Overview of the epidemiologic studies on the health effects of ELF electric and magnetic fields (ELF-EMF) published in the first quarter of 2026.

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1. Reviews and meta-analyses

1.1 Recent Research on electromagnetic fields and Health Risk, twentieth report from SSM's Scientific Council on Electromagnetic Fields, 2025

Huss, A., Harbo, A., Sauter, C. et al. (2026).
https://www.stralsakerhetsmyndigheten.se/en/publications/reports/radiation-protection/2026/202603/

Background & Objective

The Swedish Radiation Safety Authority's (SSM) Scientific Council on Electromagnetic Fields monitors current research on potential health risks in relation to exposure to electromagnetic fields and provides the authority with advice on assessing possible health risks. The Council gives guidance when the authority must give an opinion on policy matters when scientific testing is necessary. The council is required to submit a written report each year on the current research and knowledge situation. This is a consensus report. This means that all members of the Scientific Council agree with the complete report. This increases the strength of the given conclusions.

The report has the primary objective of covering the previous year's research in the area of electromagnetic fields (EMF) and health but also to place this in the context of present knowledge. The report gives the authority an overview and provides an important basis for risk assessment.

Methods

This report reviews studies on electromagnetic fields (EMF) and health risks, published from January 2024 up to and including December 2024. The report is the twentieth in a series of annual scientific reviews, which consecutively discusses and assesses relevant new studies and put these in the context of available information. The report covers different areas of EMF (static, low frequency, intermediate and radio frequency fields) and different types of studies such as biological, human and epidemiological studies. The result will be a gradually developing health risk assessment of exposure to EMF.

Results

- No new established causal relationships between EMF exposure and health risk have been identified.
- The studies presented in this report do not resolve whether the consistently observed association between ELF magnetic field (ELF-MF) exposure and childhood leukaemia in epidemiology is causal or not.

Conclusion

Despite the fact that no health risks associated with weak electromagnetic fields have been demonstrated up to date, the authority considers that further research is important, in particular regarding long-term effects as more or less the entire population is exposed.

1.2 Health Effects of Extremely Low-Frequency Electromagnetic Field Exposure From High-Voltage Power Lines and Substations: A Scoping Review of Primary Empirical Research

Todorovic, P., Vukojevic, K., Matjaca, D. et al. (2026). IEEE Access, 14, 38447-38459. https://doi.org/10.1109/ACCESS.2026.3671962

Background & Objective

This scoping review descriptively maps primary empirical research on associations between extremely low frequency electromagnetic field (ELF-EMF) exposure from high-voltage transmission lines (≥110 kV) and substations and health outcomes, without establishing causality.

Methods

The authors searched Web of Science, Scopus, and EMF Portal for epidemiological and experimental studies. Studies with mixed EMF sources or aggregated Job Exposure Matrix approaches were excluded.

Results

A total of 51 primary studies from 1979-2025 were included, spanning 46 years across >20 countries on five continents. Study designs included case-control (n=28, 55%), cohort (n=10, 20%), cross-sectional (n=10, 20%), experimental (n=1, 2%), case report (n=1, 2%), and pooled analysis (n=1, 2%). The most frequently investigated outcomes were childhood leukemia (41%), neuropsychological symptoms (18%), adult cancers (16%), reproductive outcomes (8%), and neurodegenerative diseases (6%). Regarding association direction, 24 studies (47%) reported positive associations, 18 studies (35%) reported null findings, and 9 studies (18%) reported weak or mixed results.

Conclusion

The most consistently reported positive associations emerged for childhood leukemia, with relative risks of 3.8–5.1 at magnetic field exposures ≥0.3–0.5 μT, consistent with the IARC classification of ELF magnetic fields as ‘‘possibly carcinogenic to humans’’ (Group 2B). Suggestive associations have been reported for neuropsychological outcomes. Associations for adult cancers and reproductive outcomes remain limited or inconsistent. Associations for neurodegenerative diseases are limited, with suggestive findings for Alzheimer’s disease but insufficient data for other conditions. Critical research gaps include absence of studies from southeastern Europe, Eastern Europe, Africa, South Asia, and China, highlighting a foundation for prioritizing future research and informing public health policy.

Limitations

This scoping review has several limitations. Regarding study identification, the strict ‘‘clean source’’ inclusion criteria, while essential for addressing the specific research question, excluded numerous studies with mixed exposure sources that may contain relevant information. Regarding synthesis, the considerable heterogeneity of included studies in terms of exposure assessment methods, health outcomes investigated, and study designs precluded quantitative pooling of reported associations and limited the comparability of findings across studies. Publication bias may affect the available literature, though the inclusion of null findings suggests this is not severely distorting the overall picture.

2. Residential exposure

2.1 Long-term residential magnetic field exposure and neurodegenerative disease mortality: An 18-year nationwide cohort study in Switzerland

Sandoval-Diaz, N.,Loizeau, N., Huss, A. et al. (2026). Environmental International, 208: 110145.
https://doi.org/10.1016/j.envint.2026.110145

Background & Objective

Epidemiological evidence on the association between extremely low-frequency magnetic fields (ELF-MF) exposure and neurodegenerative diseases (NDD) remains inconsistent. Few population-based studies using exposure from high-voltage power lines (HVPL) have found mixed findings, and none have yet considered exposure from railway lines.

Methods

The authors followed 3,555,064 adults from the Swiss National Cohort (2001–2018), contributing 55.4 million person-years. Long-term ELF-MF exposure from HVPL (50 Hz) and railway lines (16.7 Hz) was modelled using validated proximity models and updated over four intervals (2001–2005, 2006–2010, 2011–2015, 2016–2018). Long-term ELF-MF exposure was calculated as a time-weighted average exposure over 10-year windows preceding each interval. Cox proportional hazards models estimated hazard ratios (HRs) for mortality from Alzheimer's disease (AD), other types of dementia (OTD), amyotrophic lateral sclerosis (ALS), Parkinson's disease (PD), and multiple sclerosis (MS), adjusting for sociodemographic and environmental co-exposures.

Results

During follow-up, 146,655 NDD deaths occurred. Less than 1% of the population was exposed to longterm ELF-MF ≥ 0.3 μT from HVPL and 2.4% from railway lines. HVPL exposure was positively associated with mortality from AD (HR per 1 μT increase in exposure = 1.54; 95% CI: 1.23–1.92) and OTD (HR = 1.31; 95% CI: 1.13–1.52). Associations for railway exposure were weaker and attenuated after adjusting for environmental co-exposures. No associations were observed for ALS, PD, or MS.

Conclusions

Long-term ELF-MF exposure was associated with higher dementia mortality risk in the general population, but not with ALS, PD, or MS. Causal inference remains limited by the absence of established biological mechanisms.

Limitations

Within the limitations of this study, exposure misclassification is an important aspect to consider. First, data on power transmission and railway grids were not available for different years, so time-varying exposure only accounted for residential mobility and not for changes in the infrastructure of the lines.

In Switzerland, power and railway grids are long-established networks, so any changes throughout follow-up likely did not introduce large exposure misclassification. Second, the exposure assessment approach relied on proximity models that used distance as a proxy for ELF-MF exposure, without considering other factors related to magnetic field generation. However, there is no reason to believe that this measurement error differed by outcome status. Thus, the true exposure would be the result of the predicted value plus a nondifferential (Berkson-type) measurement error, which would increase uncertainty with wider confidence intervals but not introduce bias in the association estimates (Yland et al., 2022). When exposure was categorised to explore non-linear patterns, non-differential misclassification between adjacent categories may have biased the estimates toward one another (Lash et al., 2021). This could explain the higher risks observed for intermediate exposure categories and the absence of a consistent higher risk for the ≥ 0.3 μT (or ≥ 0.4 μT) category. The magnitude of bias depends on the proportion of misclassified individuals (Yland et al., 2022). Because few individuals were exposed to high levels, estimates for low exposure categories are likely correct, whereas estimates for the highest category may underestimate the true association (Birkett, 1992). Lastly, the authors did not account for occupational exposure to ELF-MF, which may be an important predictor of the outcomes. However, because the relationship between occupational and residential ELF-MF exposure is not well characterised, it is unclear how this might have influenced the observed associations.

The authors relied on mortality data to assess the risk of neurodegenerative diseases, so outcome misclassification is another potential limitation of this study. It is well known that dementia and Parkinsońs disease are often underreported on death certificates (Ganguli & Rodriguez, 1999; Romero et al., 2014), while ALS and multiple sclerosis are expected to be well documented (Horrocks et al., 2017). Underreporting of dementia mortality could, in principle, be differential if it is related to socioeconomic position, since individuals with higher socioeconomic position are more likely to be diagnosed with dementia (Holm et al., 2022). Because socioeconomic position may also be associated with ELF-MF exposure, with wealthier individuals tending to be less exposed (Schüz et al., 2000), underreporting would likely be more common among those with higher exposure. This would bias the estimates towards the null. Including socioeconomic position and education level in the models did not materially change the results, therefore any remaining differential outcome misclassification is likely to be limited. Residual confounding by socioeconomic position, lifestyle factors, family history, or other unmeasured environmental exposures can never be fully ruled out. However, analyses using negative control outcomes did not show consistent associations, so substantial residual confounding by main lifestyle factors like alcohol consumption or smoking is unlikely. While confounding by another environmental factor remains possible, the E-values indicate that a confounder would need to have at least moderate to strong associations with both exposure and outcome to fully explain the observed associations. Such strong correlational relations are rare in environmental epidemiology, making it unlikely that unmeasured environmental factors entirely explain the results.

2.2. Emotional Well-Being and Environmental Sensitivity: The Case of ELF-MF Exposure

Raz-Steinkreycer, L.S., Gelberg, S., Portnov, B.A. (2026). Sustainability, 18, 620.
https://doi.org/10.3390/su18020620

Background & Objective

Extremely low-frequency magnetic fields (ELF-MF) generated by high-voltage power lines raise concerns about their potential impact on health and well-being. Previous research suggests that chronic exposure to ELF-MFs can contribute to sleep disturbances, headaches, and mood disorders, possibly through physiological stress responses and melatonin disruption. This study examines whether self-reported happiness mediates the relationship between exposure to ELF-MFs and health symptoms among people living near a 161 kV transmission line in the city of Or Akiva in Israel.

Methods

A total of 427 participants completed questionnaires on physical symptoms and life satisfaction, while fixed-site ELF-MF measurements were conducted at and around homes. The structural equation modelling (SEM) was then applied to assess the direct and indirect effects of exposure to ELF-MFs, complemented by logistic regressions for confounder analysis.

Results

The results indicate that higher exposure to ELF-MFs was associated with lower happiness and increased symptoms, including poor sleep and reduced mobility ($p < 0.05$). On the contrary, greater happiness was correlated with fewer headaches, better sleep quality, improved mobility, and reduced perceived need for medical care ($p < 0.01$). Mediation analysis also revealed that happiness partially buffers the adverse effects of ELF-MFs on headaches, mood, and sleep problems ($p < 0.05$).

Limitations

There are several limitations to consider. First, the study's cross-sectional design means the authors cannot establish causality or directionality unequivocally. It was hypothesized that ELF-MF exposure leads to lower happiness and worse health, but it is also conceivable that individuals with poor health or certain negative dispositions might, for example, perceive their environment more negatively or report lower happiness (reverse causation). The use of objective exposure measurements helps mitigate the concern that it is all perception-based, but it cannot fully untangle cause and effect with a one-time survey. Longitudinal or experimental studies (e.g., interventions to increase happiness, or following people before and after changes in exposure) would be needed to confirm the causal mediation effect. Since this study is an epidemiological survey, it did not involve clinical laboratory tests or invasive electrical inspections of private homes. In future studies, measures of oxidative stress, along with antioxidant concentrations and other biochemical markers, could be assessed using non-invasive saliva tests. Additionally, investigating the role of grounding currents in plumbing as a potential source of magnetic fields would strengthen the interpretation of findings.

Second, all health symptoms and happiness were self-reported, which introduces the possibility of reporting bias. People who are unhappy might over-report symptoms, or those with many symptoms might rate themselves as unhappy—a form of common method variance that could inflate associations. The authors attempted to address this by using SEM (which can account for measurement error to some extent) and by controlling for numerous covariates, but self-report bias remains a consideration. Relatedly, our measurement of happiness was a single-item scale. While this simple measure has the advantage of brevity and was straightforward for participants, a multi-item validated well-being scale (e.g., the Satisfaction with Life Scale or a positive affect scale) could capture the construct more reliably. That said, the single happiness item did show expected correlations with known determinants (for instance, it was higher among those without chronic illness and among those who exercised more), lending some credibility to it. While happiness has been shown to predict lower morbidity and increased longevity, it is important to acknowledge that health itself may influence happiness, suggesting a potential bidirectional relationship between affect and health. In the mediation model, happiness was conceptualized as a mediator; however, reverse causality remains plausible. For example, individuals experiencing chronic headaches or insomnia may become unhappy as a consequence of their health condition, rather than (or in addition to) unhappiness contributing to the onset of such symptoms. The cross-sectional data cannot disentangle this. Future studies might use cross-lagged panel designs or intervention experiments (e.g., deliberately improving happiness through an intervention and observing if health complaints subsequently drop) to sort out the direction of effects.

Another limitation is the specific sample and setting: a single town with a particular infrastructure layout (one major power line through a residential area). The generalizability of our quantitative estimates may be limited; however, the fundamental relationships observed should be applicable in other communities near power lines, even if the effect sizes vary. Cultural factors or individual differences in risk perception could moderate how strong the happiness–health connection is in different contexts—for instance, if a community is very aware of and fearful about power line radiation, that might amplify stress and diminish happiness more than in a community that is less concerned.

3. Occupational exposure

3.1 Quality of life and physical activity levels of musculoskeletal disorders in workers exposed to high and low frequency magnetic fields: A comparative study

Cankaya, M., Cingöz, H.T. (2026). Work: A Journal of Prevention, Assessment and Rehabilitation, 1–13. https://doi.org/10.1177/10519815251414411

Background & Objective

The increased use of electronic devices and technological advances has led to greater exposure to electromagnetic fields (EMF) in various occupational environments. The study's objective was to assess the effect of work-related musculoskeletal disorders (WMSD) on the quality of life and physical activity levels of individuals exposed to low-frequency magnetic fields.

Methods

The subjects were evaluated by a physiotherapist or a physical medicine and rehabilitation physician. In this comparative study, hospital workers and welding workers working in the company (Konya) who were exposed to EMF were included. These participants came to the physiotherapy unit of State Hospital between September 2024 and April 2025. The following were assessed: musculoskeletal symptoms in the last 12 months (using the Extended Nordic Musculoskeletal Questionnaire Version (ENMQ) and the Cornell Musculoskeletal Discomfort Questionnaire (CMDQ), working posture (Ovako Working Posture Analysis System (OWAS), physical activity level (International Physical Activity Questionnaire Short Form (IPAQ-Sf), and quality of life (World Health Organization Quality of Life Scale (WHOQOL-Bref).

Results

A total of 120 participants between the ages of 18–56 years, with HF-MF (n=40), LF-MF (n =40), and a control group consisting of employees not exposed to magnetic fields (n= 40), were included in the study. The mean age of one hundred and twenty EMF exposed workers was 37.44±9.16 years. The highest prevalence rate of ENMQ in the last 12 months was 77.5% (n =31) in the low back region and 50% (n =20) in the shoulder region in those exposed to high-grade magnetic fields. The mean scores of WHOQOL-Bref were given for those exposed to high and low magnetic fields and those not exposed to magnetic fields (M ±SD: 63.51±8.35; 73.27±9.37; 76.43±8.43, respectively).

Conclusion

The prevalence of WMSD in workers was found to be highest in the low back, shoulder, and hand region in HF-MF workers. LF-MF group, the highest concentration was found to be highest in the neck region. Prevalence rates have been reported for different body sites, with the highest prevalence rates observed in the group exposed to HFMF. Quality of life was found to be lower in the group exposed to HF-MF.

Limitations

The individual exposure of workers to magnetic fields was not measured or assessed, but based on their job. This poses a serious limitation in this study. Next to this, other sources of exposure were not included – another crucial limitation to be considered. No confounding elements were examined, which can heavily influence the outcomes in this study. Overall, the quality of this research is substandard and does not permit such bold conclusions.

4. Exposure Assessment

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5. Leukaemia Studies

5.1 Gasoline stations and risk of childhood cancer: a population-based cohort study in Quebec, Canada

Brizard, F., Auger, N., Smargiassi, A. et al. (2026). Environmental Pollution, 394. https://doi.org/10.1016/j.envpol.2026.127737

Background & Objective

Gasoline (petrol) stations emit benzene and other volatile organic compounds (VOCs) into ambient air, potentially increasing childhood cancer risk, though epidemiological evidence remains limited. The authors of this study investigated whether residential proximity to gasoline stations at birth was associated with childhood cancer incidence.

Methods

A population-based cohort study of 824,414 newborns in Quebec, Canada was conducted. The authors constructed three exposure metrics at the birth residence: A) number of gasoline stations within 250 m; B) distance to the nearest gasoline station; C) sum of inverse distances to all gasoline stations within 500 m categorized as quartiles. Associations with any cancer, any leukemia, and acute lymphoblastic leukemia (ALL) were estimated using Cox models adjusted for potential confounders. Higher childhood cancer risks were suggested when at least one gasoline station was within 250 m of the residence, with risk increasing as the distance to the nearest station decreased.

Results

For newborns residing within 100 m of a gasoline station, adjusted hazard ratios (HRs) were 1.14 (95 % CI: 0.80–1.63) for any cancer, 1.35 (0.74–2.47) for leukemia and 1.27 (0.63–2.59) for ALL, compared to those with no station within 500 m. When excluding Montreal where gasoline stations must control vapor emissions, HRs were 1.42 (0.93–2.18) for any cancer and 1.55 (0.72–3.30) for leukemias. For exposure metric C, the HR for the highest exposure quartile compared to those unexposed was 1.34 (1.01–1.77) for leukemia and 1.34 (0.97–1.84) for ALL.

Conclusion

Residential proximity to gasoline stations may increase the risk of childhood cancer, particularly leukemia, supporting measures to limit VOC emissions

5.2 Reported industrial air emissions and childhood cancer incidence in Alberta, Canada, 2003-2019: A population-based matched case-control study

Syer, J., Nielsen,C.C., Yamamoto, S.S., Vargas, A.O. (2026). International Journal of Hygiene and Environmental Health, 274. https://doi.org/10.1016/j.ijheh.2026.114769

Background & Objective

Childhood cancer (CC) is the highest mortality-causing disease for children under 15 years, and the incidence in Canada is increasing. Air pollution has been associated with the development and progression of CC, but the role of spatiotemporally varying industrial sources is understudied. The authors assessed the association between industrial air emissions and CC by performing a population-based matched case-control study in Alberta, Canada.

Methods

Using a nationwide database, the authors studied 1320 children ages 0-14 with a primary CC diagnosis from 2003 to 2019. Each case was matched to six controls based on birth month, year, and sex from provincial birth records. Industrial air emissions were linked to participant postal codes using a wind-based exposure assessment. Chemicals were aggregated into six groups based on reporting requirements as monthly averages beginning one year before birth until the month of diagnosis. Using conditional logistic regression models (CLR) the authors analyzed all cancers and subgroups for leukemias, lymphomas, CNS tumours, and other cancers.

Results

This analysis included 1320 cases and 7920 controls. In adjusted CLR models, the authors found positive associations in models combining all cancers for multiple groups, notably: core substances (Q4 OR = 3.22, 95% CI: 2.60-4.00), alternate threshold substances (Q4 OR = 1.77, 95% CI: 1.44-2.17), criteria air contaminants (Q4 OR = 6.06, 95% CI: 4.87-7.55), and speciated volatile organic compounds (Q4 OR = 2.52, 95% CI: 2.04-3.10). They did not find evidence of a different effect on CC types.

Conclusion

Emissions from industrial sources may be worth considering as additional air pollutants in CC research.

Limitations

The primary limitation of the use of postal codes as a proxy for exposure and that the researchers did not measure chemicals using monitors, on the person, or in the body (i.e. biomarkers). With the use of wind data the sought to reduce exposure misclassification by weighing the exposure according to the frequency with which the wind blew in the direction of children's residence and their distance from facilities. This approach had the advantage of retaining tonnes as units and simplifying our results. The authors also assumed chemicals were emitted evenly throughout the year, which may under- or overestimate exposures in some months. For the part groups, an equivalent toxicity for each tonne of

a chemical within their respective group was assumed, as the authors prioritized grouping chemicals according to reporting criteria. The authors do not necessarily advocate grouping and aggregating chemicals in this way as they may not optimally characterize actual exposure. Reported emissions may be less accurate than air monitoring, and therefore advanced statistical methods that more optimally model chemical mixtures are unlikely to overcome any mischaracterization of the exposure, given this limitation.

The sensitivity analysis excluding participants who required imputed pre-2003 averages retained the associations, although weaker, likely due, in part, to a smaller sample. Conversely, unmeasured confounding is a key limitation of this study, which could be due to missing child and parental level variables, including age, ethnicity, occupation, lifestyle factors (e.g. diet, exercise, weight), genetic information, infection history, and measures of ionizing radiation, household smoking, and alcohol use. Another aspect of unmeasured confounding could be the lack of control for broader temporal trends. The study period sensitivity analysis did not indicate differences between study periods, but the authors do suggest future research employ time series study designs to capture any effects from broader temporal trends, as this study design is limited in this regard; notably, that statistical power is lost when stratifying by time.

Another key limitation of this study is the lack of residential history data across our exposure windows.

5.3 Maternal hormonal contraception use and childhood cancer risk: a systematic review and meta-analysis

Carlsen, S.E., Jarden, E., Hemmingsen, C.H. et al. (2026). European Journal of Epidemiology, 41:135–147 https://doi.org/10.1007/s10654-025-01335-5

Background & Objective

Observational studies have linked maternal hormonal contraception use to childhood cancer risk, but findings are inconsistent. A systematic review was conducted of this potential relationship.

Methods

A systematic search was performed in PubMed, Embase, Scopus, Cochrane, and Web of Science databases until April 9, 2025. Studies reporting maternal hormonal contraception use before or during pregnancy and childhood cancer risk (0–19 years) were eligible. The authors included studies providing risk estimates in English or Scandinavian languages. Newcastle-Ottawa Scale was used to assess study quality. Meta-analysis using fixed and random effects was used to pool relative risks (RRs) with 95% confidence intervals (CIs) for childhood cancer according to maternal hormonal contraception use (1) up to or during pregnancy, and (2) exclusively during pregnancy.

Results

The authors included 27 studies (24 case-control and 3 cohort), totaling 11,067 childhood cancer cases. Maternal hormonal contraception use up to and during pregnancy increased risk of any childhood

cancer (RR=1.18; 95% CI=1.10–1.26), leukemia (RR=1.24; 95% CI=1.06–1.45), and lymphoid leukemia (RR=1.17; 95% CI=1.06–1.28). Exposures during pregnancy showed higher risk estimate for any cancer (RR=1.32; 95% CI=1.12–1.56) and leukemia (RR=1.63; 95% CI=1.07–2.49). Most studies were moderate (70%) or high (26%) quality.

Conclusion

Maternal hormonal contraception use may increase childhood cancer risk, particularly for leukemia, and during pregnancy. Further prospective studies are needed, focusing on specific hormonal contraception substances and exposure timing.

5.4 Traffic-related air pollution and childhood acute leukemia in France: GEOCAP nationwide case-control study

Salmon, C., Some, A., Jacquemin, B. et al. (2026). Environmental Research, 288. https://doi.org/10.1016/j.envres.2025.123303

Background & Objective

Outdoor air pollution and particulate matter (PM) have been classified as carcinogenic to humans, and benzene exposure is known to increase the risk of leukemia in adults. Yet the evidence regarding childhood leukemia remains inconclusive. In this study, the authors sought to investigate whether traffic-related air pollution increases the risk of acute lymphoblastic leukemia (ALL) and acute myeloid leukemia (AML).

Methods

Data from GEOCAP, an ongoing population-based case-control study conducted in France, was used. It includes 4611 ALL and 830 AML cases, diagnosed between 2002 and 2013 and identified through the French national registry of childhood cancer, and 60,189 contemporaneous controls representative of the French pediatric population. Annual average exposures to nitrogen dioxide (NO2), fine PM (PM2.5) and Black Carbon (BC) at the geocoded address of residence at diagnosis for cases and inclusion for controls were estimated using land-use regression models. The authors also evaluated major roads length within 150 m of the geocoded addresses. Polytomous logistic regression was used to derive odds ratios (ORs) and 95 % confidence intervals (CI).

Results

Increased risks of AML were found with NO2 (OR per 10 µg/m3 = 1.09, 95 %CI = 1.03–1.15), PM2.5 (OR per 5 µg/ m3 = 1.09, 95 %CI = 1.01–1.18) and BC exposures (OR per 0.5 10-5/m = 1.09, 95 %CI = 1.03–1.16). The length of major roads within 150 m of the residence was also associated with AML risk (OR per 300 m = 1.13, 95 %CI = 1.03–1.25). These increases in risk were more pronounced in the most urbanized areas. For ALL, inverse associations were suggested.

Conclusion

This study provides further evidence supporting a role of traffic-related air pollution in AML risk in children.

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