

**Analysis of import notifications in fishery
and aquaculture products in Australia,
the European Union, Japan and the United
States of America**

Giulia Loi

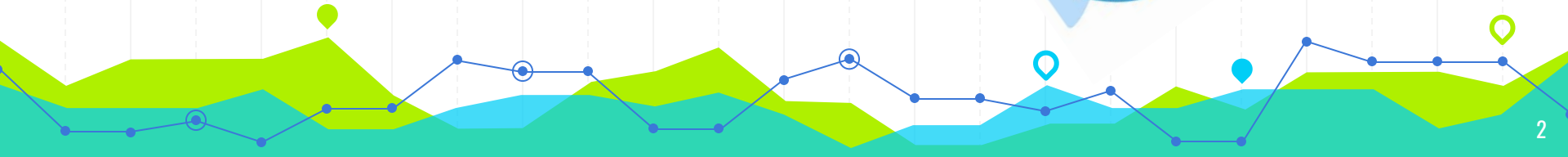
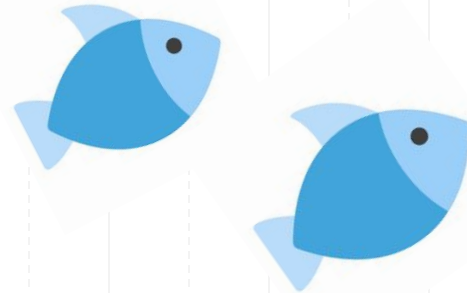
Food Safety Advisor

**Food Safety, Nutrition and Health Team (NFIMF)
Fisheries and Aquaculture Division, FAO**

Our work

The Fisheries and Aquaculture Division of FAO collects data on import notifications on a monthly basis since 2016

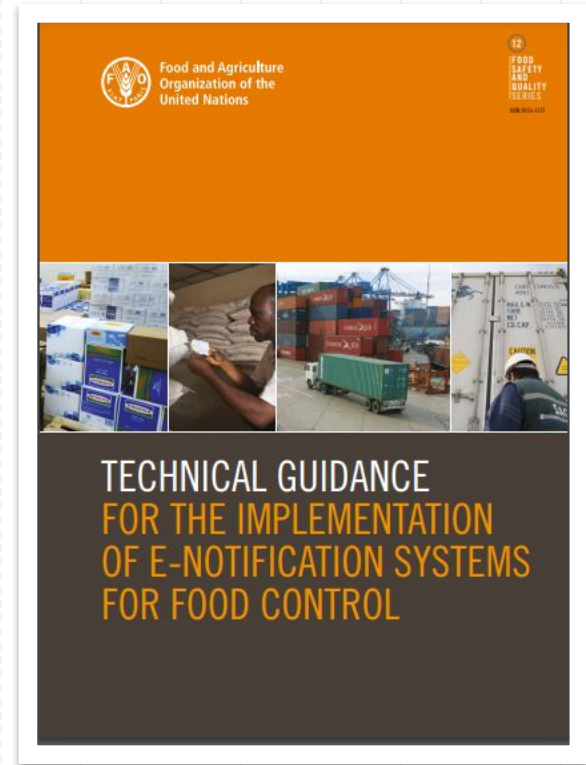
The analysis is conducted only for fisheries and aquaculture products



E-notification system

“E-notification system is formally defined as a system whereby: A document is served by sending an electronic message to the electronic service address at, or through which, the party has authorized the electronic service. The message specifies the exact name of the document served and provides a hyperlink at which it can be viewed and downloaded”

<https://www.fao.org/documents/card/en?details=cc0850en%2f>



Which systems are used?



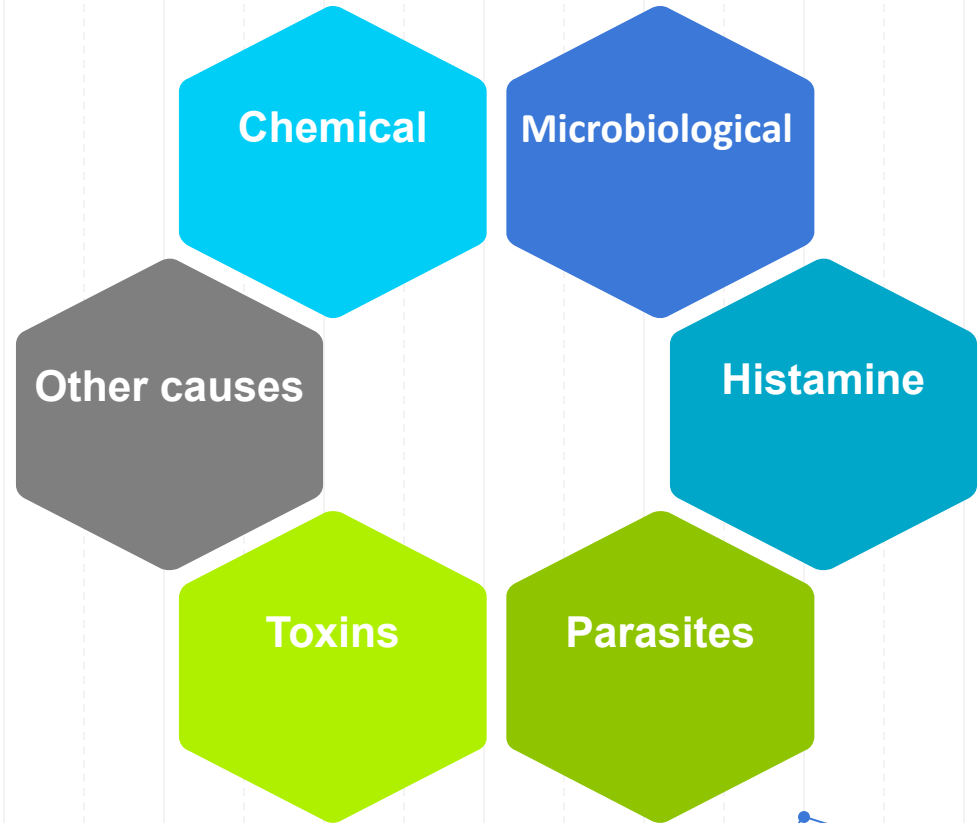
Australian Government

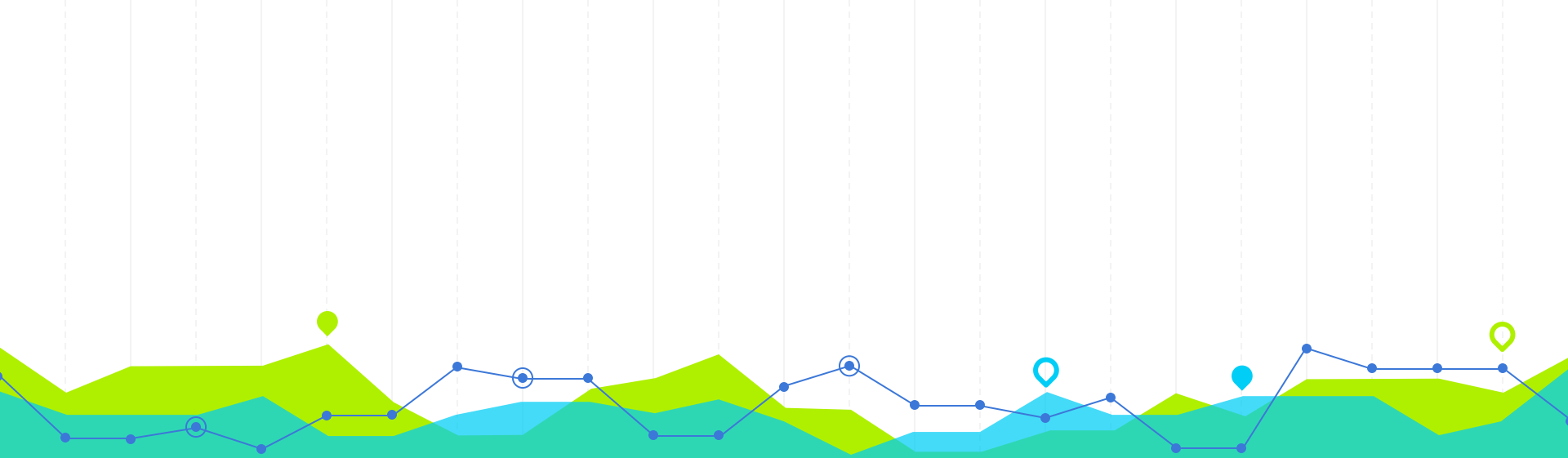


- **Imported Food Inspection Scheme** of the Australian Government
- **Rapid Alert System for Food and Feed (RASFF)** in the European Union
- **Import Refusal Report (IRR)** of the Food and Drug Administration (FDA) in the United States of America
- **Quarantine Stations** of the Ministry of Health, Labour and Welfare (MHLW) in Japan



Classification of import notifications





Import notifications in Australia

Trend analysis 2019 - 2022

Import notifications in Australia (2019 – 2022)

<i>Causes</i>	<i>2019</i>	<i>2020</i>	<i>2021</i>	<i>2022</i>	<i>Total</i>
<i>Histamine</i>	34	39	22	25	120
<i>Chemical</i>	18	26	28	37	109
<i>Microbiological</i>	24	29	8	18	79
<i>Others</i>	0	0	3	0	3
<i>Total</i>	76	94	61	80	311



Chemical causes in Australia (2019 – 2022)

<i>Causes</i>	<i>2019</i>	<i>2020</i>	<i>2021</i>	<i>2022</i>	<i>Total</i>
<i>Iodine</i>	6	9	12	6	33
<i>Nitrofurans</i>	5	9	2	6	22
<i>Enrofloxacin</i>	5	4	6	5	20
<i>Fluoroquinolones</i>	0	0	0	16	16
<i>Additives</i>	2	2	3	2	9
<i>Arsenic</i>	0	2	1	0	3
<i>Ciprofloxacin</i>	0	0	2	0	2
<i>Leuchomalachite green</i>	0	0	0	2	2
<i>Levofloxacin</i>	0	0	1	0	1
<i>Ofloxacin</i>	0	0	1	0	1
Total	18	26	28	37	109

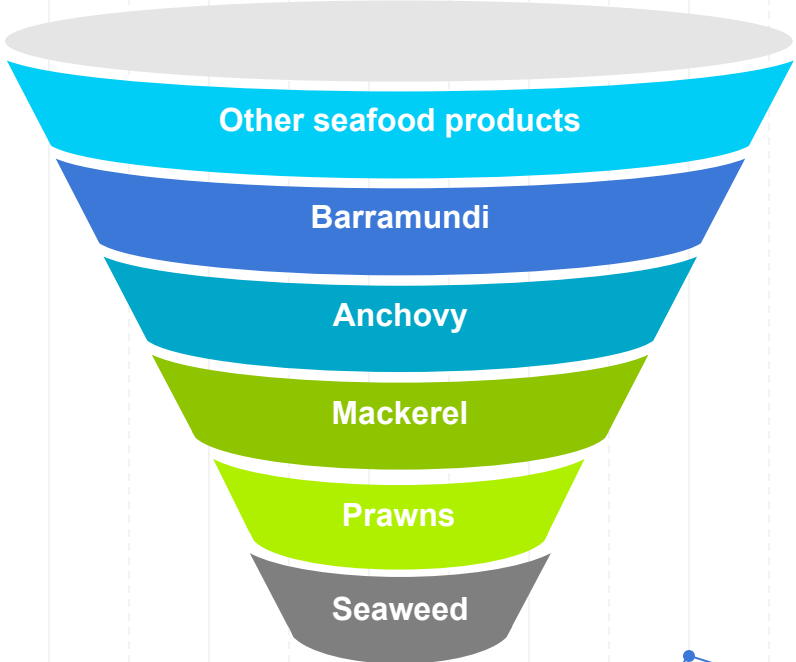


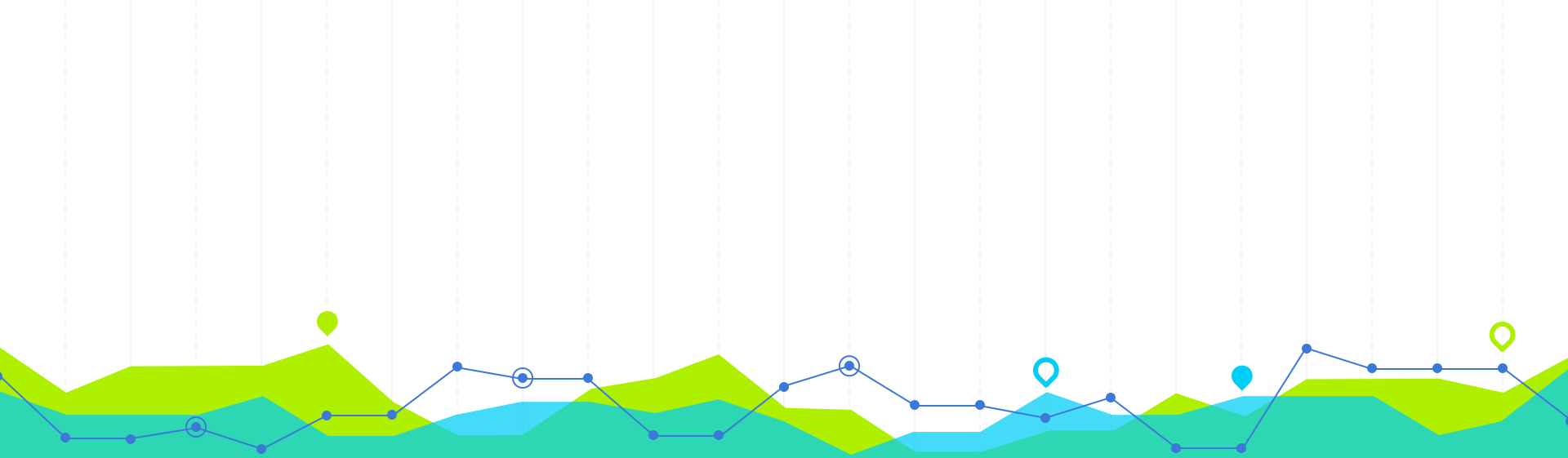
Microbiological causes in Australia (2019 – 2022)

<i>Causes</i>	<i>2019</i>	<i>2020</i>	<i>2021</i>	<i>2022</i>	<i>Total</i>
<i>Live bacteria</i>	12	14	0	0	26
<i>Escherichia coli</i>	3	6	5	11	25
<i>Listeria monocytogenes</i>	4	8	1	7	20
<i>Salmonella</i>	3	0	1	0	4
<i>Vibrio cholerae</i>	2	0	1	0	3
<i>Vibrio alginolyticus</i>	0	1	0	0	1
<i>Total</i>	24	29	8	18	79



Top 6 – Rejected products in Australia in 2022





Import notifications in the European Union

Trend analysis 2016 - 2022

Import notifications in the EU (2016 – 2022)

<i>Causes</i>	<i>2016</i>	<i>2017</i>	<i>2018</i>	<i>2019</i>	<i>2020</i>	<i>2021</i>	<i>2022</i>	<i>Total</i>
<i>Others</i>	96	115	139	116	77	92	91	726
<i>Chemical</i>	114	159	73	68	62	58	45	579
<i>Microbiological</i>	62	41	75	44	57	37	52	368
<i>Histamine</i>	20	30	13	15	7	6	15	106
<i>Toxins</i>	12	11	7	10	10	8	6	64
<i>Parasites</i>	3	3	1	8	14	20	11	60
<i>Total</i>	307	359	308	261	227	221	220	1 903

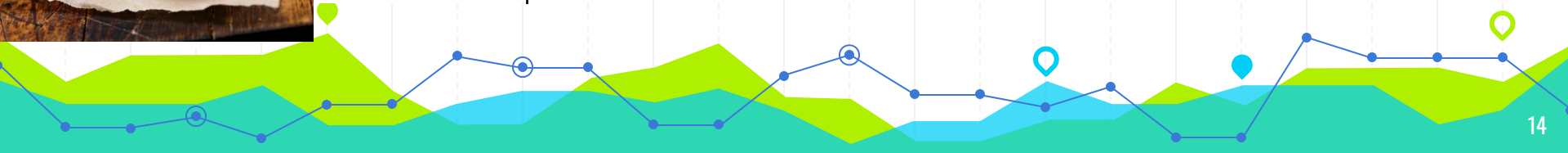


Other causes in the EU (2016 – 2022)

<i>Causes</i>	2016	2017	2018	2019	2020	2021	2022	Total
<i>Poor temperature control</i>	44	61	86	78	40	48	46	403
<i>Unfit for human consumption</i>	16	18	12	8	13	7	10	84
<i>Issues of health certificate</i>	11	2	19	4	5	17	12	70
<i>Attempt to illegally import</i>	4	14	1	10	10	0	0	39
<i> Labelling</i>	0	4	4	4	3	11	8	34
<i>Unsuitable packaging</i>	9	10	6	2	1	2	1	31
<i> Allergens</i>	6	3	3	5	3	3	4	27
<i>Unauthorized operator</i>	1	2	8	2	2	1	0	16
<i>Unsuitable transport conditions</i>	5	1	0	3	0	0	0	9
<i> Species mismatch</i>	0	0	0	0	0	0	4	4
<i>Unauthorized vessel</i>	0	0	0	0	0	1	4	5
<i>Unauthorized country</i>	0	0	0	0	0	2	2	4
Total	96	115	139	116	77	92	91	726

Chemical causes in the EU (2016 – 2022)

<i>Causes</i>	<i>2016</i>	<i>2017</i>	<i>2018</i>	<i>2019</i>	<i>2020</i>	<i>2021</i>	<i>2022</i>	<i>Total</i>
<i>Mercury</i>	61	95	42	38	30	23	22	311
<i>Residues of vet drugs</i>	29	35	21	8	8	4	10	115
<i>Cadmium</i>	15	25	6	11	13	13	7	90
<i>Additives</i>	1	0	2	1	5	7	2	18
<i>Benzo(a)pyrene</i>	8	0	0	4	1	0	1	14
<i>Chlorate</i>	0	0	0	5	4	0	1	10
<i>Sulphite</i>	0	0	0	0	0	4	2	6
<i>Irradiation</i>	0	0	0	0	0	5	0	5
<i>Contaminants</i>	0	0	2	1	0	0	0	3
<i>Lead</i>	0	3	0	0	0	0	0	3
<i>Carbon monoxide</i>	0	1	0	0	1	0	0	2
<i>Arsenic</i>	0	0	0	0	0	1	0	1
<i>Sodium carbonate</i>	0	0	0	0	0	1	0	1
Total	114	159	73	68	62	58	45	579



Microbiological causes in the EU (2016 – 2022)

<i>Causes</i>	<i>2016</i>	<i>2017</i>	<i>2018</i>	<i>2019</i>	<i>2020</i>	<i>2021</i>	<i>2022</i>	<i>Total</i>
<i>Listeria monocytogenes</i>	19	11	24	19	20	17	26	136
<i>E. Coli</i>	22	12	21	12	12	10	4	93
<i>Norovirus</i>	4	7	21	3	22	4	7	68
<i>Salmonella</i>	7	6	7	6	1	5	9	41
<i>Vibrio spp.</i>	6	2	1	1	2	1	6	19
<i>Hepatitis A virus</i>	3	0	1	1	0	0	0	5
<i>Clostridium Botulinum</i>	1	1	0	2	0	0	0	4
<i>Not specified</i>	0	2	0	0	0	0	0	2
<i>Total</i>	62	41	75	44	57	37	52	368

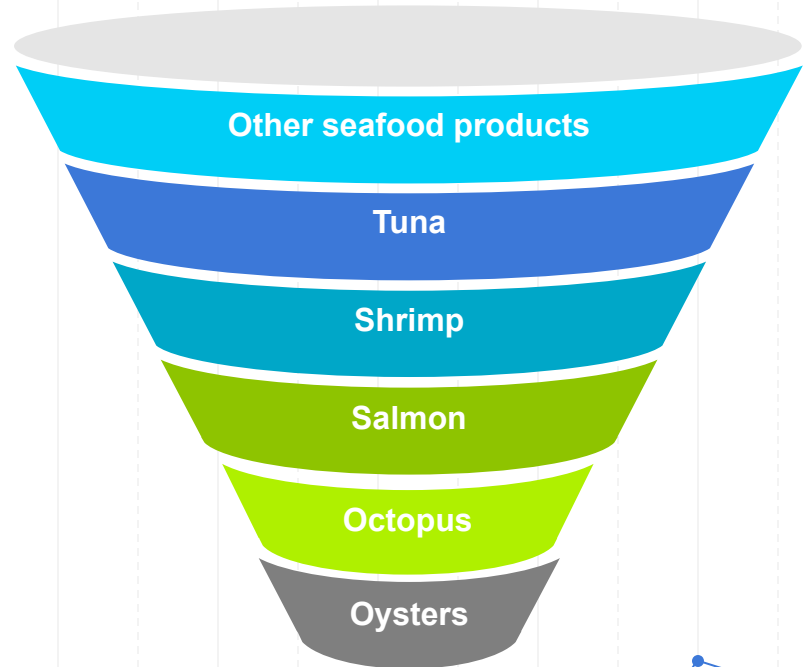


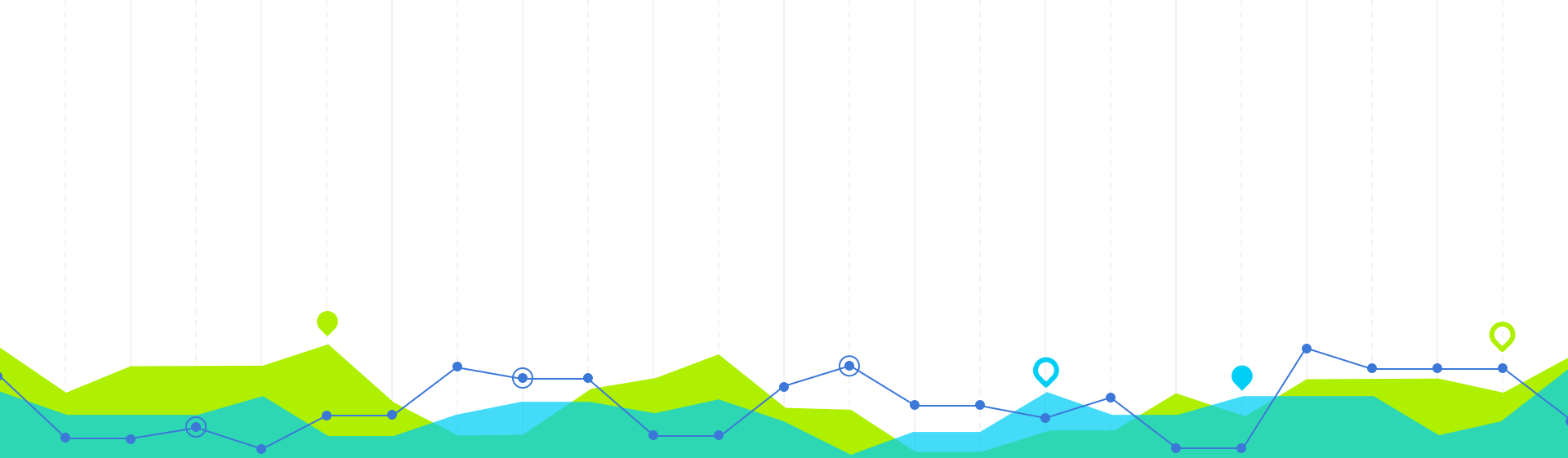
Toxins causes in the EU (2016 – 2022)

<i>Causes</i>	<i>2016</i>	<i>2017</i>	<i>2018</i>	<i>2019</i>	<i>2020</i>	<i>2021</i>	<i>2022</i>	<i>Total</i>
<i>Diarrhetic shellfish poisoning</i>	7	2	5	7	8	4	0	33
<i>Amnesic shellfish poisoning</i>	1	7	2	1	0	0	0	11
<i>Paralytic shellfish poisoning</i>	0	1	0	1	1	1	0	4
<i>Ciguatera</i>	1	1	0	1	1	0	0	4
<i>Tetrodotoxin</i>	3	0	0	0	0	0	0	3
<i>Lipophilic toxins</i>	0	0	0	0	0	3	4	7
<i>Azaspiracid poisoning</i>	0	0	0	0	0	0	2	2
<i>Total</i>	12	11	7	10	10	8	6	61



Top 6 – Rejected products in the European Union in 2022





Import notifications in Japan

Trend analysis 2016 - 2022

Import notifications in Japan (2016 – 2022)

<i>Causes</i>	2016	2017	2018	2019	2020	2021	2022	Total
Microbiologica	94	99	81	77	47	94	81	573
Chemical	42	36	24	27	32	25	32	218
Toxins	0	0	0	4	7	2	1	14
Others	0	8	1	1	0	0	0	10
Total	136	143	106	109	86	121	114	815



Microbiological causes in Japan (2016 – 2022)

<i>Causes</i>	<i>2016</i>	<i>2017</i>	<i>2018</i>	<i>2019</i>	<i>2020</i>	<i>2021</i>	<i>2022</i>	<i>Total</i>
<i>Coliform</i>	51	50	42	43	23	59	45	313
<i>Live</i>	30	29	19	23	16	24	21	162
<i>bacteria</i>								
<i>E. coli</i>	10	19	17	10	8	11	12	87
<i>Salmonella</i>	1	0	3	0	0	0	1	5
<i>Vibrio</i>	2	1	0	1	0	0	2	6
<i>Total</i>	94	99	81	77	47	94	81	573



Chemical causes in Japan (2016 – 2022)

Causes **2016** **2017** **2018** **2019** **2020** **2021** **2022** **Total**

<i>Residues of vet drugs</i>	35	31	15	15	14	11	20	141
<i>Additives</i>	4	4	8	9	15	8	11	59
<i>Pesticides</i>	2	1	0	3	3	6	1	16
<i>Contaminants</i>	0	0	1	0	0	0	0	1
<i>Irradiation</i>	1	0	0	0	0	0	0	1
TOTAL	42	36	24	27	32	25	32	218

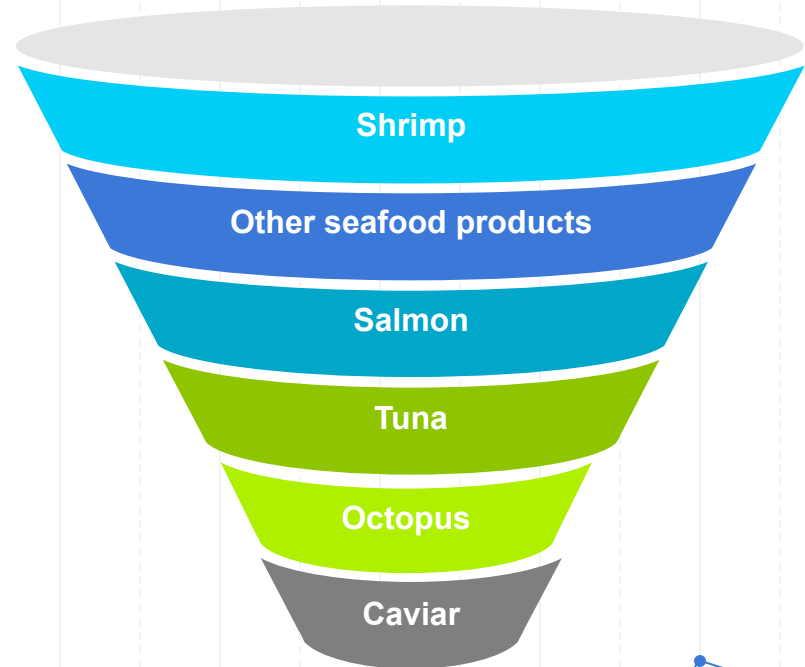


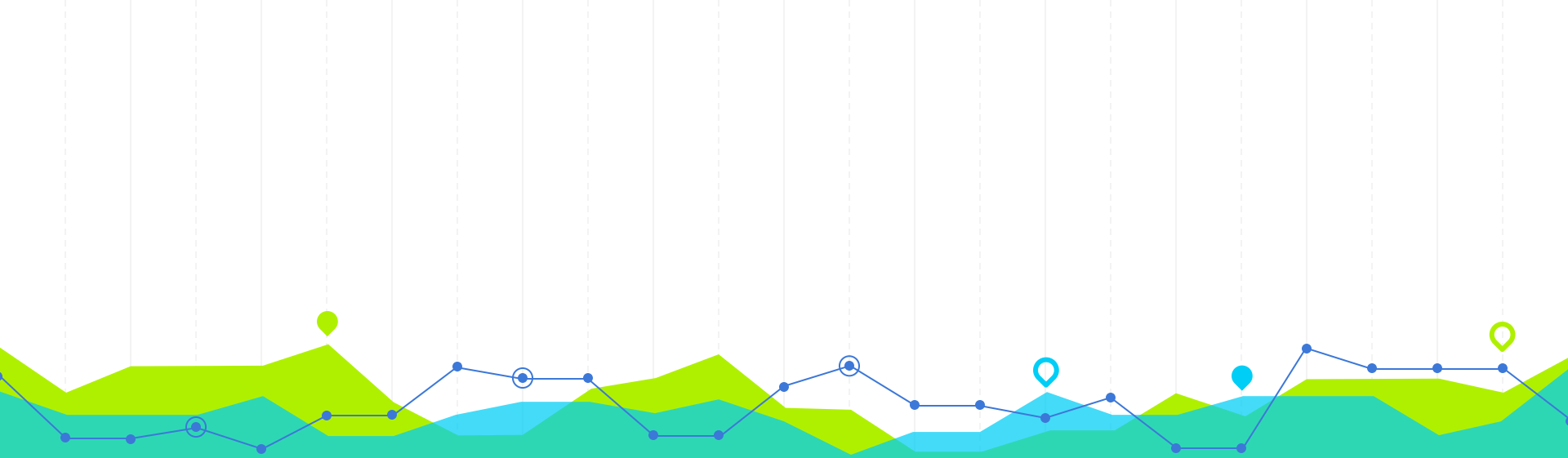
Toxins causes in Japan (2016 – 2022)

<i>Causes</i>	<i>2016</i>	<i>2017</i>	<i>2018</i>	<i>2019</i>	<i>2020</i>	<i>2021</i>	<i>2022</i>	<i>Total</i>
<i>Diarrhetic shellfish poisoning</i>	0	0	0	0	7	2	1	10
<i>Ciguatera poisoning</i>	0	0	0	3	0	0	0	3
<i>Paralytic shellfish poisoning</i>	0	0	0	1	0	0	0	1
TOTAL	0	0	0	4	7	2	1	14



Top 6 – Rejected products in Japan in 2022





Import notifications in the United States of America

Trend analysis 2016 - 2022

Import notifications in the US (2016 – 2022)

<i>Causes</i>	2016	2017	2018	2019	2020	2021	2022	Total
Others	1 553	1 114	917	864	419	476	428	5 771
Microbiological	253	281	275	230	219	400	243	1 901
Chemical	233	156	241	151	72	90	93	1 036
Histamine	32	25	24	59	20	46	23	229
Toxins	1	1	0	0	0	0	0	2
Total	2 072	1 577	1 457	1 304	730	1 012	787	8 939



Other causes in the US (2016 – 2022)

<i>Causes</i>	<i>2016</i>	<i>2017</i>	<i>2018</i>	<i>2019</i>	<i>2020</i>	<i>2021</i>	<i>2022</i>	<i>Total</i>
<i>Unfit for consumption</i>	1 365	836	681	679	313	366	378	4 618
<i>Labelling</i>	103	116	70	100	58	71	45	563
<i>Packaging</i>	54	59	57	48	25	34	5	282
<i>Adulteration</i>	14	78	88	22	11	0	0	213
<i>Allergens</i>	6	18	3	5	12	5	0	49
<i>No process</i>	11	7	18	10	0	0	0	46
<i>Total</i>	1 553	1 114	917	864	419	476	428	5 771



Microbiological causes in the US (2016 – 2022)

<i>Causes</i>	<i>2016</i>	<i>2017</i>	<i>2018</i>	<i>2019</i>	<i>2020</i>	<i>2021</i>	<i>2022</i>	<i>Total</i>
<i>Salmonella</i>	213	246	202	177	166	384	201	1 589
<i>Listeria monocytogenes</i>	10	33	38	52	53	16	41	243
<i>Hepatitis A</i>	0	2	35	1	0	0	0	38
<i>Escherichia coli</i>	0	0	0	0	0	0	1	1
Total	223	281	275	230	219	400	243	1 871

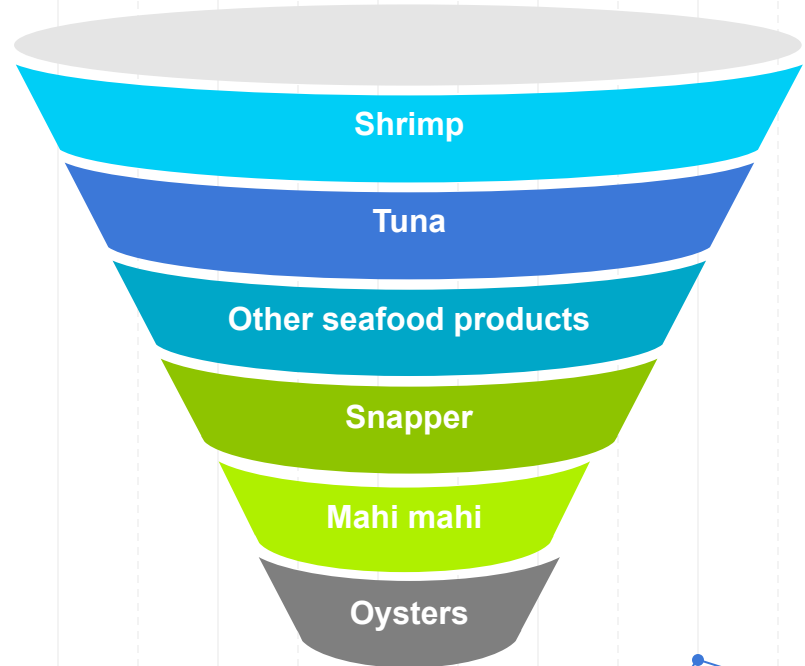


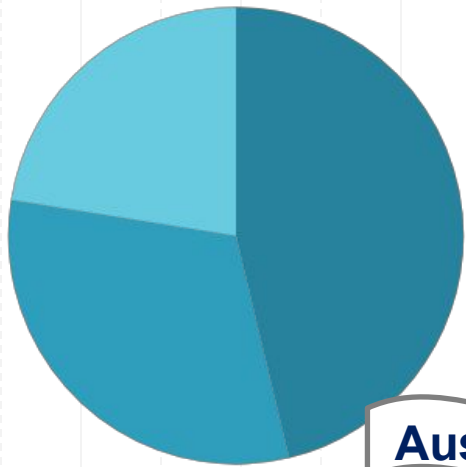
Chemical causes in US (2016 – 2022)

<i>Causes</i>	<i>2016</i>	<i>2017</i>	<i>2018</i>	<i>2019</i>	<i>2020</i>	<i>2021</i>	<i>2022</i>	<i>Total</i>
<i>Residues of vet drugs</i>	160	117	192	81	49	44	43	686
<i>Nitrofurans</i>	45	14	21	55	15	42	33	225
<i>Additives</i>	12	14	13	9	0	3	8	59
<i>Chloramphenicol</i>	10	10	3	5	5	0	5	38
<i>Pesticides</i>	0	1	12	1	3	0	4	21
<i>Sulphites</i>	0	0	0	0	0	1	0	1
<i>Total</i>	227	156	241	151	72	90	93	1 030

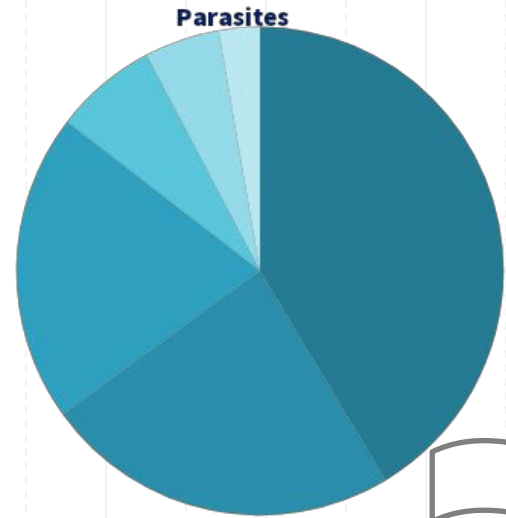


Top 6 – Rejected products in US in 2022

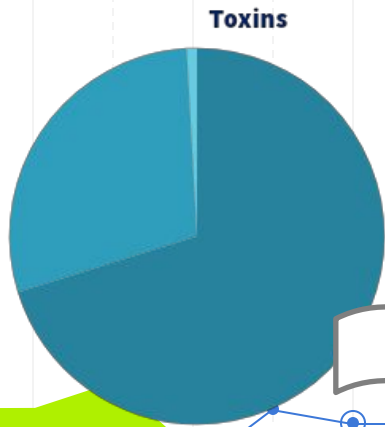




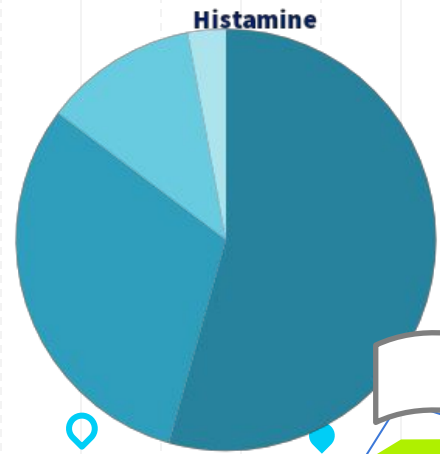
Australia



EU



Japan



US



Conclusions and Recommendations

Possible measures to encourage the reduction of cases of import notifications are multiple and they are aimed at:

Exporting Countries:

- ✓ base actions on risk analysis approach from primary production to consumers;
- ✓ make available relevant data on international databases;
- ✓ organize staff training and develop national surveillance programs; and
- ✓ use international standards, guidelines and recommendations provided by the *CODEX Alimentarius*.

Conclusions and Recommendations

FAO:

- ✓ continues to provide training programs to ensure that officials and producers in developing countries fully understand international food safety and quality requirements in line with *CODEX Alimentarius*;
- ✓ continues to support *CODEX Alimentarius* on the standardization to harmonize requirements and eliminate trade barriers; and
- ✓ plays a key role in providing information on sanitary problems related to international trade.

Thank you for your attention!

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Food and Agriculture Organization

FAO

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