

**HAND ARM
VIBRATION**



French occupational disease system. Example of diseases caused by hand-arm vibration

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Definitions

- Several social security schemes
 - The general scheme covers roughly 18 million workers
 - The agricultural scheme covers roughly 2 million workers
 - The civil servant scheme covers roughly 5.6 million workers
- Independent workers not covered
 - roughly 4 million workers



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Definitions

- Medico-legal concept
- A disease is “occupational” if it is “*the direct consequence of a worker’s exposure to a physical, chemical or biological hazard, or results from the conditions under which they perform their professional activity*”.
- It must be “*listed in an occupational disease table and be contracted under the conditions defined by that table or meet the other criteria established by law no. 93-121 of 27 January 1993*”.



Presumption of origin: occupational disease tables (Article L. 461-1 of the French Social Security Code)

- Hazard and sometimes type of disease

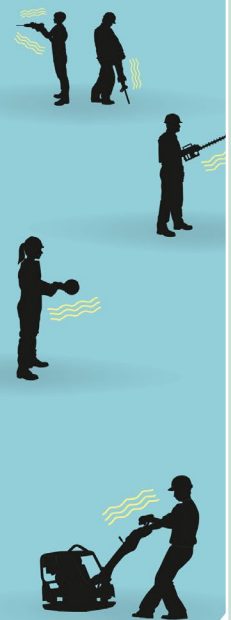
- Diseases caused by vibrations and shock transmitted by certain machine tools, tools and objects and repeatedly hammering objects with the palm heel

Diseases or symptoms	Time limit for compensation	Indicative or restrictive list of work
Name of the disease Conditions of the diagnosis Additional exams	The maximum period between the end of exposure to the hazard and the first medical diagnosis Minimum period of exposure (for some tables)	Includes work and tasks and not jobs

Presumption of origin: occupational disease tables (Article L. 461-1 of the French Social Security Code)

- Hazard and sometimes type of disease

Diseases or symptoms	Time limit for compensation	Indicative or restrictive list of work
<p>Name of the disease ; Conditions of the diagnosis ; Additional exams</p> <ul style="list-style-type: none"> • Osteoarticular diseases confirmed by radiology exams : <ul style="list-style-type: none"> - Arthritis of the elbow involving radiological signs of osteophytosis; - Osteonecrosis of the lunate (Kienböck disease); - Osteonecrosis of the carpal scaphoid (Köhler disease). • Angioedema of the hand, predominately the index and middle fingers, which may be accompanied by cramps in the hand and prolonged impaired sensitivity and confirmed by functional tests for an objective diagnosis of Raynaud's disease • Hypothenar hammer syndrome (HHS) causing Raynaud's phenomenon or finger ischemia confirmed by arteriography, providing objective evidence of an aneurysm or thrombosis of the ulnar artery or the superficial palmar arch. 	<p>The maximum period between the end of exposure to the hazard and the first medical diagnosis</p> <p>Minimum period of exposure (for some tables)</p>	<p>Includes work and tasks and not jobs</p>



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Presumption of origin: occupational disease tables (Article L. 461-1 of the French Social Security Code)

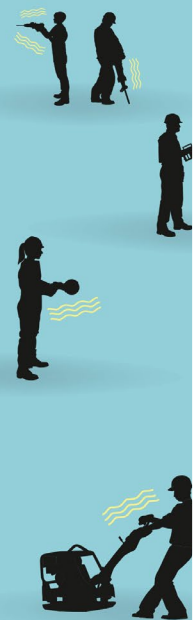
- Hazard and sometimes type of disease

Diseases or symptoms	Time limit for compensation	Indicative or restrictive list of work
Name of the disease Conditions of the diagnosis Additional exams	The maximum period between the end of exposure to the hazard and the first medical diagnosis Minimum period of exposure (for some tables) For arthritis 5 years For angioedema 1 year For hypothenar hammer syndrome 1 year (subject to an exposure period of 5 years)	Includes work and tasks and not jobs

Presumption of origin: occupational disease tables (Article L. 461-1 of the French Social Security Code)

• Hazard and sometimes type of disease

Diseases or symptoms	Time limit for compensation	Indicative or restrictive list of work
<p>Name of the disease</p> <p>Conditions of the diagnosis</p> <p>Additional exams</p>	<p>The maximum period between the end of exposure to the hazard and the first medical diagnosis</p> <p>Minimum period of exposure (for some tables)</p>	<p>Includes work and tasks and not jobs</p> <p>RESTRICTIVE</p> <ul style="list-style-type: none"> • Work regularly involving exposure to vibration transmitted by: <ul style="list-style-type: none"> (a) Hand-held machine tools, in particular (b) Hand-held machines associated with certain abovementioned machines, particularly in chiseling work; (c) Workpieces held in the hand while being processed, particularly during grinding and polishing work and work on swaging machines. • Work regularly involving exposure to shocks caused by manual use of percussive tools: • Work regularly involving exposure to repeat hammering of objects with the palm heel or involving exposure to shock transmitted to the hypothenar eminence by a percussive tool or a tool receiving impact.



Presumption of origin: occupational disease tables (Article L.461-1 of the Social Security Code)

- If all of the conditions set out in the table are met
- It is not up to the victim to prove the link between the exposure and the disease
- It is up to the employer and the social security body to prove that there is no link
- The tables are the result of social consensus based on scientific expertise within advisory commissions under the Labour and Agriculture Ministries.



French complementary health insurance

Regional occupational disease recognition committee

1. **Disease listed** in a table but the criteria in the middle and right columns are not met (paragraph 6 of Article L.461-1 of the Social Security Code).
 - Victim must establish a direct link with the professional activity.
2. **Disease does not appear** in a table (paragraph 7 of Article L.461-1 of the Social Security Code).
 - Victim is dead or the disease caused an impairment rating of at least 25%.
 - The victim must establish a direct and essential link between this disease and the work.
 - In actual fact, the establishment of the link falls within the jurisdiction of the regional occupational disease recognition committee.



Procedure

- Establishment of a precise diagnosis
- Request for recognition by the victim or their beneficiaries
- Employer informed
- Investigation conducted by the social security body
- Examination of the recognition request following the adversarial principle (employer/worker)
- Specific compensation more “favourable”
- Employer responsible for costs



Some figures

- Approximately 50,000 occupational diseases recognised every year under the general social security scheme and 5,000 under the agricultural social security scheme
- 80% to 85% of those are musculoskeletal disorders (MSDs)
- About 100 cases per year for hand and arm vibration
- Especially osteonecrosis of the lunate and elbow arthritis

Professional sectors

- construction (structural work and finishings)
- civil engineering
- automobile industry (manufacturing, repairs)
- wildlife rangers

