Group B3d**	**Sub-total for Group B3d**	**1**		**3**	
Milk		**Total for Milk**			**3**	
Pigs	Group A3	Normethandrolone	France	26	2	7.69
Pigs	**Group A3**	**Sub-total for Group A3**	**1**		**2**	
Pigs	Group B1	Amoxycillin	Germany	349	6	1.72
Pigs	Group B1	Benzylpenicillin (Penicillin G)	Germany	224,913	5	0.00
Pigs	Group B1	Doxycycline	Germany	224,920	23	0.01
Pigs	Group B1	Sum of enrofloxacin and ciprofloxacin	Germany	224,913	3	0.00
Pigs	Group B1	Sum of florfenicol and its metabolites measured as florfenicol-amine	Germany	326	1	0.31
Pigs	Group B1	Sum of oxytetracycline and its 4-epimer	Germany	224,917	6	0.00
Pigs	**Group B1**	**Sub-total for Group B1**	**1**		**44**	
Pigs	Group B2b	Narasin	Portugal	70	1	1.43
Pigs	**Group B2b**	**Sub-total for Group B2b**	**1**		**1**	
Pigs	Group B2e	Meloxicam	Germany	302	2	0.66
Pigs	**Group B2e**	**Sub-total for Group B2e**	**1**		**2**	
Pigs	Group B2f	Dexamethasone	Germany	21	2	9.52
Pigs	**Group B2f**	**Sub-total for Group B2f**	**1**		**2**	
Pigs		**Total for Pigs**			**51**	
Poultry	Group A6	Furazolidone	Italy	2	1	50.00
Poultry	**Group A6**	**Sub-total for Group A6**	**1**		**1**	
Poultry	Group B2b	Monensin sodium	Portugal	32	1	3.12

Category	Group	Substance	Country	Samples analysed	Non-compliant results	% Non-compliant[(a)]
Poultry	**Group B2b**	**Sub-total for Group B2b**	**1**		**1**	
Poultry		**Total for Poultry**			**2**	
Rabbits	Group B1	Sum of enrofloxacin and ciprofloxacin	Italy	41	1	2.44
Rabbits	**Group B1**	**Sub-total for Group B1**	**1**		**1**	
Rabbits		**Total for Rabbits**			**1**	
Sheep/goats	Group B1	Sum of enrofloxacin and ciprofloxacin	Germany	4647	1	0.02
Sheep/goats	Group B1	Sum of oxytetracycline and its 4-epimer	Germany	4647	1	0.02
Sheep/goats	Group B1	Sum of oxytetracycline and its 4-epimer	Italy	6	1	16.67
Sheep/goats	**Group B1**	**Sub-total for Group B1**	**2**		**3**	
Sheep/goats		**Total for Sheep/goats**			**3**	

(a): the % of non-compliant samples is calculated as ratio between the number of non-compliant results over the total number of samples, therefore it can result in a value higher than 100%.

Appendix E Annex I to Directive 96/23/EC

GROUP A – Substances having anabolic effect and unauthorised substances

A.1. Stilbenes, stilbene derivatives, and their salts and esters

A.2. Antithyroid agents

A.3. Steroids

A.4. Resorcylic acid lactones, including zeranol

A.5. Beta-agonists

A.6. Compounds included in Annex IV to Council Regulation (EEC) N° 2377/90 of 26 June 1990[19]

GROUP B – Veterinary drugs and contaminants

B.1. Antibacterial substances, including sulphonamides, quinolones

B.2. Other veterinary drugs

a. Anthelmintics

b. Anticoccidials

c. Carbamates and pyrethroids

d. Sedatives

e. Non-steroidal anti-inflammatory drugs (NSAIDs)

f. Other pharmacologically active substances

B.3. Other substances and environmental contaminants

a. Organochlorine compounds, including PCBs

b. Organophosphorus compounds

c. Chemical elements

d. Mycotoxins

e. Dyes

f. Others

[19] Council Regulation (EEC) No 2377/90 of 26 June 1990 laying down a Community procedure for the establishment of maximum residue limits of veterinary medicinal products in foodstuffs of animal origin. OJ L 224, 18.8.1990, p. 1–8.

Annex A Outcome of the Member States and Commission consultation on the draft 2022 VMPR Annual Report

Annex A is available under the Supporting Information section on the online version of the scientific output.