
**Publications récentes**

*Residential Exposure to Pesticide During Childhood and Childhood Cancers: A Meta-Analysis.*

**Exposition résidentielle aux pesticides pendant l'enfance et les cancers de l'enfant : une méta-analyse**

Chen M et al., Pediatrics. 2015 Oct

**CONTEXT:** There is an increasing concern about chronic low-level pesticide exposure during childhood and its influence on childhood cancers.

**OBJECTIVE:** In this meta-analysis, we aimed to examine associations between residential childhood pesticide exposures and childhood cancers. DATA SOURCES: We searched all observational studies published in PubMed before February 2014 and reviewed reference sections of articles derived from searches. STUDY SELECTION: The literature search yielded 277 studies that met inclusion criteria. DATA EXTRACTION: Sixteen studies were included in the meta-analysis. We calculated effect sizes and 95% confidence intervals (CIs) by using a random effect model with inverse variance weights. RESULTS: We found that childhood exposure to indoor but not outdoor residential insecticides was associated with a significant increase in risk of childhood leukemia (odds ratio [OR] = 1.47; 95% CI, 1.26-1.72; I(2) = 30%) and childhood lymphomas (OR = 1.43; 95% CI, 1.15-1.78; I(2) = 0%). A significant increase in risk of leukemia was also associated with herbicide exposure (OR = 1.26; 95% CI, 1.10-1.44; I(2) = 0%). Also observed was a positive but not statistically significant association between childhood home pesticide or herbicide exposure and childhood brain tumors.

**LIMITATIONS:** The small number of studies included in the analysis represents a major limitation of the current analysis.

**CONCLUSIONS:** Results from this meta-analysis indicated that children exposed to indoor insecticides would have a higher risk of childhood hematopoietic cancers. Additional research is needed to confirm the association between residential indoor pesticide exposures and childhood cancers. Meanwhile, preventive measures should be considered to reduce children's exposure to pesticides at home.
**Associations between self-reported pest treatments and pesticide concentrations in carpet dust.**

**Associations entre traitements aux pesticides autodéclarés et concentrations de pesticides dans les poussières des tapis.**

Deziel NC et al., Environ Health 2015 Mar

BACKGROUND: Recent meta-analyses demonstrate an association between self-reported residential pesticide use and childhood leukemia risk. Self-reports may suffer from recall bias and provide information only on broad pesticide categories. We compared parental self-reported home and garden pest treatments to pesticides measured in carpet dust.

METHODS: Parents of 277 children with leukemia and 306 controls in Northern and Central California (2001-2007) were asked about insect and weed treatments during the previous year. Carpet dust samples were analyzed for 47 pesticides. We present results for the 7 insecticides (carbaryl, propoxur, chlorpyrifos, diazinon, cyfluthrin, cypermethrin, permethrin), 5 herbicides (2,4-dichlorophenoxyacetic acid [2,4-D], chlorthal, dicamba, mecoprop, simazine), and 1 synergist (piperonyl butoxide) that were present in home and garden products during the study period and were detected in ≥25% of carpet dust samples. We constructed linear regression models for the relative change in pesticide concentrations associated with self-reported treatment of pest types in cases and controls separately and combined, adjusting for demographics, housing characteristics, and nearby agricultural pesticide applications.

RESULTS: Several self-reported treatments were associated with pesticide concentrations in dust. For example, households with flea/tick treatments had 2.3 (95% Confidence Interval [CI]: 1.4, 3.7) times higher permethrin concentrations than households not reporting this treatment. Households reporting treatment for ants/cockroaches had 2.5 (95% CI: 1.5, 4.2) times higher cypermethrin levels than households not reporting this treatment. Weed treatment by a household member was associated with 1.9 (1.4, 2.6), 2.2 (1.6, 3.1), and 2.8 (2.1, 3.7) times higher dust concentrations of dicamba, mecoprop, and 2,4-D, respectively. Weed treatments by professional applicators were null/inversely associated with herbicide concentrations in dust. Associations were generally similar between cases and controls and were consistent with pesticide active ingredients in these products during the study time period.

CONCLUSIONS: Consistency between self-reported pest treatments, concentrations in dust, and pesticides in products lends credibility to the exposure assessment methods and suggests that differential recall by case-control status is minimal.

**Coffee consumption and the risk of incident gastric cancer-A meta-analysis of prospective cohort studies.**

**Consommation de café et risque de cancer gastrique -Une méta-analyse d'études de cohortes prospectives**

Deng W et al., Nutr Cancer, 2015 Dec

As several epidemiological studies on the association of coffee consumption with gastric cancer risk have produced inconsistent results, this meta-analysis was designed to synthesize current evidence of this potential relationship. We searched PubMed, EMBASE, and the Cochrane Library up to September 2014 to retrieve relevant articles. Prospective cohort studies were included if the relative risks (RRs) or hazard ratios and 95% confidence intervals (CIs) for gastric cancer according to coffee consumption were reported. Fixed- or random-effects models were used based on heterogeneity. The search yielded 13 eligible cohort studies of 3484 incident gastric cancer patients from among 1,324,559 participants. A significantly increased risk was found between gastric cardia cancer and coffee consumption (RR = 1.50, 95% CI: 1.09-2.07). Compared with Europeans (RR = 1.12, 95% CI: 0.86-1.46) and Asians (RR = 0.96, 95% CI: 0.72-1.27), Americans (RR = 1.36, 95% CI: 1.06-1.74) demonstrated a significantly positive association. However, the significant differences of the pooled results vanished after adjusting for smoking or body mass index. Our meta-analysis results suggest that a high level of coffee consumption is a risk factor for gastric cancer. However, these results should not be overinterpreted because residual confounding effects of other factors could exist.
Body mass index, physical activity and quality of life of ovarian cancer survivors: time to get moving?

Indice de masse corporelle, activité physique et qualité de vie de patientes ayant eu un cancer de l'ovaire: c'est le moment de bouger?

Smits A et al., Gynecol Oncol 2015 Oct

OBJECTIVE:
To evaluate the association between body mass index (BMI), physical activity (PA) and the quality of life (QoL) of ovarian cancer survivors.

METHODS:
We performed a two-centre cross-sectional study of women who had been treated for ovarian cancer between January 2007 and December 2014 at the Royal Cornwall Hospital Trust and the Plymouth Hospitals NHS Trust. QoL was assessed using the EORTC QLQ-C30 and QLQ-OV28 questionnaires, and PA using the Godin Leisure Time Exercise questionnaire.

RESULTS:
In total, 293 ovarian cancer survivors were invited to participate, of which 209 women (71.3%) responded. Thirty-five percent of women were overweight and 18% were obese, whilst only 21% met recommendations for PA. Obesity was associated with significantly poorer global QoL, physical, cognitive and social functioning, a poorer body image and more symptomatology. Sedentary behaviour was associated with poorer QoL scores including global QoL, physical, role, social and sexual functioning. After adjustment, BMI and PA both remained independently associated with QoL scores.

CONCLUSION:
Obesity and inactivity are associated with poorer QoL among ovarian cancer survivors. Future interventions promoting PA and weight loss should be evaluated as possible means to improve the QoL of this population.

A review and meta-analysis of outdoor air pollution and risk of childhood leukemia.

Une revue et méta-analyse de la pollution de l'air extérieur et le risque de leucémie infantile.

Filippini T et al., J Environ Sci Health C Environ Carcinog Ecotoxicol Rev. 2015

Leukemia is the most frequent malignant disease affecting children. To date, the etiology of childhood leukemia remains largely unknown. Few risk factors (genetic susceptibility, infections, ionizing radiation, etc.) have been clearly identified, but they appear to explain only a small proportion of cases. Considerably more uncertain is the role of other environmental risk factors, such as indoor and outdoor air pollution. We sought to summarize and quantify the association between traffic-related air pollution and risk of childhood leukemia, and further examined results according to method of exposure assessment, study quality, leukemia subtype, time period, and continent where studies took place. After a literature search yielded 6 ecologic and 20 case-control studies, we scored the studies based on the Newcastle-Ottawa Scale. The studies assessed residential exposure to pollutants from motorized traffic by computing traffic density in the neighboring roads or vicinity to petrol stations, or by using measured or modeled nitrogen dioxide and benzene outdoor air levels. Because heterogeneity across studies was observed, random-effects summary odds ratios (OR) and 95% confidence intervals (CI) were reported. Whenever possible we additionally conducted stratified analyses comparing acute lymphoblastic leukemia (ALL) and acute myeloid leukemia (AML). Limiting the analysis to high-quality studies (Newcastle-Ottawa Scale ≥ 7), those using traffic density as the exposure assessment metric showed an increase in childhood leukemia risk in the highest exposure category (OR = 1.07, 95% CI 0.93-1.24). However, we observed evidence of publication bias. Results for NO2 exposure and benzene showed an OR of 1.21 (95% CI 0.97-1.52) and 1.64 (95% CI 0.91-2.95) respectively. When stratifying by leukemia type, the results based upon NO2 were 1.21 (95% CI 1.04-1.41) for ALL and 1.06 (95% CI 0.51-2.21) for AML; based upon benzene were 1.09 (95% CI 0.67-1.77) for ALL and 2.28 (95% CI 1.09-4.75) for AML. Estimates were generally higher for exposures in the postnatal period compared to the prenatal period, and for European studies compared to North American studies. Overall, our results support a link between ambient exposure to traffic pollution and childhood leukemia risk, particularly due to benzene.
Au Royaume-Uni, les autorités de santé anglaise ont pris la décision de revoir le seuil de consommation d’alcool qui restait inchangé depuis 1995. Ils ont abaissé le seuil à 14 unités par semaine, chez les hommes et les femmes. Cependant une abstinence totale durant toute la durée de leur grossesse est recommandée chez les femmes enceintes.
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