



# RASFF

The **R**apid **A**lert **S**ystem  
for **F**ood and **F**eed

Annual Report **2019**



**RASFF**  
**Annual Report 2019**

## RASFF — The Rapid Alert System for Food and Feed — Annual Report 2019

More information about RASFF — The Rapid Alert System for Food and Feed online:

[http://ec.europa.eu/food/safety/rasff/index\\_en.htm](http://ec.europa.eu/food/safety/rasff/index_en.htm)

Luxembourg: Publications Office of the European Union, 2020

© European Union, 2020



The reuse policy of European Commission documents is implemented based on Commission Decision 2011/833/EU of 12 December 2011 on the reuse of Commission documents (OJ L 330, 14.12.2011, p. 39).

Except otherwise noted, the reuse of this document is authorised under a Creative Commons Attribution 4.0 International (CC-BY 4.0) licence (<https://creativecommons.org/licenses/by/4.0/>). This means that reuse is allowed provided appropriate credit is given and any changes are indicated.

For any use or reproduction of elements that are not owned by the European Union, permission may need to be sought directly from the respective rightholders. The European Union does not own the copyright in relation to the following elements:

Cover image: © gettyimages

Print ISBN 978-92-76-17509-4 ISSN 1830-7302 doi:10.2875/233333 EW-AC-20-001-EN-C

PDF ISBN 978-92-76-17508-7 ISSN 2363-0965 doi:10.2875/993888 EW-AC-20-001-EN-N

# Contents

<b>Acronyms used in this report .....</b>	<b>4</b>
<b>Introduction .....</b>	<b>5</b>
<b>Preamble .....</b>	<b>6</b>
A quick manual to the RASFF .....	6
The legal basis .....	6
The members .....	7
The system .....	7
<b>RASFF and AAC annual report 2019 .....</b>	<b>10</b>
Integration of the Administrative Assistance and Cooperation network with the Rapid Alert System for Food and Feed .....	10
AAC notifications in 2019 .....	10
RASFF in 2019 .....	14
RASFF notifications in 2019 .....	14
Where do RASFF notifications come from? .....	15
RASFF incidents in 2019 .....	16
RASFF notifications by notifying country in 2018 and 2019 .....	21
Country fact sheets .....	22
RASFF notifications by country of origin in 2019 .....	23
More facts and figures .....	36
Evolution of the number of notifications .....	36
2019 notifications by hazard category and by classification .....	40
2019 notifications by product category and by classification .....	41
Notifications – country of origin .....	42
<b>Annex: in case you want more data .....</b>	<b>43</b>
2016-2019 notifications by country of origin .....	43
2019 notifications by hazard category and notifying country .....	45
2019 notifications by product category and notifying country .....	46
2019 notifications by product category and type of control .....	47
2019 non-member countries having provided follow-up .....	47
2019 notifications by hazard category and risk decision .....	49

# Acronyms used in this report

AAC	Administrative Assistance and Cooperation System
AAC-AA	Administrative Assistance and Cooperation System hosting non-fraud non-compliance cases
AAC-FF	Administrative Assistance and Cooperation System hosting Food Fraud cases
ACN	Alert and Cooperation Network
ALARA	As Low As Reasonably Achievable
CFU	Colony-forming units
EC	European Commission
ECDC	European Centre for Disease Prevention and Control
EEA	European Economic Area
EFSA	European Food Safety Authority
EPIS-FWD	Epidemic Intelligence Information System for food- and Waterborne Diseases and zoonoses managed by the ECDC
ESA	EFTA Surveillance Authority
EU	European Union
EWRS	Early Warning and Response System
FFN	Food Fraud Network
IMSOC	Information Management System for Official Control
iRASFF	RASFF online platform
JNS	Joint Notification Summary
MRL	Maximum Residue Limit
OCR	Official Control Regulation
OJ	Official Journal
RASFF	Rapid Alert System for Food and Feed
ROA	Rapid Outbreak Assessment
SCP	Single Contact Point
TRACES	Trade Control and Expert System
TSEs	Transmissible Spongiform Encephalopathies
UK	United Kingdom
USA	United States of America
WGS	Whole Genome Sequencing

# Introduction

2019 has been a momentous year for the Rapid Alert System for Food and Feed (RASFF) network marking its 40<sup>th</sup> anniversary. This was appropriately celebrated with the conference “All you need is RASFF”, as part of the wider conference on the new Official Control Regulation, in December 2019. The Regulation went into full application on the day after the conference and implemented notably the Information Management System for Official Control (IMSOC)<sup>1</sup>. For RASFF, it meant merging the Administrative Assistance and Cooperation (AAC) network with the RASFF network.

Following a Ministerial Conference<sup>2</sup> in the wake of the fipronil incident, Member States and the Commission had agreed on 19 specific measures to reinforce the EU’s action against food fraud<sup>3</sup>. After Single Contact Points (SCP) had been set up in Member States for both systems in 2018, the AAC was finally successfully hosted in the iRASFF platform together with RASFF in October 2019. The choice was made to fully integrate RASFF and AAC so as to allow non-compliance notifications (notifications in the AAC network) to be easily “escalated” to the RASFF network. For end of 2020, the Commission will extend this integration to the food fraud network although this network will keep its ability to work as a “closed community”.

This 40<sup>th</sup> anniversary of RASFF therefore breaks in an exciting new period in its history, one where cooperation is not only key within the RASFF network but cooperation is in addition enabled with other networks, that use the RASFF know-how to reinforce their functioning, within the concept of the IMSOC.

<sup>1</sup> 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, *OJ L 95, 7.4.2017, p. 1–142*

<sup>2</sup> [https://ec.europa.eu/food/sites/food/files/safety/docs/rasff\\_fipronil-incident\\_conclusions\\_201709.pdf](https://ec.europa.eu/food/sites/food/files/safety/docs/rasff_fipronil-incident_conclusions_201709.pdf)

<sup>3</sup> [http://europa.eu/rapid/press-release\\_STATEMENT-17-3486\\_en.htm](http://europa.eu/rapid/press-release_STATEMENT-17-3486_en.htm). These measures were presented to the AGRIFISH Council on 9 October 2017 - <http://www.consilium.europa.eu/media/31740/st12959en17.pdf>



# Preamble

Dear reader,

If you are familiar with the RASFF you may jump to the chapter on RASFF in 2019. Otherwise, or should you wish to know more about the changes brought in 2019 through the IMSOC Regulation, you are invited to go through the quick manual here below. Enjoy the report!

## A quick manual to the RASFF

The RASFF was put in place to provide the Member States' food and feed control authorities with an effective tool to exchange information about measures taken in response to serious risks related to food or feed and support a more coordinated and rapid action. Its effectiveness relies on clearly identified contact points in the Commission, the European Food Safety Authority (EFSA), the EFTA Surveillance Authority (ESA) and at national level in member countries exchanging information in a clear and structured way by means of an online platform called iRASFF.

### The legal basis

Article 50 of Regulation (EC) No 178/2002 of the European Parliament and of the Council establishes the rapid alert system for food and feed as a network involving the Member States, the Commission as member and manager of the system and EFSA. Also, Switzerland and the EEA countries Norway, Liechtenstein and Iceland are longstanding members of the RASFF<sup>4</sup>.

Whenever a member of the network has any information relating to the existence of a serious direct or indirect risk to human health deriving from food or feed, this information is immediately notified to the Commission through the RASFF. The Regulation requires Member States to immediately notify the Commission under the rapid alert system of:

- (a) *any measure they adopt which is aimed at restricting the placing on the market or forcing the withdrawal from the market or the recall of food or feed in order to protect human health and requiring rapid action;*
- (b) *any recommendation or agreement with professional operators which is aimed, on a voluntary or obligatory basis, at preventing, limiting or imposing specific conditions on the placing on the market or the eventual use of food or feed on account of a serious risk to human health requiring rapid action;*
- (c) *any rejection, related to a direct or indirect risk to human health, of a batch, container or cargo of food or feed by a competent authority at a border post within the European Union.*

The new Regulation on Official Controls (OCR) 2017/625 became fully applicable on 14 December 2019. It repealed and amended various pieces of legislation covering food and feed safety, plant health and animal-by-products in order to provide a coherent approach toward official controls all along the agri-food chain. As one of the legal acts foreseen by the OCR, the Information Management System for Official Controls (IMSOC) Regulation 2019/1715 entered into force on the same day. The IMSOC Regulation laid down rules for the functioning of the information management system for official controls and its system components:

- the Rapid Alert System for Food and Feed (RASFF),
- the system for notifying and reporting information on Animal Diseases (ADIS),
- the system for notifying and reporting the presence of pests in plants and plant products (EUROPHYT),
- the tools for Administrative Assistance and Cooperation (AAC), and
- the Trade Control and Expert System (TRACES).

<sup>4</sup> Norway, Iceland and Liechtenstein became member of the RASFF through the EEA agreement and Switzerland through the agreement between the European Community and the Swiss Confederation on trade in agricultural products.



The IMSOC Regulation repealed Commission Regulation (EU) 16/2011, fixed rules for distinguishing non-compliances generating risks from others and established iRASFF as the electronic system implementing the RASFF and AAC procedures described in Article 50 of Regulation (EC) No 178/2002 and Articles 102 to 108 of Regulation (EU) 2017/625 respectively.

## The members

The IMSOC Regulation established the ‘alert and cooperation network’ (ACN) composed of a ‘single contact point’ (SCP) per Member State, covering the RASFF and AAC networks. Member States may include their food fraud network contact point in the single contact point, to ensure coordination between RASFF, AAC and Food Fraud networks.

The SCP is responsible for *“setting up effective arrangements for the smooth exchange of relevant information with all relevant competent authorities, determining its roles and responsibilities and those of the relevant competent authorities preparing and transmitting notifications, requests and responses, and assessing and distributing notifications, requests and responses from other members of the alert and cooperation network”*.

All members of the RASFF network have out-of-hours arrangements (24/7) to ensure that in case of an urgent notification made outside office hours, on-duty officers can be warned, acknowledge the urgent information and take appropriate action. All member organisations of the RASFF, for which contact points are identified, are listed and their homepages can be consulted online at the following web page: [https://ec.europa.eu/food/safety/rasff/members\\_en](https://ec.europa.eu/food/safety/rasff/members_en)

## The system

While non-compliances generating risks are notified in RASFF other non-compliance notifications take place within AAC.

### RASFF notifications

RASFF notifications usually report on risks identified in food, feed or food contact materials that are placed on the market in the notifying country or detained at an EU point of entry. The notifying country reports on the risks it has identified, the product and its traceability and the measures it has taken. Depending on the seriousness of the risks

identified and the distribution of the product on the market, the RASFF notification is classified as alert or information notification after verification by the Commission contact point after which the Commission contact point transmits it to all network members, unless it concerns a rejection of the product before it enters the EEA market (border rejection notification). With the entry into force of the IMSOC Regulation, border rejection notifications are directly exchanged between members of the network, whereas they used to follow the procedure mentioned above for alert and information notifications.

These are the different types of RASFF notifications:

- **Alert**

An ‘alert notification’ or ‘alert’ is sent when a food, feed or food contact material presenting a serious risk is on the market and when rapid action is or might be required by another network member than the notifying member. Alerts are notified by the member of the network who detects the problem and has initiated the relevant measures, such as withdrawal or recall. The notification aims at giving all the members of the network the necessary information to verify whether the concerned product is on their market, so that they can take appropriate action.

Products subject to an alert notification are usually withdrawn from the market. Member States have their own mechanisms to carry out such actions, including the provision of detailed information through the media if necessary. The latter action is called “consumer recall”. If information regarding a consumer recall is posted on the internet, a link is made available to the information via the [RASFF Consumers’ Portal](#).

- **Information**

An ‘information notification’ concerns a food, feed or food contact material for which the risk identified does not require rapid action either because it is not considered serious or the product is not on the market at the time of notification. The IMSOC Regulation defines two sub-types of information notifications:

- ‘information notifications for follow-up’ about products that are or may be placed on the market in another RASFF network member’s country

- ‘information notifications for attention’ about products that:

(i) either are present only in the notifying network member’s country; or

(ii) have not been placed on the market; or

(iii) are no longer on the market

- **Border rejection**

A ‘border rejection notification’ concerns a consignment of food, feed or food contact material that was refused entry into the EU for reason of a risk to human health and also for reason of a serious risk to animal health or to the environment if it concerns feed.

- **News**

A ‘news notification’ in iRASFF concerns a risk deriving from food, food contact material or feed (within the meaning of Article 50 of Regulation (EC) No 178/2002 and Article 29 of Regulation (EC) No 183/2005) that has an informal source, contains unverified information or concerns as yet an unidentified product. It concerns any type of information related to the safety of food or feed which has not been communicated as an alert, information or border rejection notification, but which is judged interesting for the food and feed control authorities in member countries. News notifications are sometimes based on information picked up in the media or forwarded by colleagues of food or feed authorities in third countries, EC delegations or international organisations, after having been verified with any member countries concerned. A news notification is the only type of RASFF notification that does not systematically get reported in the online public [RASFF Portal](#) tool.

### *Non-compliance notifications*

A ‘non-compliance notification’ is sent when a member of the ACN wants to communicate about non-compliances related to agri-food commodities not presenting a health risk, except non-serious risks to animal health and risks to plant health or animal welfare. It may be used as well for potential non-compliances requiring input from other network members, to establish if there is indeed a non-compliance. It may also be used to establish whether there is a health risk or not. However if there is a potential health risk, members of the

network should consider escalating their notification to RASFF, in particular if input from not yet identified other network members may be important in handling the notification further. This is because a RASFF notification and its follow-up is systematically shared between all members of the network, contrary to a non-compliance notification. The iRASFF platform allows for a very easy conversion from a non-compliance notification to a RASFF notification through the so-called process of “escalation” of the notification.

### *Original vs follow-up notifications*

The IMSOC Regulation defines an original notification as a non-compliance notification, an alert notification, an information notification, a news notification, a food fraud notification or a border rejection notification. The first time a notification refers to one or more consignments of an agri-food commodity<sup>5</sup> that were not previously notified is labelled “original”. Any notification in reaction to this original notification by any member of the network is a “follow-up” notification that refers to the same consignments and which adds information to the original notification such as information on hazards, product traceability or measures taken.

### *Declined or withdrawn notifications*

The European Commission contact point can decline transmitting an original alert, information or news notification sent by a member of the RASFF through the iRASFF system, after verification and in agreement with the notifying country, if the criteria for notification are not met or if the information transmitted is insufficient.

The European Commission contact point can withdraw an original RASFF notification in agreement with the notifying country if the information upon which the measures taken are based turns out to be unfounded or if the transmission of the notification was made erroneously. Similarly, non-compliance or food fraud notifications can be withdrawn by the member of the network that notified it.

More information on the RASFF is available at: [https://ec.europa.eu/food/safety/rasff\\_en](https://ec.europa.eu/food/safety/rasff_en)

<sup>5</sup> Whereas the scope of RASFF remains unchanged and includes food, feed and food contact materials, the non-compliance and food fraud notifications have a wider scope that they take from the OCR.

Information on the Administrative Assistance and Cooperation mechanism (under the previous legal basis): [https://ec.europa.eu/food/safety/official\\_controls/legislation/aac\\_en](https://ec.europa.eu/food/safety/official_controls/legislation/aac_en)

Information on the food fraud network (using the Administrative Assistance and Cooperation system as its information exchange mechanism): [https://ec.europa.eu/food/safety/food-fraud/aas\\_en](https://ec.europa.eu/food/safety/food-fraud/aas_en)

# RASFF and AAC annual report 2019

## Integration of the Administrative Assistance and Cooperation network with the Rapid Alert System for Food and Feed

iRASFF, the electronic tool that until then only operated the RASFF, was adapted on 22 October 2019 to comply with the provisions of IMSOC. Although now notified within the same electronic system, AAC non-compliance notifications and RASFF notifications follow however two distinct workflows thanks to a new feature specifically developed for this purpose: the “conversation module”.

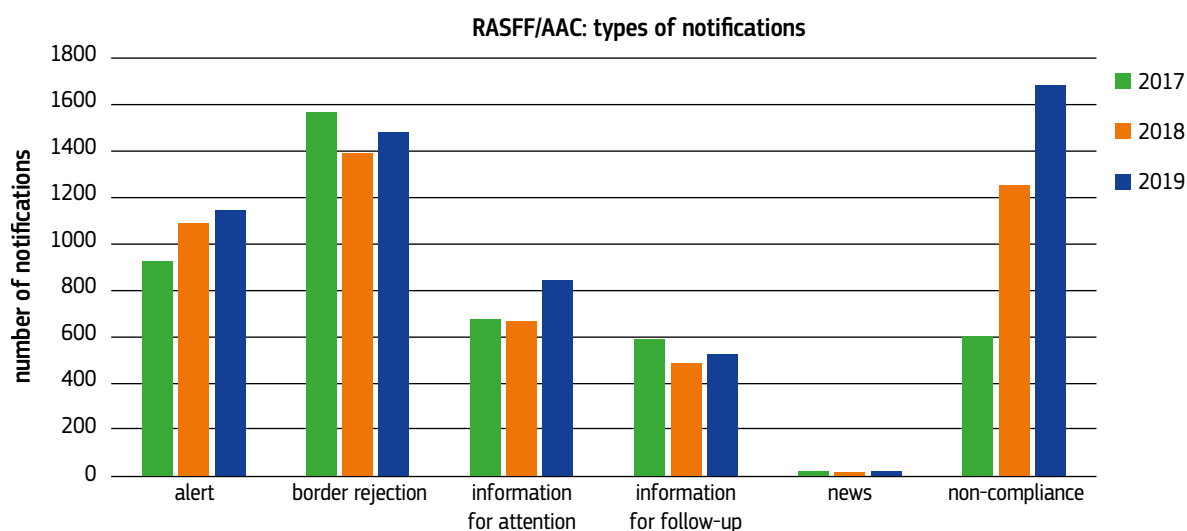
The conversation module facilitates the request and response mechanisms at the core of the AAC. The notifying country can make a request to another country, thereby sharing the notification with only that country and with the Commission. Any participant to the notification can make requests to other countries thereby sharing the notification with these and enlarging the group of countries that cooperate on the notification. In the case of a RASFF notification, all members of the network have access at the same time to the circulated information, after the Commission has validated it.

The AAC dedicated application remains operational. AAC-AA remains accessible for members to either consult or introduce additional information concerning requests submitted before 22 October. AAC-FF remains the only system where the members of the Food Fraud Network (FFN) can create new requests and exchange information in a secure manner, as its integration in iRASFF is planned for 2020.

For more information on the Food Fraud network, we refer to its [2019 annual report](#). Under the next heading, information is provided on the activities of the Administrative Assistance and Cooperation Network (AAC).

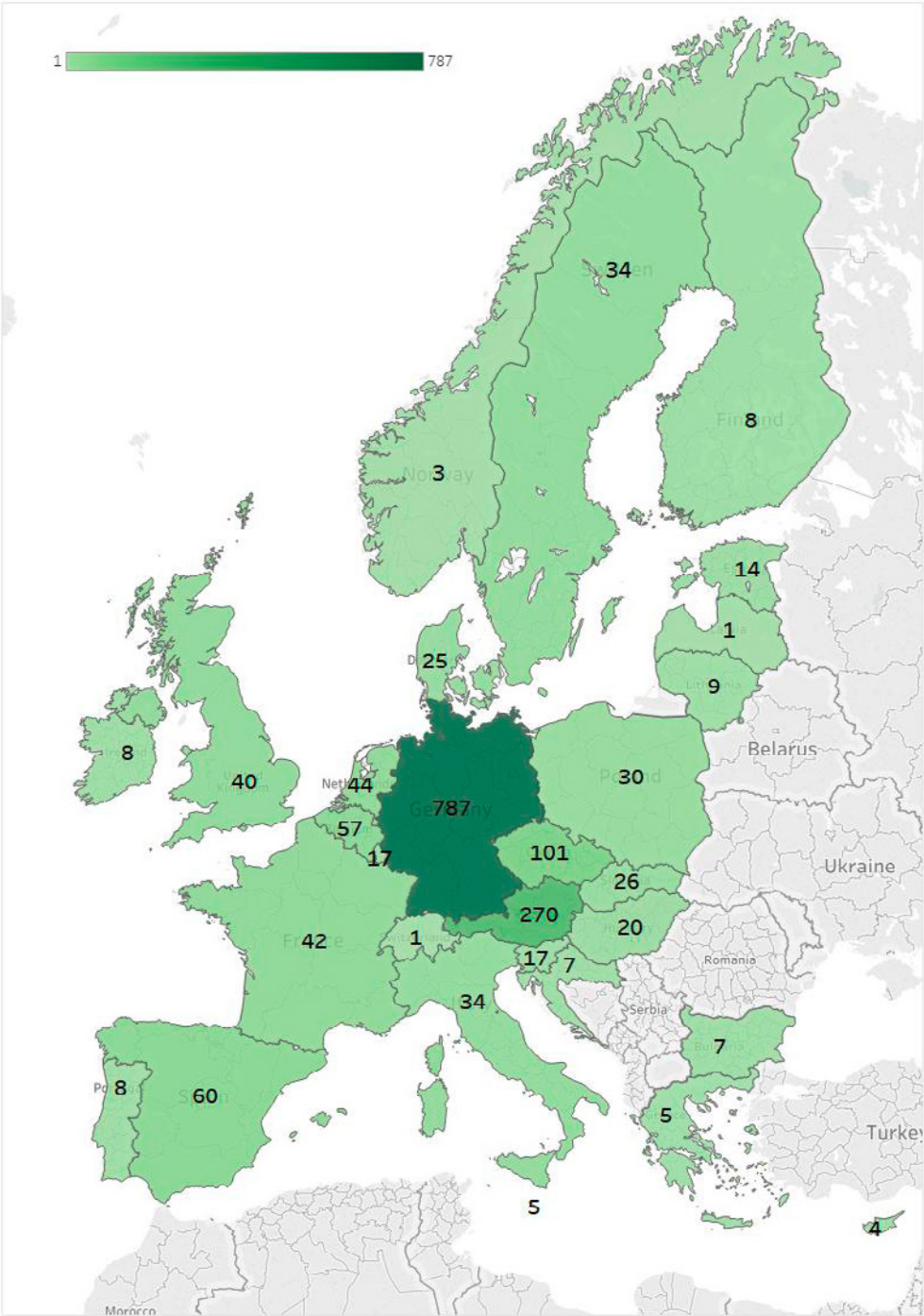
## AAC notifications in 2019

The chart below shows the evolution in the number of notifications in RASFF and in AAC in the period from 2017 to 2019. It reveals a rapid rise to significance for the non-compliance notifications reported through the AAC. Now that integration into iRASFF (the online platform of the RASFF network) is complete, the AAC network benefits from its new feature (the conversation module) but also from the already long established procedure in iRASFF using follow-up notifications.



The map below shows the number of non-compliance notifications per notifying country in 2019.

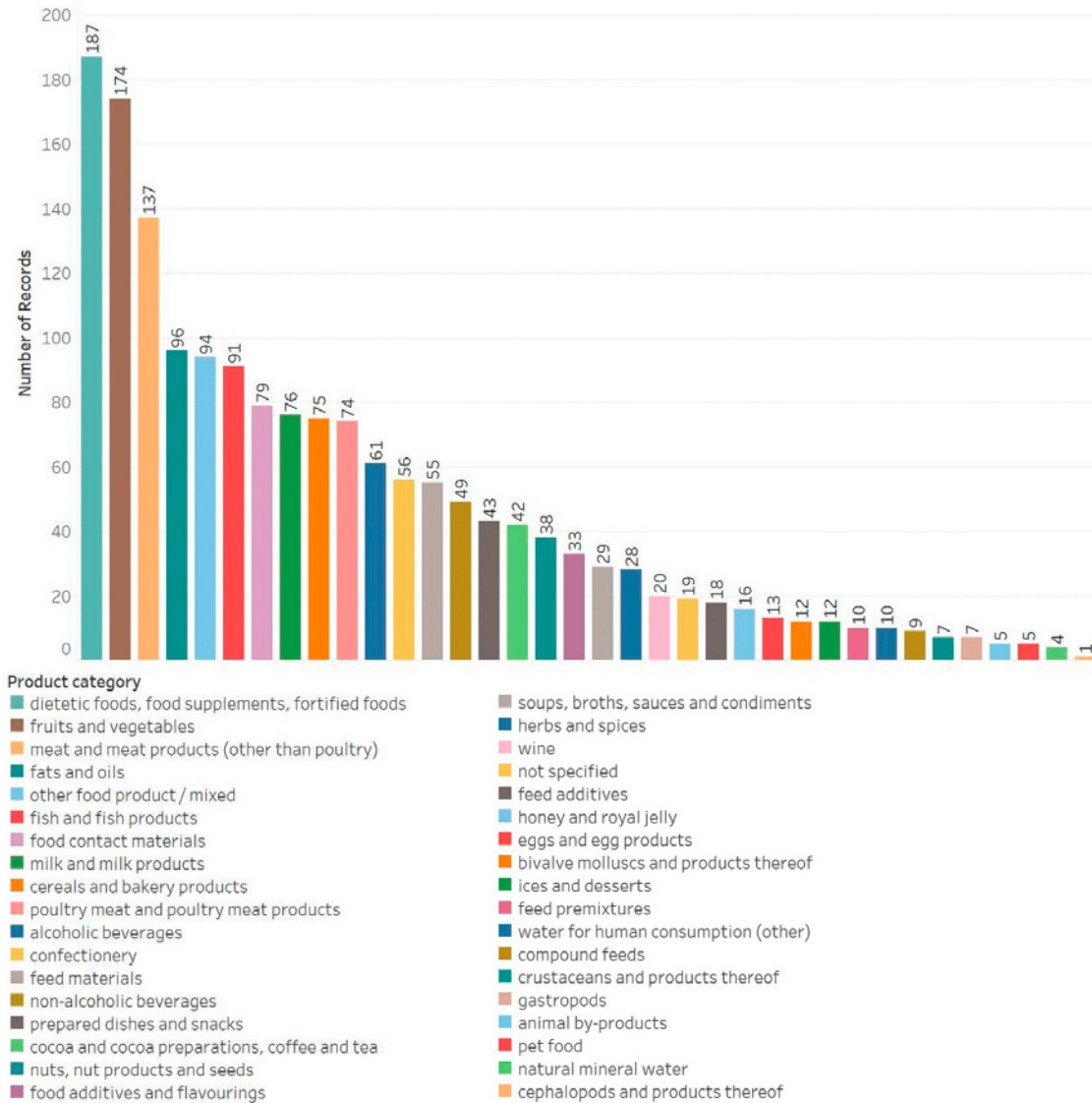
**Non-compliance notifications per notifying country in 2019**



The chart below gives the number of AAC notifications per product category in 2019. As in 2018, the most notified product category is “dietetic food,

food supplements and fortified foods”; while “fruits and vegetables” have reached the 2<sup>nd</sup> place over meat and meat products.

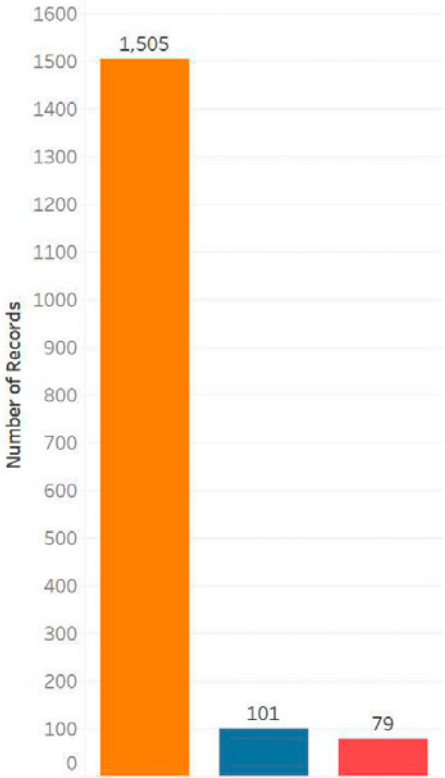
AAC notifications per product category



The chart below shows the number of AAC notifications divided by product type in 2019, confirming that foodstuffs have been the most reported ones.



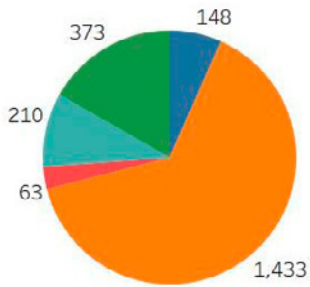
### AAC notifications per product type



Type  
food  
feed  
food contact material

The pie chart on the right shows the number of AAC notifications per type of violation in 2019. Bearing in mind that a notification may relate to more than one violation, the classification of the notifications was done by taking into account the main alleged food law violations reported by Member States. Moreover, Member States can further specify violations outside the categories provided in the system. The most reported type of violation is mislabelling, followed by unapproved treatment and/or process. Considering that in few cases (3%) the type of violation has not been indicated, the last position is held by non-compliances concerning documents.

### AAC notifications per type of violation



Non-compliance  
Documents  
Mislabelling  
Not specified  
Replacement/dilution/addition/removal in product  
Unapproved treatment and/or process



## RASFF in 2019

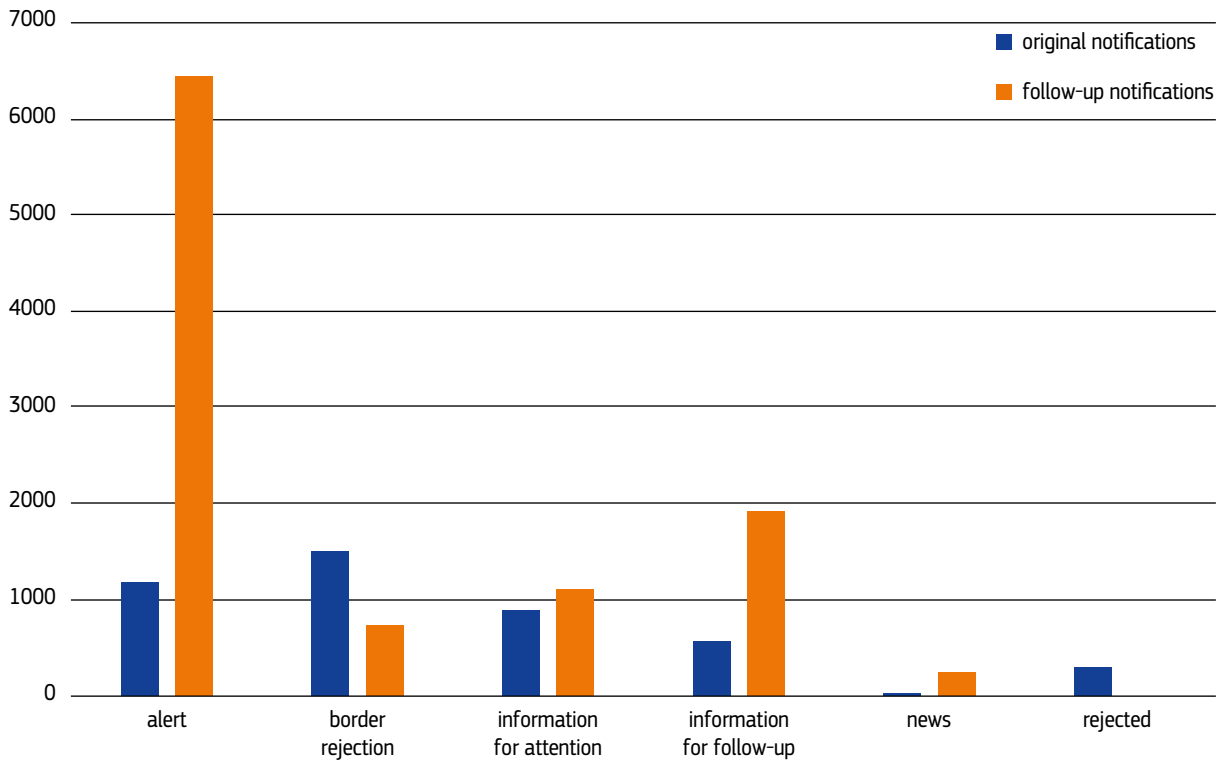
### RASFF notifications in 2019

In 2019, a total of 4118 **original notifications** were transmitted through RASFF, of which 1173 were classified as alert, 546 as information for follow-up, 882 as information for attention, 1499 as border rejection and 18 as news. These original notifications gave rise to 10388 **follow-up notifications**, representing an average of 2.5 follow-ups

per original notification. For alert notifications this average rises to 5.5 follow-ups per original notification. Compared to 2018, the number of alert notifications, implying a serious health risk of a product circulating on the market, rose by 5%. The increase in alerts is significant for the sixth year in a row.

The overall figures present a significant increase of 10% in original notifications compared to 2018 and a small 1% decrease in follow-up notifications, resulting in an overall increase of 2%.

2019 RASFF notifications by class and type



The European Commission decided, after receipt of follow-up information, to withdraw<sup>6</sup> 26 alert, 60 information and 19 border rejection notifications. It did not transmit, after consulting the notifying countries, 297 notifications to the members of the network because, after evaluation, they were found not to satisfy the criteria for a RASFF notification (rejected notifications). This represents a 31% increase compared to 2018. Almost 200 of the rejected notifications in 2019 concerned MRL exceedances of pesticides, which, after evaluation, were found not health risk related, using the methodology provided in RASFF Working Instruction 2.2.

Withdrawn or rejected notifications are further excluded from tables and charts.

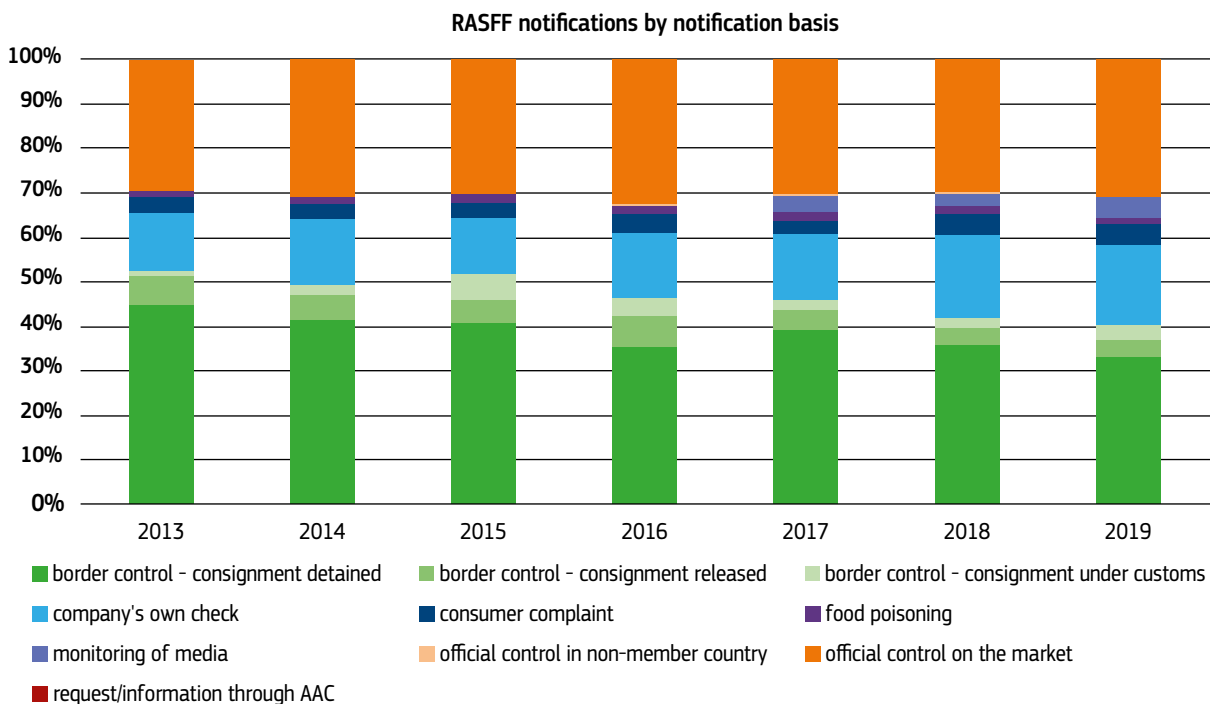
It brings the total exchanges in RASFF in 2019 to **14803**, again a number that has never been higher.

### Where do RASFF notifications come from?

The largest part concerns official controls on the (internal) market<sup>7</sup>. An official control is typically carried out at a business operator establishment (manufacturer, wholesaler, storage, retailer etc.) and

involves an inspection and possibly also a sample taking for the purpose of analysis. RASFF notifications may also be the result of a consumer complaint, a company's own check, or a food poisoning, but also and increasingly, for the past few years, of products sold online i.e. through e-commerce.

In 2019, 40% of RASFF notifications concerned controls at the outer EEA borders<sup>8</sup> at points of entry or border control posts. There is a decreasing trend because some years ago, these notifications represented more than half of the total. When the consignment was not accepted for import ("border control – consignment detained") a border rejection notification was made. In some cases, a sample was taken for analysis at the border yet the consignment was not held there but was forwarded to its destination under customs' seals ("border control – consignment under customs"). This means that it should remain stored there until the result of the analysis is available. In other cases the consignment was released ("border control – consignment released") without awaiting the analytical result, which means that the consignment would need to be retraced if the result is unfavourable and the product needs to be withdrawn from the market. Therefore, the latter cases lead to alert or information notifications.



<sup>6</sup> Data taken 30 April 2020, may have changed in the real-time RASFF system

<sup>7</sup> Products placed on the market in one of the member countries including the EEA countries Norway, Liechtenstein and Iceland.

<sup>8</sup> Since 2009, including Switzerland.

A small number of notifications were triggered by an official control in a non-member country. If a non-member country informs a RASFF member of a risk found during its official controls concerning a product that may be on the market in one of the member countries, the RASFF member may notify this to the Commission for transmission to the RASFF network. In 2019, there were 11 RASFF notifications (of which five news notifications) reporting on checks carried out in non-member countries. Below you will find more details regarding some of the notifications transmitted:

- **2019.0069** – news - designation of the competent authority authorised to sign health certificates issued for hazelnuts from Azerbaijan: as had been more customary in the past, occasionally the RASFF news notification is still used to inform border control posts of a new procedure relating to imports of particular commodities.
- **2019.1227** – alert - *Listeria monocytogenes* (<5 CFU/g) in raw milk goat's cheese from France: Canadian authorities informed France of their findings which lead to a withdrawal by the manufacturer in France. Some products were withdrawn in Denmark as well. Canada regularly informs RASFF member countries through the INFOSAN network of food safety issues concerning them.

- **2019.2663** – alert - aflatoxins in organic peanut butter from the Netherlands, with raw material from Germany: after they received a report from the Japanese authorities about aflatoxin in peanut butter, the investigation by the Dutch authorities led to withdrawals in 20 countries worldwide.
- **2019.3618** – alert - *Listeria monocytogenes* (<100 CFU/g) in chilled sheep's cheese from France: a German operator had been informed by Australian authorities of the *Listeria* finding and warned the German authorities. Having been informed through the RASFF notification, the French operator precautionarily withdrew remaining products from the lot concerned from the market.

### RASFF incidents in 2019

RASFF incidents are made up of more than one notification. In order to identify such an incident, the notifications need to have a “strong link” e.g. they share the same upstream traceability for two similar (but not identical) products or they are about identical products but different lots. Findings about the same lot of a product should however preferably be grouped under the same notification with new findings being reported as follow-up notifications. The following types of incidents were identified in 2019:

Type of incident	Number of incidents		Number of notifications	
	2019	2018	2019	2018
accidental or environmental contamination	21	17	58	49
faulty labelling, processing or storage conditions	2	2	4	5
foodborne outbreak	2	6	12	30
foreign body contamination / physical danger	1	7	2	16
fraud investigation	2	1	4	5
hazardous or unauthorised composition	21	11	53	31
intentional contamination / tampering	0	0	0	0

### Accidental or environmental contamination

This incident type involves most contamination events as it fortunately only rarely happens that a contamination is induced deliberately in the food chain. The nature of the contamination can be either chemical or (micro)biological.

Examples from the 2019 collection:

- *Salmonella* in frozen peppered turkey breast from a manufacturer in Chile exported by another operator in Chile and intended to be imported by a particular operator in Italy. The incident involved six border rejections.
- Large withdrawal from the market of cheeses from a French manufacturer because of contamination with *Listeria monocytogenes*: five notifications.

### Faulty labelling, processing or storage conditions

This is where an element of the “logistics” chain went wrong and led to risks in the food or feed. Typically, most incidents reported under this type would relate to labelling mistakes leading to undeclared allergens. It could be for example that several notifications about products with undeclared allergens can be traced back to the same labelling defect.

### Foodborne outbreak

A foodborne outbreak can be reported in a single RASFF notification or through several notifications linked to one particular outbreak event, in which case an incident of this type is identified.

In 2019, 64 notifications were triggered by a food poisoning event. In this report, the term “food poisoning” refers to anything that triggers an adverse reaction. Not only pathogenic bacteria or viruses but also chemical contamination, harmful composition of a food or the presence of an allergenic substance that is not labelled, so long as the notifying country has reported that consumers were affected by consumption of the food. Therefore there are likely more notifications regarding findings that have adversely affected consumers, but that did not report this explicitly.

From the table above you could already see that only 12 notifications were linked with foodborne outbreak incidents in 2019. In total, 40 notifications

related to foodborne outbreaks in 2019; so most reported foodborne outbreaks are reported in a single RASFF notification. From these 40 notifications on foodborne outbreaks, 14 identified *Salmonella* as the (probable) cause, 11 were about *Listeria monocytogenes* and seven identified norovirus.

In total, eight notifications related to a multi-country foodborne outbreak. This is an outbreak where persons have been affected in more than one country. In such event, coordination at the EU level is even more important. As soon as a multi-country foodborne outbreak is identified, ECDC and EFSA start collaborating on it on their own initiative or at the request of the Commission. Such joint ECDC-EFSA action can take the form of a Rapid Outbreak Assessment (ROA) or of a joint notification summary (JNS). A Rapid Outbreak Assessment (ROA) is jointly prepared by EFSA and ECDC in close cooperation with affected countries. This ROA gives an overview of the situation in terms of public health and possibly identifies the contaminated food vehicle that caused the infections. It also includes trace-back and trace-forward investigations to identify the origin of the outbreak and where contaminated products have been distributed. This is crucial to identify the relevant control measures in order to put an end to the outbreak. Involved network members use RASFF notifications to inform about their food investigations in the context of the outbreak. When finalised, EFSA makes an anonymised version of the ROA public on its website.

The joint notification summary (JNS) is a summary of the state of play of a smaller scale multi-country foodborne outbreak with a brief preliminary assessment made by ECDC and EFSA, which is shared only in EWRS, EPIS-FWD and RASFF platforms.

Eight multi-country foodborne outbreaks were identified in 2019 and have led to a ROA or to a JNS, as reported below:

**Multi-country outbreak of *Salmonella* Poona infections linked to consumption of rice milk infant formula (RASFF news 2019.0224 by France):** An outbreak of *Salmonella* enterica serotype Poona in infants and young children was identified through whole genome sequencing (WGS) analysis in three EU Member States: France (30 cases), Belgium (1 case) and Luxembourg (1 case). In January 2019, France issued a RASFF news and an urgent enquiry in EPIS-FWD platform concerning a small cluster of *Salmonella* Poona infections in infants and young children, who consumed the

same infant formula. France, Belgium and Luxembourg subsequently reported additional *Salmonella* Poona cases in infants and young children who consumed infant formula products based on rice proteins from the same brand. The suspected infant formulae were manufactured in Spain and distributed to several EU and non-EU countries. *Salmonella* Poona was not detected in any sample of the implicated batches of infant formula tested either at the Spanish or French companies. Moreover, no positive samples for *S. Poona* had been reported in the production environment or in any other product dehydrated in the same drying tower since 2017. A recall and a withdrawal of infant formula products and baby food of the same brand were initiated on 24 January 2019 by the French company in France and this was followed by a recall in Luxembourg. Moreover, public warnings were released in France, Belgium and Spain, and the involved e-commerce operator informed all customers. In addition, recalls and public messaging were implemented in response to an INFOSAN alert in several non-RASFF member countries where the products had been distributed.

On 12 March 2019 the joint ECDC-EFSA ROA was [published](#).

**Multi-country outbreak of *Listeria monocytogenes* clonal complex 8 infections linked to consumption of cold-smoked fish products (RASFF 2018.0394, 2018.1833, 2018.2003, 2018.2870, 2018.3687, 2018.3808, 2019.0806, 2019.0999)** – A multi-country outbreak caused by *Listeria monocytogenes* was identified through WGS in five EU Member States: Denmark, Estonia, Finland, France and Sweden. Five patients have died due to, or with, the disease. In December 2017, Denmark issued an urgent inquiry in the EPIS-FWD platform concerning a national outbreak with *Listeria monocytogenes* sequence type 1247. In February 2019, Finland reported two human cases closely related to the Danish isolates and France transmitted a RASFF follow-up reporting two *Listeria monocytogenes* food isolates, which matched the outbreak strain by WGS, from cold smoked trout. In the following months, in the context of the outbreak investigations, other *Listeria monocytogenes* food isolates matching the human strain by WGS were detected at wholesale and retail level in four countries (i.e. France, Denmark, Italy and Sweden) from cold smoked or gravad salmon and cold smoked trout products. Traceability information of the contaminated batches pointed to an Estonian operator as the single common manufacturer of these fish

products. *Listeria monocytogenes* isolates matching the outbreak strain were found at the premises of Estonian operator. Control measures were implemented in Estonia, Denmark, France and Italy: the Estonian operator was requested to comply with the food safety criterion that specifies the absence of *Listeria monocytogenes* in 25 g in cold-smoked and salted products. In Denmark and France, the concerned products were withdrawn from the market and recalled from consumers. In Italy, the batches found positive for *Listeria monocytogenes* were seized by the Italian competent authority before they ever reached consumers.

On 4 June 2019 the joint ECDC-EFSA ROA was [published](#).

**Multi-country cluster of monophasic *Salmonella* Typhimurium infection in EU Member States (RASFF 2018.0895, 2018.2772, 2019.0690, 2019.0822, 2019.0286, 2019.0907, and 2019.1920)**: On 5 June 2018, an outbreak of *Salmonella* enterica with antigenic formula 4,5,12:i:- (monophasic *Salmonella* Typhimurium) infections was reported by France in the EPIS-FWD platform. In March 2019, Denmark reported an ongoing outbreak with human isolates closely related to the French representative isolates. In the following months, Luxembourg, United Kingdom and Finland reported cases possibly associated with this outbreak. On 24 May 2019, Denmark notified a RASFF news informing about a *Salmonella* positive finding in chilled minced beef. According to WGS analysis, this isolate matched the outbreak strain defined in the EPIS-FWD platform. In the following months, another two food sequences were closely related to the outbreak strains: one isolated from marinated pork preparation, sampled by Czech Republic and the other one isolated from minced beef, sampled by Finland. However, despite these microbiological links, it was not possible to outline the unique or multiple nature of the event and to draw firm conclusions about the involved food vehicles and the possible point(s) of contamination along the food chain due to the unclear traceability and exposure information and due to the clonality of monophasic *Salmonella* Typhimurium. Indeed, as it has been highlighted in the JNS, the monophasic *Salmonella* Typhimurium represents a clonal group, which is widely spread in the livestock, and the same clones can circulate in different animal populations. Therefore, descriptive epidemiological evidence is needed to support microbiological evidence in order to establish whether this cluster corresponds either to a single multi-country outbreak

with one or multiple vehicles of infection, or to multiple independent outbreaks linked to the consumption of different meat products contaminated with the same clone.

The Joint Notification Summary was made available in iRASFF on 26 June 2019 and updated on 26 August 2019.

**Multi-country outbreak of *Listeria monocytogenes* sequence type 6 infections linked to ready-to-eat meat products (RASFF 2019.3490):** On 1 August 2019, the Netherlands reported a cluster of 18 invasive listeriosis cases, identified through WGS, in EPIS-FWD platform. In the following weeks, Belgium reported two human cases of *L. monocytogenes* infections, which shared identical sequences with the Dutch isolates. At least three patients died and one had a miscarriage due to or with the disease. On 4 October 2019, the Netherlands launched a RASFF alert reporting that, as result of a national foodborne outbreak investigation, cooked sliced beef produced in Netherlands was recalled. A week later, a *Listeria monocytogenes* strain sampled at the Dutch operator was found matching the outbreak strain. The outbreak investigations showed that, overall, nine isolates from six sliced ready-to-eat meat products, produced between 2017 and 2019 by the Dutch manufacturing company, were found to be contaminated with *L. monocytogenes* strains matching the outbreak strain. The product was distributed to five EU Member States (Belgium, Germany, Luxemburg, Spain and United Kingdom) and to four non-EU countries. Following the detection in food of *L. monocytogenes* isolates matching the outbreak strain, and the finding of the environmental contamination with other *L. monocytogenes* strains, the Dutch operator stopped the production in October 2019, and finalised the withdrawals and recalls of all ready-to-eat meat products.

On 25 November 2019 the joint ECDC-EFSA ROA was [published](#).

Around the same time as the withdrawals and recalls of the ready to eat meat products involved in foodborne outbreak just described above were taking place, withdrawals and recalls of different types of meat products (including ready to eat products) were occurring in several EU and non-EU countries due to a *Listeria monocytogenes* outbreak in Germany. On 2 October 2019, Germany launched RASFF alert notification 2019.3464, reporting the withdrawal from the market and recall from the consumers of all meat products produced by

a Germany company, suspected to be the food source of an ongoing outbreak in Germany (37 cases, since 2014). On 9 October 2019, Germany uploaded in iRASFF the results of the core-genome based multilocus sequence typing (cgMLST) showing that food and environmental isolates matched with human isolates. All meat products produced by the Germany company were withdrawn from the market and public warnings were released. The company ceased business operations. This outbreak had no multi-country dimension, for this reason no ROA or JNS were prepared. Germany issued an urgent inquiry in the EPIS-FWD platform for this event.

**Foodborne outbreak caused by *Salmonella enterica* ser. Bredeney in chilled cooked pork preparation from Romania, with raw material from Italy and Belgium (RASFF 2019.2572)** - On 4 July 2019, Ireland issued an urgent inquiry in the EPIS-FWD platform reporting a cluster of cases of *Salmonella* Bredeney. In the following days, the United Kingdom reported cases possibly associated with this outbreak. On 15 July 2019, Ireland transmitted a RASFF alert about the presence of *Salmonella* in a chilled cooked pork preparation from Romania, providing evidence that this Romanian product was associated with the outbreak. On 30 July 2019, the results of the WGS analysis were uploaded in iRASFF: no differences were found between the food isolate and the outbreak strain. On 19 July, the Romanian producer suspended the processing activities to proceed with sanitation and disinfection of the premises. Restrictions to the intra-EU market were also implemented.

A JNS was made available in iRASFF on 05 August 2019.

**Multi-country outbreak of *Salmonella* München infections in EU/EEA countries (RASFF 2019.0038, 2019.0807, 2019.0817, 2019.1490, and 2019.1633)** - On 26 August 2019, the Netherlands reported in EPIS FWD an outbreak of *Salmonella* München with 14 patients, a genomic cluster by WGS was found in 9 of them. As of 18 October 2019, Austria, Belgium, the Czech Republic, Denmark, Ireland and Norway reported *Salmonella* München cases with isolates closely related by WGS to the representative Dutch outbreak strain. Based on the information provided by the countries involved in the event, no RASFF notifications have been found to be linked to the outbreaks. In order to explore food categories that could be possibly linked to the event, a search in iRASFF was performed and



5 RASFF notifications concerning the detection of *Salmonella* München were found. Sesame seeds from Sudan were the food products involved in all the 5 notifications. A WGS analysis on these food products was performed, but no match between the food isolates and isolates obtained from the patients in the Netherlands or to any other isolates have been detected. No food item could therefore be associated with the outbreak strain. As of 15 Oct 2019, since no new cases were notified, the Dutch public health authority considered the outbreak investigation closed.

A Joint Notification Summary was made available in iRASFF on 19 September 2019.

**Foodborne outbreak suspected to be caused by *Salmonella* enterica ser. Enteritidis in eggs from Poland (RASFF 2019.2765)** - On 30 July 2019, Austria transmitted a RASFF information notification concerning *Salmonella* Enteritidis in eggs from Poland, possibly related to an Austrian outbreak with *Salmonella* Enteritidis cases. In response to the EPIS FWD urgent inquiry about the same event, six EU Member States (Germany, Ireland, Netherlands, Norway, Sweden and the United Kingdom) reported human cases of *Salmonella* Enteritidis with isolates closely related to the Austrian outbreak. In Austria, patient interviews pointed to different Asian restaurants linked to the cluster of outbreak cases. Food investigations identified that restaurants have processed eggs from the same batch that tested positive for *Salmonella* Enteritidis. This batch originated from a single Polish farm. Two sequences of the isolates originated from the eggs sampled at the restaurants matched the Austrian reference outbreak strain. Eggs from the same batch were distributed to several restaurants in Austria and Slovenia via a Czech transporter. In the same period, the implicated Polish farm has delivered eggs to other trading companies. Following the detection of *Salmonella* Enteritidis from faecal and dust samples of the Polish farm in August 2019, stricter hygiene procedures and preventive measures were required by the Polish food authority and adopted by the Polish farm.

A JNS was made available in iRASFF on 18 September 2019.

**Multi-country spread of *Salmonella* Coeln strains in EU Member States (RASFF news 2019.2879 by EFSA):** Prolonged multi-country EU-wide spread of several *Salmonella* Coeln genotypes have been verified through WGS causing human infections at least in 7 Member States (Austria, Czech Republic,

Croatia, Denmark, Latvia, Slovakia and United Kingdom). Two urgent inquiries in the EPIS-FWD platform were issued for this event: one in 2018, by Czech Republic and one in 2019, by Denmark. Particularly, one genotype of *Salmonella* Coeln (ST1995) has caused human infections since 2012. The microbiological investigation and phylogenetic analyses showed that this specific *Salmonella* Coeln genotype emerged approximately in 2007 and circulates in several poultry species in different countries. Due to the detection of ST1995 genotype in different types of primary poultry production, contaminated feed could be a common epidemiological link between various poultry production types, but the available evidence was not sufficient to confirm this hypothesis. Since the spread of strains of *Salmonella* Coeln was not linked to food or feed notified in RASFF, EFSA opened a RASFF news on 7 August 2019 with the scope of sharing the JNS.

#### *Foreign body contamination / physical danger*

This type of incident is reserved for physical hazards. This is typically the case for an unintentional foreign body contamination but it can also be about the characteristics of a product leading to a risk, e.g. the addition of gelling additives to mini fruit cups leading to a suffocation risk.

#### *Fraud investigation*

These are incidents that could also fall under the other incident types but are given this type to emphasise the (potential) fraud element of the investigation that spans several notifications.

#### *Hazardous or unauthorised composition*

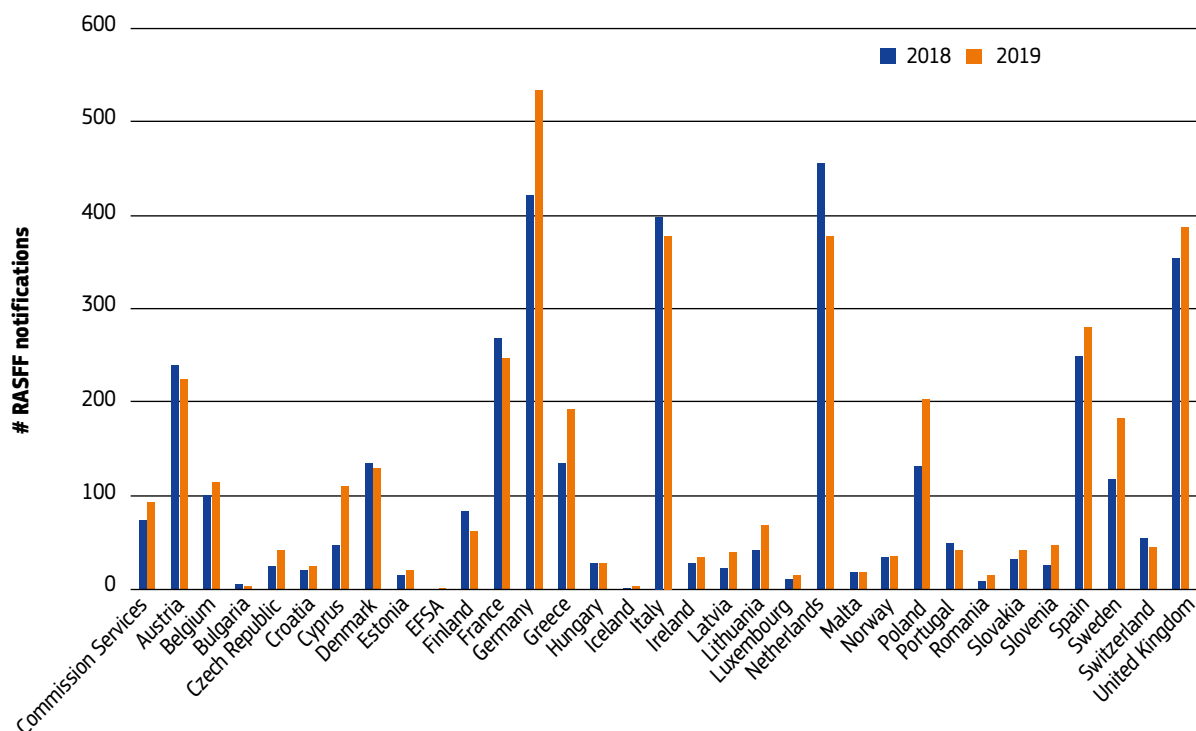
In this type of incident, an ingredient or additive lies at the basis of the health risk. Examples from the 2019 collection:

- High content of vitamin D in canned dog food from a United States' manufacturer: two notifications. Through wholesalers in the EU, widespread distribution to almost 50 countries. The product was subject to a consumers' recall.
- Six notifications of various products from a particular brand sold by an Austrian operator, both online and in traditional commerce with high levels of tetrahydrocannabinol. This substance is a psychotropic substance that is naturally present in cannabis plants and is not allowed in food supplements.



## RASFF notifications by notifying country in 2018 and 2019

Original notifications by notifying country in 2018 and 2019



### Top 10 number of notifications by notifying country

Number of notifications counted for each combination of hazard/product category/notifying country.

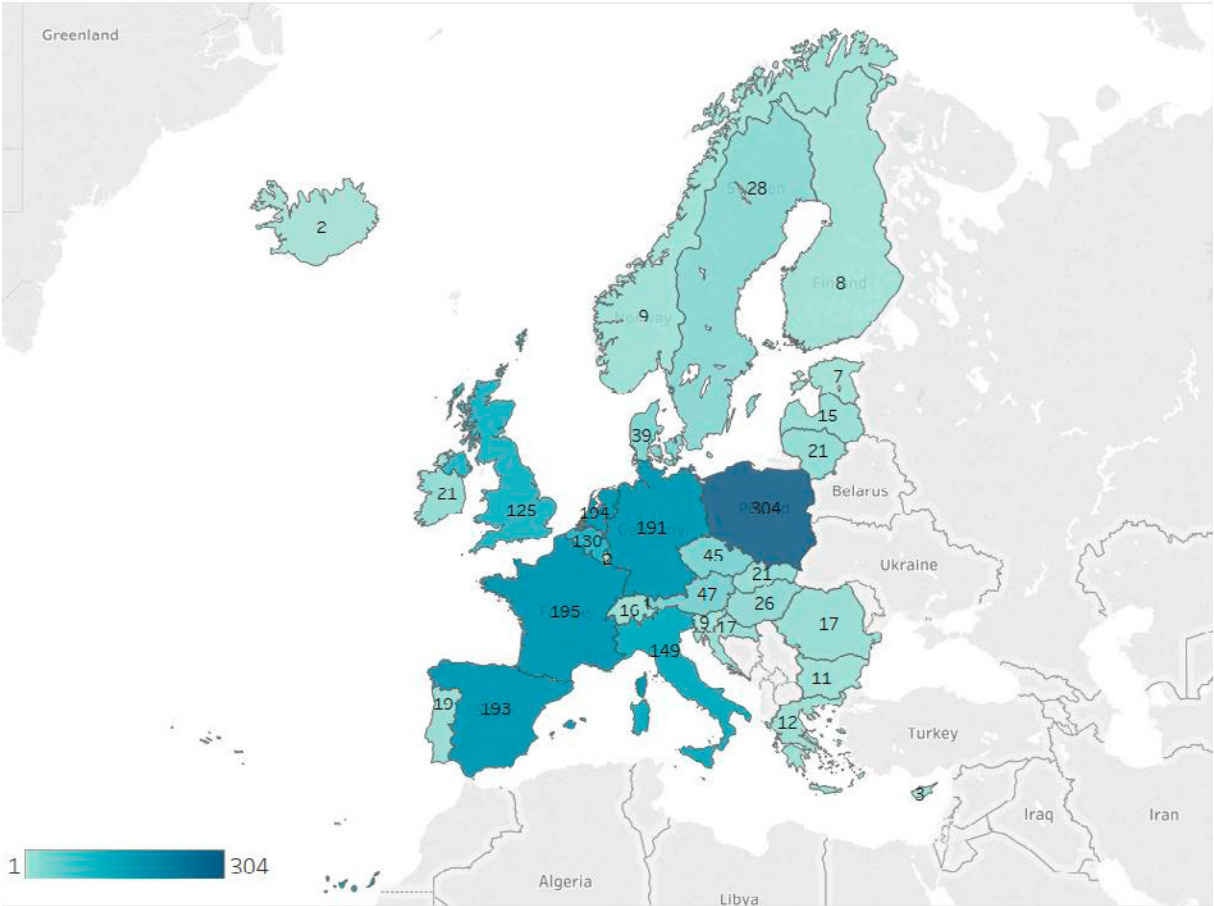
hazard	product category	notifying country	notifications
aflatoxins	nuts, nut products and seeds	Netherlands	113
2,4-dinitrophenol (DNP)	dietetic foods, food supplements, fortified foods	United Kingdom	66
<i>Salmonella</i>	poultry meat and poultry meat products	Czech Republic	58
aflatoxins	nuts, nut products and seeds	Germany	49
<i>Salmonella</i>	poultry meat and poultry meat products	Poland	49
aflatoxins	nuts, nut products and seeds	Spain	45
mercury	fish and fish products	Italy	40
aflatoxins	nuts, nut products and seeds	Italy	40
<i>Salmonella</i>	nuts, nut products and seeds	Greece	40
too high intake of monacolin K	dietetic foods, food supplements, fortified foods	Sweden	30

## Country fact sheets

 Austria	 Germany	 Netherlands
 Belgium	 Greece	 Norway
 Bulgaria	 Hungary	 Poland
 Croatia	 Iceland	 Portugal
 Cyprus	 Ireland	 Romania
 Czech Republic	 Italy	 Slovakia
 Denmark	 Latvia	 Slovenia
 Estonia	 Lithuania	 Spain
 Finland	 Luxembourg	 Sweden
 France	 Malta	 Switzerland
		 United Kingdom

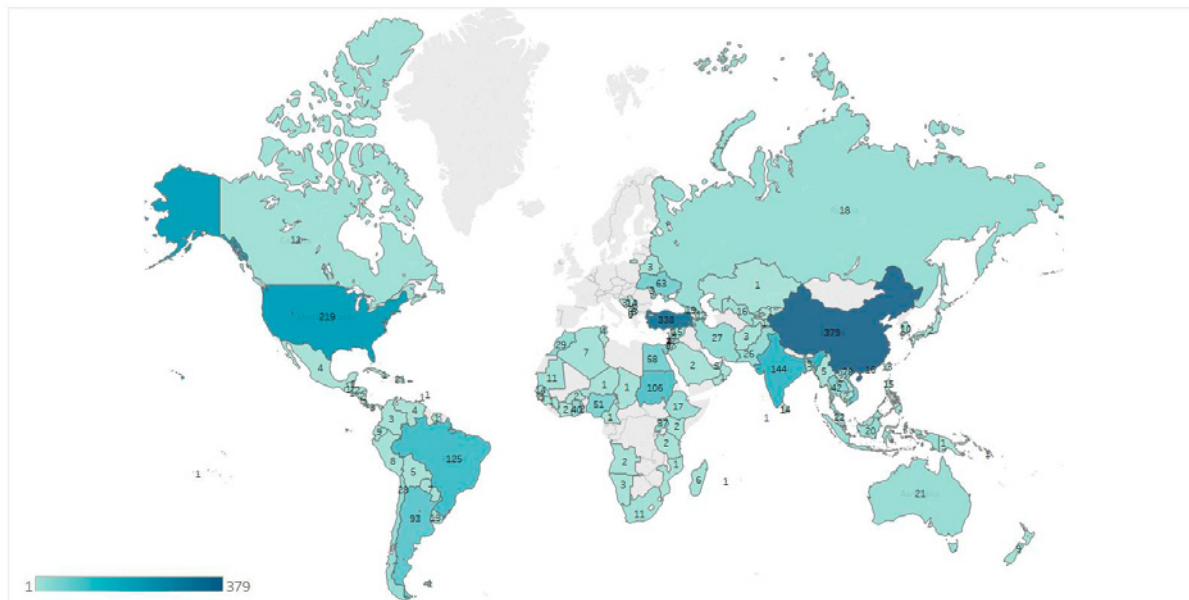
### RASFF notifications by country of origin in 2019

Origin member countries in 2019<sup>9</sup>



<sup>9</sup> Member countries of RASFF identified as the origin of the product notified, expressed in number of notifications per country of origin.

*Origin non-member countries in 2019*



*Top 10 number of notifications by country of origin*

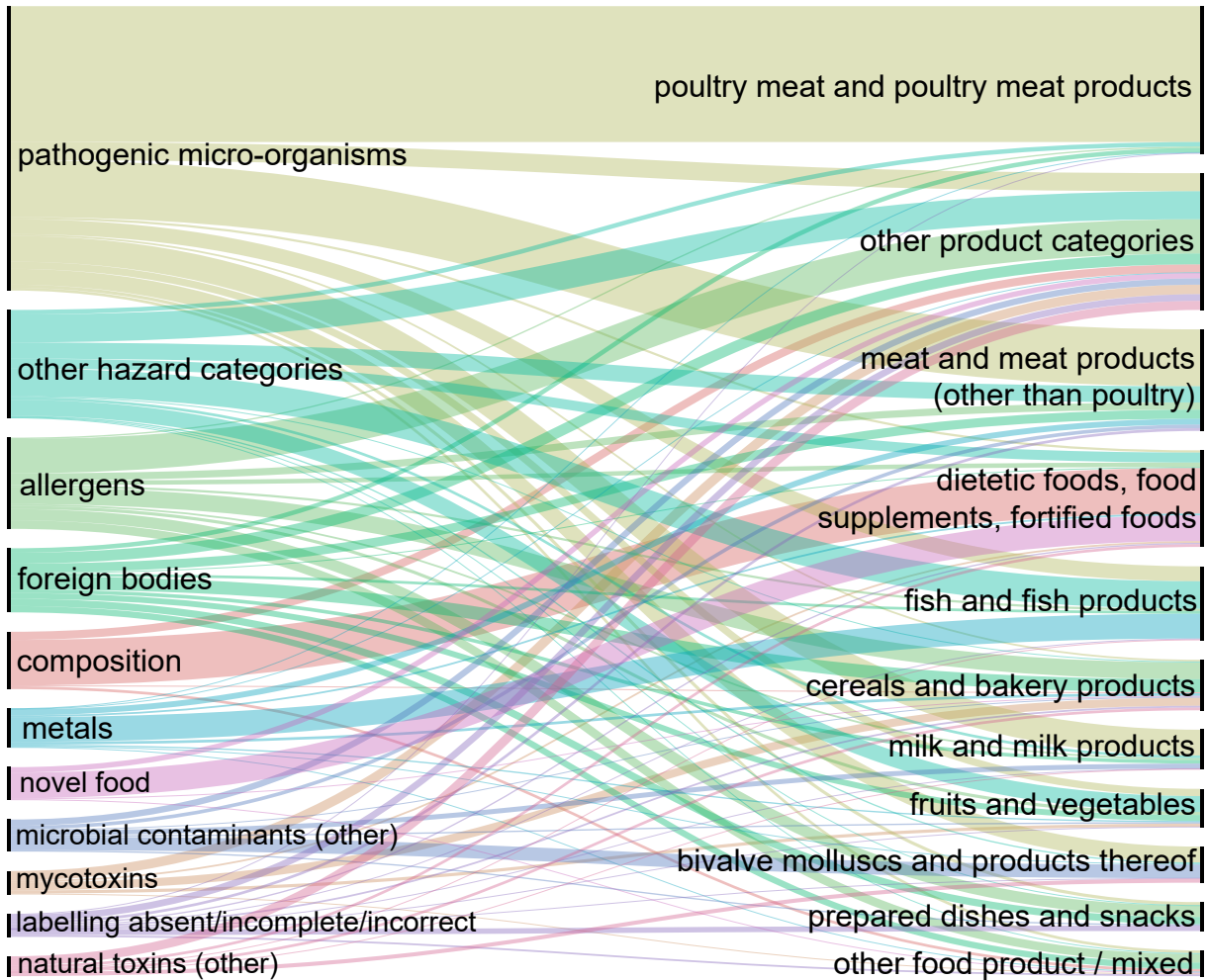
Number of notifications counted for each combination of hazard/product category/country.

hazard	Product category	Country of origin	notifications
<i>Salmonella</i>	poultry meat and poultry meat products	Poland	181
<i>Salmonella</i>	Nuts, nut products and seeds	Sudan	99
aflatoxins	nuts, nut products and seeds	United States	80
<i>Salmonella</i>	Herbs and spices	Brazil	67
aflatoxins	nuts, nut products and seeds	Argentina	63
aflatoxins	nuts, nut products and seeds	Turkey	55
aflatoxins	fruits and vegetables	Turkey	49
mercury	fish and fish products	Spain	38
ochratoxin A	fruits and vegetables	Turkey	36
migration of formaldehyde	food contact materials	China	36

In the following sections, using alluvial diagrams, the most frequently reported hazard and product categories are analysed for food, feed and food contact materials separately. The “top” hazard categories are explored in more detail, while identifying

recurrent issues (more than 10 notifications for the same hazard, product and country of origin combination) and operators (operators notified in RASFF three times or more in a three-month period).

2019 top 10 hazard and product categories on food products originating from member countries

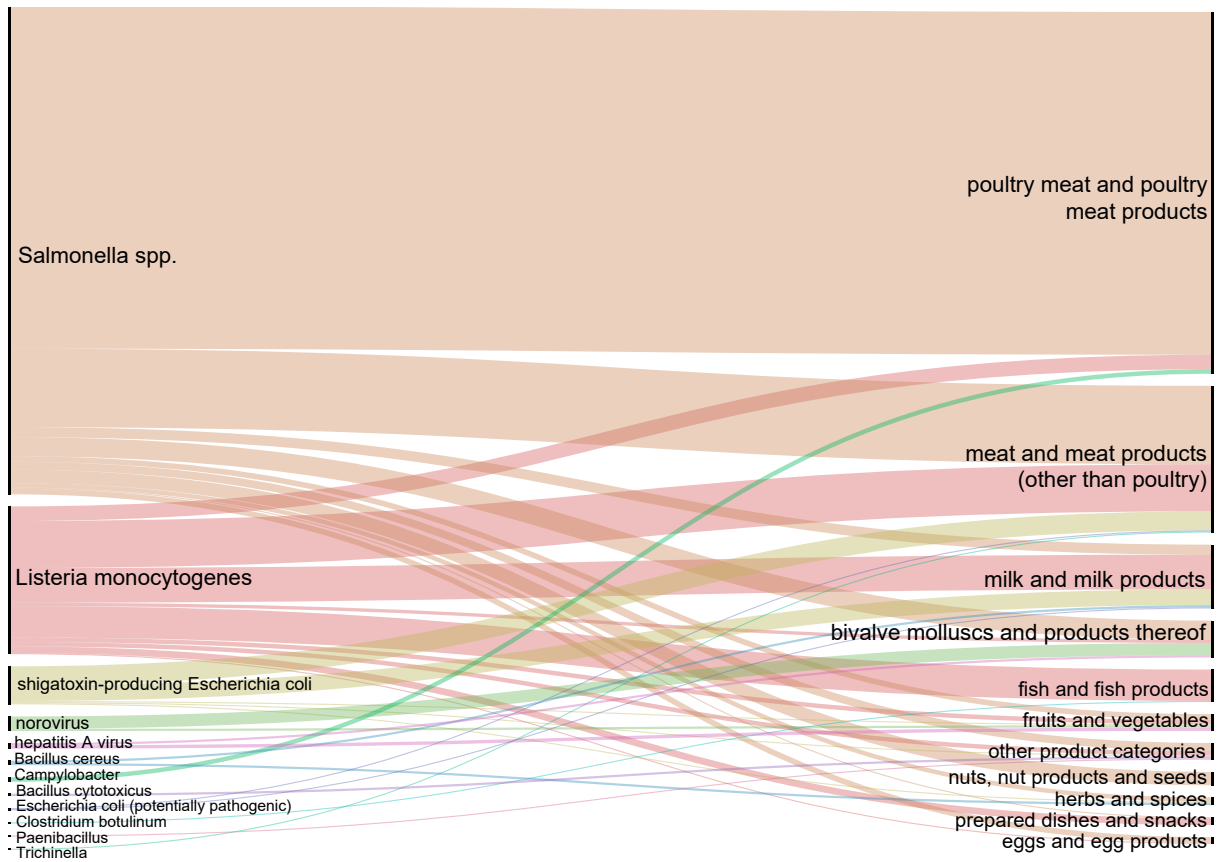


**Pathogenic microorganisms**

575 notifications

The alluvial diagram above shows that a significant part of the RASFF notifications on products from

member countries concern pathogenic micro-organisms in food of animal origin mostly. The diagram below provides more detail about this. There has been a 17% increase in notifications on pathogenic micro-organisms in 2019 compared to 2018.



### Salmonella

*Salmonella* is the most frequently reported pathogen in food from member countries (371 notifications, up by 51%). The same goes for non-member countries (347 notifications, see later in this report). Meat is taking up the bulk of the notifications, poultry meat in particular because of the food safety criterion for absence of *Salmonella* Typhimurium and Enteritidis in fresh poultry meat. There were 181 notifications on *Salmonella* in poultry products originating from Poland. About half of these concerned *Salmonella* Enteritidis or *Salmonella* Typhimurium, for which a food safety criterion is set for fresh poultry. Fourteen operators were identified as recurrent.

### Listeria monocytogenes

The diagram above reveals that *Listeria monocytogenes* contamination is mostly found on foods of animal origin. As clearly showcased in the food poisoning section of this report, *Listeria monocytogenes* in cold-smoked fish products and in ready-to-eat meat products were in 2019 important

causes of foodborne outbreaks. *Listeria monocytogenes* is particularly dangerous and even lethal for persons with weakened immune system. *Listeria monocytogenes* was notified 16 times in cheese from France (often made from raw milk). Two operators were identified as recurrent.

### Shigatoxin-producing Escherichia coli

Shigatoxin-producing *Escherichia coli* (32 notifications) can cause foodborne illness because of its capacity to produce toxins. As the capacity of the strain to really cause illness depends on several factors, it is not straightforward to estimate the risk a contamination poses to health. The contamination is of animal or human origin and therefore is most often found on (non-heat treated) meat products (15 notifications) and cheeses (14 notifications).

### Norovirus

There were 17 notifications (down by 64%) concerning norovirus, eight of which reported norovirus in live oysters from France. Two notifications were



related to frozen red currants from Poland. There were no recurrent operators.

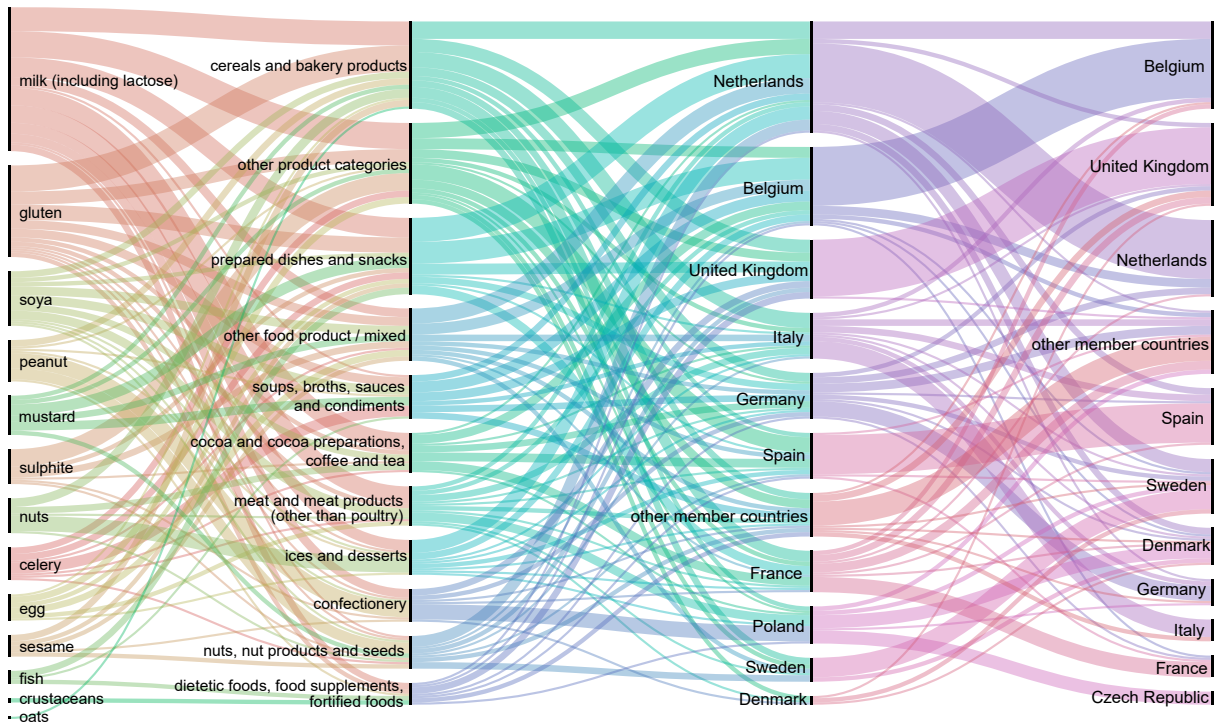
**Allergens**

194 notifications (up by 30%)

Milk, gluten and soya are the most commonly reported allergens. Cereals and bakery products

are most often notified. It is interesting to note that countries notify allergen issues that originate from their own country. Not all allergen issues are harmonised in EU legislation. Quite often, traces of allergens are notified, occurring in foods due to cross-contamination e.g. on the same production lines as other products containing allergens. Such occurrence of allergens is not regulated at EU level.

*Allergens notified in 2019, set out against food product category set out against member country of origin set out against notifying country*



It is worth to mention that in the alluvial diagrams, like the one above, a relationship is only demonstrated between two sides, not throughout the whole diagram. For example, above we can see that milk is an occurring allergen in dietetic food, food supplement, fortified foods, and that a fraction of the allergen issues in dietetic food, food supplement, fortified foods concern products from United Kingdom. However, it would be wrong to conclude that there are issues regarding milk allergen in dietetic food, food supplement, fortified foods products from United Kingdom! In fact, there are none; but it is not possible to read that from the diagram.

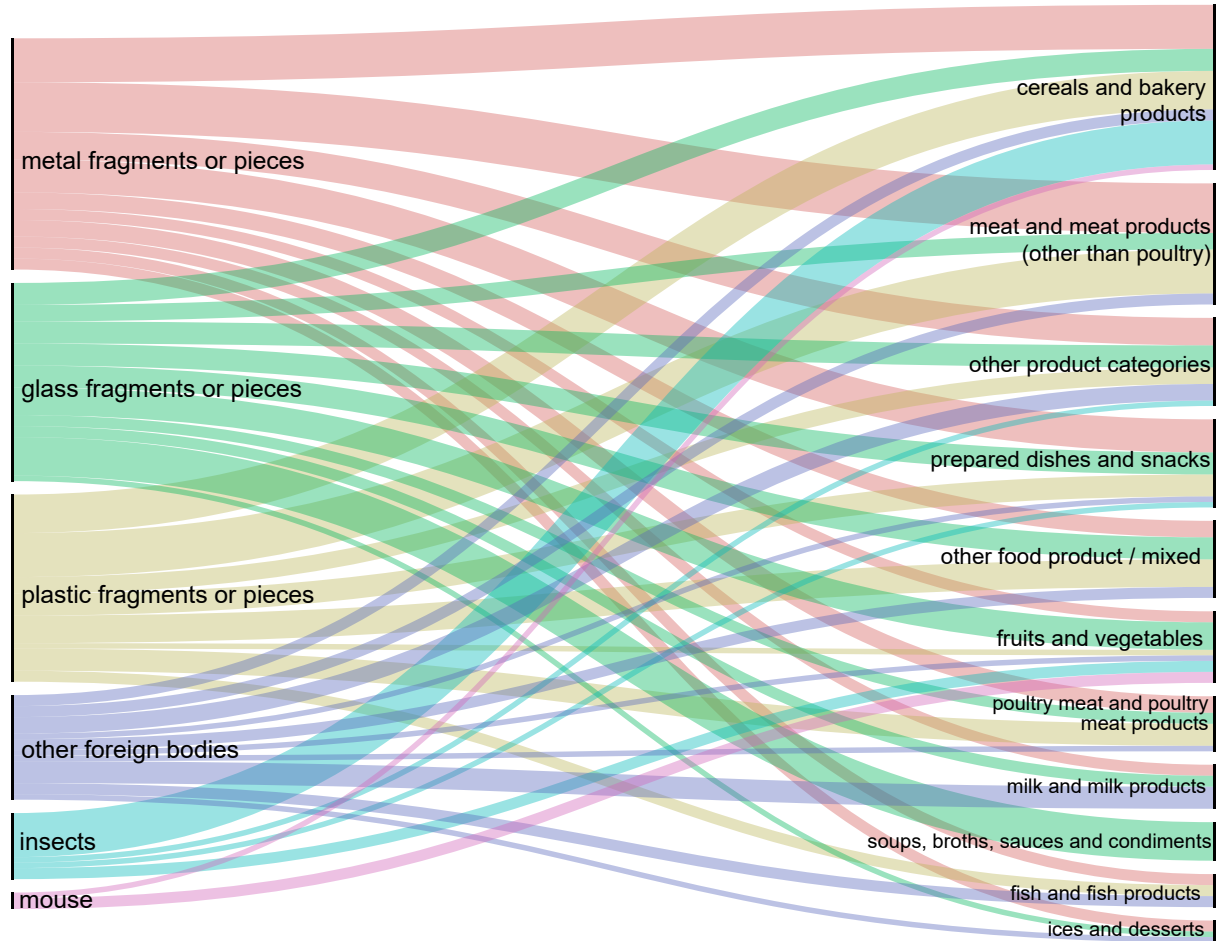
**Foreign bodies**

137 notifications

The three most frequently notified types of foreign bodies are metal, glass and plastic. Such hard materials found in food (most often reported through consumer complaints) pose a risk due to injury of the digestive tract. They are typically found in ground or bulk raw materials such as cereals or flours or in processed foods due to a contamination during production. Glass fragments are often found in products packaged in glass, where damage to the jars at some stage has led to contamination.

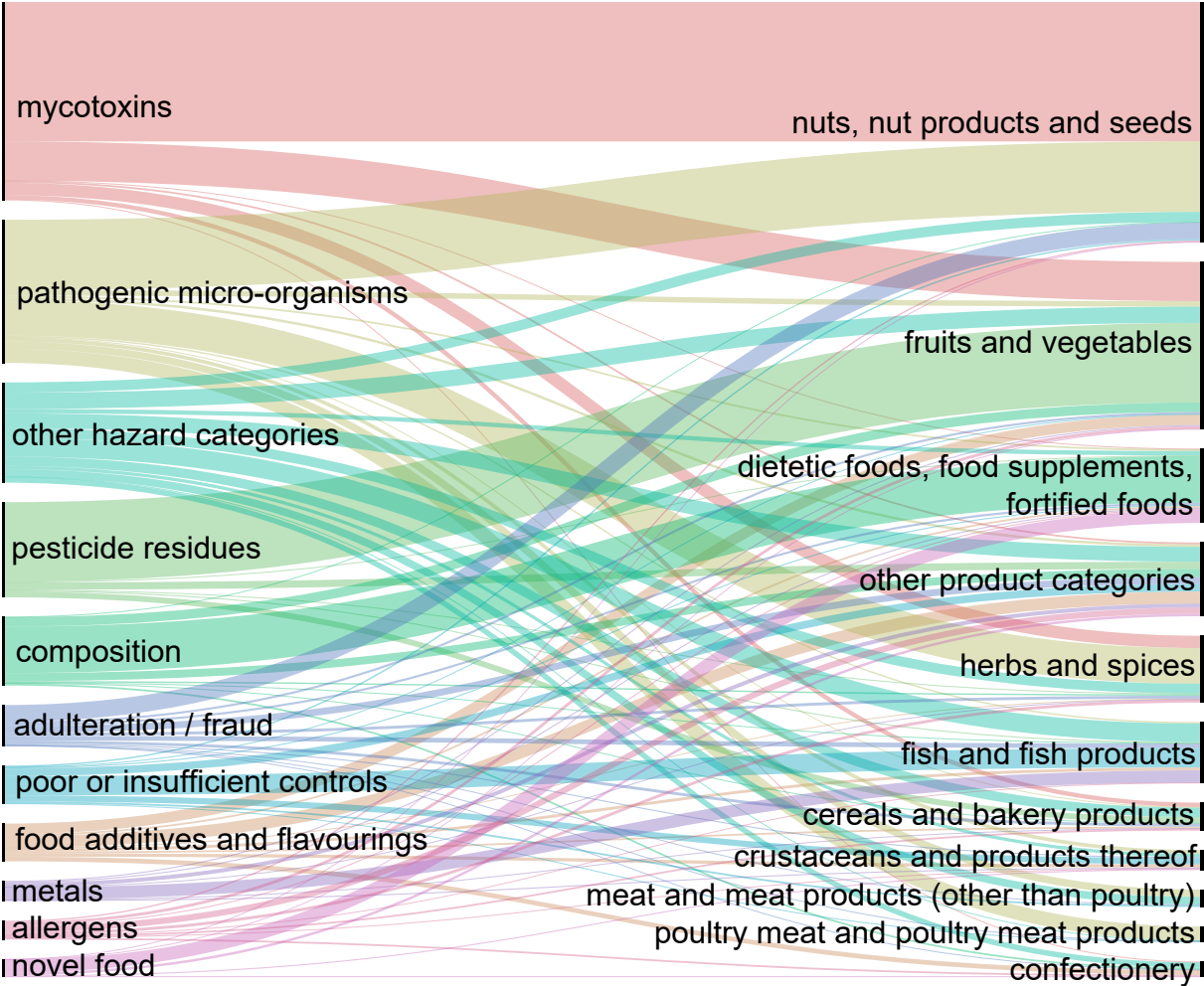


*Types of foreign bodies notified in 2019, set out against food product category*



**2019 top 10 hazard and product categories on food products originating from non-member countries**

As usual, issues on mycotoxins and pathogenic micro-organisms are the top issues for products from non-member countries, with mycotoxins as the most reported type of hazard.



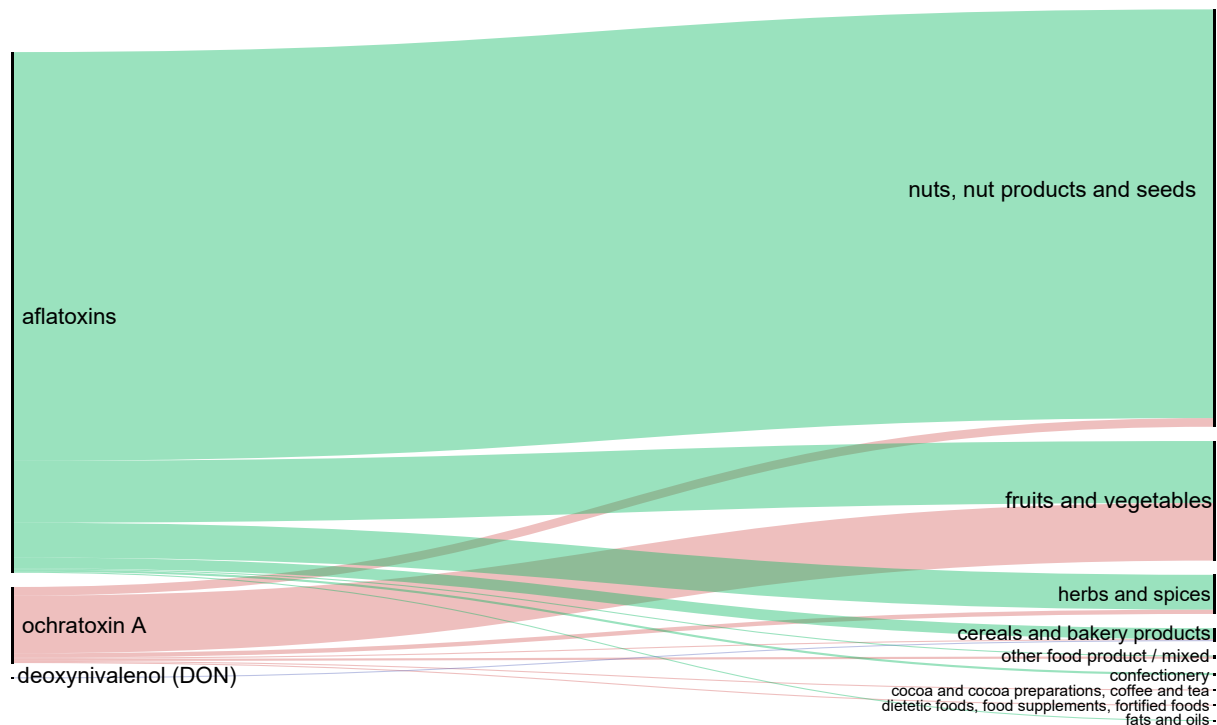
**Mycotoxins**

534 notifications

Mycotoxin levels in food usually do not produce an acute adverse effect on consumers but chronic exposure may pose a significant risk to consumers

who are eating these products frequently, in particular for aflatoxins. Aflatoxin B1 is a carcinogenic and genotoxic substance, for which there is no real safe level of intake. For this reason the ALARA principle is applied and the legal limit enforced is as low as reasonably achievable.

*Mycotoxin hazards notified in 2019, set out against food product category*



**Aflatoxins**

Aflatoxins are the most frequently reported mycotoxins in food, particularly in nuts, from non-member countries. The most notified country of origin was Turkey (104 notifications).

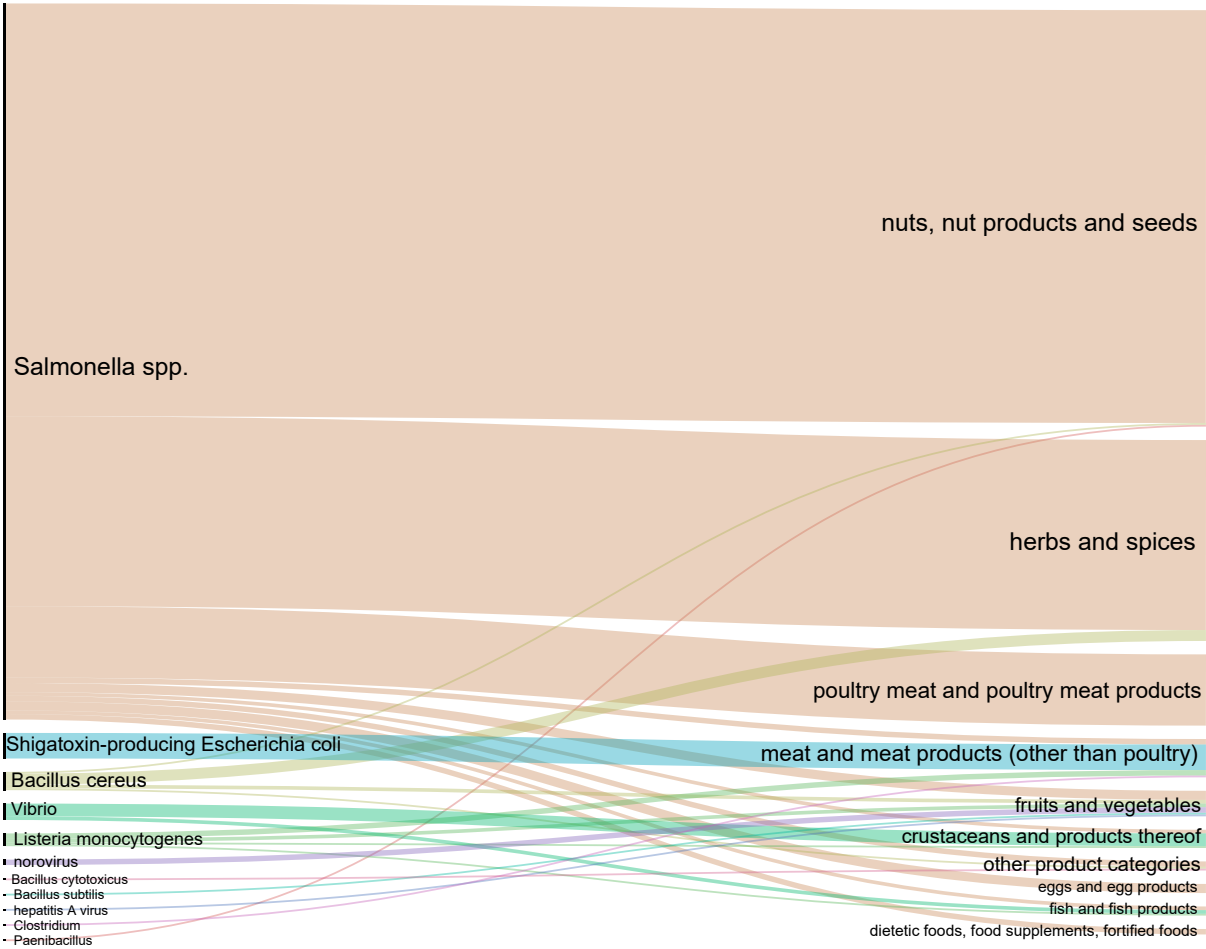
**Ochratoxin A**

The diagram above shows that ochratoxin A is mostly found in fruits and vegetables, in particular in raisins, followed by dried figs. Also concerning ochratoxin A, Turkey was the most notified country of origin (39 notifications).

**Pathogenic micro-organisms**

399 notifications

Most issues reported on pathogens in food from non-member countries are still about *Salmonella* findings. *Salmonella* was mostly notified in sesame seeds (184 notifications), followed by *Salmonella* in herbs and spices (88 notifications). Sudan was the most notified country of origin (99 notifications on sesame seeds). Brazil was notified 65 times concerning *Salmonella* in black pepper.



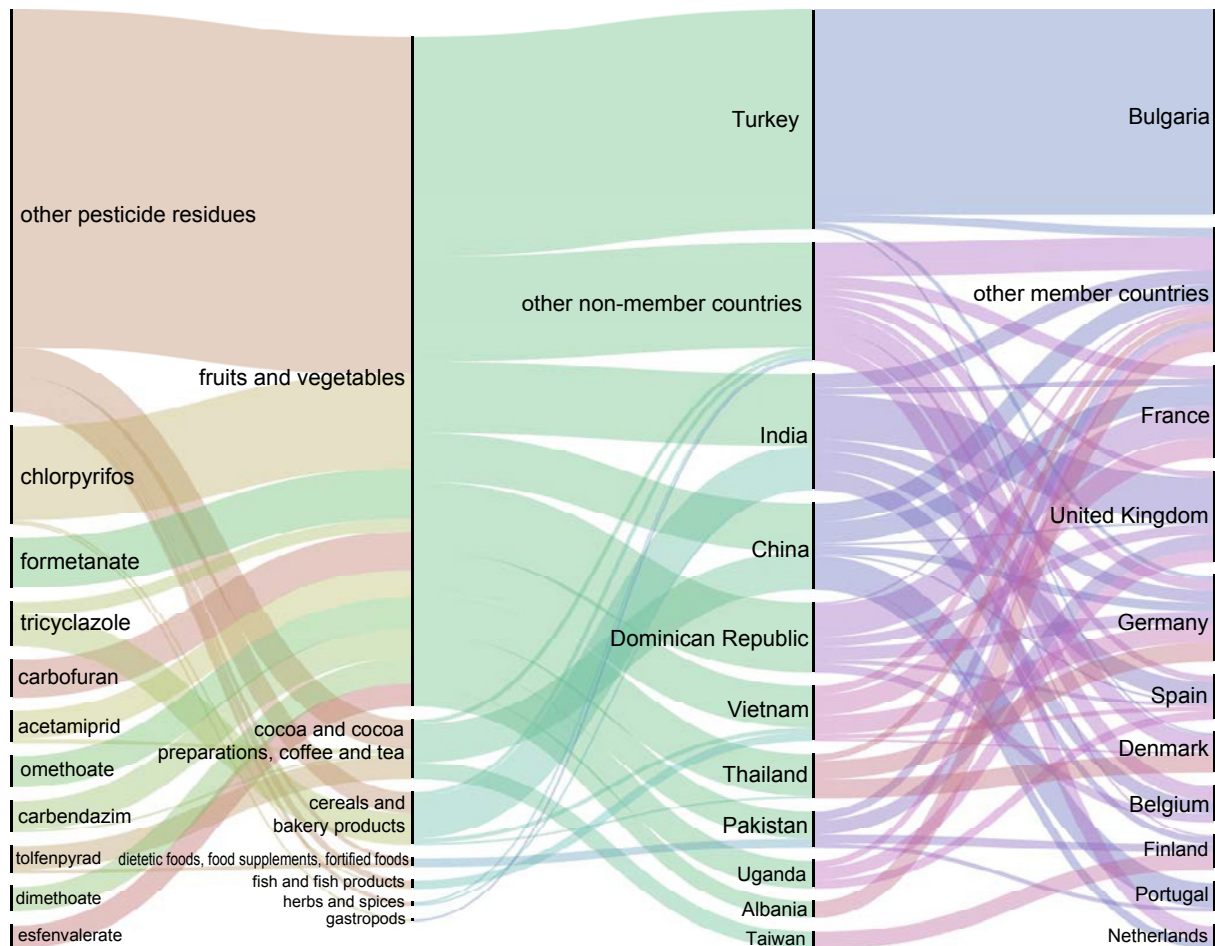
**Pesticide residues**

253 notifications

Obviously most notifications report on the group of fruits and vegetables, in which most non-compliances on pesticides are traditionally found. In 2019, the most reported pesticide was chlorpyrifos that

can no longer be used in the EU, given the possible genotoxicity and developmental neurotoxicity. The most notifying country on pesticide issues was Bulgaria, which last year reported only border rejections on Turkish commodities. All notifications in the “cocoa and cocoa preparations, coffee and tea” category concern tea, mostly from China (17 notifications), as can be deduced from the diagram below.

*Food product categories for pesticide residues notifications in 2019, set out against non-member country of origin set out against notifying country*



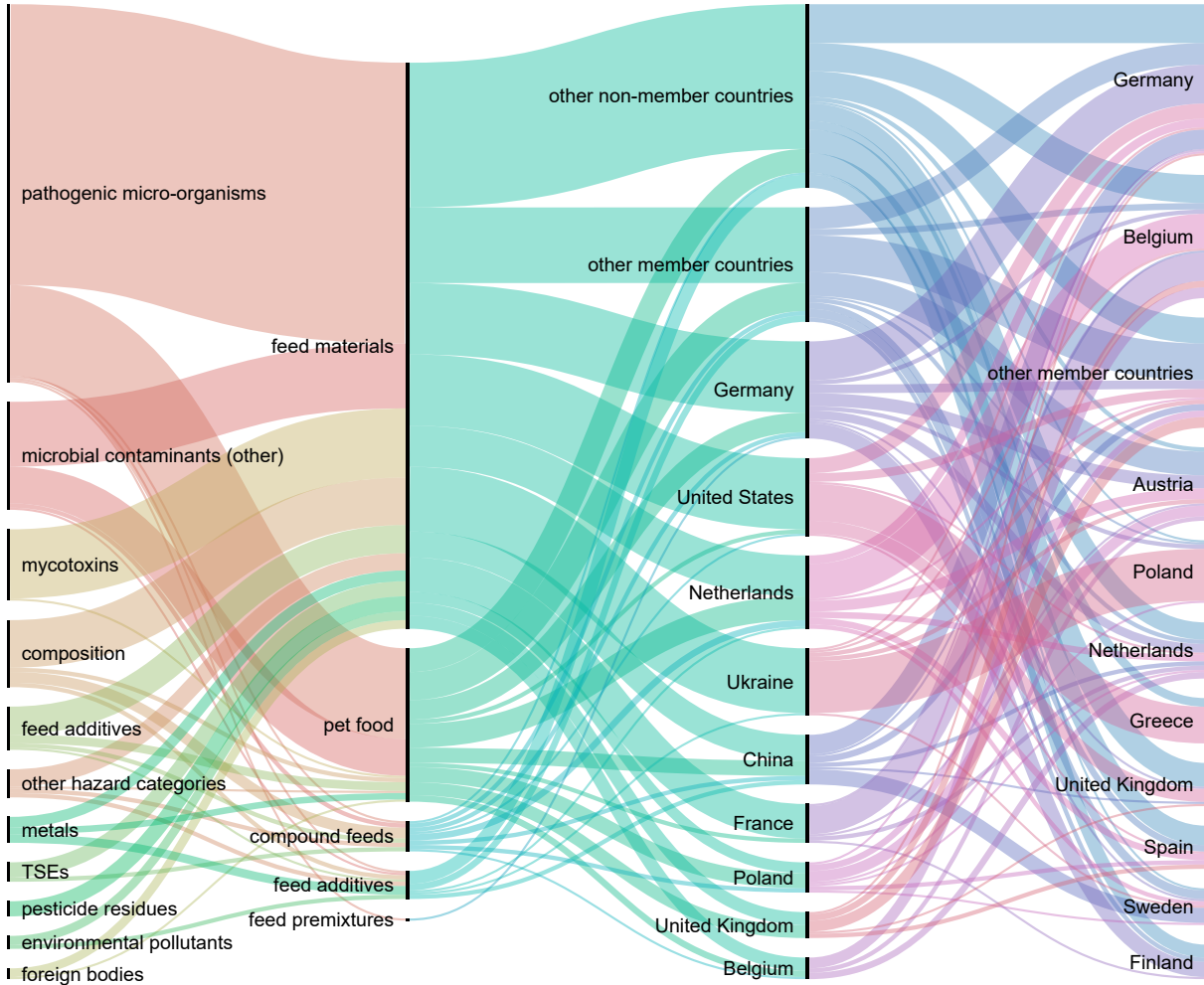
As many as 188 out of the 253 notifications are rejections at the EEA border. These products therefore never entered the EU. This is certainly in part due to the list of commodities held under Commission Regulation (EC) No 669/2009, replaced at the end of 2019 by Regulation (EU) 2019/1793, which is reviewed twice yearly, requiring intensified checks at the border.

**2019 feed notifications**

325 notifications

The notifications regarding feed take about 8% of the total volume of RASFF notifications. Their number has increased by 12 compared to 2018 but their relative share has decreased by one percent.

**Hazard categories for feed notifications in 2019 set out against feed product categories, set out against country of origin set out against notifying country**



The chart above demonstrates that the notifications relate to feed from diverse origins, both from member countries and from non-member countries. An important part of the notifications report on pathogenic micro-organisms but let's have a closer look at the different issues reported.

#### Pathogenic microorganisms

All of the 166 notifications concern *Salmonella* in different types of feed materials but also in pet food (28 notifications). In dog chews this is considered a serious health risk, not so much for the dog itself but for a child that may be contaminated from a dog chew lying around the house.

#### Microbial contaminants

Out of 49 notifications, 31 notifications concern non-compliances with the microbiological feed hygiene criterion for feed materials: in accordance with Commission Regulation (EC) No 142/2011, Enterobacteriaceae count cannot exceed 300 colony forming units (cfu)/g in five batch samples of feed material derived from animal by-products. The other 18 notifications were all border rejections notified by Poland about dried beet pulp or sunflower seed meal from Ukraine infested with moulds. The related risk is a potential mycotoxin contamination.



### Mycotoxins

Of the 32 notifications on mycotoxins all but two concern aflatoxins, reported mostly in groundnuts of various origin. The other two notifications were about zearalenone in beet pulp molasse from Germany and T-2 toxin and HT-2 toxin detected in wheat flour from Belgium.

### Composition

Twenty-eight notifications were about compositional issues. Most of them concerned too high content of ragweed seeds (17 notifications). As explained in earlier annual reports, this is considered a serious risk as the environmental spread of ragweed can be detrimental to persons allergic to its pollen. Another issue was a too high content of zinc (5 notifications).

### 2019 food contact materials notifications

Notifications on food contact materials continue to rise in number in 2019 with 172 notifications (up by 24%). Their relative share in the overall notifications in 2019 is still a modest 4%.

### Migration

Most issues relating to food contact materials are about migration of chemicals from food contact materials into food. This is usually measured by bringing the material in contact with a “simulation solution” and analysing the chemicals that have migrated into the solution. Depending on the type of material, different chemicals will migrate. The table below gives an overview of the main materials and migrants notified to RASFF in 2019:

food contact material	compounds migrating	notifications in 2019
Melamine	formaldehyde, melamine	68
Metal	chromium (8), nickel (25), manganese (1), iron (2), lead (2), aluminium (4)	40
Nylon	primary aromatic hydrocarbons	25
Ceramics, decorated glass	lead (3), cadmium (3), aluminium(2), arsenic (1)	6
Silicone	volatile organic compounds	5
Lids of jars, plastic objects	plasticizers	1

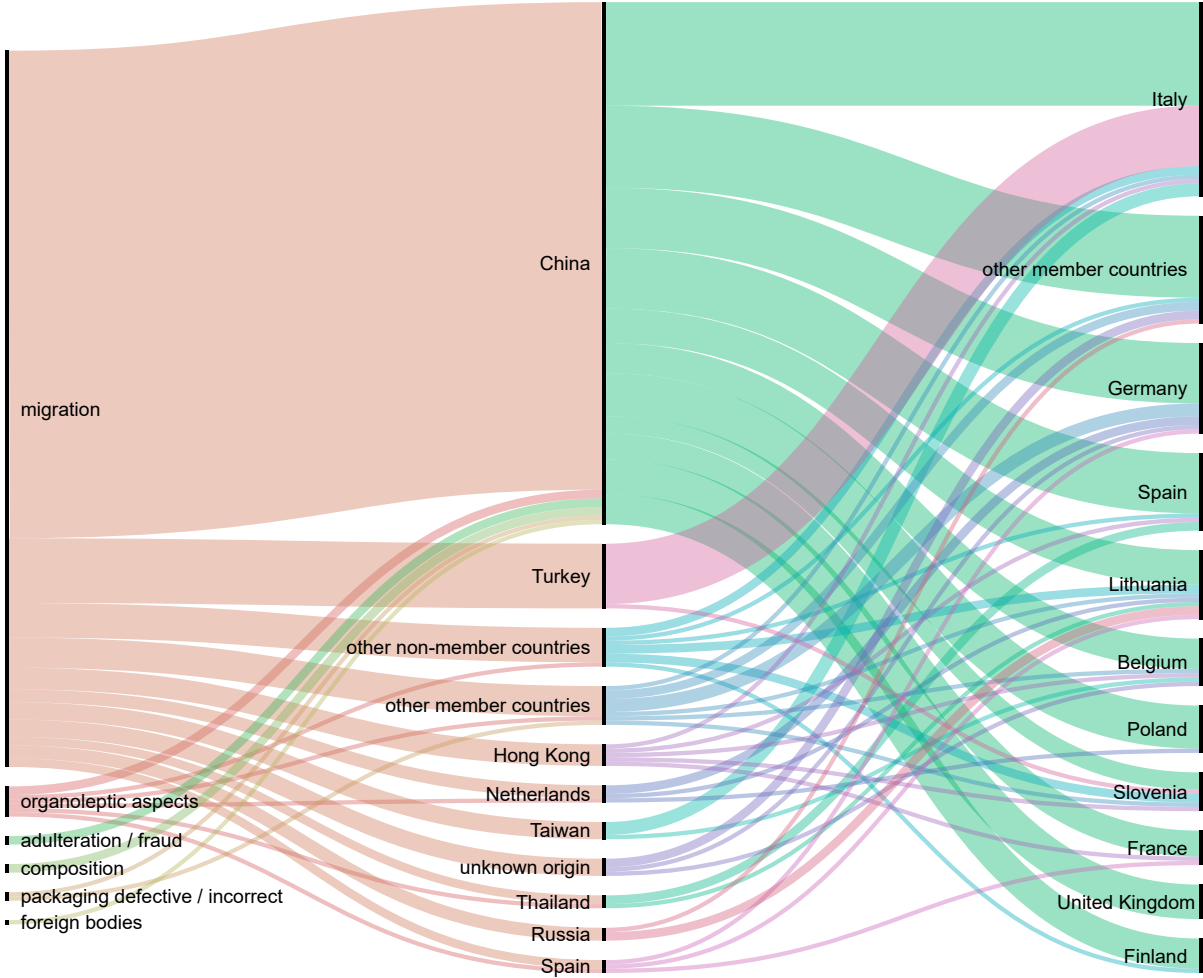
Of the notifications concerning the migration of melamine and formaldehyde there were quite a few (at least 34) that described the objects as made from “bamboo fiber”. In some of these notifications, there was often no mention of the melamine material used and sometimes it was described as “filler”. Often these products had also false claims such as “eco-friendly” or “compostable”. Preliminary results of the analysis of such products show that they are prone to higher migration of chemicals into the food. An evaluation by EFSA recently determined

that such bamboo material is not authorised as filler material for plastics.

The alluvial diagram below shows that the migration of substances from food contact materials from China was by far the most reported issues in 2019. Italy was the most notifying country, which reported almost all non-compliances about food contact materials from Turkey, in particular concerning migration of nickel from oven grills.



*Hazard categories for food contact material notifications in 2019 set out against country of origin, set out against notifying country*



## More facts and figures

### Evolution of the number of notifications

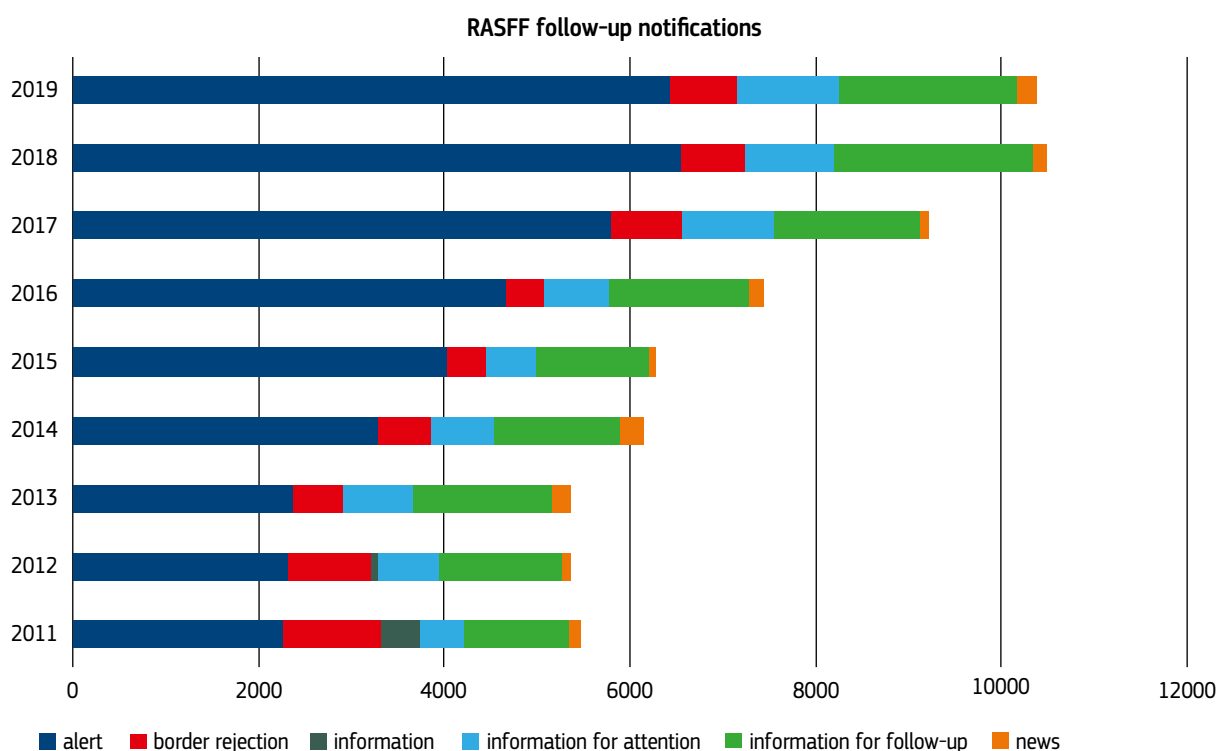
- by notification classification

#### Original notifications and follow-up

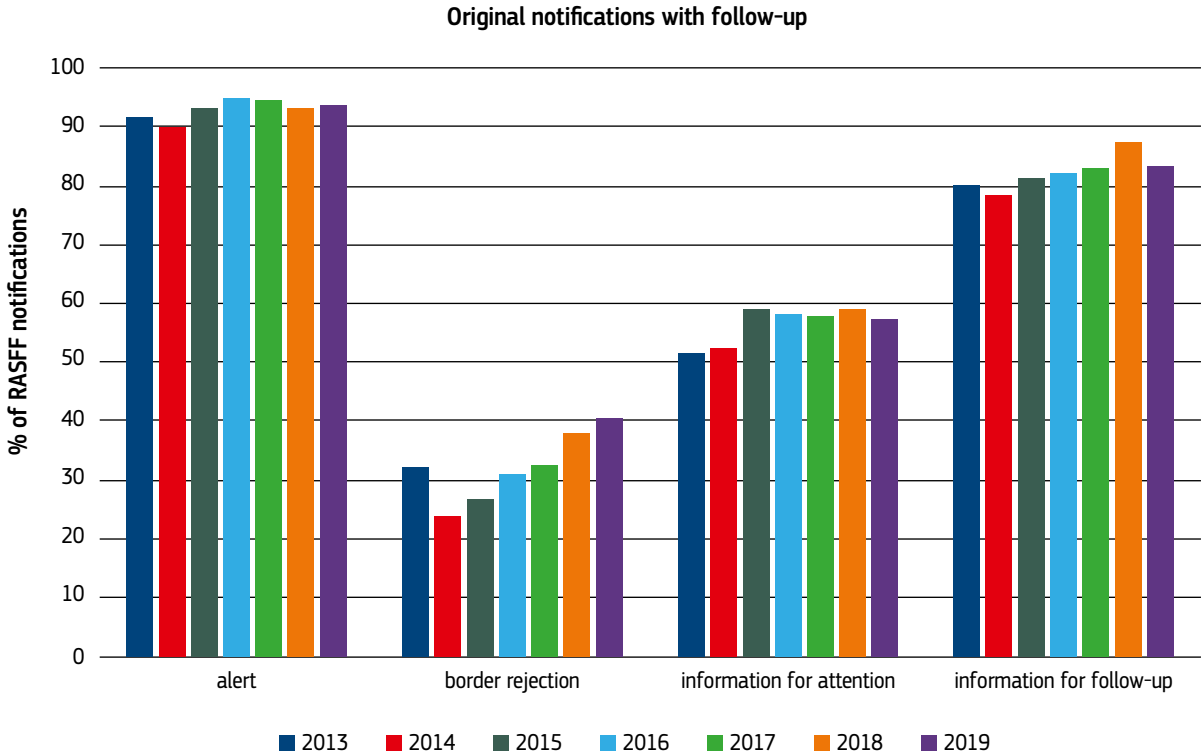
year	alert		border rejection		information for attention		information for follow-up		news	
	original	follow-up	original	follow-up	original	follow-up	original	follow-up	Original	Follow-up
2013	584	2376	1438	525	679	763	429	1493	38	205
2014	725	3280	1357	581	605	670	402	1377	39	235
2015	748	4028	1376	417	475	538	378	1222	39	72
2016	817	4659	1159	421	573	704	372	1504	20	163
2017	927	5781	1570	771	683	979	586	1586	17	88
2018	1118	6513	1401	692	675	957	493	2141	12	138
2019	1149	6441	1480	719	843	1091	525	1908	18	229

The table above shows that the growth trend in RASFF was in 2019 back on original notifications, whereas before it was particularly pronounced for follow-up notifications. The chart below demonstrates this clearly. The small decline in follow-ups is not because the reactivity between members of the network has dropped. On the contrary, since

mid 2019, members of the network can use a new feature of the online application iRASFF: the conversations. The conversations allow a simple question and response mechanism and can therefore replace follow-ups for this type of interaction. In 2019 already over 2600 conversations were held in iRASFF.



Original notifications with follow-up



The chart shows the percentage of notifications, per notification type, that have been followed up on (i.e. that have received at least one follow-up). Now that the option to follow-up through conversations is there, it may be that some notifications

only were followed up by conversations. There is however an important difference: the conversations are only open to invited participating network members, whereas follow-up notifications are visible to all.

*- by notifying member***Original notifications***Evolution of original notifications by notifying member<sup>10</sup>*

member	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Austria	88	65	49	46	46	56	46	48	72	<b>92</b>
Belgium	94	128	143	164	198	179	129	199	240	<b>225</b>
Bulgaria	33	116	75	54	87	99	92	109	100	<b>113</b>
Commission Services	12	4	1	1	0	0	1	2	1	<b>4</b>
Croatia				8	11	20	28	49	24	<b>42</b>
Cyprus	52	76	46	44	55	39	29	41	21	<b>25</b>
Czech Republic	90	96	71	70	70	56	79	79	47	<b>110</b>
Denmark	131	151	130	112	99	94	80	130	134	<b>129</b>
Estonia	18	9	17	32	12	17	15	28	14	<b>20</b>
EFSA	0	0	0	0	0	0	0	0	0	<b>1</b>
Finland	130	111	105	88	98	55	57	65	83	<b>63</b>
France	171	199	275	249	266	235	194	254	268	<b>248</b>
Germany	396	416	362	331	330	275	369	384	419	<b>534</b>
Greece	157	128	65	65	60	64	57	88	135	<b>193</b>
Hungary	20	13	10	3	15	9	20	29	28	<b>29</b>
Iceland	2	6	3	1	1	4	1	1	2	<b>4</b>
Ireland	33	49	53	40	42	57	31	68	29	<b>34</b>
Italy	541	544	515	528	503	506	412	543	398	<b>377</b>
Latvia	21	17	26	27	20	42	28	32	23	<b>39</b>
Liechtenstein	0	0	0	0	0	0	0	0	0	<b>0</b>
Lithuania	48	39	51	28	36	30	42	37	41	<b>68</b>
Luxembourg	23	25	8	17	12	13	13	7	11	<b>14</b>
Malta	12	27	11	12	8	13	15	38	19	<b>19</b>
Netherlands	214	202	173	264	252	258	287	490	456	<b>378</b>
Norway	23	51	61	45	44	31	65	36	34	<b>35</b>
Poland	140	225	180	120	132	90	74	87	131	<b>203</b>
Portugal	18	22	28	40	38	30	33	29	50	<b>42</b>
Romania	25	21	14	14	17	23	16	19	9	<b>15</b>
Slovakia	56	35	35	35	38	34	40	50	32	<b>41</b>
Slovenia	56	45	43	34	30	39	32	31	26	<b>47</b>
Spain	285	300	239	200	189	174	146	237	250	<b>279</b>
Sweden	73	72	95	91	67	74	94	106	117	<b>183</b>
Switzerland	7	6	20	40	34	24	47	60	54	<b>46</b>
United Kingdom	319	509	516	327	279	337	349	373	353	<b>387</b>

<sup>10</sup> From 2019, the numbers include news notifications

## Follow-up notifications

### Evolution of follow-up notifications by notifying member

member	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	% dif
Austria	71	118	79	80	117	188	202	217	309	361	17
Belgium	117	158	210	240	297	262	290	459	588	521	-11
Bulgaria	57	56	60	106	147	143	187	166	143	158	10
Commission Services	307	346	340	421	424	427	352	412	353	248	-30
Croatia	3	0	2	15	31	31	66	98	100	113	13
Cyprus	68	47	76	73	62	78	85	69	118	100	-15
Czech Republic	185	199	163	210	232	190	230	221	243	258	6
Denmark	95	160	131	179	207	198	180	247	366	367	0
Estonia	17	24	23	46	60	65	75	94	113	90	-20
European Food Safety Authority				0	2	0	0	0	25	37	48
Finland	23	19	23	64	97	94	98	92	130	136	5
France	556	361	283	242	325	359	453	552	702	578	-18
Germany	452	519	409	376	512	483	597	705	817	883	8
Greece	113	118	98	66	74	91	87	109	151	183	21
Hungary	85	103	120	91	143	90	207	154	240	168	-30
Iceland	1	5	0	0	4	6	12	15	28	32	14
Ireland	43	60	72	154	130	115	143	183	128	185	45
Italy	520	654	486	439	433	587	693	940	732	754	3
Latvia	32	40	36	43	68	58	64	72	95	105	11
Liechtenstein			0	3	0	1	0	0	0	0	
Lithuania	51	55	72	69	70	59	89	95	97	119	23
Luxembourg	15	16	8	30	37	37	48	82	111	155	40
Malta	43	24	32	43	42	77	96	109	142	138	-3
Netherlands	155	135	180	222	265	364	498	824	692	576	-17
Norway	44	49	58	44	58	67	98	79	106	91	-14
Poland	154	202	313	415	420	343	411	385	522	704	35
Portugal	42	25	74	85	109	138	96	130	141	209	48
Romania	48	63	85	76	137	127	123	125	167	186	11
Slovakia	68	69	76	59	70	74	86	76	88	94	7
Slovenia	42	47	86	44	68	76	100	116	122	138	13
Spain	1288	1077	1058	706	719	648	733	943	961	970	1
Sweden	83	84	95	161	155	201	211	214	403	322	-20
Switzerland	70	62	87	85	105	138	176	188	262	224	-15
United Kingdom	125	152	182	141	109	219	382	455	601	486	-19

## 2019 notifications by hazard category and by classification

hazard category	alert	border rejection	information for attention	information for follow-up	news
adulteration / fraud		99	14	2	
allergens	192	4	42	3	
biological contaminants (other)	16	12	14	1	
chemical contaminants (other)	2				
composition	152	13	123	49	2
environmental pollutants	33	1	14	7	1
feed additives			2	14	
food additives and flavourings	10	60	29	26	
foreign bodies	98	12	26	37	
genetically modified food or feed	1	13	4	2	
industrial contaminants	1		1		1
labelling absent/incomplete/incorrect	33	7	10	14	
metals	64	11	51	10	
microbial contaminants (other)	21	56	34	33	
migration	46	72	19	26	
mycotoxins	67	440	73	6	4
natural toxins (other)	45	1	13	4	
not determined / other	3	5	1	1	
novel food	20	7	19	58	
organoleptic aspects	1	16	5	21	
packaging defective / incorrect	10	9	2	7	
parasitic infestation		8	10	24	
pathogenic micro-organisms	329	356	280	144	10
pesticide residues	31	185	66	15	
poor or insufficient controls	4	95	9	18	1
process contaminants	7	1	3	2	
radiation	1	1	6	5	
residues of veterinary medicinal products	6	15	13	13	
TSEs		2		7	

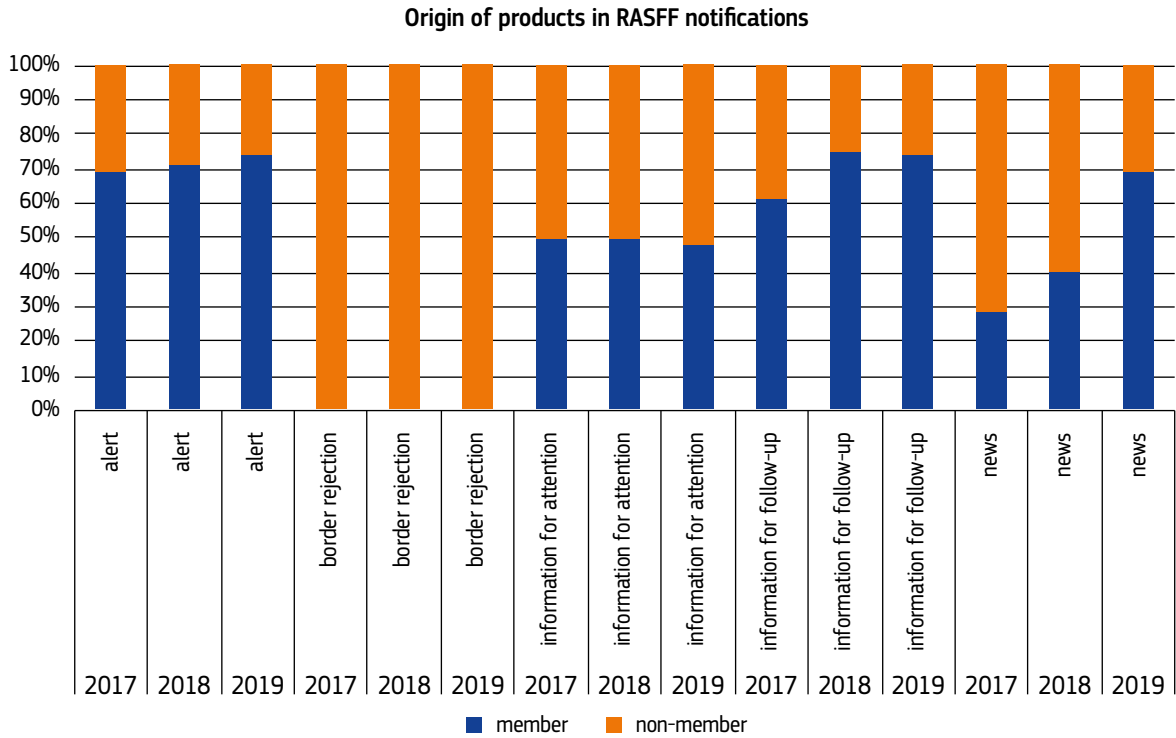
## 2019 notifications by product category and by classification

product category	alert	border rejection	information for attention	information for follow-up	news
alcoholic beverages	7		2	1	
bivalve molluscs and products thereof	33	3	44	5	
cephalopods and products thereof	2	20	5		
cereals and bakery products	77	46	24	26	
cocoa and cocoa preparations, coffee and tea	27	22	7	14	
compound feeds	2	1	3	6	
confectionery	22	13	12	13	
crustaceans and products thereof	6	27	21	2	
dietetic foods, food supplements, fortified foods	138	11	121	71	4
eggs and egg products	10	2	6	4	1
fats and oils	17	7	7	7	
feed additives		2	3	6	
feed materials	29	98	18	100	1
feed premixtures				2	
fish and fish products	80	90	90	42	2
food additives and flavourings	4			1	
food contact materials	49	76	19	29	
fruits and vegetables	95	297	102	26	2
gastropods		2	1		
herbs and spices	58	110	32	8	
honey and royal jelly	2	2	3	2	
ices and desserts	16		2	1	
meat and meat products (other than poultry)	114	26	57	44	3
milk and milk products	60	1	12	12	1
natural mineral water	1		1	4	
non-alcoholic beverages	9	11	1	7	
nuts, nut products and seeds	64	540	60	5	3
other food product / mixed	40	19	7	10	
pet food	23	7	6	18	
poultry meat and poultry meat products	102	38	167	34	1
prepared dishes and snacks	38	7	15	12	
soups, broths, sauces and condiments	23	5	10	10	
water for human consumption (other)	2			3	
wine	1		1	2	

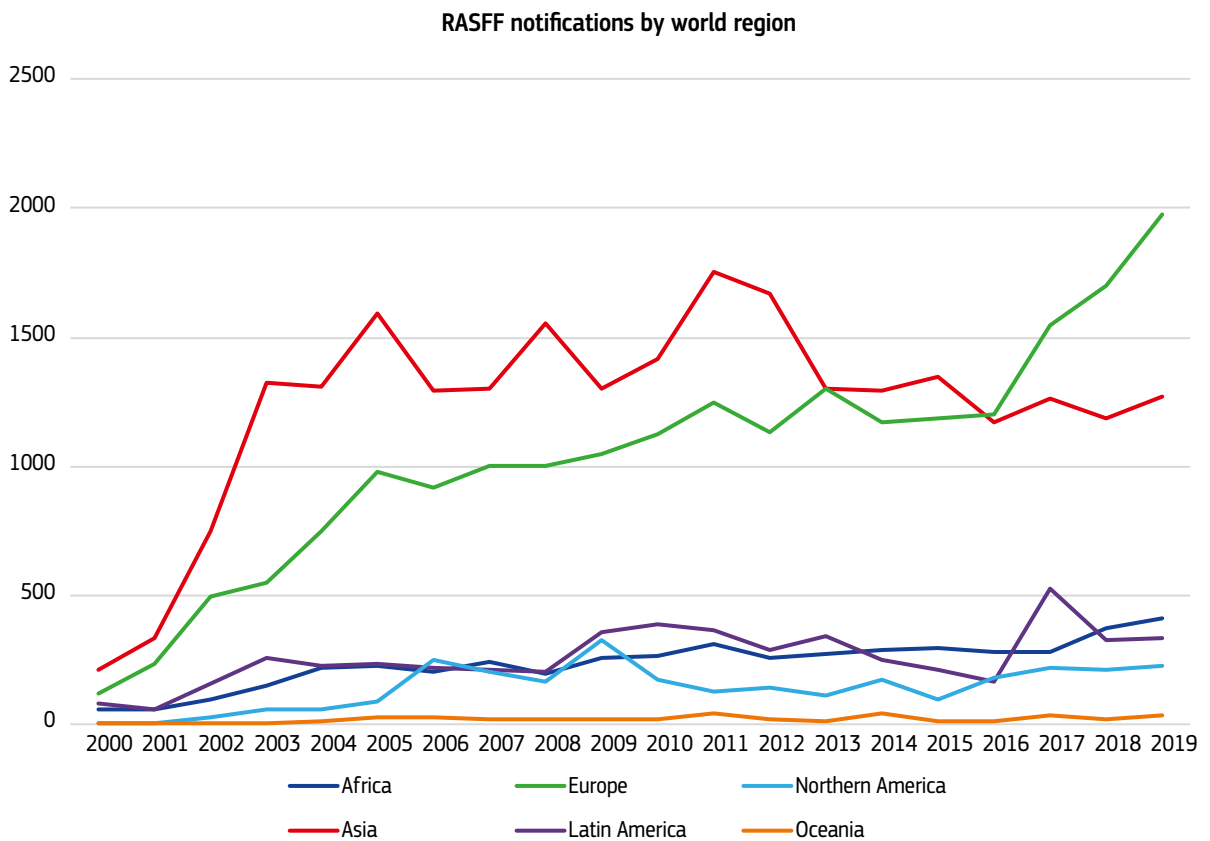


## Notifications – country of origin

2017-2019 notifications by country type (origin)



2000-2019 notifications by world region



# Annex: in case you want more data

## 2016-2019 notifications by country of origin

country	2016	2017	2018	2019
Afghanistan	2		4	3
Albania		4	7	9
Algeria		11		7
Andorra	1			
Angola				2
Argentina	35	56	92	92
Australia	5	10	8	20
Austria	18	13	25	47
Azerbaijan	6	18	18	12
Bangladesh	9	9	13	9
Barbados				1
Belarus		1	6	3
Belgium	55	92	128	130
Belize		1		1
Benin	4	2	2	
Bolivia	6	13	15	5
Bosnia and Herzegovina	4	9	2	3
Brazil	56	373	108	124
Brunei		1		
Bulgaria	12	11	10	11
Burkina Faso	1	2	4	2
Cambodia	3	3		2
Cameroon	2	1	1	1
Canada	7	20	11	11
Cape Verde	3	4		
Chad				1
Chile	11	15	32	28
China	256	305	316	379
Colombia	5	4	2	3
Costa Rica	2	2		3
Côte d'Ivoire	1	3		2
Croatia	7	5	7	17
Cuba				1
Cyprus	1	1	2	3
Czech Republic	30	25	24	48
Denmark	35	29	33	39
Dominican Republic	6	7	16	21
Ecuador	9	17	8	9
Egypt	59	60	56	58
El Salvador	2	1		1
Estonia	2	4	11	7
Eswatini		1		
Ethiopia	12	16	11	17
Faeroe Islands	1		1	
Falkland Islands				1

country	2016	2017	2018	2019
Fiji	1	1		
Finland	2	2	7	8
France	119	133	215	193
French Polynesia				1
Gambia	1	1	24	
Georgia	15	8	10	19
Germany	117	143	153	190
Ghana	23	13	11	40
Greece	8	10	15	12
Greenland			1	
Grenada				1
Guatemala			1	1
Guinea	2	1	2	1
Guinea-Bissau				1
Honduras				2
Hong Kong	12	5	3	16
Hungary	24	26	43	26
Iceland	4		3	2
India	202	225	161	144
Indonesia	38	23	25	20
Iran	68	73	39	27
Ireland	16	22	25	21
Israel	8	5	5	8
Italy	108	190	156	148
Japan	7	2	11	2
Jordan	1	1	4	7
Kazakhstan		1	2	1
Kenya	3		2	2
Kosovo		1	1	1
Kyrgyzstan				1
Laos	29	4	1	2
Latvia	5	9	10	14
Lebanon	5	18	10	13
Liechtenstein				1
Lithuania	24	13	13	21
Luxembourg	2	3	1	2
Madagascar	9	3	2	6
Malawi		1		
Malaysia	6	5	9	22
Maldives		1	3	1
Mali	1	1	3	
Malta	1	7	2	
Mauritania	8	3	10	11
Mauritius	2	2	8	1
Mexico	5	5	6	4

country	2016	2017	2018	2019
Moldova	3		2	3
Mongolia			1	
Montenegro	1			
Morocco	34	26	31	29
Mozambique	6		4	
Myanmar	1	1	5	5
Namibia	8	8	9	3
Nepal	1			
Netherlands	113	148	166	192
New Zealand	8	13	8	9
Nicaragua	4	2	5	2
Niger	1			1
Nigeria	25	47	49	51
Norway	5	11	11	9
Oman			1	1
Pakistan	12	11	24	26
Panama	7	2	4	3
Papua New Guinea	2	7	3	1
Paraguay	1			7
Peru	12	9	14	8
Philippines	9	14	15	15
Poland	136	161	186	303
Portugal	20	31	23	19
Republic of North Macedonia	3	1	2	3
Romania	14	13	20	17
Russia	17	27	22	18
Saudi Arabia	2	1	2	2
Senegal	14	12	16	14
Serbia	15	23	4	14
Seychelles	5	4	9	
Sierra Leone			1	
Singapore			2	
Slovakia	5	8	16	22

country	2016	2017	2018	2019
Slovenia	3	7	9	9
Solomon Islands		1		1
South Africa	23	9	13	11
South Korea	9	10	12	10
Spain	176	227	184	195
Sri Lanka	15	17	29	14
Sudan		20	79	106
Suriname	1	1	2	1
Sweden	18	19	27	28
Switzerland	6	8	12	16
Syria	4	9	16	15
Taiwan	8	3	5	13
Tajikistan				1
Tanzania	1	1	1	2
Thailand	86	83	55	41
Togo		2	2	2
Trinidad and Tobago			1	
Tunisia	18	24	8	4
Turkey	275	318	318	337
Uganda	10	5	10	37
Ukraine	20	12	19	63
United Arab Emirates		2	1	5
United Kingdom	67	108	105	126
United States	179	203	202	220
unknown origin	9	49	25	33
Uruguay	4	12	18	13
Uzbekistan	21	6	5	16
Venezuela	1	9	1	4
Vietnam	68	80	61	77
West Bank and Gaza Strip				4
Yemen		1		
Zambia			3	
Zimbabwe	2	1	1	

## 2019 notifications by hazard category and notifying country

hazard category	AT	BE	BG	CH	CY	CZ	DE	DK	EE	ES	FI	FR	FS	GB	GR	HR	HU	IE	IS	IT	LT	LU	LV	MT	NL	NO	PL	PT	RO	SE	SI	SK	
adulteration / fraud				4			1	2	10			63	9						10	2						2	9				2	1	
allergens	2	29	3	2	8	16	18	1	19	4	9	36	3	1	1	4	12	1	2	27	2	3	1		2	3	1		30	3	4		
biological contaminants (other)	5	5	2	1		4		1	6		2	2	2	2	1	5	1	2	1										5				
chemical contaminants (other)	1								1																								
composition	10	17	11	4	13	58	7	11	3	4	67	6	10	2	1	4	2	2	4	2	2	4	2	5	1	11	4	1	71	5	3		
environmental pollutants	1	3	1	1	20	4	1	1	1	1	1	2	3	1	1	2	3	1	1	2	2	2	5	5							3		
feed additives	1	1			4		6															2		1							1		
food additives and flavourings	2	1	3	4	2	10	10	1	4	19	3	2	4	32	2	2	6	3	1	2	6	3	1	1	2	1	2		9		3		
foreign bodies	1	8	1	4	52	20	1	2	9	19	1	1	4	1	1	16	1	2	1	13	1	6	1		5	1	1				1		
genetically modified food or feed	3			2			7												2					3				2			1		
industrial contaminants						1	1																		1								
labelling absent/incomplete/incorrect	1	4		1	8	11	3	1	5	4		2	5											1	10	3	1				4		
metals	7	7	1	3	2	3	13	3	1	7	18	1	1	1	1	49	1							12	1		4				1		
microbial contaminants (other)	2	6			19	8	2	10	11	14	2	1	1	24									6	3	21	2		8		3			
migration	1	11	2	6	2	21	18	5	8	8	2	1	3	42	9	2	1	1	3	8					1	3	8		8		1		
mycotoxins	3	22	22	7	3	1	10	87	8	47	3	35	58	9	2	3	5	52	6	3	5	1	144	3	18	6	3	3	9	12			
natural toxins (other)	7	5	1		19	2	1	1	7	2	2	2	2	5										9					1		1		
not determined / other					1	1	2	1	1	3															1								
novel food	10	2	4	1	19	7	10	1	2	2	1	2	2	2	2	3	2								3	2	1	2		32	1		
organoleptic aspects			1		3	4	1	1	1	5	3	1	1	2	8	1	3	3	1								3	1		1	3		
packaging defective / incorrect	1	2			6	2	1	1	1	8	1	2													2				2				
parasitic infestation							1	5	2																							4	
pathogenic micro-organisms	39	77	4	5	1	61	156	12	9	46	32	84	1	37	140	13	5	5	1	67	29	3	14	118	14	92	4	5	21	11	13		
pesticide residues	6	16	81	4	1	2	31	23	1	13	10	26	25	8	9	8	1								13	3	6	3	6	1			
poor or insufficient controls	1		1	1	1	3	64	3	22	6	1	2	11	1	2	1	1	2	1	1	2	1	1	2	1	1	2		3	1			
process contaminants	2	3			1	1	1		1	1		1	1											1		1			1				
radiation							2		1															1	3	2		1			3		
residues of veterinary medicinal products	7	4		1	4	1	1	2	3	1		5	1												3	1	12	1					
TSEs	1			1					2																							1	

The coloured cells indicate the country with the highest number of notifications for a given hazard category.

## 2019 notifications by product category and notifying country

product category	AT	BE	BG	CH	CY	CZ	DE	DK	EE	ES	FI	FR	FS	GB	GR	HR	HU	IE	IS	IT	LT	LU	LV	MT	NL	NO	PL	PT	RO	SE	SI	SK	total	
alcoholic beverages	3						3	1	1					1																		1	10	
bivalve molluscs and products thereof	1						1	1	17	19	4			2						30				10									85	
cephalopods and products thereof	1						1		14	1	2									5	1			1								1	27	
cereals and bakery products	3	17	3	3	22	15	12	5	5	19	4	2	4	17	1	1	1	1	1	1	1	2	10	2	10	4	6	5	5	5	173			
cocoa and cocoa preparations, coffee and tea	4	3	1	1	13	3	1	9	4	8	2	2	1	1	1	3				3		1	2		2	4	3	1	1	1	70			
compound feeds	1	1			2		1		1					1	1	1				1	1	1									2	12		
confectionery	1	1	1	2	3	6	5	1	4	2	2	11		2	2	2	4	2	3	3	5	2	4	2	3	1	3	5	2	2	60			
crustaceans and products thereof	1	3			2	2	2	14	9	7	1			7						7		2	3	1							4	56		
dietetic foods, food supplements, fortified foods	9	5	4	5	9	43	11	4	13	3	9	76	1	5	14	1	1	4	4	4	2	3	1	10	4	15	1	1	86	1	345			
eggs and egg products	1	3		1	1	2			1	1	1			1	1				1		5	3		3	2	1					23			
fats and oils	3	2	3	3	6	6	1	2	1	5	1			2	1	7	1	1		2		1								2	38			
feed additives	3				2		2		2		1			1		1				1											11			
feed materials	8	40	1	2	50	6	8	16	3	17	23	1	3	4	3				4	3		21	1	27	1	9	2	2	246					
feed premixtures	1				1																										2			
fish and fish products	2	12	1	9	3	2	28	5	2	48	25	26	2	3	1	1	100	2	1	9	4	8	8	1	1	1	1	1	1	304				
food additives and flavourings	2				1	1																									5			
food contact materials	2	10	2	6	2	20	1	18	8	8	8	2	1	2	42	15	2	1		3	11						8	1	173					
fruits and vegetables	6	14	85	5	3	13	76	37	1	16	2	48	53	12	7	1	2	1	27	3	4	3	28	5	8	11	5	22	15	6	522			
gastropods									2		1																				3			
herbs and spices	10	7	2	1	1	1	69		19	4	8	13	5	8	8	2	1	4	26	3	6	3	4	3	4	3	4	3	208					
honey and royal jelly	1				1	2	2							1		1				1											9			
ices and desserts	1			1	1	5	1	2	2	3				1	2					1							2			19				
meat and meat products (other than poultry)	13	26	2	5	27	5	6	14	9	24	11	2	2	2	4	23	1	1	27	20	3	1	7	3	6	244								
milk and milk products	1	10	3	1	18	3	24	1	4	2				9	1	4			9	1	4					1	1	2	86					
natural mineral water	1			3					1																						6			
non-alcoholic beverages	2				2	2	4		8					1	3	1	3	1		1										28				
nuts, nut products and seeds	7	11	20	5	8	82	4	47	1	17	61	139	3	1	1	46	5	2	153	4	23	6	4	4	2	13	672							
other food product / mixed	6	1	1	1	11	5	4	4	3	11	1	1		6	1	1	12	1	3	2	1									76				
pet food	14	5			9	1	3		3					3		1	3	1		6	1	1								54				
poultry meat and poultry meat products	5	20	3	58	16	6	3	2	3	28	1	25	8	4	1	22	27	10	30	3	56	1	3	7	342									
prepared dishes and snacks	10		1	6	10	2	2	4	9					7	1	3	7		10											72				
soups, broths, sauces and condiments	5		1	9	5	1			9					2	6	1	3	1	1	3	1	1	3	1	1	3	1	48						
water for human consumption (other)	1								2	2																				5				
wine																															4			
<b>total</b>	<b>92</b>	<b>225</b>	<b>113</b>	<b>46</b>	<b>4</b>	<b>25</b>	<b>110</b>	<b>534</b>	<b>129</b>	<b>20</b>	<b>279</b>	<b>63</b>	<b>248</b>	<b>1</b>	<b>386</b>	<b>193</b>	<b>42</b>	<b>29</b>	<b>34</b>	<b>4</b>	<b>377</b>	<b>68</b>	<b>14</b>	<b>39</b>	<b>19</b>	<b>378</b>	<b>35</b>	<b>203</b>	<b>42</b>	<b>15</b>	<b>183</b>	<b>47</b>	<b>41</b>	<b>4038</b>

The coloured cells indicate the country with the highest number of notifications for a given product category.

## 2019 notifications by product category and type of control

product category	border	market
alcoholic beverages	1	9
bivalve molluscs and products thereof	3	82
cephalopods and products thereof	20	7
cereals and bakery products	42	131
cocoa and cocoa preparations, coffee and tea	24	46
compound feeds	2	10
confectionery	16	44
crustaceans and products thereof	36	20
dietetic foods, food supplements, fortified foods	12	328
eggs and egg products	5	17
fats and oils	10	28
feed additives	4	7
feed materials	99	146
feed premixtures		2
fish and fish products	117	185
food additives and flavourings		5
food contact materials	57	116

product category	border	market
fruits and vegetables	287	233
gastropods	2	1
herbs and spices	117	91
honey and royal jelly	3	6
ices and desserts		19
meat and meat products (other than poultry)	38	203
milk and milk products	1	84
natural mineral water		6
non-alcoholic beverages	11	17
nuts, nut products and seeds	513	156
other food product / mixed	18	58
pet food	10	44
poultry meat and poultry meat products	40	301
prepared dishes and snacks	8	64
soups, broths, sauces and condiments	4	44
water for human consumption (other)		5
wine	1	3

## 2019 non-member countries having provided follow-up

country	distr	orig	other	total	follow-ups
Afghanistan		3		3	2
Albania	7	8	2	17	17
Algeria	2	7		9	
Andorra	33		3	36	22
Angola	1	2		3	
Antigua and Barbuda	3			3	
Argentina	3	92	1	96	10
Armenia	1			1	
Aruba	1			1	
Australia	10	20	1	31	11
Azerbaijan	1	12		13	
Bahamas	4		2	6	
Bahrain	6			6	1
Bangladesh		9	2	11	2
Barbados		1	1	2	
Belarus	6	2	2	10	
Belize		1		1	
Benin	1			1	
Bermuda	5		1	6	
Bolivia	2	5		7	
Bosnia and Herzegovina	10	4	1	15	13
Brazil		127		127	75
Brunei	2			2	
Burkina Faso		2		2	
Cambodia		2		2	
Cameroon	2	2	2	6	
Canada	12	11	6	29	4

country	distr	orig	other	total	follow-ups
Cape Verde	1			1	1
Cayman Islands	4			4	
Chad		1		1	
Chile	3	28		31	12
China	7	388	14	409	
Colombia		3	1	4	2
Comoros	1			1	
Congo (Brazzaville)	2			2	
Costa Rica		3		3	
Côte d'Ivoire	6	2	1	9	
Cuba		1		1	
Curaçao	5			5	
Democratic Republic of the Congo	6			6	
Djibouti	1			1	
Dominican Republic	4	21		25	3
Ecuador	1	11	1	13	11
Egypt		58	1	59	3
El Salvador		1		1	1
Equatorial Guinea	1			1	
Ethiopia		16		16	
Faeroe Islands	5			5	2
Falkland Islands	3	1		4	
French Polynesia	2	1		3	3
Gabon	5			5	
Gambia	1			1	1
Georgia	3	20		23	27

country	distr	orig	other	total	follow-ups
Ghana	10	40	1	51	
Gibraltar	12		1	13	8
Greenland	3		1	4	
Grenada		1		1	
Guadeloupe	1			1	
Guatemala		1		1	
Guernsey	8		1	9	
Guinea	1	1		2	
Guinea-Bissau		1		1	
Haiti	2			2	
Honduras	1	2		3	
Hong Kong	32	15	15	62	46
India	1	146	4	151	164
Indonesia	5	21		26	17
INFOSAN			779	779	
Iran		27	1	28	1
Iraq	4		1	5	
Isle of Man	5			5	
Israel	8	9		17	4
Jamaica	2			2	
Japan	14	2		16	5
Jersey	15		1	16	
Jordan	2	7	1	10	
Kazakhstan	3	1		4	
Kenya		3		3	
Kosovo	6	1	1	8	4
Kuwait	5			5	
Kyrgyzstan		1		1	
Laos		2		2	
Lebanon	8	12	4	24	15
Liberia	1			1	
Libya	2			2	
Macao	2			2	
Madagascar		6		6	
Malaysia	8	22	1	31	1
Maldives	2	1		3	
Mauritania		12		12	
Mauritius	7	2	1	10	1
Mayotte	1			1	
Mexico	4	4		8	1
Moldova	7	3	1	11	
Monaco	7		2	9	
Montenegro	4		1	5	2
Morocco	10	30	1	41	8
Mozambique		1		1	
Myanmar	1	5		6	
Namibia		3		3	
New Caledonia	3			3	4
New Zealand	5	9	3	17	1
Nicaragua		2		2	
Niger		1		1	

country	distr	orig	other	total	follow-ups
Nigeria	4	52	2	58	7
Oman	3	1		4	
Pakistan	3	26	2	31	
Panama	2	3	1	6	
Papua New Guinea		1		1	
Paraguay		6		6	
Peru	4	8	1	13	5
Philippines	9	15	1	25	1
Qatar	7			7	
Republic of North Macedonia	6	3	1	10	6
Russia	12	18	3	33	1
Saint Barthélemy	1			1	
Saint Kitts and Nevis	1			1	
Saint Lucia	1			1	
Saint Martin	2			2	
Saint Pierre and Miquelon	1			1	
Saint Vincent and the Grenadines	1			1	
San Marino	17			17	27
Saudi Arabia	4	2		6	
Senegal	7	14		21	3
Serbia	13	14		27	6
Seychelles	4			4	
Singapore	14		10	24	1
Sint Maarten	2			2	
Somalia	1			1	
South Africa	7	11		18	6
South Korea	5	10	11	26	
Sri Lanka		14	1	15	14
Sudan		107		107	
Suriname	3	2		5	1
Syria	1	15		16	
Taiwan	7	14	2	23	2
Tajikistan		1		1	
Tanzania		3		3	
Thailand	5	43	2	50	8
Togo	5	2		7	
Trinidad and Tobago	1			1	
Tunisia	4	4		8	1
Turkey	9	334	28	371	6
Uganda	1	36		37	
Ukraine	20	64	6	90	19
United Arab Emirates	18	5	10	33	
United States	22	216	30	268	58
Uruguay	1	13	3	17	3
Uzbekistan	1	16		17	
Venezuela		4		4	
Vietnam	13	82	7	102	9
West Bank and Gaza Strip		4		4	
Zimbabwe	1			1	



The first column “distr” shows the number of 2019 notifications for each country to which the Commission’s Services notified distribution of a product. The second column “orig” shows the number of 2019 notifications for each country to which the Commission’s Services notified a product originating from it. The third column “other” gives the number of notifications for which the country was notified for another reason than origin or distribution e.g. if the product transited through the country. The fourth column “follow-ups” shows the number of follow-ups received from each country in 2019.

Categories coloured red have predominantly notifications<sup>11</sup> with risk decision “serious”, whereas categories coloured green have mostly notifications with a “not serious” risk decision. Categories coloured blue have predominantly “undecided” risk and those coloured yellow have predominantly “serious” and “undecided” risk as compared to “not serious”.

### 2019 notifications by hazard category and risk decision

hazard category	undecided	serious	not serious
adulteration / fraud	8	8	99
allergens	4	235	2
biological contaminants (other)	2	40	1
chemical contaminants (other)		2	
composition	65	252	22
environmental pollutants	8	42	6
feed additives	8		8
food additives and flavourings	12	20	93
foreign bodies	24	108	41
genetically modified food or feed	18		2
industrial contaminants		1	2
labelling absent/incomplete/incorrect	13	35	16
metals	6	123	7
microbial contaminants (other)	23	42	79
migration	75	63	25
mycotoxins	13	574	3
natural toxins (other)	4	57	2
not determined / other	2	8	
novel food	64	30	10
organoleptic aspects	8	2	33
packaging defective / incorrect	12	8	8
parasitic infestation	1		41
pathogenic micro-organisms	61	794	264
pesticide residues	85	202	10
poor or insufficient controls	23	3	101
process contaminants	2	9	2
radiation	1	3	9
residues of veterinary medicinal products	15	17	15
TSEs	2		7

<sup>11</sup> Please note that what is counted here are really “hazards” and as a notification can contain multiple hazards, a non-serious hazard can become combined with a serious hazard in a notification, leading to a “serious” risk decision for the notification. This however leads to the non-serious hazard being counted as “serious” in the table.







## **Getting in touch with the EU**

### **In person**

All over the European Union there are hundreds of Europe Direct information centres. You can find the address of the centre nearest you at: [https://europa.eu/european-union/contact\\_en](https://europa.eu/european-union/contact_en)

### **On the phone or by email**

Europe Direct is a service that answers your questions about the European Union. You can contact this service:

- by freephone: 00 800 6 7 8 9 10 11 (certain operators may charge for these calls),
- at the following standard number: +32 22999696 or
- by email via: [https://europa.eu/european-union/contact\\_en](https://europa.eu/european-union/contact_en)

## **Finding information about the EU**

### **Online**

Information about the European Union in all the official languages of the EU is available on the Europa website at: [https://europa.eu/european-union/index\\_en](https://europa.eu/european-union/index_en)

### **EU publications**

You can download or order free and priced EU publications at: <https://publications.europa.eu/en/publications>. Multiple copies of free publications may be obtained by contacting Europe Direct or your local information centre (see [https://europa.eu/european-union/contact\\_en](https://europa.eu/european-union/contact_en)).

### **EU law and related documents**

For access to legal information from the EU, including all EU law since 1952 in all the official language versions, go to EUR-Lex at: <http://eur-lex.europa.eu>

### **Open data from the EU**

The EU Open Data Portal (<http://data.europa.eu/euodp/en>) provides access to datasets from the EU. Data can be downloaded and reused for free, both for commercial and non-commercial purposes.

