

# ANNEXE

**Référence :** *Hygiène & sécurité du travail*, n° 264 – septembre 2021, Dossier « Fluides de coupe : expositions professionnelles, effets sur la santé et prévention », pp. 24-32

## Expositions aux fluides de coupe et principaux effets sur la santé : une revue des études épidémiologiques

Ève Bourgkard, Valérie Demange, INRS,  
département Épidémiologie en entreprise

Cette bibliographie accompagne l'article cité en référence, qui fait partie du dossier « Fluides de coupe : expositions professionnelles, effets sur la santé et prévention » paru dans le n° 264 de la revue *Hygiène & sécurité du travail* » (3<sup>e</sup> trimestre 2021, pp. 24-32).

### BIBLIOGRAPHIE

ACQUAVELLA J., LEET T., JOHNSON G. – Occupational experience and mortality among a cohort of metal components manufacturing workers. *Epidemiology*, 1993, 4, pp. 428-434.

AFSSET – Conséquences sur la santé des fluides de coupe. Air et agents chimiques. Rapport d'appui scientifique et technique, 2009, 229 p.

AMEILLE J., WILD P., CHOUDAT D. ET AL. – Respiratory symptoms, ventilatory impairment, and bronchial reactivity in oil mist-exposed automobile workers. *American journal of industrial medicine*, 1995, 27(2), pp. 247-256.  
Doi: 10.1002/ajim.4700270209.

BAND P.R., LE N.D., MC ARTHUR A.C. ET AL. – Identification of occupational cancer risks in British Columbia: a population-based case-control study of 1.129 cases of bladder cancer. *Journal of occupational and environmental medicine / American College of occupational and environmental medicine*, 2005, 47(8), pp. 854-858.

BARBER C.M., WIGGANS R.E., CARDER M., AGIUS R. – Epidemiology of occupational hypersensitivity pneumonitis; reports from the SWORD scheme in the UK from 1996 to 2015. *Occupational and environmental medicine*, 2017, 74, pp. 528-530.

BARDIN J.A., EISEN E.A., TOLBERT P.E. ET AL. – Mortality studies of machining fluid exposure in the automobile industry. V: A case-control study of pancreatic cancer. *American journal of industrial medicine*, sept. 1997, 32(3), pp. 240-247.

BOURGKARD E., WILD P., COURCOT B. ET AL. – Lung cancer mortality and iron oxide exposure in a French steel-producing factory. *Occupational and environmental medicine*, 2009, 66(3), pp. 175-181.

BURGE S. – Hypersensitivity pneumonitis due to metalworking fluid aerosols. *Curr Allergy Asthma Rep.*, 2016, 16, p. 59.  
Doi : 10.1007/s11882-016-0639-0.

BURTON C.M., CROOK B., SCAIFE H. ET AL. – Systematic review of respiratory outbreaks associated with exposure to water-based metalworking fluids. *Annals of occupational hygiene*, 2012, 56, pp. 374-388. doi: 10.1093/annhyg/mer121.

CIRC (IARC) – *Chemical agents and related occupations*. Lyon, coll. IARC Monographs for the evaluation of carcinogenic risks to humans, 2012, n° 100, 440 p.

CIRC (IARC) – *Overall evaluations of carcinogenicity: an updating of IARC Monographs*. Lyon, coll. coll. IARC Monographs for the evaluation of carcinogenic risks to humans, 1987, n° 1 – 42, 599 p.

CIRC (IARC) – *Polynuclear aromatic hydrocarbons, Part 2 – Carbon Blacks, mineral Oils (lubricant base oils and derived products) and some nitroarenes*. Lyon, coll. coll. IARC Monographs for the evaluation of carcinogenic risks to humans, 1984, n° 33, 122 p.

CLAUDE J.C., FRENTZEL-BEYME R.R., KUNZE E. – Occupation and risk of cancer of the lower urinary tract among men. A case-control study. *International journal of cancer*, 1988, 41(3), pp. 371-379.

COGGON D., PANNETT B., ACHESON E.D. – Use of job-exposure matrix in an occupational analysis of lung and bladder cancers on the basis of death certificates. *Journal of the National Cancer Institute*, 1984, 72, pp. 61-65.

COLIN R., GRZEBYK M., WILD P., HÉDELIN G., BOURGKARD È. – Bladder cancer and occupational exposure to metalworking fluid mist: a counter-matched case-control study in French steel-producing factories. *Occupational and environmental medicine*, 2018, 75(5), pp. 328-336.

## Expositions aux fluides de coupe et principaux effets sur la santé : une revue des études épidémiologiques

**COLT J.S., BARIS D., STEWART P. ET AL.** – Occupation and bladder cancer risk in a population-based case-control study in New Hampshire. *Cancer causes & control: CCC*, 2004, 15(8), pp. 759-769.

**COLT J.S., FRIESEN M.C., STEWART P.A. ET AL.** – A case-control study of occupational exposure to metalworking fluids and bladder cancer risk among men. *Occupational and environmental medicine*, 2014, 71(10), pp. 667-674.

**COLT J.S., KARAGAS M.R., SCHWENN M. ET AL.** – Occupation and bladder cancer in a population-based case-control study in Northern New England. *Occupational and environmental medicine*, 2011, 68(4), pp. 239-249.

**CORDIER S., CLAUEL J., LIMASSET J.C. ET AL.** – Occupational risks of bladder cancer in France: a multicentre case-control study. *International journal of epidemiology*, 1993, 22(3), pp. 403-411.

**COSTELLO S., CHEN K., PICCIOTTO S. ET AL.** – Metalworking fluids and cancer mortality in a US autoworker cohort (1941-2015). *Scandinavian journal of work, environment & health*, sept. 2020, 46(5), pp. 525-532.

**CUMMINGS K.J., STANTON M.L., NETT R.J. ET AL.** – Severe lung disease characterized by lymphocytic bronchiolitis, alveolar ductitis, and emphysema (BADE) in industrial machine-manufacturing workers. *American journal of industrial medicine*, 2019, 62, pp. 927-937. Doi: 10.1002/ajim.23038.

**DARES (MATINET B., ROSANKIS É., LÉONARD M.)** – *Les expositions aux risques professionnels. Les produits chimiques*.

Dares, Juillet 2020, coll. Synthèse Stat, n° 32. Accessible sur :

[https://dares.travail-emploi.gouv.fr/sites/default/files/pdf/dares\\_expositions\\_risques\\_professionnels\\_produits\\_chimiques-2.pdf](https://dares.travail-emploi.gouv.fr/sites/default/files/pdf/dares_expositions_risques_professionnels_produits_chimiques-2.pdf).

**DECOUFLE P.** – Further analysis of cancer mortality patterns among workers exposed to cutting oil mists.

*Journal of the National Cancer Institute*, 1978, 61, pp. 1025-1030.

**DELZELL E., BROWN D.A., MATTHEWS R.** – Mortality among hourly motor vehicle manufacturing workers.

*Journal of occupational and environmental medicine*, 2003, 45, pp. 813-830.

**EISEN E.A., BARDIN J., GORE R. ET AL.** – Exposure-response models based on extended follow-up of a cohort mortality study in the automobile industry. *Scandinavian journal of work, environment & health*, 2001, 27(4), pp. 240-249.

**EISEN E.A., TOLBERT P.E., HALLOCK M.F. ET AL.** – Mortality studies of machining fluid exposure in the automobile industry. III: A case-control study of larynx cancer. *American journal of industrial medicine*, août 1994, 26(2), pp. 185-202.

**FISCHBEIN A., JIN-CHYUAN J.L., SOLOMON S.J. ET AL.** – Clinical findings among hard metal workers.

*British journal of industrial medicine*, 1992, 49, pp. 17-24.

**FRIESEN M.C., COSTELLO S., EISEN E.A.** – Quantitative exposure to metalworking fluids and bladder cancer incidence in a cohort of autoworkers. *American journal of epidemiology*, 2009, 169(12), pp. 1471-1478.

**GARCIA E., BRADSHAW P.T., EISEN E.A.** – Breast cancer incidence and exposure to metalworking fluid in a cohort of female autoworkers. *American journal of epidemiology*, 2018, 187(3), pp. 539-547.

**GERHARDSSON DE VERDIER M., PLATO N., STEINECK G., PETERS J.M.** – Occupational exposures and cancer of the colon and rectum. *American journal of industrial medicine*, 1992, 22(3), pp. 291-303.

**GONZALEZ C.A., LOPEZ-ABENTE G., ERREZOLA M. ET AL.** – Occupation and bladder cancer in Spain: a multi-centre case-control study. *International journal of epidemiology*, 1989, 18(3), pp. 569-577.

**GREAVES I.A., EISEN E.A., SMITH T.J. ET AL.** – Respiratory health of automobile workers exposed to metal-working fluid aerosols: respiratory symptoms. *American journal of industrial medicine*, 1997, 32(5), pp. 450-459.  
Doi: 10.1002/(sici)1097-0274(199711)32:5<450::aid-ajim4>3.0.co;2-w

**HERWALDT I.A., GORMON G.W., MC GRATH T. ET AL.** – A new Legionella species, *Legionella feeleii* species Nova, causes Pontiac fever in a automobile plant. *Annals of internal medicine*, 1984, 100, pp. 333-338.

**HOURS M., DANANCHE B., FEVOTTE J. ET AL.** – Bladder cancer and occupational exposures.  
*Scandinavian journal of work, environment & health*, 1994, 20(5), pp. 322-330.

**ILGAZ A., MOORE V.C., ROBERTSON A.S. ET AL.** – Occupational asthma: the limited role of air-fed respiratory protective equipment. *Occupational Medicine*, 2019, 69, pp. 329-335. Doi: 10.1093/occmed/kqz074.

**JARVHOLM B., LAVENIUS B.** – Mortality and cancer morbidity in workers exposed to cutting fluids.  
*Archives of environmental health*, 1987, 42(6), pp. 361-366.

**KAZEROUNI N., THOMAS T.L., PETRALIA S.A., HAYES R.B.** – Mortality among workers exposed to cutting oil mist: update of previous reports. *American journal of industrial medicine*, 2000, 38, pp. 410-416.

**KENNEDY S.M., CHAN-YEUNG M., MARION S. ET AL.** – Maintenance of stellite and tungsten carbide saw tips: respiratory health and exposure-response evaluations. *Occupational and environmental medicine*, 1995, 52, pp. 185-91.  
Doi: 10.1136/oem.52.3.185.

**KENNEDY S.M., GREAVES I.A., KRIEBEL D. ET AL.** – Acute pulmonary responses among automobile workers exposed to aerosols of machining fluids. *American journal of industrial medicine*, 1989, 15(6), pp. 627-641.

**KIRKHUS N.E., SKARE O., ULVESTAD B. ET AL.** – Pulmonary function and high-resolution computed tomography examinations among offshore drill floor workers. *International archives of occupational and environmental health*, 2018, 91, pp. 317-326.  
<https://doi.org/10.1007/s00420-017-1281-4>

**KOLLER M.F., PLETSCHER C., SCHOLZ S.M., SCHNEUWLY P.** – Metal working fluid exposure and diseases in Switzerland.

## ANNEXE

### Expositions aux fluides de coupe et principaux effets sur la santé : une revue des études épidémiologiques

*International journal of occupational and environmental health*, 2016, 22(3), pp. 193-200.  
Doi: 10.1080/10773525.2016.1200210.

**KRIEBEL D., SAMA S.R., WOSKIE S. ET AL.** – A field investigation of the acute respiratory effects of metal working fluids.  
I : Effects of aerosols exposures. *American journal of industrial medicine*, 1997, 31(6), pp. 756-766.

**MALLIN K., BERKELEY L., YOUNG Q.** – A proportional mortality ratio study of workers in a construction equipment and diesel engine manufacturing plant. *American journal of industrial medicine*, 1986, 10(2), pp. 127-141.

**MALLOY E.J., MILLER K.L., EISEN E.A.** – Rectal cancer and exposure to metalworking fluids in the automobile manufacturing industry. *Occupational and environmental medicine*, 2007, 64, pp. 244-249.

**MEYER-BISCH C., PHAM Q.T., MUR J.M. ET AL.** – Respiratory hazards in hard metal workers: a cross sectional study.  
*British journal of industrial medicine*, 1989, 46, pp. 302-309.

**NETT R.J., STANTON M., GRIMES G.R.** – Occupational respiratory and skin diseases among workers exposed to metalworking fluids. *Current opinion in allergy and clinical immunology*, 2021, 21(2), pp. 121-127. Doi:10.1097/ACI.0000000000000717.

**PARIS C., NGATCHOU-WANDJI J., LUC A. ET AL.** – Work-related asthma in France: recent trends for the period 2001-2009.  
*Occupational and environmental medicine*, 2012, 69, pp. 391-397. Doi: 10.1136/oemed-2011-100487.

**PARIS C.** – Pneumopathies d'hypersensibilité professionnelles. *Références en santé au travail*, 2017, 151, pp. 91-107.  
Accessible sur : [www.rst-sante-travail.fr](http://www.rst-sante-travail.fr).

**PARK D.U., JIN K.W., KOH D.H. ET AL.** – Association between use of synthetic metalworking fluid and risk of developing rhinitis-related symptoms in an automotive ring manufacturing plant. *Journal of occupational health*, 2008, 50, pp. 212-220.  
Doi: 10.1539/joh.07006.

**PARK R.M., MIRER F.E.** – A survey of mortality at two automotive engine manufacturing plants.  
*American journal of industrial medicine*, 1996, 30(6), pp. 664-673.

**PARK R.M., WEGMAN D.H., SILVERSTEIN M.A. ET AL.** – Causes of death among workers in a bearing manufacturing plant.  
*American journal of industrial medicine*, 1988, 13(5), pp. 569-580.

**PARK R.M.** – Risk assessment for metalworking fluids and respiratory outcomes. *Safety and health at work*, 2019, 10, pp. 428-436. Doi : <https://doi.org/10.1016/j.swh.2019.09.001>

**PETNAK T., MOUA T.** – Exposure assessment in hypersensitivity pneumonitis: a comprehensive review and proposed screening questionnaire. *ERJ Open Res*. 2020, 6. Doi : <https://doi.org/10.1183/23120541.00230-2020>.

**REICH A., WILKE A., GEDIGA G. ET AL.** – Health education decreases incidence of hand eczema in metal work apprentices:  
Results of a controlled intervention study. *Contact dermatitis*, 2020, 82, pp. 350-360. Doi : 10.1111/cod.13502.

**RØNNEBERG A., ANDERSEN A., SKYBERG K.** – Mortality and incidence of cancer among oil exposed workers  
in a Norwegian cable manufacturing company. Part 2. Mortality and cancer incidence 1953-84.  
*British journal of industrial medicine*, 1988, 45, pp. 595-601.

**ROSENMAN K.** – Occupational diseases in individuals exposed to metal working fluids.  
*Current opinion in allergy and clinical immunology*, 2015, 15, pp. 131-136. Doi: 10.1097/ACI.0000000000000140.

**ROTINI C., AUSTIN H., DELZELL E. ET AL.** – Retrospective follow-up study of foundry and engine plant workers.  
*American journal of industrial medicine*, 1993, 24(4), pp. 485-498.

**SCHIFFLERS E., JAMART J., RENARD V.** – Tobacco and occupation as risk factors in bladder cancer: a case-control study  
in southern Belgium. *International journal of cancer*, 1987, 39(3), pp. 287-292.

**SCHUBERT S., BRANS R., REICH A. ET AL. (Schubert 2020a)** – Assessment of occupational exposure and spectrum of contact sensitization in metalworkers with occupational dermatitis: results of a cohort study within the OCCUDERM project.  
JEADV, 2020, 34, pp. 1536-1544. Doi : 10.1111/jdv.16130.

**SCHUBERT S., BRANS R., REICH A. ET AL. (Schubert 2020b)** – Contact sensitization in metalworkers: Data from the information network of departments of dermatology (IVDK), 2010-2018. *Contact dermatitis*, 2020, 83, pp. 487-496.  
Doi : <https://doi.org/10.1111/cod.13686>.

**SIEMIATYCKI J., DEWAR R., NADON L. ET AL.** – Associations between several sites of cancer and twelve  
petroleum-derived liquids. Results from a case-referent study in Montreal.  
*Scandinavian journal of work, environment & health*, 1987, 13(6), pp. 493-504.

**SILVERMAN D.T., LEVIN L.I., HOOVER R.N. ET AL.** – Occupational risks of bladder cancer in the United States:  
I. White men. *Journal of the National Cancer Institute*, 1989, 81(19), pp. 1472-1480.

**SILVERSTEIN M., PARK R., MARMOR M. ET AL.** – Mortality among bearing plant workers exposed to metalworking fluids  
and abrasives. *Journal of occupational medicine*, 1988, 30(9), pp. 706-714.

**SPAGNOLO P., ROSSI G., CAVAZZA A. ET AL.** – Hypersensitivity pneumonitis: A comprehensive review.  
*Journal of investigational allergology & clinical immunology*, 2015, 25, pp. 237-250.

**SPRINCE N.L., OLIVER L.C., EISEN E.A. ET AL.** – Cobalt exposure and lung disease in tungsten carbide production.  
A cross-sectional study of current workers. *American review of respiratory disease*, 1988, 138, pp. 1220-1226.

**STEENLAND K., BURNETT C., OSORIO A.M.** – A case-control study of bladder cancer using city directories as a source

## ANNEXE

### Expositions aux fluides de coupe et principaux effets sur la santé : une revue des études épidémiologiques

of occupational data. *American journal of epidemiology*, 1987, 126(2), pp. 247-257.

**SULLIVAN P.A., EISEN E.A., WOSKIE S.R. ET AL.** – Mortality studies of metalworking fluid exposure in the automobile industry: VI. A case-control study of esophageal cancer. *American journal of industrial medicine*, 1998, 34(1), pp. 36-48.

**SULLIVAN P.A., EISEN E.A., KREIBEL D. ET AL.** – A nested case-control study of stomach cancer mortality among automobile machinists exposed to metalworking fluid. *Annals of epidemiology*, 2000, 10(7), pp. 480-481.

**THOMPSON D., KRIEBEL D., QUINN M.M. ET AL.** – Occupational exposure to metalworking fluids and risk of breast cancer among female autoworkers. *American journal of industrial medicine*, 2005, 47(2), pp. 153-160.

**TOLBERT P.E., EISEN E.A., POTHIER L.J. ET AL.** – Mortality studies of machining-fluid exposure in the automobile industry. II. Risks associated with specific fluid types. *Scandinavian journal of work, environment & health*, 1992, 18(6), pp. 351-360.

**VENA J.E., SULTZ H.A., FIEDLER R.C., BARNES R.E.** – Mortality of workers in an automobile engine and parts manufacturing complex. *British journal of industrial medicine*, 1985, 42(2), pp. 85-93.

**VINEIS P., DI PRIMA S.** – Cutting oils and bladder cancer. *Scandinavian journal of work, environment & health*, 1983, 9(5), pp. 449-450.

**WARSHAW E.M., HAGEN S.L., DEKOVEN J.G. ET AL.** – Occupational contact dermatitis in North American production workers referred for patch testing: retrospective analysis of cross-sectional data from the North American contact dermatitis group 1998 to 2014. *Dermatitis*, 2017, 28(3), pp. 183-194. Doi : 10.1097/DER.0000000000000277.

**WILKE A., GEDIGA G., GOERGENS A. ET AL.** – Interdisciplinary and multiprofessional outpatient secondary individual prevention of work-related skin diseases in the metalworking industry: 1-year follow-up of a patient cohort. *BMC Dermatology*, 2018, 18, p. 12. Doi : <https://doi.org/10.1186/s12895-018-0080-2>.

**WU B.G., KAPOOR B., CUMMINGS K.J. ET AL.** – Evidence for environmental-human microbiota transfer at a manufacturing facility with novel work-related respiratory disease. *American journal of respiratory and critical care medicine*, 2020, 202, pp. 1678-1688. Doi: 10.1164/rccm.202001-0197OC.

**ZHAO Y., KRISHNADASAN A., KENNEDY N. ET AL.** – Estimated effects of solvents and mineral oils on cancer incidence and mortality in a cohort of aerospace workers. *American journal of industrial medicine*, 2005, 48(4), pp. 249-258.

**ZHENG T., CANTOR K.P., ZHANG Y., LYNCH C.F.** – Occupation and bladder cancer: a population-based, case-control study in Iowa. *Journal of occupational and environmental medicine / American College of occupational and environmental medicine*, 2002, 44(7), pp. 685-691.