

iMIS Food - Biological Hazards - Pests Table

Group	Specie(s)	Food Products	Risks	Regulations (EU)	Prevention & Control	Comments
Rodents	<ul style="list-style-type: none"> House mouse (<i>Mus musculus</i>) 	Packaged dry goods (cereals, pasta), baked goods, nuts, chocolate. Gnaws through packaging.	<ul style="list-style-type: none"> Damage: Packaging, wiring. Micro: <i>Salmonella</i>, Hantavirus. Physical: Faeces, urine, fur. 	<ul style="list-style-type: none"> Reg. (EC) 852/2004: Hygiene procedures. Reg. (EU) 2017/625: Verification. 	<ul style="list-style-type: none"> Exclusion: Seal gaps (>6mm), screens. Hygiene: Rodent-proof containers. Control: Traps, secure bait stations. 	Signs: Small dark droppings (rice-size), gnaw marks, musky odour. Very curious nature.
Rodents	<ul style="list-style-type: none"> Norway rat (<i>R. norvegicus</i>) Roof rat (<i>R. rattus</i>) 	Raw ingredients (grain), stored meats, warehouse goods, waste.	<ul style="list-style-type: none"> Damage: Structures, cables. Micro: <i>Salmonella</i>, <i>E. coli</i>, <i>Leptospirosis</i>. Physical: Large droppings, urine. 	<ul style="list-style-type: none"> Reg. (EC) 852/2004: Hygiene procedures. Reg. (EU) 2017/625: Verification. 	<ul style="list-style-type: none"> Exclusion: Seal gaps (>12mm), protect drains. Hygiene: Eliminate food/water sources. Control: Professional service highly recommended. 	Signs: Large droppings, greasy rub marks, gnawing. Norway rats burrow; Roof rats climb. Neophobic (wary).
Crawling Insects	Cockroaches <ul style="list-style-type: none"> German (<i>B. germanica</i>) Oriental (<i>B. orientalis</i>) American (<i>P. americana</i>) 	Uncovered food, residues, crumbs, damp/dark storage areas.	<ul style="list-style-type: none"> Micro: <i>Salmonella</i>, <i>Listeria</i>. Physical: Dead insects, faecal pellets. Allergenic: Shed skins trigger asthma. 	<ul style="list-style-type: none"> Reg. (EC) 852/2004: Hygiene procedures. Reg. (EU) 2017/625: Verification. 	<ul style="list-style-type: none"> Exclusion: Seal cracks/crevices. Hygiene: Intensive cleaning of drains/hidden areas. Control: Gels, baits, sticky monitoring traps. 	Signs: Unpleasant oily odour, droppings. Nocturnal; daytime sightings indicate heavy infestation.
Crawling Insects	Stored Product Beetles <ul style="list-style-type: none"> Weevils (<i>Sitophilus</i>) Flour beetles (<i>Tribolium</i>) Khaphra beetle 	Bulk grains, flour, pasta, nuts, spices, dried fruit.	<ul style="list-style-type: none"> Damage: Consumption, mould promotion. Physical: Live/dead insects, skins, faeces. 	<ul style="list-style-type: none"> Reg. (EC) 852/2004: Hygiene procedures. Reg. (EU) 2017/625: Verification. 	<ul style="list-style-type: none"> Inspection: Check incoming goods. Storage: Cool/dry (<15°C), FIFO. Control: Freeze/Heat treatment, fumigation. 	Signs: Live adults, larvae in product, damaged kernels. Weevils develop inside kernels. Khaphra is a quarantine pest.
Crawling Insects	Ants <ul style="list-style-type: none"> Black garden ant Pharaoh ant 	Sugar, syrups, honey, greasy residues.	<ul style="list-style-type: none"> Micro: Pathogens from bins/drains. Physical: Dead insects in product. 	<ul style="list-style-type: none"> Reg. (EC) 852/2004: Hygiene procedures. Reg. (EU) 2017/625: Verification. 	<ul style="list-style-type: none"> Exclusion: Seal entry points. Hygiene: Clean spills immediately. Control: Baits (do not spray Pharaoh ants). 	Signs: Visible trails, live insects. Pharaoh ants are tiny and require specialized control.

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Flying Insects	Filth flies · House fly · Blue/Green bottles	Uncovered foods, waste bins, drains, decaying matter.	· Micro: High risk (<i>Salmonella</i> , <i>Shigella</i> , <i>E. coli</i>). · Physical: Maggots, vomit spots, dead flies.	· Reg. (EC) 852/2004: Hygiene procedures. · Reg. (EU) 2017/625: Verification.	· Exclusion: Screens, EFKs (glue boards). · Hygiene: Manage waste, clean drains. · Control: Light traps, targeted insecticide.	Signs: Flying adults, maggots in waste, fly spots. Rapid breeding in organic matter.
Flying Insects	Fruit Flies (<i>Drosophila</i> spp.)	Fermenting materials, overripe fruit, drains, sugary spills, beer/juice.	· Micro: Spoilage yeasts, pathogens. · Physical: Larvae/pupae in product.	· Reg. (EC) 852/2004: Hygiene procedures. · Reg. (EU) 2017/625: Verification.	· Hygiene: Remove fermentation sources. · Exclusion: Fine mesh screens. · Control: Traps.	Signs: Small flies near drains/fruit. Indicates sanitation issues. Rapid breeding cycle.
Flying Insects	Stored Product Moths · Indian meal moth · Warehouse moth	Dried goods, nuts, cereals, spices, pet food.	· Damage: Webbing clogs machinery. · Physical: Larvae, webbing, frass.	· Reg. (EC) 852/2004: Hygiene procedures. · Reg. (EU) 2017/625: Verification.	· Inspection: Incoming goods check. · Storage: Sealed containers. · Monitoring: Pheromone traps. · Control: Discard infested stock.	Signs: Webbing in food, erratic flying adults. Larvae cause the main physical damage.
Flying Insects	Wasps · Common wasp · German wasp	Sugary liquids, jams, meat/fish (outdoors), waste bins.	· Safety: Stings. · Physical: Dead insects in product.	· Reg. (EC) 852/2004: Hygiene procedures. · Reg. (EU) 2017/625: Verification.	· Exclusion: Screens, keep doors closed. · Hygiene: Lidded bins, clean spills. · Control: Traps outdoors.	Signs: Visible adults, nests. Seasonal nuisance (late summer/autumn).
Arachnids	Stored Product Mites · Flour mite · Cheese mite	Moist stored products: flour, grain, cheese, cured meats.	· Damage: "Mite taint" (musty odour). · Allergenic: "Baker's itch". · Physical: "Living dust".	· Reg. (EC) 852/2004: Hygiene procedures. · Reg. (EU) 2017/625: Verification.	· Exclusion: Low humidity (<60% RH). · Control: Dispose product, deep clean.	Signs: "Dust" on product surface moving. Microscopic. Indicates moisture/mould issues.
Birds	· Pigeons · Sparrows · Gulls	Raw materials outdoors, loading docks, waste areas.	· Micro: <i>Salmonella</i> , <i>Campylobacter</i> , <i>Histoplasma</i> . · Physical: Feathers, droppings.	· Reg. (EC) 852/2004: Hygiene procedures. · Reg. (EU) 2017/625: Verification.	· Exclusion: Netting, spikes. · Control: Professional deterrents.	Signs: Droppings, nesting materials, noise. Droppings are acidic and damage buildings.

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Nuisance Pests	<ul style="list-style-type: none"> · Silverfish · Woodlice · Spiders 	Enter buildings seeking shelter/dampness. Not direct food feeders.	<ul style="list-style-type: none"> · Physical: Contamination of product/packaging. 	<ul style="list-style-type: none"> · Reg. (EC) 852/2004: Hygiene procedures. · Reg. (EU) 2017/625: Verification. 	<ul style="list-style-type: none"> · Environment: Control dampness. · Exclusion: Seal cracks. 	Signs: Sightings in damp areas. Indicates structural or environmental issues.
Mammals	<ul style="list-style-type: none"> · Cats · Dogs 	Can access waste areas or enter premises if not secured.	<ul style="list-style-type: none"> · Micro: Pathogens via fur/feces. · Physical: Hair. 	<ul style="list-style-type: none"> · Reg. (EC) 852/2004: Hygiene procedures. · Reg. (EU) 2017/625: Verification. 	<ul style="list-style-type: none"> · Exclusion: Keep doors closed. · Hygiene: Secure waste bins. 	Signs: Hair, footprints, droppings. Issue if hygiene/structure is poor.

