



RESULTS OF THE 12TH SURVEY ON DRAFT BRIEFING NOTES

Knowledge, Innovation and Partnership Management Unit (KNOW)
Nour Elersawy, Milen Georgiev

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2026 - IDENTIFICATION OF COVERT MORTALITY NODAVIRUS (CMNV) AS A ZOONOTIC PATHOGEN IN HUMAN OCULAR DISEASE

17 answers

Topic	Yes	No	More info needed
New hazard?	12 (70.5%)	5 (29.5%)	---
Increased exposure?	9 (53%)	8 (47%)	---
New target group?	9 (53%)	8 (47%)	---
Emerging risk?	7 (41%)	1 (6%)	9 (53%)

Suggested conclusion:
Further info needed

Conclusion: **Emerging risk**

Uncertain emerging risk → 53% “more information needed”; evidence considered insufficient for confirmation, but signal considered relevant for follow-up.

Main concern: CMNV, a known aquatic virus, may have new human-health relevance, with reported association to ocular infections, suggesting a possible zoonotic shift.

Key issue (evidence): Detection in human ocular samples, supported by limited serological/experimental indications; however, causality remains unconfirmed and evidence is methodologically weak

Exposure pathways: Likely through direct contact with aquatic animals or raw seafood handling; foodborne transmission by ingestion not established

Target groups: Primarily high-exposure populations → seafood handlers, aquaculture workers, and individuals with repeated raw seafood contact.

Drivers: aquaculture expansion, seafood trade and distribution, prevalence in imported seafood, probability of spread to European fish/crustaceans, and possible occurrence within European sea areas, repeated human–animal interaction, lack of routine surveillance/diagnostics, environmental changes, including climate-related factors influencing viral spread and pathogenicity.

Key gaps: Unclear transmission pathways, lack of EU occurrence/prevalence data, limited clinical and food monitoring, and insufficient evidence linking virus to disease in humans

Overall judgement:  **Moderate signal** → requires targeted monitoring, additional studies, and One Health investigation.



2026 - HYDROCYANIC ACID IN NUTS, OIL SEEDS AND DERIVED PRODUCTS

18 answers

Topic	Yes	No	More info needed
New hazard?	3 (17%)	15 (83%)	---
Increased exposure?	11 (61%)	7 (39%)	---
New target group?	6 (33%)	12 (67%)	---
Emerging risk?	2 (11%)	6 (33%)	10 (56%)

Suggested conclusion:
Further info needed

Conclusion: Further info needed

Conclusion (consensus): widely recognized *known hazard*, already well-regulated (EU limits, EFSA ARfD); however, data gaps prevent full exposure assessment

NOT a new hazard → cyanogenic glycosides and HCN extensively studied, with established toxicology (acute toxicity well characterized)

Main concern: increase in dietary intake, driven by shifting consumption patterns (nuts, seeds, plant-based diets, “superfoods”), rather than hazard novelty

Exposure signal: Mixed evidence → some indications of increased exposure opportunities (higher consumption, product availability), but no consistent data confirming EU-wide exposure increase → processing (e.g., refining, cooking) may reduce HCN levels, adding uncertainty

Target groups: No clearly new population → primarily general consumers, potentially higher exposure in specific subgroups: high consumers of seeds/nuts, raw-product users, diet/health-driven consumers

Drivers: Dietary recommendations promoting nuts/seeds intake, growth in plant-based diets and functional foods, increased availability of raw and imported products, consumer practices and misinformation, and limited monitoring data affecting exposure estimation

Key gaps: lack of EU-wide occurrence and exposure data, Insufficient data on chronic exposure and long-term risk, limited evidence on processing effects on HCN levels, need for larger monitoring datasets and updated consumption data

Overall judgement: ⚠ **Moderate signal**, known risk with possible evolving exposure patterns → Monitor, improve data, refine exposure assessment (risk management focus, not emerging risk classification)



2026 - EMERGING MYCOTOXIN REMEDIATION METHODS

20 answers

Topic	Yes	No	More info needed
New hazard?	4 (20%)	16 (80%)	---
Increased exposure?	6 (30%)	14 (70%)	---
New target group?	2 (10%)	18 (90%)	---
Emerging risk?	4 (20%)	10 (50%)	6 (30%)

Suggested conclusion:
Not an emerging risk

Conclusion: Not an emerging risk

Strong consensus: not a new hazard (80%), no new target group (90%), no clear increased exposure (70%).

Hazard dimension: Mycotoxins remain a well-known, regulated hazard → Emerging aspect relates to remediation technologies and potential secondary hazards (e.g. degradation products, nanoparticles, chemical residues, altered food chemistry).

Main concern: Unintended effects of new technologies, including: unknown toxic breakdown products residues from treatment (nanoparticles, chemicals), changes in food/feed composition.

Exposure signal: No confirmed increase → technologies aim to reduce contamination → However, uncertainty on exposure to new compounds (consumers & workers) → Climate change remains a separate driver increasing baseline mycotoxin occurrence.

Target groups: No new population identified → general consumers and animals remain key groups → Possible occupational exposure for workers applying new technologies.

Drivers: Technological innovation (detoxification methods), climate change (increasing mycotoxin occurrence), food system transitions (plant-based commodities), potential future commercialization and scale-up.

Key gaps & uncertainties: limited data on toxicity, stability, and fate of degradation products, lack of real-world/industrial-scale evidence (low TRL), insufficient data on nanoparticle residues and environmental impact, uncertainty on actual exposure pathways.

Overall judgement: Emerging technologies (**not emerging risk**), requires monitoring, validation, and safety assessment before large-scale use



2026 - INCREASING INCLUSION OF PROBIOTICS, PREBIOTICS, PARAPROBIOTICS AND POSTBIOTICS IN FOODS

16 answers

Topic	Yes	No	More info needed
New hazard?	8 (50%)	8 (50%)	---
Increased exposure?	9 (56%)	7 (44%)	---
New target group?	12 (75%)	4 (25%)	---
Emerging risk?	4 (25%)	2 (12.5%)	10 (62.5%)

Suggested conclusion:
Further info needed

Conclusion: **Further info needed**

Consensus conclusion: Moderate agreement that this is not a new hazard, but a changing risk context driven by broader use and limited data; evidence still insufficient for firm classification

Main concern: Expansion of “biotics” into diverse foods with limited characterisation, safety data and oversight, especially for novel strains, postbiotics and formulations

Increased exposure: Strongly supported → wider inclusion in foods + cumulative intake across products → higher and less controlled dietary exposure

Potential impact zones (target groups): Primarily vulnerable groups (infants, elderly, immunocompromised, patients with impaired gut barrier), and general population via routine diet

Drivers: Market growth of functional foods; consumer perception of “health benefits”; microbiome trends; technological innovation (new strains, formulations); demographic changes

Key gaps: Cumulative exposure levels; long-term safety; AMR transfer; product composition/label accuracy; safety of novel biotics; real-world consumption data

Overall judgement: ⚠ **Moderate signal** – requires monitoring and targeted assessment



2026 - HEPATITIS A CONTAMINATION OF BERRIES

Topic	Yes	No	More info needed
New hazard?	1 (6%)	16 (94%)	---
Increased exposure?	10 (59%)	7 (41%)	---
New target group?	2 (12%)	15 (88%)	---
Emerging risk?	4 (24%)	7 (41%)	6 (35%)

Suggested conclusion:
Not an emerging risk

Conclusion: Not an emerging risk

strong consensus: not a new hazard (94%), no new target group (88%) → Signal reflects persistent risk with possible increasing exposure

Hazard status: HAV contamination of berries is a well-known, repeatedly documented foodborne hazard, linked to outbreaks in Europe

Main concern: recurrent contamination and insufficient control, combined with changing consumption patterns (raw/frozen berries)

Exposure signal: majority indication of increased exposure (59%), driven by: higher consumption of frozen and ready-to-eat berries, increased use in smoothies/raw products, possible changes in production practices, and imports from higher-endemicity regions → but limited quantitative evidence of EU-wide increase

Target groups: No new group → general consumers, higher risk in: high-consumption groups, adults with low immunity (EU), and frequent consumers of raw/unheated products

Drivers: dietary trends (raw consumption, smoothies), global trade and imports, declining population immunity, persistent contamination in supply chains,

Key gaps & uncertainties: limited data on contamination levels and epidemiological trends. lack of EU-wide exposure assessment, unclear contamination pathways and origin-related risks, and climate-related factors affecting water use and hygiene.

Overall judgement: → **Not an emerging risk**, but a persistent and potentially increasing food safety issue → Requires enhanced monitoring and risk management



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CLOUDS AS A POTENTIAL NEGLECTED RESERVOIR AND TRANSPORT PATHWAY FOR PESTICIDES

18 answers

Topic	Yes	No	More info needed
New hazard?	5 (28%)	13 (72%)	---
Increased exposure?	13 (72%)	5 (28%)	---
New target group?	6 (33%)	12 (67%)	---
Emerging risk?	4 (22%)	4 (22%)	10 (56%)

Suggested conclusion:
Further info needed

Conclusion: Further info needed

Consensus conclusion: No new hazard identified → pesticides already well known, assessed and monitored; novelty lies in the cloud-mediated transport pathway

Main concern: underestimated exposure route → long-range transport and diffuse deposition beyond agricultural areas

Increased exposure: → Most supported category, potential additional and underestimated exposure route, not fully captured in current models or monitoring.

Potential impact zones (target groups): remote, organic and sensitive ecosystems; low temperature regions, possible exposure to mixtures and banned substances in non-agricultural areas.

Drivers: climate and atmospheric dynamics (cloud formation, persistence), long-range transport processes (aerosols, air masses), advances in analytical detection and research, and gaps in current regulatory/risk assessment frameworks

Key gaps: this pathway is not fully captured in current risk assessment and monitoring frameworks, limited data on exposure mechanisms, deposition to soil, plants, crops, water, food chain and human exposure.

Overall judgement → ⚠ **Moderate signal** – requires further data, monitoring and targeted research



Topic	Yes	No	More info needed
New hazard?	10 (63%)	6 (37%)	---
Increased exposure?	8 (50%)	8 (50%)	---
New target group?	7 (44%)	9 (56%)	---
Emerging risk?	5 (31%)	2 (13%)	9 (56%)

Suggested conclusion:
Further info needed

Conclusion: **Further info needed**

Further information needed → 56% more info needed, 31% Yes, 13% No → Mixed views: new hazard (63% Yes), new target group (44% Yes), increased exposure (50% split)

Main concern: Novel use of insects as active vaccine-delivery vectors, raising biosafety, biosecurity and containment concerns

Potential risk areas: accidental or intentional release spread to non-target species and ecosystems recombination, pathogen adaptation, possible misuse / dual-use, difficult-to-control spatial dissemination, and engineered vaccine-delivery insects creating new biological and ecological hazards.

Target groups: may extend beyond intended targets to include wildlife, livestock, non-target species, workers, and nearby populations, but highly scenario-dependent

Exposure: no confirmed current exposure → risk mainly future-oriented, linked to potential large-scale deployment and uncontrolled spread.

Drivers: rapid technological development (synthetic biology, vector systems), possible regulatory gaps or inconsistencies accidental, environmental, or intentional release scenarios.

Key gaps: no field deployment evidence, limited data on genetic stability, recombination, persistence, and spread, unclear real-world exposure pathways and ecological impacts.

Overall judgement: →  **Moderate signal** → Potential emerging technological risk → Requires horizon scanning and early biosafety assessment, but evidence is still insufficient to confirm emerging-risk status



2026UPD/ 2013 - INCREASE OF CRYPTOSPORIDIUM INFECTIONS IN THE NETHERLANDS, THE UK AND GERMANY (ID0303)

16 answers

Topic	Yes	No	More info needed
New hazard?	2 (12%)	14 (88%)	---
Increased exposure?	11 (69%)	5 (31%)	---
New target group?	2 (12%)	14 (88%)	---
Emerging risk?	6 (38%)	3 (19%)	7 (44%)

Suggested conclusion:
Further info needed

Conclusion: Further info needed

Strong consensus: not a new hazard (88%), no new target group (88%), but clear signal of increased exposure (69%)

Hazard status: well-known pathogen (waterborne, zoonotic, occasionally foodborne)→ Issue relates to increasing incidence, not hazard novelty

Main concern: rising number of cases in EU countries and uncertain transmission pathways particularly the role of foodborne transmission→ growing recognition as endemic public health issue.

Exposure signal: strong indication of increase, driven by: climate-related events (flooding, heavy rainfall), contamination of water and irrigation systems, water reuse practices, consumption of raw produce, and possible contribution of zoonotic reservoirs (livestock, rodents, wildlife)

Target groups: No new population → general population exposed via faecal–oral routes→ vulnerable: children and immunocompromised individuals

Drivers: climate change, contaminated water use, agricultural practices, zoonotic reservoirs, improved detection, diagnostics and surveillance sensitivity.

Key gaps: limited data on food vs water transmission, lack of EU-wide epidemiological and subtyping data and true exposure levels vs reported cases, unclear contamination pathways in primary production, and the need for better integration of surveillance data across countries

Overall judgement:→ Re-emerging/increasing risk (not new)→ requires enhanced monitoring, data integration, and pathway clarification.

