

Newsletter Q1/Q2 2025

The future of food safety is evolving, and the stake has never been higher!

With the introduction of Regulation (EU) 2024/2895, the European Commission is raising the bar by enforcing a zero-listeria limit in ready-to-eat (RTE) foods from July 2026. This game-changing regulation demands stricter controls across the entire food supply chain, ensuring greater consumer protection. While the challenges are significant, so are the opportunities for those ready to lead. At Milarex, we are embracing this shift, investing in cutting-edge food safety measures to set new industry standards and deliver the highest quality products with confidence.

EU addressing listeria challenges in RTE foods by introducing a Zero listeria limit from 2026

On November 20, 2024, the European Commission introduced Regulation (EU) 2024/2895, amending the existing Regulation (EC) No 2073/2005 on microbiological criteria for foodstuffs. This amendment, effective from July 1, 2026, tightens the food safety standards concerning Listeria monocytogenes in ready-to-eat (RTE) foods.

- **Stricter Limits:** For RTE foods that support the growth of Listeria monocytogenes, the bacterium must be undetectable in 25 grams of product throughout the entire shelf life, unless manufacturers can demonstrate that levels will not exceed 100 colony-forming units per gram (cfu/g) until the end of the expiration date.
- Extended Responsibility: The implications of the amendment extends responsibility beyond manufacturers to
 include all entities in the food supply chain, ensuring compliance with microbiological standards throughout the
 product's shelf life.

Food businesses must enhance their testing protocols, including comprehensive shelf-life and challenge tests, to verify that Listeria monocytogenes levels remain within acceptable limits. This proactive approach aims to bolster consumer protection against listeriosis.

Implications – A Game-Changer for Food Safety

The amended regulations bring a major shift for ready-to-eat (RTE) producers, suppliers, and customers alike. Producers now face a critical choice: develop robust models and procedures to prove compliance with listeria limits or ensure that no 25 g sample contains listeria throughout the product's shelf-life. Either path will demand increased resources, stricter controls, and likely higher production costs.

For suppliers, the pressure will mount as producers demand listeria-free raw materials to meet the new standards. Those with strong food safety track records may gain a competitive edge, while others struggle to find buyers.

Customers, especially those prioritizing food safety and brand integrity, may shift towards producers with the highest standards and proven track records. Over time, these changes could reshape the industry, and raise the bar for food safety across the board.



Milarex intent – Raising the Bar for Food Safety Excellence

At Milarex, food safety is not just a requirement—it is our commitment, our passion, and our responsibility. As industry leaders, we are determined to stay ahead of evolving regulations and ensure that our products set the gold standard for safety and quality.

With the introduction of stricter food safety criteria, Milarex is taking bold steps to further strengthen our listeria control measures.

Our goal is clear: Safe and sustainable salmon. We will implement cutting-edge predictive microbiology models, perform challenge - & durability testing and tighten oversight of raw materials suppliers. These initiatives will allow us to proactively detect and mitigate risks before they become issues, and we will demonstrate that listeria monocytogenes cannot grow beyond 100 cfu/gram.

We recognize that true leadership in food safety requires constant innovation and unwavering diligence. That is why we are investing in new technologies, refining our processes, and holding our suppliers to the highest standards. By taking these proactive measures, we not only meet regulatory expectations—we will exceed them, ensuring that every product that leaves our facility is of the highest possible quality.

At Milarex, food safety is not just part of what we do—it defines who we are. We are committed to setting new benchmarks for excellence and leading the industry towards a safer, more responsible future.

Our 2022/2023/2024 Listeria test results

As in previous years Milarex' publishes results for food safety. We believe that improved food safety starts with openness and sharing results. Creating industry dialogue and sharing best practice are part of our food safety culture and continuous improvement process.

Listeria results for incoming raw materials

All raw material batches arriving at our production facility undergo rigorous pathogen testing, with listeria as the primary focus for salmon. Our standard is zero listeria on incoming deliveries, regardless of species, origin, or packing station. However, the results indicate that this expectation is not met and has been moving in the wrong direction, reinforcing the need for strict testing protocols to minimize risks.

Listeria monocytogenes- Raw material										
Species	Origin	2022			2023			2024		
		total	positive	% positive	total	positive	% positive	total	positive	% positive
Salmon	Norwegian	1278	22	1.7%	1440	43	3.0%	1795	64	3.6%
	Organic	142	1	0.7%	171	4	2.3%	164	9	5.5%
	Scottish	130	5	3.8%	64	5	7.8%	81	10	12.3%
	Icelandic	214	3	1.4%	132	13	9.8%	113	5	4.4%
	TOTAL	1764	31	1.8%	1807	65	3.6%	2193	88	4.0%
Trout	Norwegian	71	0	0.0%	89	3	3.4%	25	0	0.0%
	Dennmark	20	2	10.0%	7	3	42.9%	37	1	2.7%
	Poland	60	20	33.3%	17	13	76.5%	19	4	21.1%
	Scottish	59	3	5.1%	62	1	1.6%	61	1	1.6%
	Finland	-	-	-	3	0	0.0%	1	0	0.0%
	Sweden	-	-	-	-	-	-	6	1	16.7%
	Spain	-	-	-	-	-	-	6	1	16.7%
	France	-	-	-	-	-	-	3	0	0.0%
	Turkey	-	-	-	-	-	-	6	0	0.0%
	Bulgaria	-	-	-	-	-	-	5	0	0.0%
	TOTAL	210	25	11.9%	178	20	11.0%	169	8	4.7%
Sockeye		251	9	3.6%	234	29	12.4%	195	20	10.3%
All	All Species		65	2.9%	2226	114	5.1%	2557	116	4.7%

At Milarex, food safety begins with our raw materials, and our ongoing monitoring of listeria levels play a crucial role in ensuring the highest standards. The latest testing data from 2022 to 2024 highlights some important trends in listeria prevalence across different species and origins.

Overall Trends (All Species)

- 2022: 2.9% positive cases (65 out of 2,225 samples)
- 2023: 5.1% positive cases (114 out of 2,223 samples)
- 2024: 4.7% positive cases (126 out of 2,587 samples)

The overall listeria rate increased from 2022 to 2023 but stabilized in 2024, showing a slight improvement.

Listeria Trends in Atlantic Salmon, Trout & Sockeye Salmon

- Norwegian salmon: Increased from 1.7% (2022) to 3.0% (2023), and further to 3.6% (2024).
- Scottish salmon: Showed a significant rise, from 3.8% (2022) to 7.8% (2023), reaching 12.3% (2024).
- Icelandic salmon: The highest increase in 2023 (from 1.4% to 9.8%) but improved in 2024 (down to 4.4%).
- Organic salmon: Remained relatively low in 2022 but increased from 0.7% (2022) to 5.5% (2024).

Listeria levels in salmon have increased overall, with Scottish and Icelandic origins showing the most fluctuations.

- **Trout:** Poland remains the highest-risk origin, with listeria levels peaking at 76.5% in 2023 before improving to 21.1% in 2024. Norwegian trout maintained a 0% rate in 2022 and 2024, while Scottish trout showed a steady decline to 1.6%. Danish trout spiked in 2023 but dropped to 2.7% in 2024.
- **Sockeye Salmon:** Listeria cases tripled from 2022 to 2023, reaching 12.4%, before slightly improving to 10.3% in 2024. Further monitoring and preventive actions remain crucial.

Rising Listeria in Raw Materials Underscores Need for Continued Vigilance and improvements

We are disappointed to see an increase in listeria cases in incoming raw materials from 2022 to 2023, with only a slight improvement in 2024. Scottish and Icelandic salmon, as well as sockeye, showed significant spikes, while Norwegian salmon and organic salmon also saw a steady rice.

All findings of listeria are addressed with the supplier in accordance with Milarex food safety specifications and an established set of delivery rules.

In Milarex we take pride in maintaining low levels of listeria throughout our operations. We see this as a strong indicator of operational excellence, as we believe is also the case with farming companies.

Listeria results for environmental monitoring

Occasionally, listeria is detected in our production environment. Our extensive experience allows us to identify high-risk zones and equipment, while our specially designed Milarex facility minimizes the risk of pathogen spread.

Listeria Results for environment	2022	2023	2024	
monitoring (according to monthly schedules)	% positive	% positive	% positive	
Low risk area - BEFORE PRODUCTION	0.0%	0.4%	2.8%	
Low risk area - DURING PRODUCTION	1.4%	2.6%	6.2%	
high care / high risk area - BEFORE PRODUCTION	0.6%	1.6%	0.7%	
high care / high risk area - DURING PRODUCTION	1.2%	3.0%	2.8%	
Suma / TOTAL	1.1%	2.6%	3.2%	

Listeria is a resilient bacterium, capable of growing at refrigeration temperatures, with or without oxygen, and even in high-salt environments. This makes daily testing of production equipment and the factory environment essential to maintaining the highest food safety standards.

Our 2024 environmental screening showed a slight increase in positive listeria test results compared to 2023, primarily in isolated areas of our production facility. These findings reinforce the importance of a systematic and stringent testing regime. With our zero-listeria mindset, we are committed to continuous improvement.

At Milarex, we proactively assess and enhance our processes and facility design, implementing preventive measures wherever risks or improvement opportunities arise.

All our testing follows the highest industry standards, including HACCP, GMP, and relevant ISO certifications, ensuring uncompromising food safety for our consumers.

Listeria results for finished products

Producing and supplying ready-to-eat (RTE) products for global retail markets carries a significant responsibility. Ensuring the highest food safety standards is essential, as these products are often consumed directly from the pack, without further preparation. This requires strict quality control, rigorous testing, and continuous improvements to uphold consumer trust and safety.

Listeria results for finished product at the beginning of shelf life test RTE (2022 Year)	Total Samples	Positive	% positive
Sum Atlantic, Sockeye, Trout	74187	82	0.11%
Listeria results for finished product at the beginning of shelf life test RTE (2023 Year)	Total Samples	Positive	% positive
Sum Atlantic, Sockeye, Trout	66403	172	0.26%
Listeria results for finished product at the beginning of shelf life test RTE (2024 Year)	Total Samples	Positive	% positive
Sum Atlantic, Sockeye, Trout	62867	451	0.72%

Food Safety First: Our Zero-Listeria Mindset in Action

At Milarex, we implement strict hygiene optimization, preventive measures, and a robust testing regime to ensure the highest food safety standards. However, even with these efforts, a small percentage of finished products test positive for listeria.

Whenever a positive result is detected, immediate action is taken:

- Affected products are blocked from distribution.
- Each positive case is investigated to find a source of contamination.
- Products could be reworked for alternative use or destroyed, following strict safety protocols.
- Corrective measures are implemented to prevent recurrence.

2024 Listeria Testing Results & Continuous Improvement

This year's 0.72% positive listeria rate in RTE (ready-to-eat) finished products represents a slight increase from 2023. While we are dedicated to further reducing this number, we also recognize that an absence of listeria findings over an entire year would indicate ineffective testing rather than a truly listeria-free environment.

Beyond Compliance: A Commitment to Food Safety Culture

Milarex products are produced in full compliance with HACCP principles and undergo strict risk assessments for the four major food hazards:

- Microbiological
- Chemical
- Physical
- Allergens

For many, food safety is a matter of compliance—but at Milarex, we see it differently. Compliance is the starting point; true food safety requires a deep-rooted culture of responsibility, vigilance, and continuous improvement.

Consumers assumes their food is safe to eat. That's why we go beyond the basics—because protecting people's health is not just a regulation, it's our duty.

For us, food safety is all about behavior.

We believe that food safety culture is a choice

you make!

