UNITED STATES DISTRICT COURT NORTHERN DISTRICT OF NEW YORK

MICHELE BAKER; CHARLES CARR; ANGELA CORBETT; PAMELA FORREST; MICHAEL HICKEY, individually and as parent and natural guardian of O.H., infant; KATHLEEN MAIN-LINGENER; KRISTIN MILLER, as parent and natural guardian of K.M., infant; JENNIFER PLOUFFE; SILVIA POTTER, individually and as parent and natural guardian of C.P, infant; and DANIEL SCHUTTIG, individually and on behalf of all others similarly situated,

Plaintiffs,

CIV. No. 1:16-CV-917 (LEK/DJS)

v.

SAINT-GOBAIN PERFORMANCE PLASTICS CORP., HONEYWELL INTERNATIONAL INC. f/k/a ALLIED-SIGNAL INC. and/or ALLIEDSIGNAL LAMINATE SYSTEMS, INC., E.I. DUPONT DE NEMOURS AND COMPANY and 3M CO.,

Defendants.

DECLARATION OF DAVID A. SAVITZ, Ph.D.

I, David A. Savitz, declare and state as follows:

- 1. I prepared the Expert Report attached as Exhibit A to this Declaration.
- 2. Each of the opinions in the Expert Report is stated to a reasonable degree of scientific certainty and was arrived at using reliable and generally accepted scientific methods.
- 3. If called as a witness, I will testify competently to the matters stated in this Expert Report.
- 4. I declare under penalty of perjury under the laws of the United States of America that the foregoing is true and correct.

Dated: March 14, 2020

Jul A. Serg

DAVID A. SAVITZ, Ph.D.

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EXHIBIT A

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UNITED STATES DISTRICT COURT NORTHERN DISTRICT OF NEW YORK

IN RE HOOSICK FALLS PFOA CASES

Case No. 1:19-mc-00018-LEK-DJS

EXPERT REPORT OF DAVID A. SAVITZ, PH.D.

I. PRIOR TESTIMONY AND COMPENSATION

I have not testified as an expert at a trial or deposition in the past four years. My rate of compensation is \$400 per hour.

II. QUALIFICATIONS & RELEVANT EXPERIENCE

I am Professor of Epidemiology at the School of Public Health and Professor of Obstetrics and Gynecology and Pediatrics at the Warren Alpert Medical School of Brown University in Providence, RI. A copy of my C.V. is attached as Exhibit A. I received my Ph.D. in epidemiology from the University of Pittsburgh's Graduate School of Public Health in 1982 and have had academic appointments at several academic institutions since 1981. Throughout my career, I have served as the Principal Investigator on approximately 40 public health studies and have been an author on more than 350 articles in the peer-reviewed, scientific literature and more than 20 book chapters.

I have extensive experience analyzing the health effects of PFOA in humans. I have published thirteen scientific papers in the peer-reviewed literature regarding PFOA health effects, most focused on health effects related to pregnancy and children, which are listed and highlighted in Exhibit A. I was asked to serve as a Peer Reviewer of the June 2018 Draft Toxicological Profile for Perfluoroalkyls (a class of chemicals that includes PFOA) by the United States Department of Health and Human Services, Agency for Toxic Substances and Disease Registry (ATSDR).¹ I recently chaired a scientific panel to advise the State of Michigan Science Advisory Panel on addressing the health and environmental concerns related to perfluoroalkyl substances (PFAS) exposure and provided a report entitled "Scientific Evidence and Recommendations for Managing PFAS Contamination in Michigan ² I was also one of three epidemiologists chosen to serve on the

¹ https://www.atsdr.cdc.gov/toxprofiles/tp200.pdf

² https://www.michigan.gov/documents/pfasresponse/Science_Advisory_Board_Report_641294_7.pdf.

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C8 Science Panel to evaluate the probable causal link between exposure to PFOA and the development of certain diseases.

I provide this report in support of plaintiffs' Motion for Class Certification.

III. BACKGROUND ON EPIDEMIOLOGY

Epidemiology is the study of the patterns and determinants of disease in human populations, seeking an understanding of the causes of disease in order to determine needed actions to improve the health of the public. As trained epidemiologists, we conduct and review studies of populations first to determine whether there is evidence indicative of a statistical association between some potentially causative agent and a human illness or condition. This typically requires comparing the frequency of disease in a group that has relatively elevated exposure to the frequency of disease in a group that has a lower level of exposure.

When we determine those who are more highly exposed have an elevated risk of disease relative to those who are not, we conduct analyses needed to make an informed judgment regarding whether it is likely that the exposure has in fact caused an elevated risk of disease. While this cannot be proven with 100% certainty, the field of epidemiology has developed clear principles and methodologic tools to make a reasoned, scientifically grounded judgment. By considering alternative explanations of the association, including biases and random error, and conducting analyses to address those alternative explanations, the case for a causal interpretation can be strengthened or weakened, depending on what is found. I co-authored a book devoted to practical strategies for making such inferences in a methodical, transparent, informative manner. (Savitz DA, Wellenius GA, Interpreting Epidemiologic Evidence: Connecting Research to Applications. New York: Oxford University Press, 2016.)

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The question of causality is central to epidemiology since the study of statistical associations alone without evaluating the causal significance offers no guidance for methods of preventing disease to improve public health. There is a continuum of evidence that can support causal inferences, with the example of smoking and lung cancer being one for which the evidence of a causal effect is compelling yet for many years was challenged with the simplistic mantra "correlation is not causation." The judgment to be made is whether the evidence of an association is or is not likely to reflect a causal impact. While scientific certainty of causality is difficult to establish with any exposure and may take decades of study to reach this level, epidemiologists are able to make informed use of available data to address questions of causality. By considering the body of scientific evidence and interpreting it with an appreciation of the underlying methodologic strengths and limitations, reliable judgments can be made, including when a causal link is more likely than not to be present.

An important point that needs to be emphasized is that in epidemiology, a negative study, i.e., a study that does not show a statistically significant association between an exposure and a specific illness, also needs to be scrutinized for its validity in suggesting there is no association. Just as for a positive indication of an association, studies that generate an absence of association are subject to biases and random error that can generate a false negative finding, i.e., failing to find an association even when a causal effect is truly present. There is no reason to automatically accept "lack of correlation" as a clear indicator of "no causal effect" any more than to accept "presence of correlation" as a clear indicator of "causal effect present." The interpretation of either result calls for a thorough assessment. An overall assessment considers the full range of relevant studies. Negative studies may reflect insufficient statistical power to detect associations due to

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small populations or limited range of exposure, a particular challenge in studying rare diseases like cancer. Studies that do not measure exposure accurately are also more likely to fail to detect a true association that may be present, with the error in exposure estimation tending to shift measures of association towards the null value (showing little or no association).

Epidemiologists cannot ethically conduct experiments with controls where one group of people is intentionally exposed to a suspected toxic agent while a control group is not and then follow these groups to compare how many from each group develops a particular disease. Epidemiologists must instead study groups that have already been exposed to assess the incidence of disease in comparison to an unexposed population to determine whether those who were more highly exposed to the toxic substance have a greater risk of disease than those not exposed. Epidemiologists may study occupational exposures, where people in a particular occupation are exposed through their work to a suspected toxicant, or community exposures, which are often more difficult to study because of the challenge in measuring exposure and possible confounders that may be associated with exposure. For this reason, the C8 Health Project was unique in that it enabled the study of nearly 70,000 people whose exposure was markedly elevated in some cases and could be reconstructed given the well-defined source of contamination. The extensive data collection on this large, highly exposed population substantially advanced our understanding of the potential human health effects of elevated exposure to PFOA.

IV. PFOA EXPOSURE IN HUMANS

C8 is a name given to perfluorooctanoic acid (PFOA), a man-made chemical used in manufacturing various consumer products including non-stick cookware, protective finishes on carpets and fabrics as well as water-resistant clothing. DuPont's West Virginia Washington Works Plant in southwest Parkersburg released PFOA into the air and Ohio River from the 1950s until

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the early 2000s. C8 reached drinking water supplies by entering the groundwater and was detected in six water districts near the DuPont plant in 2002. A class action lawsuit brought by the communities against DuPont resulted in a Settlement Agreement in the Wood County Circuit Court. As part of that settlement, Brookmar Inc., an independent company, was set up and conducted a year-long survey (August 2005 - July 2006) called the C8 Health Project. The C8 Health Project gathered information through interviews and questionnaires and collected blood samples from about 69,000 people living near the Washington Works plant in West Virginia. The settlement also established that a group of public health scientists would assess whether or not there is a probable link between PFOA exposure and disease in the community. The members of the Science Panel were jointly selected by the lawyers for the community and DuPont. The C8 Science Panel consisted of Dr. Tony Fletcher of the London School of Hygiene and Tropical Medicine, Dr. Kyle Steenland of Emory University in Atlanta and myself. We were chosen because of our extensive experience designing and carrying out environmental health studies and the view of the parties in the settlement that we would be able to objectively generate and evaluate the evidence. We came to the C8 Science Panel as independent epidemiologists--scientists trained in gathering information to evaluate whether environmental factors may or may not be causing disease in groups of people and remained independent and neutral throughout. The settlement paid for our work but the parties to that case did not direct what we did or how we did it. We had no preconceived notion as to whether or not C8 exposure affected human health.

The first stage of our work was compiling what was known from the research of others regarding health effects of PFOA and designing and implementing the new research needed to make an informed assessment about possible health effects. These new studies on exposure to PFOA and health were conducted in the communities in the Mid-Ohio Valley. As these studies

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were completed, we shared the results with the Court overseeing the settlement, the community of the Mid-Ohio Valley, and scientists. These results became available at different times, not all at once, and were shared as they became available. The Panel emphasized the results of these studies provided background and valuable information for making an evaluation of whether there is or is not a probable link between PFOA exposure and any disease, but that evaluation was a separate phase of the Science Panel's work.

Following the research studies the next task was to make a judgment regarding the evidence of a causal link between PFOA and the risk of developing a disease. The Settlement Agreement between the plaintiffs and the defendant DuPont required the Science Panel determine whether there is or is not a probable causal link between PFOA exposure and any disease. This determination was to be based on health research carried out by the Science Panel in the Mid-Ohio Valley population exposed to PFOA, as well as other published scientific research which could help in that assessment. Once all the studies concerned with a specific disease were completed, shared with the court, and made public, we combined those findings with those of studies done by others, including laboratory research, to make our assessment of whether or not there is a probable link between C8 exposure and that illness. The research results and the assessment of whether there is a probable causal link were completed at different times for different illnesses. Our interpretation and judgment regarding the concept of "probable link" was based on the potential for a causal influence of PFOA, taking into account whether observed associations were more likely to be due to some bias or artifact versus due to a causal effect of PFOA. When we came to the conclusion that a causal effect was more likely to be responsible, even if only slightly more likely, we determined that a probable link was present.

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To make this determination, we considered the full range of available evidence, including the research we conducted, epidemiologic studies previously reported, and toxicology of these chemicals. Where associations were identified, we examined the likelihood that they reflected a cause and effect relationship versus a spurious correlation due to reverse causality or some other influences on disease risk. These are standard, well-accepted principles in making a judgment about the potential for an exposure to affect risk of disease used by epidemiologists As a result of the above analyses, the C8 Science Panel came to the conclusion there Is a probable causal link between PFOA exposure and six human diseases and conditions: kidney cancer, testicular cancer, ulcerative colitis, thyroid disease, hypercholestolemia and pregnancy induced hypertension (preeclampsia). It is important to note that in performing our assigned task the C8 Science Panel was instructed to focus only on disease, not on changes in biomarkers that could potentially be used to predict future disease. For example, as a result, we analyzed whether PFOA caused the recognized condition of "hypercholesterolemia" but not whether it generally resulted in elevation of cholesterol levels that did not yet rise to the level required to diagnose hypercholesterolemia. Similarly, the C8 Science Panel did not analyze whether elevated liver enzymes levels or uric acid levels were associated with PFOA exposure. However, other researchers have addressed these associations as described in more detail below and have concluded that there is likely to be a causal link to these elevated biomarkers as well.

For this report, I updated the research done by the panel regarding probable causal links between PFOA exposure and human disease and provide my opinions on this topic below. My opinions have been reached to a reasonable degree of scientific certainty and are based on my work on the C8 Panel, my review of the scientific literature performed before, during and after the

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completion of that work³, and my education, training and experience in the field of epidemiology. The methodology I employed here to review the scientific literature and reach the opinions below is the same methodology I use daily as an epidemiologist. I describe this methodology above in the Background on Epidemiology section.

Thyroid disease – There is support in the scientific literature for a causal link between cumulative PFOA exposure and thyroid disease, specifically hyperthyroidism and hypothyroidism. Based upon my evaluation of this research, and the collective opinion of the C8 Science Panel, it is more probable than not that exposure to PFOA is capable of causing thyroid disease in human. This causal relationship is supported by research done as part of the C8 Health Project (116)⁴, with some support from the analysis of National Health and Nutrition Examination Survey (NHANES) data (74). In the analysis of the Ohio/West Virginia population, there was an association between historical PFOA exposure and increased risk of both hypothyroidism and hyperthyroidism in women but not men. However, the prospective study which began with enrollment in the C8 Health Project and identified new cases of thyroid disease going forward found a clear positive association of PFOA with hypothyroidism in men and a somewhat weaker association with hyperthyroidism in men. For hypothyroidism in women, there was a clear doseresponse gradient, with the first indication of an increased risk in the third quintile of exposure which became larger in the higher exposure groups. For hyperthyroidism in woman, a doseresponse relationship was found with an increase in incidence being found starting in the second quintile and continuing to rise with increasing exposure. For prospective cases (diagnosed after PFOA was measured), hypothyroidism among men increased starting in the third quintile and

³ A Bibliography of the published articles on this topic I reviewed is attached as Exhibit B.

⁴ Parenthetical numerical references are to articles in listed in Exhibit B.

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showed a consistently increasing risk with increasing exposure above that level, rising to a twofold increased risk in the uppermost quintile.

A study of thyroid disease in children in the same population also found a higher risk of thyroid disease, largely hypothyroidism, associated with measured PFOA exposure (120). A recently published study from a community in Sweden with elevated exposure to PFOS and PFHxS, with modest elevation in PFOA, did not find increased risk of thyroid disease (Andersson et al., 2019). Studies of changes in thyroid hormone levels have been mixed, with some indicative of changes in various thyroid hormones and others not (121). Although the research has been somewhat variant in regard to hypothyroidism vs. hyperthyroidism, decreased or increased thyroid hormones levels, and associations for men and women, the overall body of evidence indicates an elevated risk of thyroid disorders resulting from elevated levels of PFOA.

Ulcerative Colitis - Increasing levels of PFOA are associated with increased risk of developing ulcerative colitis based on a series of studies conducted by the C8 Science Panel. Thus, it is my opinion, and the collective opinion of the C8 Science Panel, that it is more probable than not that exposure to PFOA is capable of causing ulcerative colitis. Epidemiologic studies from the C8 Science Panel, with results from the combined community and occupational cohort (99) and from the study of disease incidence in DuPont workers (100) clearly demonstrates this association. In the first study, there was a strong dose-response gradient of increasing risk with increasing cumulative exposure. Using a cumulative exposure measure of nanograms per milliliter (ng/mL), quartiles of the distribution were examined and each of the upper three quartiles was compared to the lowest. Exposures >158 ng/ml were associated with increasing risk and the risk continued to rise with more elevated exposure. Other approaches to evaluating exposure were considered, with varying details, but all tending to show increased risk above the lowest quartile

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of exposure. The study of DuPont workers (100) had more limited numbers of cases (28 in total) but also supported the presence of a positive association. A recent report from Sweden that addressed a different constellation of PFAS exposure as noted for thyroid disease (markedly elevated PFOS and PFHxS, modestly elevated PFOA) did not find increased risk of ulcerative colitis (122). Nonetheless, based on the strong evidence from the studies in Ohio/West Virginia, the evidence supports an effect of elevated PFOA on the risk of ulcerative colitis.

Kidney Cancer - There is consistent evidence of a strong association and dose-response relationship between PFOA exposure and kidney cancer based on the work of the C8 Science Panel and, it is my opinion, and the collective opinion of the C8 Science Panel, that it is probable exposure to PFOA is capable of causing kidney cancer. This opinion is based on three different studies all conducted as part of the C8 Science Panel research in the Ohio/West Virginia area. The studies consist of a geographic study by Vieira et al. (112), an occupational study of mortality DuPont workers by Steenland and Woskie (98), and a cancer incidence study that combined occupational and community cohorts by Barry et al. (6). Although there is some overlap in the populations, the methods and coverage are different enough to consider these somewhat independent of one another. In the geographic study, kidney cancer was elevated only in the Little Hocking and Tuppers Plains water districts, but not in the exposed water districts more generally compared to nearby counties. The association that was restricted to the most highly exposed water districts is a form of a dose-response gradient. Using estimated serum levels (assuming a 10-year residence in the current water district there is a clear gradient, with risk increasing above around 30 ug/l. Smoking information was not available in this study. In the occupational mortality study of DuPont workers (98), kidney cancer mortality was examined, with and without lags (in which the most recent exposure is ignored to focus on past exposures). Across the quartiles of exposure,

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each compared to a population consisting of Appalachian DuPont workers at other plants, the standardized mortality ratio (relative risk) generally increased with increasing exposure. Analyses assuming 10 and 20 year lags showed the same pattern – an increased risk of kidney cancer death in the highest exposure group, which was >2700 ppm-years for the unlagged exposure. Smoking data was not available for adjustment in this study. Finally, the combined community and worker study of cancer incidence (6) integrated the strongest features of the previous studies, looking at incident cases rather than deaths, accounting for individual exposure histories, and adjusting for cigarette smoking unlike the other studies. Comparing the 2nd, 3rd, and 4th quartiles to the first quartile as the referent category, the relative risk was found to increase with increasing level of exposure. The increase in risk of kidney cancer incidence began around a cumulative exposure of 812 ng/ml-yr. Only one of the studies adjusted for smoking but there is little reason to suspect strong confounding given the source of the exposure. A study of highly exposed 3M workers (123) did not find elevated risk of kidney cancer, but had limited power due to the small study size. While the evidence indicating an effect of PFOA on kidney cancer has not become stronger subsequent to the reports of the C8 Science Panel, it remains solid based on those studies.

Testicular Cancer – The epidemiological literature generated by the C8 Science Panel supports an association between PFOA exposure and an increased risk of developing testicular cancer. It is my opinion, and the collective opinion of the C8 Science Panel, that it is more probable than not that exposure to PFOA is capable of causing testicular cancer. There are two studies that address PFOA and testicular cancer, one a geographic study in Ohio and West Virginia (111) and the other the study of the combined community and occupational cohort by the C8 Science Panel (6). In the geographic study, the numbers of cases were limited, making the results imprecise. Only one of the districts, Little Hocking, showed an elevated risk. In the examination of estimated

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PFOA serum levels, the relative risks for low, medium, and high exposure groups were all below 1.0 and highly imprecise, with evidence of elevated risk in the very high group. While there was not a gradient of risk across the exposure range considered, the isolation of elevated risk in the highest exposure group is of note. The community and occupational cohort study (6) included 32 reported incident cases of testicular cancer of which 19 were validated. Across the range of exposure, there was an increasing risk of testicular cancer per log unit change in cumulative PFOA and across quartiles of exposure. Similar results were found with a 10-year lag. These two studies are consistent with an elevated risk of testicular cancer associated with increased levels of PFOA exposure. Based on the Barry et al. (6) study, the elevated risk begins above 812 ng/ml-yr cumulative exposure but this estimate is imprecise because of the rarity of this form of cancer.

Uric Acid Levels - There is rather clear and convincing evidence that higher levels of PFOA are associated with higher levels of serum uric acid. Thus, it is my opinion that it is more probable than not that exposure to PFOA is capable of causing increased uric acid levels. This is seen in the analyses of the C8 Health Project participants (97), with notable increases in average serum uric acid levels and the risk of being above the cut point defining hyperuricemia (significantly elevated serum uric acid) across the spectrum of PFOA exposure. The increase in risk was especially strong in the lower range and reflects somewhat of a ceiling effect with less of an increase across the highest levels. An elevation in risk was clear in going from the first to the second quintile of exposure, above 11.4 ng/ml of PFOA and increasing modestly with higher exposures. Evidence of this association was corroborated in studies in children (38; 84) and adults (13; 42) in other populations. While studies based on serum markers of PFOA and serum uric acid are susceptible to spurious associations due to kidney function, this is not plausible in studies based on variation in water levels as done by the C8 Science Panel.

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Hyperlipidemia (high cholesterol) – A substantial number of studies have found clear associations between PFOA exposure and both total and LDL cholesterol (124). It is my opinion based on these studies that it is more probable than not that exposure to PFOA causes an increase in both total and LDL cholesterol. A preponderance of studies shows a positive association between PFOA and elevated levels of total cholesterol and LDL cholesterol, but this is not universal across studies, some of which show no association with either total or LDL cholesterol or both. Again, generalizing across a large body of studies, the most consistent and compelling association would be with total cholesterol in part because more studies have addressed this measure. This association is found in adults, children and adolescents, and pregnant women with some consistency. While an increase in average lipid levels with increasing PFOA means it is likely that hypercholesterolemia, generally defined as a total cholesterol >240 mg/dL or LDL cholesterol >110 mg/DL, will also be increased, there are fewer studies of hypercholesterolemia because much larger study populations are required. Using cross-sectional data from the C8 Health Project, Steenland et al. (95) found clear evidence that higher levels of PFOA are associated with greater risk of hypercholesterolemia, with increasing odds ratios across exposure quartiles and with a similar pattern for LDL cholesterol. In an analysis of the community and worker cohort developed by the C8 Science Panel, Winquist and Steenland (115) again found increased risk of hypercholesterolemia when compared to the lowest quintile. An association with hypercholesterolemia was also found in National Health and Nutrition Examination Survey (NHANES) data (38) where an increased risk of elevated levels of LDL cholesterol was also found. There is a strong empirical basis for concluding that higher levels of PFOA are associated with higher levels of total and LDL cholesterol, and that PFOA is associated with increased risk of hypercholesterolemia. Further support for a causal effect comes from a demonstration that the

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magnitude of decline in PFOA levels was associated with the magnitude of decline in serum cholesterol and LDL in the C8 Science Panel study population (125).

An important point to note, which may explain some of the inconsistency in the findings across studies, is that the dose-response gradient shows a rapid increase in total cholesterol in the lower range of PFOA exposure but appears to plateau, with little increased risk as exposure rises further. This was true in the cross-sectional study (96) and even clearer in the cohort study in which risk increased from the first to second quintiles of PFOA exposure but did not increase further across the highest four quintiles (115). Highly exposed populations such as occupational cohorts do not consistently report associations of PFOA with cholesterol, possibly because all those studied are in the relatively high exposure range, whereas community studies of background exposure ranges more consistently identify an association. Focusing specifically on HDL cholesterol, which is inversely related to cardiovascular disease risk (higher HDL cholesterol predicts a lower risk of cardiovascular disease), fewer studies have examined the association with PFOA. The expected effect of PFOA would be to reduce HDL cholesterol levels and this has been found in some studies. In the occupational health literature, a negative association between PFOA and HDL cholesterol was found by Olsen and Zobel (67) and Wang et al. (112), but not in a number of comparable studies (e.g., 81; 86; 13). The community studies are likewise mixed in regard to an association with HDL, with the cross-sectional study of C8 Health Project participants not showing an association between PFOA and HDL cholesterol in adults (96) or children (34). An absence of association was reported for studies in community populations with background exposure (77; 31; 30; 39). One study of children did find a reduction in HDL cholesterol with higher PFOA levels (118), and another study found higher HDL cholesterol levels with increasing exposure to PFOA during pregnancy (95). Thus, the inverse association between PFOA exposure

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and lowered HDL cholesterol is less clear than the positive association with total cholesterol and LDL cholesterol.

Elevated Liver Enzymes – There is support in the scientific literature for an association between PFOA exposure and elevation of at least some liver enzymes in the blood serum, reviewed recently by Knutsen et al. (2018) (124). It is my opinion that it is more probable than not that exposure to PFOA is capable of causing an increase in liver enzyme levels in the blood. A substantial number of studies have examined the correlation between serum levels of PFOA and an array of liver enzymes. Those that are most frequently studied include ALT (alanine transferase), ALP (alkaline phosphatase), AST (aspartate aminotransferase), GGT (gamma gluatmyl transferase), bilirubin (total and direct), and CCK (cholecystokinin). Many of the studies examine the entire panel of routinely assayed liver enzymes and others do so selectively. Given the large number of enzymes and large number of studies, there are an array of results which are not entirely consistent but with some patterns present. Elevated liver enzymes usually do not indicate the presence of chronic liver disease but more often some reversible cause such as inflammation or injury to the liver that has caused leakage of liver enzymes into the bloodstream. Often elevation in liver enzymes is caused by medications (over the counter or prescription), drinking alcohol, or underlying disease such as hepatitis or heart failure. The most consistent finding is an association of PFOA with increased levels of ALT, observed in the C8 Science Panel research (36; 17) in the National Health and Nutrition Examination Survey (68; 42), and in some of the occupational studies (82; 86; 13). While some other studies found no association, there is a clear weight of evidence in support of a positive association of PFOA with elevated ALT. Perhaps the next most commonly observed association is with PFOA and elevated GGT, found in some occupational studies (82; 86) and in the National Health and Nutrition Examination Survey (68;

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42) but not in the C8 Science Panel research. Beyond that, the findings for all the other enzymes, including AST and bilirubin as the most frequently studied, are not supportive of an association with PFOA.

Immune System Effects - Several studies support an association between PFOA exposure and immune response, particularly from prenatal exposures and subsequent immune response in children (Rappazzo et al., 2017; Liew et al., 2018) (128; 129). Based upon these studies, it is my opinion that it is probable that exposure to PFOA can affect the immune response to pathogens. While there are a number of studies of indicators of PFOA and immune function, fewer studies considered PFOA exposure and actual infectious disease. In a study of prenatal exposure and early childhood illness in Denmark (29), no association was observed overall or for boys alone, but for girls, there was a gradient of increasing risk of infectious disease with a clear dose-response gradient across quartiles of PFOA. Another Danish study (14) evaluated prenatal PFOA levels in relation to infectious diseases among children ages 1-4. Across three levels of PFOA exposure, there was a gradient of increasing risk for fever, but not for cough, nasal discharge, diarrhea, or vomiting. A study from Japan (80) had small numbers that limited ability to examine the one infectious disease considered, otitis media (ear infection) for which they found an adjusted odds Self-reported influenza infections and colds among ratio showing increased incidence. participants in the C8 Health Project did not indicate an association between PFOA level and risk of these diseases (71). In the National Health and Nutrition Examination Survey data, a positive association was found for PFOA and risk of rhinitis but a negative association for the risk of mumps and rubella (105). Although the numbers of cases were small, a Norwegian study reported a modest association between PFOA and episodes of colds and gastroenteritis and a negative association with rubella antibodies (36). More recent studies continue to yield mixed findings

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(Impinen et al., 2018, 2019) (130;129). The possibility of PFOA being associated with increased risk of infection is supported indirectly by some research suggesting elevated levels of PFOA are associated with a weaker response to influenza vaccination (57), though another study noted a more favorable response to influenza vaccination with higher PFOA levels (106). Several studies have reported a decreased response to vaccine to prevent diphtheria (a bacterial respiratory disease) associated with higher PFOA levels (43; 61; 45). It is difficult to draw any firm conclusions given the diversity of conditions examined and inconsistent results. It seems plausible, perhaps even likely, that there is some increase in infections in relation to PFOA serum levels, but the research does not provide clear or consistent evidence of increased risk of specific infectious diseases associated with elevated PFOA.

Preeclampsia, Pregnancy Induced Hypertension – There is some evidence in the published literature for an association between PFOA exposure and the incidence of preeclampsia or pregnancy induced hypertension. Our study of the C8 community showed an increased risk for preeclampsia. (89). Another study of this population showed a weak association between PFOA exposure and pregnancy induced hypertension (16). Attempts at replicating these findings have not been supportive (Huang et al., 2019; Wikstrom et al., 2019) (126; 127) (calling this association into question given the modest increases found in the C8 Science Panel studies and non-supportive evidence in subsequent studies.

In addition to the above adverse health effects that I believe more probably than not are related to PFOA exposure, there are a number of other health conditions that are under study and may reach this threshold in the future. The health effects discussed below fall into this category.

Prostate Cancer – There is limited evidence supporting an association between PFOA exposure and risk of prostate and ovarian cancers. In the study by Hardell et al. (51), the

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association between PFOA and prostate cancer was divided by family history. Since family history predisposes to prostate cancer at a younger age, this has indirect relevance to an age-specific effect. They did find that PFOA above the median was associated with increased risk of prostate cancer in the subgroup with a family history of prostate cancer. In a study of 3M workers, Raleigh et al. (2014) (123) did not find an association between PFOA and prostate cancer whereas in a study of DuPont workers, Steenland et al. (2015) (132) reported a trend towards higher risk of medically confirmed prostate cancer with higher levels of PFOA exposure. The relationship of PFOA to prostate specific antigen (PSA) was examined by Ducatman et al. (22) and stratified by age, with weak evidence that there was a positive association among younger men (20-49). PSA level is considered a marker for the development of prostate cancer, although the accuracy of this marker has been questioned in recent years.

Ovarian Cancer – There is limited evidence supporting an association between PFOA exposure and ovarian cancer. The only evidence addressing PFOA and ovarian cancer comes from the geographic study by Vieira et al. (111) and the analysis of combined community and occupational cohort by Barry et al. (6). Vieira et al. (111) identified 48 cases of ovarian cancer and found elevated risks in the Little Hocking and Belpre water districts. Examining estimated serum levels of PFOA, and dividing the population into quartiles, there was evidence of an association. In contrast, the cohort study (6) which included 43 confirmed cases found no association with a continuous measure of PFOA exposure.

It is important to note that as more research is conducted on PFOA exposed populations, more evidence has accumulated suggesting associations between PFOA and human illness.

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Because drinking water has only recently become a focus of attention for PFOA contamination and because a testing of both public and private drinking water sources had detected significant levels of PFOA in many locations across the United States, it is highly likely that more research will be done that may add to support for an association between PFOA and adverse human health effects in the future.

Based upon my research, specifically including my work on the C8 Science Panel, my review of the medical, scientific and epidemiological literature, as well as my education, training and experience as an epidemiologist, it is my opinion to a reasonable degree of scientific certainty that elevated PFOA exposure increases the risk of the development of certain diseases and conditions referenced above. The question of a lower limit for this effect is not resolved at present, but there is evidence that for exposures above background levels, elevated risks are likely to be present, particularly for developmental immune disorders but possibly for other conditions⁵ Even at current US "background" levels, studies have repeatedly suggested biological effects on the immune system with negative effects being seen with increasing PFOA blood levels. Studies of Norwegian children (46), a study from the Danish National Birth Cohort (29) and a study of children in the Faroe Islands (43) have all shown negative immune response with increasing PFOA blood levels at or near U.S. background levels. Because PFOA demonstrates adverse biological effects even near "background" levels, evidence does not exist for establishing a level of PFOA exposure below which no negative effects can be assured. While it is true that evidence of increased incidence of disease for some conditions listed above were only seen in the highest

⁵ In the Michigan report "Scientific Evidence and Recommendations for managing PFAS Contamination in Michigan" we concluded that the current EPA health advisory limit of 70 ppt for drinking water might not be sufficiently protective because increases in ulcerative colitis, some cancers and other health effects have been reported for exposures predicted in people consuming water containing this level of PFOA. https://www.michigan.gov/documents/pfasresponse/Science_Advisory_Board_Report_641294_7.pdf, at p. 11.

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exposed groups, for other outcomes such as elevated cholesterol and ulcerative colitis, increased risks were present in the near-background exposure range. It is unclear whether exposures at or below background are associated with all of the diseases causally linked to PFOA exposure, but since a dose- response relationship has emerged for a number of the associated illnesses, what is clear is that as exposure increases above background so does risk of disease.

Of note about the exposures involved in the Ohio River Valley studied in the C8 Health Project is that they varied by community to a significant extent. Little Hocking, OH had very high levels of PFOA in its municipal water supply and the population there had correspondingly higher PFOA levels in their blood. The other communities studied, Lubeck, WV, Tupper Plains, OH and Mason County, WV had variably elevated levels, much lower but still substantially elevated above background levels of PFOA in their municipal water supplies and again residents of those communities had levels of PFOA in their blood that corresponded to the levels in their drinking water source when tested (Shin et al., 2011) (133). Accordingly, the almost 70,000 people who participated in the C8 project had a wide range of exposures to PFOA and a wide range of PFOA blood levels.

In this case, the data I have seen from the NYSDOH indicates that there were two rounds of testing and some individuals were tested twice.

REDACTED PURSUANT TO PROTECTIVE ORDER (ECF NOs. 131 & 132)

This mean

exposure level is lower than Little Hocking, OH and Lubeck, WV, but higher or analogous to

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Belpre and Tuppers Plain, OH, and Mason County, WV that were part of the C8 Health Project (Frisbee et al., 2009) (134).⁶

I have reviewed the Cancer Incidence Investigation 1995-2014 conducted by the NYS Department of Health for the Village of Hoosick Falls in May of 2017. This report provides data on cancer incidence in the Hoosick Falls community. Such information is routinely collected by the state cancer registry and can be used for general surveillance purposes. It is not designed to be nor is it useful for etiologic studies of the potential effect of an environmental toxicant on diseases in the population. There are several reasons that it is not suitable for such purposes: 1) There is no exposure information other than that the person resided in a community with elevated levels of PFOA in the water at the time of diagnosis with no information on how long they resided in that community, and no direct information on the levels of PFOA in the water over the period that the person lived there or even a basis for estimating cumulative PFOA exposure. For example, if someone were exposed to the elevated levels of PFOA in the water and moved prior to diagnosis, such cases would not be included in the tabulation; 2) There is no information on other potential causes of these cancers that may need to be taken into account to isolate any effect of PFOA, which might mask true associations or generate spurious associations; 3) The numbers of events for the cancers of particular interest are simply too small to be informative. As a scientific contribution to the previously conducted studies examining potential health effects of PFOA exposure, there is no added value to this analysis. It is entirely reasonable to tabulate and share the data as a general

⁶ Participation in the C8 Health Project required that minimum 12 month exposure to drinking water of 500 ppt or greater. NYSDOH had no such requirement and people in the Town of Hoosick who did not drink from a contaminated well were likely included in those tested. The class definition in this case requires that the person with PFOA in their blood above 1.86 ug/L also consumed contaminated drinking water from a private well or the Hoosick Falls municipal water system. Therefore, comparison of the mean blood levels in the C8 Health Project communities to the subset of people in the Town of Hoosick who meet the class definition is more appropriate than comparing the mean of all people tested to the C8 Health Project community levels. Moreover, because we do not know at this point how many of the people above 1.86 ug/L in the NYSDOH testing would not meet the class definition, the mean likely understates the true class mean once the class is identified.

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description of the community's health experience but it simply is not suitable for addressing cause and effect relationships in this population or more generally.

My approach with the C8 Panel and in coming to the opinions stated herein was based upon generally accepted principles practiced in the field of epidemiology and that my opinions regarding the causal link between PFOA exposure and human health effects are generally accepted in my field. My opinions and conclusions are also supported by the June 2018 Draft Toxicological Profile for Perfluoroalkyls which states: "The available epidemiology studies suggest links between perfluoroalkly exposure and several health outcomes.." listing hepatic effects, cardiovascular effects, endocrine effects, immune effects, reproductive effects and developmental effects linking PFOA exposure in each of these adverse health outcomes.⁷ The 2018 report by the Health Effects Subcommittee of the New Jersey Water Quality Institute supporting the lowering of the maximum amount of PFOA that should be permitted in drinking water to 14 ppt. also succinctly states what I believe be the consensus view of epidemiologists and public health experts about PFOA:

> In summary, associations of PFOA with numerous health endpoints have been found in human populations with evidence supporting criteria for causality for some endpoints. These health endpoints include both non-carcinogenic effects in the general population and both non-carcinogenic effects and cancer in communities with drinking water exposure. The epidemiologic data for PFOA are notable because of the consistency between results among human epidemiologic studies in different populations, the concordance with toxicological findings from experimental animals, the use of serum concentrations as a measure of internal exposure, the potential clinical importance of endpoints for which associations are observed, and the

⁷ <u>https://www.atsdr.cdc.gov/toxprofiles/tp200.pdf</u>, at p. 25.

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observation of associations within the exposure range of the general population. 8

 $\frac{12/28}{19}$ Date

DAVID A. SAVITZ, Ph.D.

⁸ <u>https://www.state.nj.us/dep/watersupply/pdf/pfoa-appendixa.pdf</u>, Executive Summary, pp. 8-9; See also, https://www.michigan.gov/documents/pfasresponse/Science_Advisory_Board_Report_641294_7.pdf.

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EXHIBIT A

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CURRICULUM VITAE

September 2019

David A. Savitz, Ph.D. Providence, RI 02912 401-863- 6090(Phone) 401-863-3713(Fax) David_Savitz@Brown.edu

EDUCATION

BA, Brandeis University, Waltham, Massachusetts - 1971-1975

Ohio State University College of Medicine, Columbus, Ohio (Passed Part I, National Boards) - 1975-1976

MS, **Ohio State University**, Department of Preventive Medicine Columbus, Ohio - 1976-1978

PhD, University of Pittsburgh, Department of Epidemiology Graduate School of Public Health Pittsburgh, Pennsylvania - 1979-1982

HONORS/AWARDS

- 1975 Highest Honors in Psychology Brandeis UniversityB.A., summa cum laudeBrandeis University
- 1983 Excellence in Teaching Award, Second Year Medical Students, University of Colorado School of Medicine
- 1999 Elected to American Epidemiological Society

William R. Gemma Award, Outstanding Alumnus, Department of Preventive Award, Ohio State University

- 2003 Slone Memorial Lecturer, Slone Epidemiology Center at Boston University
- 2004 Advancing Knowledge Award, Coalition for Excellence in Maternal and Child Health Epidemiology

Distinguished Graduate Award, University of Pittsburgh Graduate School of Public Health

- 2007 Elected Member, National Academy of Medicine (formerly Institute of Medicine)
- 2011 Distinguished Lecturer, Occupational and Environmental Epidemiology Branch, National Cancer Institute

ACADEMIC APPOINTMENTS

2010–Present	Professor of Epidemiology School of Public Health Brown University Providence, Rhode Island
2010–Present	Professor of Obstetrics and Gynecology The Warren Alpert Medical School Brown University Women and Infants Hospital Providence, Rhode Island
2018-Present	Professor of Pediatrics The Warren Alpert Medical School Brown University Women and Infants Hospital Providence, Rhode Island
2018-Present	Associate Dean for Research School of Public Health Brown University Providence, Rhode Island
2013-2017	Vice President for Research Brown University Providence, Rhode Island
2006-2010	Charles W. Bluhdorn Professor of Preventive Medicine Director, Disease Prevention and Public Health Institute Mount Sinai School of Medicine New York, New York
2003-2005	Cary C. Boshamer Distinguished Professor Department of Epidemiology School of Public Health University of North Carolina Chapel Hill, North Carolina
1999-2005	Associate Director, Center for Infectious Diseases
1996-2005	Professor and Chair
1993-1996	Professor
1992-2005	Member, Lineberger Comprehensive Cancer Center
1989-1992	Associate Professor
1980-2003	Assistant Professor
1705-1707	Assistant F 10105501
1981-1985	Assistant Professor Department of Preventive Medicine and Biometrics University of Colorado School of Medicine Denver, Colorado
1979-1981	Public Health Service Trainee in Psychiatric Epidemiology

Department of Epidemiology Graduate School of Public Health University of Pittsburgh Pittsburgh, Pennsylvania

1977-1979 Researcher (Epidemiology) Ecology and Ecosystems Analysis Section Battelle-Columbus Laboratories Columbus, Ohio

OTHER PROFESSIONAL APPOINTMENTS

Elected Positions in Professional Societies

Society for Epidemiologic Research		
1987-1991	Secretary-Treasurer	
1994-1997	Executive Committee Member	
1999-2000	President-Elect	
2000-2001	President	
2001-2002	Past President	

International Epidemiological Association 1996-2001 North American Regional Councilor

Society for Pediatric and Perinatal Epidemiologic Research2003-2004President-Elect2004-2005President

International Society for Environmental Epidemiology 2012-2014 Executive Council Member

Appointed Membership to Editorial Boards

1988-1990, 2010-Present	Associate Editor, American Journal of Epidemiology
1990-1998	Editor, American Journal of Epidemiology
1989-1990	Editorial Board, Bioelectromagnetics
1993-1997, 2009-Present	Editorial Board, Environmental Health Perspectives
1996-2001	Editorial Board, Japanese Journal of Epidemiology
1998-2005	Editorial Board, Pediatric and Perinatal Epidemiology
2001-2013	Editor, Epidemiology
2005	Editorial Board, Annual Reviews in Public Health
2008-2012	Editorial Board, Journal of Neurodevelopmental
	Disorders
Manuscript Review	American Industrial Hygiene Association Journal
-	American Journal of Epidemiology
	American Journal of Industrial Medicine
	American Journal of Obstetrics and Gynecology
	American Journal of Preventive Medicine
	American Journal of Public Health
	Annals of Epidemiology
	Bioelectromagnetics
	Birth Defects Research A
	3

British Journal of Obstetrics and Gynecology CA -- A Cancer Journal for Clinicians Cancer Epidemiology Biomarkers and Prevention Cancer Causes and Control Cancer Research Critical Reviews in Toxicology Developmental Origins of Health and Disease Drug Safety Environment International **Environmental Health Perspectives** Environmental Research Environmental Technology Letters Epidemiology Ethnicity and Diseases International Journal of Epidemiology Journal of the American Medical Association Journal of Clinical Epidemiology Journal of Exposure Analysis and Environmental Epidemiology Journal of the National Cancer Institute Journal of Occupational and Environmental Medicine Journal of Pediatrics Journal of Toxicology and Environmental Health Journal of Urban Health Mayo Clinic Proceedings New England Journal of Medicine Obstetrics and Gynecology Occupational and Environmental Medicine Occupational Hygiene Pediatric and Perinatal Epidemiology Pediatrics PLOS One **Preventive Medicine Reproductive Toxicology Risk Analysis** Sleep Teratology

Intramural/Extramural Committees

University of Colorado	
1982-1983	Member, Faculty Senate
1982-1985	Member, Admissions Committee
	Department of Preventive Medicine and Biometrics
1983-1985	Chairperson, Comprehensive Examination Committee
	Department of Preventive Medicine and Biometrics
1983-1985	Member, Appointments and Promotions Committee
	Department of Preventive Medicine and Biometrics
1984-1985	Director, Epidemiology Program
	Community Health Section
	Department of Preventive Medicine and Biometrics

University of North Carolina

1986-1992 Chair, Seminar Commi

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1986-1989	Department of Epidemiology Member, Institutional Review Board on Research Involving Human Subjects School of Public Health
1986-1991, 1994-1996	Member, Admissions Committee
1987-1996	Member, Training Committee
1987-1990	Carolina Population Center Co-Chairperson, Low Birth Weight Prevention Task Force Center for Health Promotion
1000 1000	and Disease Prevention
1988-1990	Carolina Population Center
1989-1990	Alternate Member, University Faculty Council
1989-1994	Advisory Council, Carolina Population Center
1989	Member Search Committee Nutrition
1707	Department Chair
1990	Member Strategic Planning Task Force
1770	School of Public Health
1001-1003	Member Academic Programs Committee
1771-1775	School of Public Health
1003 1006	Member Appointments and Promotions Committee
1993-1990	School of Dublic Health
1004 1006	School of Public Health Member, Advisory Committee for the Conter for
1994-1990	Environmental Madiaina and Lung Dialagu
1006 2004	Environmental Medicine and Lung Biology
1996-2004	Member Advisory Board, Sheps Center for Health
1006 1007	Services Research
1996-1997	Member, Search Committee, Director of Lineberger
	Cancer Center
1997-1998	Chair, Search Committee, Department of
	Biostatistics Chair
2002-2003	Chair, Search Committee, Department of Maternal and
	Child Health Chair
2004-2005	Chair, Advisory Board, Sheps Center for Health
	Services Research
2005	Chair, Search Committee, Department of Nutrition Chair
<u>Brown University</u>	
2010-2011	Member, Admissions Committee
2010-2012	Chair, Search Committee, Environmental Epidemiology Faculty Recruitment
2012	Chair, Methods Curriculum Review Committee
2018-Present	Associate Director, Center for the Study of Children at
	Risk
2018-Present	Chair, Internal Advisory Committee, Advance-CTR
Grant Review	
1983	Grant Review, American Cancer Society New York, New York
1983-1989	Grant Review, National Science Foundation

	Washington, D.C.
1984, 1986	Grant Review, March of Dimes
1985, 1988, 1991, 1993	Member, Special NIH Study Section

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1986-1987 1989	Grant Review, Electric Power Research Institute Grant Review, National Institute of Environmental
	Health Sciences
1989	Grant Review, Health Effects Institute
1989-1992	Member, March of Dimes Research Advisory
	Committee on Reproductive Hazards in the
	Workplace, Home, Community and Environment
1990, 1992, 1994	Grant Review, Health and Welfare Canada
1990	Grant Review, U.S. Department of Energy
1991-1993	Special Reviewer, Epidemiology and Disease
	Control I Study Section, National Institutes of Health
1994-1998	Charter Member, Epidemiology and Disease Control I
	Study Section, National Institutes of Health
1994	Grant Review, Dutch Cancer Society
1998	Special Reviewer, Radiation Epidemiology Branch
	National Cancer Institute
1999	Special Reviewer, Occupational Epidemiology Branch
	National Cancer Institute, Johnson Foundation
1989-1992	Member, March of Dimes Research Advisory
	Committee on Reproductive Hazards in the
	Workplace, Home, Community and Environment
1994-1998	Charter Member, Epidemiology and Disease Control I
	Study Section, National Institutes of Health
2005	March of Dimes Birth Defects Foundation, Social and
	Behavioral Sciences Review Committee
2005	Young Epidemiology Scholars Program, Robert Ward
2012	Reviewer, Autism Networks and Center Programs Study
	Section, National Institutes of Health
2012	Ad Hoc Member, Infectious, Reproductive, Asthma, and
	Pulmonary Conditions Study Section, National
	Institutes of Health
2012	Reviewer, Core Infrastructure and Methodological
	Research for Cancer Epidemiology Cohorts
	Study Section
2012	Chair, Contract Review, Exposure to Contaminants in
	the Generation R Study, National Institute of
	Environmental Health Sciences
2014-2019	Member, National Institutes of Health Grant Review,
	Conflict/Special Study Sections (multiple)
2016, 2017	Chair, GULF Synthesis Grants Review Committee,
	GULF Research Program, National Academies of
	Sciences, Engineering, and Medicine

Other Scientific Review Committees, Congressional Testimony, and Related Professional Activities

1982-1983	Member, Planning Committee
	Cancer Prevention Conference
	AMC Cancer Center and Penrose Hospital
1983	Member, Governor's Advisory Group on
	Rocky Flats, Colorado State Government
1984	Member, Extremely Low Frequency Electromagnetic
	Fields Bioeffects Review Committee
	American Institute for Biological Sciences
1985-1986	Expert Witness, Benzene Regulation Hearings

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	U.S. Occupational Safety and Health Administration
1986-1988	Member, Family Health International Protection
	of Human Subjects Committee
1986	Member, Electric Power Research Institute
	Program Review on Non-Ionizing Radiation
1986-1991	Member, National Council on Radiation Protection
	and Measurements Scientific Committee 79
	Extremely Low Frequency Electric and
	Magnetic Fields
1987	Testimony, U.S. House of Representatives
	Subcommittee on Water and Power Resources
	and Human Development Planning Conference
1988	Participant, National Institute for Child Health
	on the Reproductive Effects of Video Display
	Terminal Use
1988	Member, Ad Hoc Committee on Reproductive and
1700	Developmental Epidemiology U.S. Environmental
	Protection Agency
1989-1992	Member Peer Review Committee
	Woburn Environment and Birth Study
1989-1992	Chair Working Group on Electromagnetic Fields
1707 1772	Environmental Epidemiology Planning Project
	Health Effects Institute
1990	Member Planning Committee for International
1770	Symposium on Birth Defects Epidemiology
	March of Dimes Birth Defects Foundation
1993-1996	Vice Chairman Committee on Possible Effects of
1775 1776	Electromagnetic Fields on Biologic Systems
	National Research Council National Academy
	of Sciences
1994-1996	Member Committee to Review the Health
1777 1770	Consequences of Service During the Persian Gulf War
	Institute of Medicine National Academy of Sciences
1997-2001	Member Maternal and Fetal Medicine Network
1777 2001	Advisory Committee National Institute of Child
	Health and Human Development
1999	Member Panel of Court Appointed Scientific Experts
1777	(CASE) for the American Association for the
	Advancement of Science (AAAS)
1999-2004	Member Board of Scientific Counselors National
1777 2001	Cancer Institute
1999	Co-Chair Scientific Organizing Committee NIFHS
1777	Conference on Epidemiology in the Twenty-First
	Century
1999-2000	Member External Advisory Board The University of
1999-2000	Iowa College of Public Health
2000 2002	Member American Cancer Society Breast Cancer
2000-2002	Prevention Forum
2000 2013	Member Standing Committee on Enidemiology
2000-2013	International Commission on Non Ionizing Radiation
	Protection
2001	Witness Senate Cancer Coalition Hearing on Cancer
2001	Clusters
2001 2005	Ulusius Mambar Advisory Committee for the Trucking Industry
2001-2003	Darticle Study Harvard University
	rande Study, marvaru Oniversity

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2002	Panel Member, Joint Science, Technology, and Law Program and American Law Institute, National
2002	Academy of Sciences
2002	Panelist, Health Canada Workshop Held to Identify
	Critical End Points for Assessment of the Health
	Risks Related to Trihalomethanes in Drinking Water
2002-2003	Member, Expert Panel on Risks and Benefits of Policies
	to Reduce Human Methyl Mercury Exposure
	through Fish Consumption, Harvard Center for Risk
	Analysis
2002-2003	Member, Advisory Panel on Health Effects of Blood
	Lead Levels <10µg/dl in Children, Centers for
	Disease Control and Prevention, National Center
	for Environmental Health
	Consultant, Case-Control Study of Gynecologic
	Cancers in Northern Vietnam, Family Health
	International
2002 - 2012	Member, Agricultural Health Study Advisory
	Committee
2004 - 2005	Armed Forces Epidemiologic Board
2004	Chair, National Children's Study Sampling Design
	Workshop
2004-2005	Member, Committee on EPA's Exposure and Human
2004-2006	Health Reassessment of TCDD and Related Compounds,
	Board on Environmental Studies and Toxicology,
	National Academy of Sciences
2005-2006	Member, Committee on Preterm Birth: Causes,
	Consequences, and Prevention, Institute of Medicine,
	National Academy of Sciences
2006—2009	Member, Advisory Panel on Research, Association of
	American Medical Colleges
2006 - 2010	Member, University of North Carolina School of Public
	Health External Advisory Board
2006-2008	Chair, Committee on Making the Best Use of the Agent
	Orange Exposure Reconstruction Model,
	Institute of Medicine, National Academy of Sciences
2007 - 2009	Chair, Committee on Contaminated Drinking Water at
	Camp Lejeune, National Research Council,
	National Academy of Sciences
2008 – 2009	Member, Committee on Reexamination of IOM
	Pregnancy Weight Guidelines, Institute of Medicine,
2000	National Academy of Sciences
2009	Member, International Agency for International
2010 2011	Research on Cancer, Monograph 100 Working Group
2010 - 2011	Member, Committee on Obesity Prevention Policies for
	Young Children, Institute of Medicine, National
2010	Academy of Sciences
2010	Member, Planning Committee for Institute of Medicine
	worksnop on Assessing the Effects of the Gulf
2012 2014	or Mexico Oil Spill on Human Health
2012 - 2014	Member, Centre for Research in Environmental
0015 D	Epidemiology Scientific Advisory Committee
2015 – Present	Co-Chair, ISGlobal (formerly Centre for Research in
	Environmental Epidemiology [CREAL])
	Scientific Advisory Committee

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2013-2014	Chair, Committee to Review of EPA's Draft Paper on State of the Science on Nonmonotonic Dose Response, National Research Council
2013	Member, Advisory Council, Population Sciences and Epidemiology Integrated Review Group Evaluation, Center for Scientific Review, National Institutes of Health
2014-2016	Member, Board on the Health of Selected Populations, Institute of Medicine, National Academy of Sciences
2015	Chair, World Health Organization Workshop on the Effect of Maternal Influenza and Influenza Vaccination on the Developing Foetus, Montreel Canada
2015-2017	Chair, Committee to Assess the Department of Veterans Affairs Airborne Hazards and Open Burn Pit Registry, National Academy of Medicine
2017-2018	Member, Committee on the Review of the Health Effects of Electronic Nicotine Delivery Systems (ENDS), National Academy of Medicine
2017-Present	Academic Advisor, Michigan PFAS Action Response Team
2018-Present	Chair, Research Committee, Health Effects Institute
2019-Present	Chair, Committee to Review the Long-Term Effects of Antimalarial Drugs, National Academy of Medicine

TRAINING RECORD AS PRIMARY ADVISOR TO MASTERS AND DOCTORAL STUDENTS

Masters

<u>University of North Carolina</u>

1988	Lisa Feingold, MSPH
	Peter S. Kapernick, MPH
1989	Sally S. Harris, MPH
1990	Michael T. O'Shea, MPH
	Sara M. Sarasua, MSPH
1991	Kathryn M. Menard, MPH
1992	Josephine A. Evans, MPH
1996	Kurtis Andrews, MSPH
	Michael Gallagher, MSPH
	Gayle Shimokura, MSPH
1997	Valerie King, MPH
2004	Nora Franceschini, MPH
	Yevgeniy Sheyn, MPH
2005	Cherrie Heller, MPH
2010	Michele La Merrill, MPH
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Brown University

2012	Paul Davis, MPH
	Hannah Shamjii, MPH

Doctoral

University of North Carolina

1987	Hillary Klonoff-Cohen, PhD
1989	Debora Barnes, PhD
1990	Ester John, PhD
1991	Katherine M. Brett, PhD
	Martha Ann Keels, PhD
	Howard Morrison, PhD
	Shao Lin, PhD
1992	Cheryl Blackmore, PhD
	Debra E. Irwin, PhD
1993	Elizabeth M. Barnett, PhD
1994	Tye E. Arbuckle, PhD
	Laurie Elam Evans, PhD
	Kristine-Anne ToloPhD
	Suzanne L. West, PhD
	Jun Zhang, PhD
1996	Cande Ananth, PhD
	Kathryn Curtis, PhD
	Linda, Kaste, PhD
1997	Linda Pastore, PhD
1998	Amy Sayle, PhD
1999	Katherine E. Hartmann, PhD
2001	Nancy Dole, PhD
	Rukmini Bagchee Balu, PhD
2002	Juan Yang, PhD
	Lisa Pompeii, PhD
2004	Sherry Farr, PhD
2005	Emily Harville, PhD
Brown University	
2014	Valery Danilack
2017	Kimberly Glazer

TEACHING ACTIVITIES

University Courses

University of Colorado

1981-1985	Discussion group leader, Epidemiology course for
	Medical Students – 12 contact hours each year
1983	Excellence in Teaching Award, Second Year Medical
	Students, University of Colorado School of Medicine
1982-1984	Introduction to Occupational and Environmental
	Health -30 contact hours
	10

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1984-1985	Advanced Epidemiologic Methods – 30 contact hours
<u>University of North Carolina</u>	
1985-1996, 1998-2005 1986-1994 1997	Epidemiologic Research Methods – 35 contact hours Reproductive Epidemiology – 26 contact hours Advanced Epidemiologic Methods – 30 contact hours
Brown University	
2011-2012	Environmental and Occupational Epidemiology – 40 contact hours
2011	Critical Epidemiology – 40 contact hours
2013, 2016-2017, 2019	Interpretation and Application of Epidemiology – 40 contact hours
2018-2019	Reproductive Epidemiology – 40 contact hours

Other Teaching

New England Epidemiology Institute Summer Program Course on Occupational and Environmental
Epidemiology
University of Michigan Summer Program in
Epidemiology Course on Environmental Epidemiology
Faculty for the Society for Epidemiologic Research
Student Workshop

GRANT AND CONTRACT SUPPORT

Completed

Reproductive Hazard Surveillance Among Oil, Chemical, and Atomic Workers Union Members (M. Orleans, Principal Investigator, D. Savitz, Co-Investigator) March of Dimes, \$32,000, January 1, 1981-August 31, 1984.

Case-Control Study of Invasive Cervical Cancer (R.F. Hamman, Principal Investigator, D. Savitz, Project Director), National Cancer Institute through Westat Subcontract, \$140,961, June 1, 1982-July 31, 1984.

Oil Shale Technology Health and Environmental Effects Risk Analysis (W. Marine, Principal Investigator, D. Savitz, Co-Investigator), U.S. Department of Energy, \$20,723, September 1, 1982-August 31, 1983; \$25,000, December 1, 1983-September 30, 1984.

Ethnicity and Cancer Risk in Colorado Hispanics (D. Savitz, Principal Investigator), Biomedical Research Assistance Committee, University of Colorado, \$5,670, September 1, 1982-February 28, 1983.

Cancer Risk Among Oil, Chemical, and Atomic Workers Exposed to Halogenated Hydrocarbons (D. Savitz, Principal Investigator), American Cancer Society Institutional Research Grant, \$5,000, October 1, 1982-December 31, 1983.

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Childhood Cancer and Electromagnetic Field Exposure (D. Savitz, Principal Investigator), Health Research, Incorporated, New York State Department of Health, \$391,000, December 1, 1983-August 31, 1987.

Association of Parental Occupation with Late Fetal Mortality and Low Birth Weight (D. Savitz, Principal Investigator), March of Dimes, \$50,000, January 1, 1986-November 30, 1987.

Low Birth Weight among Offspring of Smokeless Tobacco Users: A Feasibility Study (D. Savitz, Principal Investigator), University of North Carolina Research Program, \$1,500, January 1, 1987 - December 31, 1987.

Epidemiologic Study of Utility Workers Exposed to Electric and Magnetic Fields (D. Savitz, Principal Investigator), Electric Power Research Institute, \$5,381,303, July 1, 1987 - December 31, 1997.

Adverse Pregnancy Outcomes among Cosmetologists. (D. Savitz, Principal Investigator with doctoral student, E. John), National Institute for Occupational Safety and Health, \$30,000, October 1, 1987-May 31, 1990.

Adverse Pregnancy Outcomes among Cosmetologists. (D. Savitz, Principal Investigator with doctoral student, E. John), March of Dimes, \$53,000, December 1, 1987-March 31, 1990.

Development of Capabilities for Microcomputer Data Analyses of Epidemiologic Data (D. Savitz, Principal Investigator), University of North Carolina Junior Faculty Development Award, \$3,000, January 1, 1988-December 31, 1988.

Epidemiology of Pregnancy Outcome in a Textile Community (D. Savitz, Principal Investigator), National Institutes of Health, National Institute of Child Health and Development, \$350,000, March 1, 1988-February 28, 1993.

Menstrual Cycle Patterns and Risk of Breast Cancer (D. Savitz, Principal Investigator with doctoral student, E. Whelan), National Institutes of Health, National Cancer Institute, \$25,000, August 1, 1988-December 31, 1989.

The Effect of Exposure to Mercury Vapor and Nitrous Oxide on the Risk of Spontaneous Abortion among Female Dental Assistants (D. Savitz, Principal Investigator with doctoral student, A. Rowland), March of Dimes, \$50,000, January 1, 1989-December 31, 1990.

Phenoxy Herbicides and Spontaneous Abortions in Ontario (D. Savitz, Principal Investigator with doctoral student, T. Arbuckle), National Institutes of Health, National Institute of Environmental Health Sciences, \$404,982, May 15, 1991 - April 30, 1995.

Lead in Pregnancy, Hypertension, and Neonatal Health (I. Hertz-Picciotto, Principal Investigator, D. Savitz, Co-Investigator), National Institutes of Health, National Institute of Environmental Health Sciences, \$855,694, August 1, 1991 - July 31, 1994.

Case-Control Study of Risk Factors in Neuroblastoma (A. Olshan, Principal Investigator, D. Savitz, Co-Investigator), National Institutes of Health, National Cancer Institute, \$1,211,736, September 30, 1991 -August 31, 1997.

Genetic susceptibility and dietary factors in ovarian dysfunction: galactose consumption, metabolism, and reproductive impairment (D. Savitz, Principal Investigator with doctoral student, Glinda Cooper), March of Dimes Birth Defects Foundation, \$39,216, January 1, 1992 - July 31, 1995.

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Mercury and Reproductive Health in Women Dentists (D. Savitz, Principal Investigator, L. Kaste, Co-Investigator), National Institutes of Health, National Institute of Dental Research, \$34,245, May 1, 1992 -April 30, 1993.

Parental Occupation and Pregnancy Outcome: Analysis of the National Maternal and Infant Health Survey (D. Savitz, Principal Investigator), March of Dimes Birth Defects Foundation, \$54,285, April 1, 1993 - March 31, 1995.

Parents' Drinking, Toxicant Interactions, and Pregnancy (D. Savitz, Principal Investigator), National Institute of Alcoholism and Alcohol Abuse, \$50,000, July 1, 1993 - June 30, 1995.

Psychosocial Risks and Preterm in African-American Women, (D. Savitz, Principal Investigator), Centers for Disease Control, \$122,222 October 1, 1996 - September 30, 1998.

Cancer Mortality in Minority Workers (D. Loomis, Principal Investigator, D. Savitz, Co-Investigator), National Institute of Occupational and Statistical Health, \$243,895, September 30, 1995 - September 29, 1997.

Epidemiology of Preterm Premature Rupture of Membranes (D. Savitz, Principal Investigator), National Institute of Child Health and Human Development, \$1,182,246, January 1, 1995 - December 31, 1998.

Pesticides and Breast Cancer in North Carolina (D. Savitz, Principal Investigator), National Institute of Environmental Health Sciences, \$883,813, January 1, 1995 - December 31, 1998.

Predictors of Urinary Tract Infection During Pregnancy, (L. Pastore, Principal Investigator, D. Savitz, Co-Investigator), Agency for Health Care and Policy Research, \$20,000, September 1, 1995 - December 31, 1996.

Environment and Breast Cancer (D. Savitz, Principal Investigator), National Cancer Institute, \$201,793, September 30, 1994 - September 29, 1998.

Supplement to Epidemiology of Preterm Premature Rupture of the Membranes on Cocaine and Preterm Delivery, (D. Savitz, Principal Investigator), National Institute of Child Health and Human Development, \$492,914, September 9, 1996 - December 31, 1998.

Research to Advance Environmental Epidemiology: Improving the Use of Human Data in Risk Assessment (D. Savitz, Principal Investigator), US Environmental Protection Agency, \$1,584,928, July 1, 1992 - June 30, 1999.

Nutritional Biochemistry and Epidemiology of Cancer Training Grant (L. Kohlmeier, Principal Investigator), National Institute of Environmental Health Sciences, \$423,297, July 1, 1997 – June 30, 2002.

Pfiesteria-Related Illness Surveillance and Prevention (C. Moe, Principal Investigator), North Carolina Department of Health and Human Services, \$1,362,821, April 1, 1998 – March 31, 2001.

Influence of Iron, Zinc and Folate on Preterm Delivery (D. Savitz, Principal Investigator), National Institute of Child Health and Human Development, \$1,405,542, January 1, 1999 – December 31, 2001.

Occupational Exertion and Preterm Delivery (D. Savitz, Principal Investigator), March of Dimes Birth Defects Foundation, \$94,877, June 1, 1999 – May 31, 2000.

Psyschosocial Factors in African-American and Preterm Birth, (D. Savitz, Principal Investigator), Association of Schools of Public Health/Centers for Disease Control and Prevention, \$170,952, September 9, 1999 – September 8, 2002.

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Community-Level Social Influences on Preterm Birth, (D. Savitz, Principal Investigator), Association of Schools of Public Health/Centers for Disease Control and Prevention, \$196,791, October 1, 1999 – September 30, 2002.

ANCA Glomerulonephritis: From Molecules to Man (R. Falk, Principal Investigator, D. Savitz, Co-Investigator) National Institute of Diabetes and Digestive and Kidney Diseases \$1,070,474, September 1, 2000 – August 31, 2005

Drinking Water Disinfection By-Products and Spontaneous Abortion (D. Savitz, Principal Investigator) American Water Works Association Foundation \$3,500,000, November 1, 1999 – September 30, 2005

Reliability, Validity, and Variability in Behavioral Determinants of Drinking Water Disinfection By-Products Exposure (D. Savitz, Principal Investigator) US Environmental Protection Agency \$471,000, September 15, 2001 – September 14, 2005

Drinking Water Disinfection By-Products and Male Reproductive Health: Semen Quality and Sperm Biomarkers (A. Olshan, Principal Investigator; D. Savitz, Co-Investigator) US Environmental Protection Agency \$557,340, Octdober 1, 2001 – September 30, 2005

Environmental Epidemiology and Exposure Assessment Training Grant Project (L. Kupper, Principal Investigator; D. Savitz, Co-Principal Investigator) National Institute of Environmental Health Sciences \$5,642,423, July 1, 2002 – June 30, 2007

Epidemiology of Exertion, Stress, and Preterm Delivery Project (D. Savitz, Principal Investigator) National Institute of Child Health and Human Development \$2,154,340, February 1, 2000 – January 31, 2006

Placental Vascular Compromise and Preterm Delivery (J. Thorp, Principal Investigator, D. Savitz, Co-Principal Investigator) National Institute of Child Health and Human Development \$2,281,788, September 1, 2001 – August 31, 2006

National Children's Study Duplin County Vanguard Center (B. Entwisle, Principal Investigator; D. Savitz, Original Principal Investigator, consultant). National Institute of Child Health and Human Development \$1,091,825, September 30, 2005 – September 29, 2008

Ethnicity and Birth Outcome in New York City (D. Savitz, Principal Investigator) National Institute of Child Health and Human Development, \$275,000, January 1, 2006 – December 31, 2008

Risk Factors for Onset and Persistence of TMD (W. Maixner, Principal Investigator; D. Savitz, Co-Investigator through July 2009) National Institute of Dental and Craniofacial Research, \$17,216,202, October 1, 2005 – July 31, 2012

National Children's Study Queens County Vanguard Center (P. Landrigan, Principal Investigator; D. Savitz, Co-Investigator). National Institute of Child Health and Human Development \$1,091,825, September 30, 2005 – September 29, 2008

C8 and Reproductive and Neurodevelopmental Outcomes (D. Savitz, Principal Investigator, Garden City Group, Inc., \$605,693 September 1, 2010 – August 31, 2013

The Epidemiology of Hospitalized Postpartum Depression (D. Savitz, Principal Investigator, NIH 5R21HD0588111-02, \$116,629, September 1, 2010 – March 31, 2014

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The National Standard for Normal Fetal Growth (E. Chien, Principal Investigator, D. Savitz, Co-Investigator). National Institute of Child Health and Human Development \$8,815. September 30, 2010 – December 31, 2011

Metals in Hair and Child Neurobehavioral Development (C. Stein, Principal Investigator; D. Savitz, Subcontract Principal Investigator), Mount Sinai/NIEHS, \$41,517, September 1, 2011 – August 31, 2013

Air Pollution and Pregnancy Outcome in New York City (D. Savitz, Principal Investigator), NIH 1-R01 - ES019955, \$339,071, April 1, 2011 – March 31, 2015

The epidemiology of postpartum depression and associated childhood outcomes (M. Silverman, Principal Investigator; D. Savitz, Co-Investigator) NIH 1R21HD073010, \$24,308, August 1/13- July 31, 2015

Residential Air Pollution and Preeclampsia (D. Savitz, Co-Investigator), NIEHS 1R21ES023073, \$204,778, July 1, 2013 – June 30, 2016

Marcellus shale development, respiratory & reproductive outcomes in Pennsylvania (B. Schwartz, Principal Investigator; D. Savitz, Co-Investigator)) NIH 1R21ES023675, \$11,748, December 1, 2013 – November 30, 2015

Residential Air Pollution and Preeclampsia (G. Wellenius, Principal Investigator, D. Savitz, Co-Investigator) R21ES023073-01, \$160,035, August 9, 2013 – July 31, 2017.

Effect of Iatrogenic Delivery at 34-38 Weeks' Gestation on Pregnancy Outcome (D. Savitz, Principal Investigator) 1R01HD077592-01A1, \$345,602, May 15, 2014 – April 30, 2019

CURRENT SUPPORT

Children's Health Exposure Analysis Resource (CHEAR): Coordinating Center (U24) (B. O'Brien, Principal Investigator, D. Savitz, Co-Investigator) 1U24ES026539-01, \$2,650,342, September 30, 2015 – August 31, 2019

Environmental Influences on Neurodevelopmental Outcome in Infants Born Very Preterm (B. Lester, Principal Investigator, D. Savitz, Co-Investigator). 5UG3OD023347-02, \$3,470,797, September 21, 2016-August 31, 2020 Role: Co-Investigator

PUBLICATIONS:

Published Peer-Reviewed Articles including Research with Original Data, Reviews, and Commentaries

<u>1980</u>

1. Rogers SE, Savitz DA. Toxic substances from coal: Some policy implications for the future. Journal of Environmental Management 1980;11:165-82.

<u>1984</u>

2. Savitz DA, Harley B, Krekel S, Marshall J, Bondy J, Orleans M. Survey of reproductive hazards among Oil, Chemical, and Atomic Workers exposed to halogenated hydrocarbons. American Journal of Industrial Medicine 1984;6:253-64.

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3. Savitz DA, Moure R. Review of epidemiologic studies of cancer risk among oil refinery workers. Journal of Occupational Medicine 1984;26:662-70.

<u>1985</u>

- 4. Savitz DA, Grace C. Determinants of medical record access for an epidemiologic study. American Journal of Public Health 1985;75:1425-6.
- 5. Savitz DA, Redmond CK. Screening for geographic heterogeneity of disease rates: Application to cancer incidence in Allegheny County, Pennsylvania, 1969-71. Journal of Chronic Diseases 1985;38:145-56.

<u>1986</u>

- 6. Brinton LA, Huggins GR, Lehman HF, Mallin K, Savitz DA, Trapido E, Rosenthal J, Hoover R. Long-term use of oral contraceptives and risk of invasive cervical cancer. International Journal of Cancer 1986; 38:339-44.
- 7. Brinton LA, Schairer C, Haenszel W, Stolley P, Lehman HF, Levine R, Savitz DA. Smoking and invasive cervical cancer. Journal of the American Medical Association 1986;255:3265-69.
- 8. Savitz DA. Changes in Spanish surname cancer rates relative to other Whites in the Denver area. American Journal of Public Health 1986; 76:1210-15.
- 9. Savitz DA, Hamman RF, Grace C, Stroo K. Respondents' attitudes regarding participation in an epidemiologic study. American Journal of Epidemiology 1986;123:362-6.

<u>1987</u>

- 10. Alderman BA, Baron AE, Savitz DA. Maternal exposure to neighborhood carbon monoxide and risk of low infant birth weight. Public Health Reports 1987;102:410-4.
- 11. Brinton LA, Tashima KT, Lehman HF, Levin RS, Mallin, Savitz DA, Stolley PD, Fraumeni JF Jr. Epidemiology of cervical cancer by cell type. Cancer Research 1987;47:1706-11.
- 12. Savitz DA, Calle EE. Leukemia and occupational exposure to electromagnetic fields. Review of epidemiologic surveys. Journal of Occupational Medicine 1987; 29:47-51.
- 13. Savitz DA, Zuckerman DL. Childhood cancer in the Denver metropolitan area, 1976-83. Cancer 1987;59:1539-42.

<u>1988</u>

- 14. Davis MD, Savitz DA, Graubard BI. Infant feeding and childhood cancer. Lancet 1988;2:365-8.
- 15. Mayer EJ, Hamman RF, Gay EC, Lezotte DC, Savitz DA, Klingensmith GJ. Reduced risk of insulin dependent diabetes mellitus among breast-fed children. The Colorado IDDM Registry. Diabetes 1988;37:1625-32.
- 16. Savitz DA. Human studies of human health hazards comparison of epidemiology and toxicology. Statistical Science 1988;3:306-13.
- 17. Savitz DA, Pierce NE. Control selection with incomplete case ascertainment. American Journal of Epidemiology 1988;127:1109-17.

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18. Savitz DA, Wachtel H, Barnes FA, John EM, Tvrdik JG. Case-control study of childhood cancer and exposure to 60-Hz magnetic fields. American Journal of Epidemiology 1988;128:21-38.

<u>1989</u>

- Barnes F, Wachtel H, Savitz D, Fuller J. The use of wiring configurations and wire codes for estimating externally-generated electric and magnetic fields. Bioelectromagnetics 1989;10:13-21.
- Klonoff-Cohen HS, Savitz DA, Cefalo RC, McCann MF. An epidemiologic study of contraception and pre-eclampsia. Journal of the American Medical Association 1989;262:3143-7 (Also published in French, Indian, and Japanese JAMA).
- 21. Narendrenathan M, Sandler RS, Suchindran CM, Savitz DA. Male infertility in inflammatory bowel disease. Journal of Clinical Gastroenterology 1989;11:403-6.
- 22. Savitz DA, Baron AE. Estimating and correcting for confounder misclassification. American Journal of Epidemiology 1989;129:1062-71.
- 23. Savitz DA, Feingold L. Association of childhood cancer with residential traffic density. Scandinavian Journal of Work, Environment and Health 1989;15:360-3.
- 24. Savitz DA, Pearce NE, Poole C. Methodological issues in the epidemiology of electromagnetic fields and cancer. Epidemiologic Reviews 1989;11:59-78.
- 25. Savitz DA, Whelan EA, Kleckner RC. Effect of parents' occupational exposures on risk of stillbirth, preterm delivery, and small-for-gestational-age infants. American Journal of Epidemiology 1989;129:1201-18.
- 26. Savitz DA, Whelan EA, Kleckner RC. Self-reported exposure to pesticides and radiation in relation to pregnancy outcome: Results from the National Natality and Fetal Mortality surveys. Public Health Reports 1989;104:473-7.

<u>1990</u>

- 27. Ad Hoc Working Group, International Agency for Research on Cancer. Extremely lowfrequency electric and magnetic fields and risk of human cancer. Bioelectromagnetics 1990;11:91-9.
- 28. Brenner H, Savitz DA. The effects of sensitivity and specificity of case selection on validity, sample size, precision, and power in hospital-based case-control studies. American Journal of Epidemiology 1990;132:181-92
- 29. Dole N, Gleiter K, Savitz DA, Chimbira THK, Mbizvo MT. Birth weight patterns in Harare, Zimbabwe. International Journal of Epidemiology 1990;1998-100.
- 30. Hildesheim A, Brinton LA, Mallin K, Lehman HF, Stolley P, Savitz D, Levine R. Barrier and spermicidal contraceptive methods and risk of invasive cervical cancer. Epidemiology 1990;1:266-72.
- 31. Loomis DP, Savitz DA. Brain cancer and leukemia among electrical workers. British Journal of Industrial Medicine 1990;47:633-8.
- 32. Savitz DA, Chen J. Parental occupation and childhood cancer: Review of epidemiologic studies. Environmental Health Perspectives 1990; 88:325-37.

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- Savitz DA, Greenland S, Stolley PD, Kelsey JL. Scientific standards of criticism: A reaction to "Scientific standards in epidemiologic studies of the menace of daily life" by A.R. Feinstein. Epidemiology 1990;1:78-83.
- 34. Savitz DA, John EM, Kleckner RC. Magnetic field exposure from electric appliances and childhood cancer. American Journal of Epidemiology 1990;131:763-73.
- 35. Savitz DA, Whelan EA, Rowland AS, Kleckner RC. Maternal employment and reproductive risk factors. American Journal of Epidemiology 1990;132:933-45.

<u>1991</u>

- 36. Albers LL, Savitz DA. Hospital setting and fetal death during labor among low-risk women. American Journal of Obstetrics and Gynecology 1991;164:868-73.
- 37. Albers LL, Savitz DA. Hospital setting for birth and use of medical procedures in low-risk women. Journal of Nurse-Midwifery 1991;36:327-33.
- 38. Checkoway H, Savitz DA, Heyer NJ. Assessing the effects of nondifferential misclassification of exposures in occupational studies. Applied Occupational and Environmental Hygiene 1991;6:528-33.
- Chestnut LG, Schwartz J, Savitz DA, Burchfiel CM. Pulmonary function and ambient particulate matter: Epidemiological evidence from NHANES I. Archives of Environmental Health 1991;46:135-44.
- 40. Flynn MR, West S, Kaune WT, Savitz DA, Chen C-C, Loomis DP. Validation of expert judgment in assessing occupational exposure to magnetic fields in the utility industry. Applied Industrial Hygiene 1991;6:141-5.
- 41. John EM, Savitz DA, Sandler DP. Prenatal exposure to parents' smoking and childhood cancer. American Journal of Epidemiology 1991;133:123-32.
- 42. Lasisse DL, Savitz DA, Hamman RF, Baron AE, Brinton LA, Levine RS. Invasive cervical cancer and intrauterine device use. International Journal of Epidemiology 1991;20:865-70.
- 43. Leeper E, Wertheimer N, Savitz D, Barnes F, Wachtel H. Modification of the 1979 "Denver wire code" for different wire or plumbing types. Bioelectromagnetics 1991;12:315-8.
- 44. Loomis DP, Savitz DA. Occupation and leukemia mortality among men in 16 states. American Journal of Industrial Medicine 1991;19:509-21.
- 45. Savitz DA, Blackmore CA, Thorp JM. Epidemiology of preterm delivery: etiologic heterogeneity. American Journal of Obstetrics and Gynecology 1991;164:467-71.
- 46. Savitz DA, Harlow SD. Selection of reproductive health endpoints for environmental risk assessment. Environmental Health Perspectives 1991;90:159-64.
- 47. Savitz DA, Schwingl PJ, Keels MA. Influence of paternal age, smoking, and alcohol consumption on congenital anomalies. Teratology 1991;44:429-40.

<u>1992</u>

48. Brenner H, Greenland S, Savitz DA. The effects of nondifferential confounder misclassification in ecologic studies. Epidemiology 1992;5:456-9.

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- 49. Brenner H, Savitz DA, Jockel KH, Greenland S. Effects of nondifferential exposure misclassification in ecologic studies. American Journal of Epidemiology 1992;135:85-95.
- 50. Feingold L, Savitz DA, John EM. Use of a job-exposure matrix to evaluate parental occupation and childhood cancer. Cancer Causes and Control 1992;3:161-9.
- 51. O'Shea M, Savitz DA, Hage ML, Feinstein KA. Perinatal events and the risk of subependymal/intraventricular hemorrhage in very low birth weight neonates. Paediatric and Perinatal Epidemiology 1992;6:352-62.
- 52. Savitz DA, Zhang J. Pregnancy-induced hypertension in North Carolina, 1988-1989. American Journal of Public Health 1992;82:675-9.
- 53. Savitz DA, Zhang J, Schwingl P, John EM. Association of paternal alcohol use with gestational age and birth weight. Teratology 1992;46:465-71.
- 54. Zhang J, Savitz DA. Preterm birth subtypes among blacks and whites in North Carolina. Epidemiology 1992;5:428-33.
- 55. Zhang J, Savitz DA, Schwingl PJ. Case-control study of paternal smoking and birth defects. International Journal of Epidemiology 1992;21:273-8.

<u>1993</u>

- 56. Alderman BW, Baron AE, Savitz DA. Cautions in the use of antecedents as surrogates for confounders. American Journal of Epidemiology 1993;137:1259-72.
- 57. Brenner H, Savitz DA, Gefeller O. The effects of joint misclassification of exposure and disease on epidemiologic measures of association. Journal of Clinical Epidemiology 1993;46:1195-1202.
- 58. Dovan T, Kaune WT, Savitz DA. Repeatability of measurements of residential magnetic fields and wire codes. Bioelectromagnetics 1993;14:145-59.
- 59. Evans JA, Savitz DA, Kanal E, Gillen J. Infertility and pregnancy outcome among MRI workers. Journal of Occupational Medicine 1993;35:1191-5.
- 60. Kanal E, Gillen J, Evans JA, Savitz DA, Shellock FG. Survey of reproductive health among female MR workers. Radiology 1993;187:395-9.
- 61. Klonoff-Cohen H, Edelstein S, Savitz D. Cigarette smoking and preeclampsia. American Journal of Obstetrics and Gynecology 1993;81:541-4.
- 62. Morrison H, Savitz D, Semenciw R, Hulka B, Mao Y, Morison D, Wigle D. Farming and prostate cancer mortality. American Journal of Epidemiology 1993;137:270-80.
- 63. Savitz DA. Epidemiologic studies of electric and magnetic fields and cancer: strategies for extending knowledge. Environmental Health Perspectives 1993;101:83-91.
- 64. Savitz DA. Health effects of electric and magnetic fields: overview of research recommendations. Environmental Health Perspectives 1993;101:71-2.
- 65. Savitz DA. Is significance testing useful in interpreting data? Reproductive Toxicology 1993;7:95-100.

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- 66. Savitz DA. Overview of epidemiologic research on electric and magnetic fields and cancer. American Industrial Hygiene Association Journal 1993;54:197-204.
- 67. Savitz DA, Kaune WT. Childhood cancer in relation to a modified residential wire code. Environmental Health Perspectives 1993;101:76-80.
- 68. Savitz DA, Pearce N, Poole C. Update on methodological issues in the epidemiology of electromagnetic fields and cancer. Epidemiologic Reviews 1993;15:558-66.
- 69. Savitz DA, Thang NM, Swenson IE, Stone EM. Infant and childhood mortality in relation to the Vietnam war. American Journal of Public Health 1993;83:1134-8.
- 70. Wartenberg D, Savitz DA. Evaluating exposure cutpoint bias in epidemiologic studies of electric and magnetic fields. Bioelectromagnetics 1993;14:237-45.
- 71. Zhang J, Savitz DA. Maternal age and placenta previa: a population-based case-control study. American Journal of Obstetrics and Gynecology 1993;168:641-5.

<u>1994</u>

- 72. Ananth CV, Savitz DA. Vaginal bleeding and adverse reproductive outcomes: a meta-analysis. Paediatric and Perinatal Epidemiology 1994;8:62-78.
- 73. Andrews KW, Savitz DA, Hertz-Picciotto I. Prenatal lead exposure in relation to gestational age and birth weight: a review of epidemiologic studies. American Journal of Industrial Medicine 1994;26:13-32.
- 74. Cooper GS, Hulka BS, Baird DD, Savitz DA, Hughes CL Jr, Weinberg CR, Coleman RA, Shields JM. Galactose consumption, metabolism, and follicle-stimulating hormone concentrations in women of late reproductive age. Fertility and Sterility 1994;62:1168-75.
- 75. Dargent-Molina P, James SA, Strogatz DS, Savitz DA. Association between maternal education and infant diarrhea in different household and community environments of Cebu, Philippines. Social Science and Medicine 1994;38:343-50.
- Henriksen TB, Savitz DA, Hedegaard M, Secher NJ. Employment during pregnancy in relation to risk factors and pregnancy outcome. British Journal of Obstetrics and Gynaecology 1994;101:858-65.
- 77. Irwin DE, Savitz DA, Hertz-Picciotto I, St. Andre KA. The risk of pregnancy-induced hypertension: black/white differences in a military population. American Journal of Public Health 1994;84:1508-10.
- Irwin DE, Savitz DA, St. Andre KA, Hertz-Picciotto I. Study of occupational risk factors for pregnancy-induced hypertension among active duty enlisted Navy personnel. American Journal of Industrial Medicine 1994;25:349-59.
- 79. John EM, Savitz DA. Effect of a monetary incentive on response to a mail survey. Annals of Epidemiology 1994;4:231-5.
- 80. John EM, Savitz DA, Shy CM. Spontaneous abortions among cosmetologists. Epidemiology 1994;5:147-55.
- 81. Kaune WT, Savitz DA. Simplification of the Wertheimer-Leeper wire-code. Bioelectromagnetics 1994;15:275-82.

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- 82. Loomis DP, Kromhout H, Peipins LA, Kleckner RC, Iriye R, Savitz DA. Sampling design and field methods of a large, randomized, multi-site survey of occupational magnetic field exposure. Applied Occupational and Environmental Hygiene 1994;9:49-52.
- 83. Loomis DP, Peipins LA, Browning SR, Howard RL, Savitz DA. Organization and classification of work history data in industry-wide studies: an application to the electric power industry. American Journal of Industrial Medicine 1994;26:413-25.
- 84. Loomis DP, Savitz DA. Effect of incomplete exposure assessment on epidemiologic doseresponse analyses. Scandinavian Journal of Work, Environment, and Health 1994;20:200-5.
- 85. Loomis DP, Savitz DA, Ananth CV. Breast cancer mortality among female electrical workers. Journal of the National Cancer Institute 1994;86:921-5.
- 86. Sarasua S, Savitz DA. Cured and broiled meat consumption in relation to childhood cancer: Denver, Colorado (United States). Cancer Causes and Control 1994;5:141-8.
- 87. Savitz DA. In defense of black box epidemiology. Epidemiology 1994;5:550-2.
- 88. Savitz DA, Ananth CV. Birth characteristics of childhood cancer cases, controls, and their siblings. Pediatric Hematology and Oncology 1994;11:587-99.
- 89. Savitz DA, Ananth CV. Residential magnetic fields, wire codes, and pregnancy outcome. Bioelectromagnetics 1994;15:271-3.
- 90. Savitz DA, Baird N, Dole N. Agreement among textile industry exposures during pregnancy based on work description, job title, and self-report. Journal of Exposure Analysis and Environmental Epidemiology 1994;4:513-24.
- 91. Savitz DA, Boyle CA, Holmgreen P. Prevalence of depression among electrical workers. American Journal of Industrial Medicine 1994;25:165-76.
- 92. Savitz DA, Brett KM, Evans LE, Bowes W. Medically treated miscarriage among Black and White women in Alamance County, North Carolina, 1988-1991. American Journal of Epidemiology 1994;139:1100-6.
- 93. Savitz DA, Ohya T, Loomis DP, Senior RS, Bracken TD, Howard RL. Correlations among indices of electric and magnetic field exposure in electric utility workers. Bioelectromagnetics 1994;15:193-204.
- 94. Savitz DA, Sonnenfeld NL, Olshan AF. Review of epidemiologic studies of paternal occupational exposure and spontaneous abortion. American Journal of Industrial Medicine 1994;25:361-83.
- 95. Savitz DA, Tolo K-A, Poole C. Statistical significance testing in the American Journal of Epidemiology, 1970 to 1990. American Journal of Epidemiology 1994;139:1047-52.
- 96. Schober EA, Kusy RP, Savitz DA. Resistance of fetal membranes to the concentrated application of force and reconciliation of puncture and burst testing. Annals of Biomedical Engineering 1994;22:540-8.
- 97. Schober EA, Kusy RP, Whitley JQ, Savitz DA. Effect of thickness on the fracture characteristics of fetal membranes. Journal of Materials Science: Materials in Medicine 1994;5:130-7.

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 West SL, Strom BL, Freundlich B, Normand E, Koch G, Savitz DA. Completeness of prescription recording in outpatient medical records from a health maintenance organization. Journal of Clinical Epidemiology 1994;47:165-71.

<u> 1995</u>

- 99. Ananth CV, Peedicayil A, Savitz DA. Effect of hypertensive diseases in pregnancy on birth weight, gestational duration, and small-for-gestational-age births. Epidemiology 1995;6:391-5.
- 100. Ananth CV, Savitz DA, Bowes WA Jr. Hypertensive diseases of pregnancy and stillbirth in North Carolina, 1988 to 1991. Acta Obstetrica et Gynecologica Scandinavica 1995;74:788-793.
- Blackmore CA, Savitz DA, Edwards LJ, Harlow SD, Bowes WA Jr. Racial differences in the patterns of preterm delivery in central North Carolina. Paediatric and Perinatal Epidemiology 1995;9:281-95.
- 102. Blair A, Burg J, Foran J, Gibb H, Greenland S, Morris R, Raabe G, Savitz D, Teta J, Wartenberg D, Wong O, Zimmerman R. Guidelines for application of meta-analysis in environmental epidemiology. Regulatory Toxicology and Pharmacology 1995; 22:189-97.
- 103. Cooper GS, Baird DD, Hulka BS, Weinberg CR, Savitz DA, Hughes CL. Follicle-stimulating hormone concentrations in relation to active and passive smoking. Obstetrics and Gynecology 1995;85:407-11.
- 104. Kromhout H, Loomis DP, Mihlan GJ, Peipins LA, Kleckner RC, Iriye R, Savitz DA. Assessment and grouping of occupational magnetic field exposure in five electric utility companies. Scandinavian Journal of Work, Environment and Health 1995;21:43-50.
- 105. Leiss JK, Savitz DA. Case-control study of home pesticide use and childhood cancer. American Journal of Public Health 1995;85:249-52.
- 106. Millikan R, DeVoto E, Newman B, Savitz D. Studying environmental influences on breast cancer risk: suggestions for an integrated population-based approach. Breast Cancer Research and Treatment 1995;34:79-89.
- 107. Olshan AF, Ananth CV, Savitz DA. Intrauterine growth retardation as an endpoint in mutation epidemiology: an evaluation based on paternal age. Mutation Research 1995; 344:89-94.
- 108. Pastore LM, Savitz DA. A case-control study of caffeinated beverages and preterm delivery. American Journal of Epidemiology 1995;141:61-69.
- 109. Pearce N, Sanjose S, Boffetta P, Kogevinas M, Saracci R, Savitz D. Limitations of biomarkers of exposure in cancer epidemiology. Epidemiology 1995,6:190-4.
- Rowland AS, Baird DD, Shore DL, Weinberg CR, Savitz DA, Wilcox AJ. Nitrous oxide and spontaneous abortion in female dental assistants. American Journal of Epidemiology 1995;141:531-8.
- 111. Savitz DA. Exposure assessment strategies in epidemiological studies of health effects of electric and magnetic fields. Science of the Total Environment 1995;168:143-53.
- 112. Savitz DA. Overview of occupational exposure to electric and magnetic fields and cancer: advancements in exposure assessment. Environmental Health Perspectives 1995, 103(Suppl 2):69-74.

Case 1:16-cv-00917-LEK-DJS Document 165 Filed 04/06/20 Page 50 of 93

- 113. Savitz DA, Andrews KW, Brinton LA. Occupation and cervical cancer. Journal of Occupational and Environmental Medicine 1995;37:357-61.
- 114. Savitz DA, Andrews KW, Pastore LM. Drinking water and pregnancy outcome in central North Carolina: source, amount, and trihalomethane levels. Environmental Health Perspectives 1995;103:592-6.
- Savitz DA, Loomis DP. Magnetic field exposure in relation to leukemia and brain cancer mortality among electric utility workers. American Journal of Epidemiology 1995;141:123-34. [Erratum: American Journal of Epidemiology 1996:144;205.]
- 116. Savitz DA, Olshan AF. Multiple comparisons and related issues in the interpretation of epidemiologic data. American Journal of Epidemiology 1995; 142:904-8.
- Schnitzer PG, Olshan AF, Savitz DA, Erickson JD. Validity of mother's report of father's occupation in a study of paternal occupation and congenital malformations. American Journal of Epidemiology 1995;141:872-7.
- 118. Wertheimer N, Savitz DA, Leeper E. Childhood cancer in relation to indicators of magnetic fields from ground current sources. Bioelectromagnetics 1995;16:86-96.
- West SL, Savitz DA, Koch G, Strom BL, Guess H, Hartzema A. Recall accuracy for prescription medications: self-report compared to database information. American Journal of Epidemiology 1995; 142:1103-12.

<u>1996</u>

- 120. Ananth CV, Savitz DA, Luther ER. Maternal cigarette smoking as a risk factor for placental abruption, placenta previa, and vaginal bleeding in pregnancy. American Journal of Epidemiology 1996;144:881-9.
- 121. Ananth CV, Savitz DA, Williams MA. Placental abruption and its association with hypertension and prolonged rupture of the membranes: a methodological review and meta-analysis. Obstetrics and Gynecology 1996;88:309-18.
- 122. Ananth CV, Wilcox AJ, Savitz, DA, Bowes WA, Luther ER. Effect of maternal age and parity on the risk of uteroplacental bleeding disorders in pregnancy. Obstetrics and Gynecology 1996;88:511-16.
- 123. Feychting M, Kaune WT, Savitz DA, Ahlbom A. Estimating exposure in studies of residential magnetic fields and cancer -- importance of short-term variability, time interval between diagnosis and measurement, and distance to power lines. Epidemiology 1996;7:220-24.
- 124. Irwin DE, Savitz DA, Bowes WA Jr, St Andre KA. Race, age and cesarean delivery in a military population. Obstetrics and Gynecology 1996;88:530-3.
- 125. Passaro KT, Little RE, Savitz DA, Noss J. The effect of maternal drinking before conception and in early pregnancy on infant birth weight. Epidemiology 1996;7:377-83.
- 126. Savitz DA, Brett KM, Baird N, Tse C-K. Male and female employment in the textile industry in relation to miscarriage and preterm delivery. American Journal of Industrial Medicine 1996;30:307-16.
- 127. Savitz DA, Olshan AF, Gallagher K. Maternal occupation and pregnancy outcome. Epidemiology 1996;7:269-74.

Case 1:16-cv-00917-LEK-DJS Document 165 Filed 04/06/20 Page 51 of 93

- 128. Sayle AE, Cooper GS, Savitz DA. Menstrual and reproductive history of mothers of galactosemic children. Fertility and Sterility 1996;65:534-8.
- 129. Zhang J, Savitz DA. Exercise during pregnancy among U.S. women. Annals of Epidemiology 1996;6:53-9.

<u>1997</u>

- Ananth CV. Savitz DA, Bowes WA Jr, Luther ER. Influence of hypertensive disorders during pregnancy on placental abruption and uterine bleeding during pregnancy. British Journal of Obstetrics and Gynecology 1997;104:572-8.
- 131. Ananth CV, Savitz DA, Luther ER, Bowes WA Jr. Pre-eclampsia and preterm birth subtypes in Nova Scotia, 1986 to 1992. American Journal of Perinatology 1997;14:17-23.
- 132. Brett KM, Strogatz DS, Savitz DA. Employment, job strain, and low birthweight delivery. American Journal of Public Health 1997;87:199-204.
- 133. Curtis KM, Savitz DA. Effects of cigarette smoking, caffine consumption, and alcohol intake on fecundability. American Journal of Epidemiology 1997;146:32-41.
- 134. Daniels JL, Olshan AF, Savitz DA. Pesticides and childhood cancers. Environmental Health Perspectives 1997;105:1068-77.
- 135. Kromhout H, Loomis DP, Kleckner RC, Savitz DA. Sensitivity of the relation between cumulative magnetic field exposure and brain cancer mortality to choice of monitoring data grouping scheme. Epidemiology 1997;8:442-5.
- 136. Loomis D, Browning SR, Schenck AP, Gregory E, Savitz DA. Cancer mortality among electric utility workers exposed to polychlorinated biphenyls. Occupational and Environmental Medicine 1997;54:720-8.
- Passaro KT, Noss J, Savitz DA, Little RE, ALSPAC Study Team. Agreement between self and partner reports of patenal smoking and drinking. International Journal of Epidemiology 1997;26:315-20.
- 138. Savitz DA. The alternative to epidemiologic theory: whatever works. Epidemiology 1997;8:210-2.
- 139. Savitz DA, Ananth CV. Luther ER, Thorp JM. Influence of gestational age on the time from spontaneous rupture of the chorioamniotic membranes to the onset of labor. American Journal of Perinatology 1997;14:129-33.
- 140. Savitz DA, Andrews KW. Review of epidemiologic evidence on benzene and lymphatic and hematopoietic cancers. American Journal Industrial Medicine 1997;31:287-95
- 141. Savitz DA, Arbuckle T, Kaczor D, Curtis KM. Male pesticide exposure and pregnancy outcome. American Journal of Epidemiology 1997;146:1025-36.
- 142. Savitz DA, Bornschein RL, Amler RW, Bove FI, Edmonds LD, Hanson JW, Kaye WE, Khoury M, Kiely M, Lemasters GK, Sever LE, Shepard TH, Spengler RF, Steinberg KK, Yeargin-Allsopp M. Assessment of reproductive disorders and birth defects in communities near hazardous chemical sites. I. Birth defects and developmental disorders. Reproductive Toxicology 1997;11:223-30.

Case 1:16-cv-00917-LEK-DJS Document 165 Filed 04/06/20 Page 52 of 93

- 143. Savitz DA, Brett KM, Dole N, Tse C-K J. Male and female occupation in relation to miscarrage and preterm delivery in central North Carolina. Annals of Epidemiology 1997;7:509-16.
- 144. Savitz DA, Dufort V, Armstrong B, Theriault G. Lung cancer in relation to employment in the electrical utility industry and exposure to magnetic fields. Occupational and Environmental Medicine 1997;54:396-402.
- 145. Schroeder JC, Savitz DA. Lymphoma and multiple myeloma mortality in relation to magnetic field exposure among electric utility workers. American Journal of Industrial Medicine 1997;32:392-402.
- 146. Zohoori N, Savitz DA. Econometric approaches to epidemiologic data: relating endogeneity and unobserved heterogeneity to confounding. Annals of Epidemiology 1997;17:251-7.

<u>1998</u>

- 147. Berkowitz GS, Blackmore-Prince C, Lapinski RH, Savitz DA. Risk factors for preterm birth subtypes. Epidemiology 1998;9:279-85.
- 148. Gallagher MD, Nuckols JR, Stallones L, Savitz DA. Exposure to trihalomethanes and adverse pregnancy outcomes. Epidemiology 1998;9:484-9.
- Kaune WT, Feychting M, Ahlbom A, Ulrich RM, Savitz DA. Temporal characteristics of transmission-line loadings in the Swedish childhood cancer study. Bioelectromagnetics 1998;19:354-65.
- 150. Loomis D, Kromhout H, Kleckner RC, Savitz DA. Effects of the analytical treatment of exposure data on associations of cancer and occupational magnetic field exposure. American Journal of Industrial Medicine 1998;34:49-56.
- 151. Marcus PM, Savitz DA, Millikan RC, Morgenstern H. Female breast cancer and trihalomethane levels in drinking water in North Carolina. Epidemiology 1998;9:156-60.
- 152. Millikan CR, Pittman GS, Tse C-K J, Duell E Newman B, Savitz D, Moorman PG, Boissy RJ, Bell DA. Catechol-*O*-methyltransferase and breast cancer risk. Carcinogenesis 1998;19:1943-7.
- 153. Millikan CR, Pittman GS, Newman B, Tse C-K J, Selmin O, Rockhill B, Savitz D, Moorman PG, Bell DA. Cigarette smoking, *N*-acetyltransferases 1 and 2, and breast cancer risk. Cancer Epidemiology, Biomarkers and Prevention 1998;7:371-8.
- 154. Passaro KT, Little RE, Savitz DA, Noss J, Alspac Study Team. Effect of paternal alcohol consumption before conception on infant birth weight. Teratology 1998;57:294-301.
- 155. Savitz DA, Checkoway H, Loomis DP. Magnetic field exposure and neurodegenerative disease mortality among electric utility workers. Epidemiology 1998;9:398-404.
- 156. Savitz DA, Koppelman LF. Occupational and environmental influences on preterm birth. Prenatal and Neonatal Medicine 1998;3:25-8.
- 157. Savitz DA, Loomis DP, Tse C-K J. Electrical occupations and neurodegenerative disease: analysis of US mortality data. Archives of Environmental Health 1998;53:71-4.
- 158. Savitz DA, Olshan AF. Describing data requires no adjustment for multiple comparisons: a reply from Savitz and Olshan. American Journal of Epidemiology 1998;147:813-4.

Case 1:16-cv-00917-LEK-DJS Document 165 Filed 04/06/20 Page 53 of 93

- 159. Shimokura GH, Savitz DA, Symanski E. Assessment of water use for estimating exposure to tap water contaminants. Environmental Health Perspectives 1998;106:55-9.
- 160. Zaffanella LE, Savitz DA, Greenland S, Ebi KL. The residential case-specular method to studywire codes, magnetic fields, and disease. Epidemiology 1998;9:16-20.
- <u>1999</u>
- 161. Ananth CV, Berkowitz TS, Savitz DA, Lapinski RL. Placental abruption and adverse perinatal outcomes. Journal of the American Medical Association 1999;282:1646-51.
- Andrews KW, Savitz DA. Accuracy of industry and occupation on death certificates of electric utility workers: implications for epidemiologic studies of magnetic fields and cancer. Bioelectromagnetics 1999;20:512-18.
- 163. Arbuckle TE, Savitz DA, Mery LS, Curtis KM. Exposure to phenoxy herbicides and the risk of spontaneous abortion. Epidemiology 1999;10:752-60.
- Blackmore-Prince C, Harlow SD, Gargiullo P, Lee MA, Savitz DA. Chemical hair treatments and adverse outcome among black women in central North Carolina. American Journal of Epidemiology 1999;149:712-6.
- 165. Curtis KM, Savitz DA, Weinberg CR, Arbuckle TE. The effect of pesticide exposure on time to pregnancy. Epidemiology 1999;10:112-117.
- 166. Hartmann KE, Thorp JM, McDonald TL, Savitz DA, Granados JL. Cervical dimensions and risk of preterm birth: a prospective cohort study. Obstetrics and Gynecology 1999;93:504-9.
- 167. Kheifets LI, Gilbert ES, Sussman SS, Guénel P, Sahl JD, Savitz DA, Thériault G. Comparative analyses of the studies of magnetic fields and cancer in electric utility workers: studies from France, Canada, and the United States. Occupational and Environmental Medicine 1999;56:567-74.
- Pastore LM, Royce RA, Jackson TP, Thorp, Jr, JM, Savitz DA, Kreaden US. Association between bacterial vaginosis and fetal fibronectin at 24-29 weeks' gestation. Obstetrics and Gynecology 1999;93:117-23.
- 169. Royce RA, Jackson T, Thorp JM Jr, Hillier SL, Rabe LK, Pastore LM, Savitz DA. Race/ethnicity, vaginal flora patterns, and pH during pregnancy. Sexually Transmitted Diseases 1999;26:96-102.
- 170. Royce RA, Thorp J, Granados JL, Savitz DA. Bacterial vaginosis associated with HIV infection in pregnant women from North Carolina. Journal of Aquired Immune Deficiency Syndromes and Human Retrovirology 1999;20:382-6.
- 171. Savitz DA, Dole N, Williams J, Thorp JM, McDonald T, Carter AC, Eucker B. Determinants of participation in an epidemiologic study of preterm delivery. Paediatric and Perinatal Epidemiology 1999;13:114-25.
- 172. Savitz DA, Liao D, Sastre A, Kleckner RC, Kavet R. Magnetic field exposure and cardiovascular disease mortality among electric utility workers. American Journal of Epidemiology 1999;149:135-42.
- 173. Savitz DA, Poole C, Miller WC. Reassessing the role of epidemiology in public health. American Journal of Public Health 1999;89:1158-61.
- 174. Van Wijngaarden E, Savitz DA, Kleckner RC, Mihlan G, Nylander-French LA, Dufort V, Cai J, Loomis D, Kromhout H. Refinements in magnetic field exposure assignment for a case-cohort study of electric utility workers. Annals of Occupational Hygiene 1999;43:485-92.

Case 1:16-cv-00917-LEK-DJS Document 165 Filed 04/06/20 Page 54 of 93

<u>2000</u>

- 175. Carozza SE, Wrensch M, Miike R, Newman B, Olshan AF, Savitz DA, Yost M, Lee M. Occupation and adult gliomas. American Journal of Epidemiology 2000;152:838-46.
- Duell EJ, Millikan RC, Savitz DA, Newman B, Smith JC, Schell MJ, Sandler DP. A populationbased case-control study of farming and breast cancer in North Carolina. Epidemiology 2000;11:523-31.
- 177. Millikan R, DeVoto E, Tse C-K, Duell E, Newman B, Moorman P, Savitz D. DDE, PCBs and breast cancer: A case-control study of African-American and white women. Cancer Epidemiology, Biomarkers and Prevention 2000;9:1233-40.
- 178. Millikan R, Pittman G, Tse C-K, Savitz DA, Newman B, Bell D. Glutathione-s-transferases M1, T1, and P1 and breast cancer. Cancer Epidemiology, Biomarker and Prevention 2000;9:567-73
- 179. Padungtod C, Savitz DA, Overstreet JW, Christiani DC, Ryan LM, Xu X. Occupational pesticide exposure and semen quality among Chinese workers. Journal of Occupational and Environmental Medicine 2000;42:982-92.
- Pastore LM, Hartmann K, Thorp J, Royce R, Jackson T, Savitz DA. Bacterial vaginosis and cervical dilation and effacement at 24-29 weeks gestation. American Journal of Perinatology 2000;17:83-8.
- Savitz DA, Ananth CV, Berkowitz GS, Lapinski R. Concordance among measures of pregnancy outcome based on fetal size and duration of gestation. American Journal of Epidemiology 2000; 151:627-33.
- 182. Savitz DA, Cai J, Van Wijngaarden E, Loomis D, Mihlan G, Dufort V, Kleckner RC, Nylander-French L, Kromhout H, Zhou H. Case-cohort analysis of brain cancer and leukemia in electric utility workers using a refined magnetic field job-exposure matrix. American Journal of Industrial Medicine 2000;38:417-25.
- 183. Savitz DA. Failure to publish results of epidemiologic studies is unethical. Epidemiology 2000; 11:361-3.
- 184. Van Wijngaarden E, Savitz DA. Occupational sunlight exposure in relation to suicide among electric utility workers. American Journal of Industrial Medicine 2000; 38:149–54.
- 185. Van Wijngaarden E, Savitz DA, Kleckner RC, Cai J, Loomis D. Exposure to electromagnetic fields and suicide among electric utility workers: a nested case-control study. Occupational Environmental Medicine 2000; 57:258-63

<u>2001</u>

- 186. Ahlbom A, Cardis E, Green A, Linet M, Savitz D, Swerdlow A. Review of the epidemiologic literature on EMF and health: ICNIRP (International Commission for Non-Ionizing Radiation Protection) standing committee on epidemiology. Environmental Health Perspectives 2001;109(s6):911-33.
- 187. DeRoos AJ, Teschke K, Savitz DA, Poole C, Grufferman S, Pollock BH, Olshan AF. Parental occupational exposures to electromagnetic fields and radiation and the incidence of neuroblastoma in offspring. Epidemiology 2001;12:508-17.

Case 1:16-cv-00917-LEK-DJS Document 165 Filed 04/06/20 Page 55 of 93

- 188. Daniels JL, Olshan AF, Teschke K, Hertz-Picciotto I, Savitz DA, Blatt J. Comparison of assessment methods for pesticide exposure in a case-control interview study. American Journal of Epidemiology 2001;51:1227-32.
- Daniels JL, Olshan AF, Teschke K, Hertz-Picciotto I, Savitz DA, Blatt J, Bondy ML, Neglia JP, Pollock BH, Cohn SL, Look AT, Seege RC, Castleberry RP. Residential pesticide exposure and neuroblastoma. Epidemiology 2001;12:20-7.
- 190. DeRoos AJ, Olshan AF, Teschke K, Poole C, Savitz DA, Blatt J, Bondy ML, Pollock BH. Parental occupational exposures to chemical and incidence of neuroblastoma in offspring. American Journal of Epidemiology 2001;154:106-14
- 191. Duell EJ, Millikan RC, Savitz DA, Schell MJ, Newman B, Tse C-K, Sandler DP. Reproducibility of reported farming activities and pesticide use among breast cancer cases and controls: A comparison of two modes of data collection. Annals of Epidemiology 2001;11:178-85.
- 192. Hatcher JL, Baris D, Olshan AF, Inskip PD, Savitz DA, Swanson GM, Pottern LM, Greenberg RS, Schwartz AG, Schoenberg JB, Brown LM. Diagnostic radiation and the risk of multiple myeloma (United States). Cancer Causes and Control 2001;12:755-61.
- 193. Hudnell HK, House D, Schmid J, Koltai D, Stopford W, Wilkins J, Savitz DA, Swinker M, Music S. Human visual function in the North Carolina clinical study on possible estuaryassociated syndrome. Journal of Toxicology and Environmental Health, Part A 2001:62;575-94.
- 194. McCurdy AL, Wijnberg L, Loomis D, Savitz DA, Nylander-French LA. Exposure to low frequency magnetic fields among working women and homemakers. Annals of Occupational Hygiene 2001;45:643-50.
- 195. Moe CL, Turf E, Oldach D, Bell P, Hutton S, Savitz DA, Koltai D, Turf M, Ingsrisawang L, Hart R, Ball JD, Stutts M, McCarter R, Wilson L, Haselow D, Grattan L, Morris JG, Weber DJ. Cohort studies of health effects among people exposed to Estuarine Waters: North Carolina, Virginia, and Maryland. Environmental Health Perspectives 2001;109(supplement 5):781-86
- 196. Savitz, DA, Dole N, Terry, JW, Zhou H, Thorp JM. Smoking and pregnancy outcome among African-American and White women in Central North Carolina. Epidemiology 2001;12:636-42.
- 197. Savitz DA, Poole C. Do studies of wire code and childhood leukemia point towards or away from magnetic fields as the causal agent? Bioelectromagnetics 2001;5:S69-S85.
- 198. Sayle AE, Savitz DA, Thorp JM Jr, Hertz-Picciotto I, Wilcox AJ. Sexual activity during late pregnancy and risk of preterm delivery. Obstetrics and Gynecology 2001;97:283-9.
- 199. Shaw GM, Savitz DA, Nelson V, Thorp JM Jr. Role of structural birth defects in preterm delivery. Paediatric and Perinatal Epidemiology 2001;15:106-9
- 200. Siega-Riz AM, Herrmann TS, Savitz DA, Thorp JM. Frequency of eating during pregnancy and its effect on preterm delivery. American Journal of Epidemiology 2001;153:647-52.
- 201. Van Wijngaarden E, Nylander-French L, Millikan RC, Savitz DA, Loomis D. Population-based case-control study of occupational exposure to electromagnetic fields and breast cancer. Annals of Epidemiology 2001;11:297-03.

Case 1:16-cv-00917-LEK-DJS Document 165 Filed 04/06/20 Page 56 of 93

- 202. Van Wijngaarden E, Savitz DA. Occupational sunlight exposure and mortality from non-Hodgkins lymphoma among electric utility workers. Journal of Occupational and Environmental Medicine 2001;43:548-53.
- Van Wijngaarden E, Savitz DA, Kleckner RC, Kavet R, Loomis D. Mortality patterns by occupation in a cohort of electric utility workers. American Journal of Industrial Medicine 2001; 40:667-73.
- 204. West SL, Yawn BP, Thorp JM, Korhonen MJH, Savitz DA, Guess HA. Tocolytic therapy for preterm labor: assessing its potential for reducing preterm delivery. Paediatric and Perinatal Epidemiology 2001;15:243-51.
- 205. Yang J, Savitz DA. The effect of vaginal bleeding during pregnancy on preterm and small-forgestational-age births: US national maternal and infant health survey, 1988. Paediatric and Perinatal Epidemiology 2001;15:34-9.
- <u>2002</u>
- 206. Balu RB, Savitz DA, Ananth CV, Hartmann KE, Miller WC, Thorp JM, Heine RP. Bacterial vaginosis and vaginal fluid defensins during pregnancy. American Journal of Obstetrics and Gynecology 2002;187:1267-71.
- 207. Calle EE, Frumkin H, Henley SJ, Savitz DA, Thun MJ. Organochlorines and breast cancer risk. CA: Cancer Journal for Clinicians 2002;52:301-9.
- 208. Cooper GS, Savitz DA, Millikan R, Chiu Kit T. Organochlorine exposure and age at natural menopause. Epidemiology 2002;13:729-33.
- 209. Evenson KR, Siega-Riz AM, Savitz DA, Leiferman JA, Thorp JM Jr. Vigorous leisure activity and pregnancy outcome: the Pregnancy, Infection, and Nutrition Study. Epidemiology 2002;13:653-9.
- 210. Kaune WT, Dovan T, Kavet RI, Savitz DA, Neutra RR. Study of high and low current configuration homes from the 1988 Denver Childhood Cancer Study. Bioelectromagnetics 2002;23:177-88.
- 211. Parks CG, Cooper GS, Nylander-French LA, Sanderson WT, Dement JM, Cohen PL, Dooley MA, Treadwell EL, St Clair EW, Gilkeson GS, Hoppin JA, Savitz DA. Occupational exposure to crystalline silica and risk of systemic lupus erythematosus: a population-based, case-control study in the southeastern United States. Arthritis and Rheumatism 2002;46:1840-50.
- 212. Pastore LM, Thorp JM Jr, Royce RA, Savitz DA, Jackson TP. Risk score for antenatal bacterial vaginosis: BV PIN points. Journal of Perinatology 2002;22:125-32.
- 213. Peck JD, Hulka BS, Poole C, Savitz DA, Baird D, Richardson BE. Steroid hormone levels during pregnancy and incidence of maternal breast cancer. Cancer Epidemiology, Biomarkers, and Prevention 2002;11:361-8.
- 214. Savitz DA, Hertz-Picciotto I, Poole C, Olshan AF. Epidemiologic measures of the course and outcome of pregnancy. Epidemiologic Reviews 2002;24:91-101.
- 215. Savitz DA, Henderson L, Dole N, Herring A, Wilkins DG, Rollins D, Thorp JM Jr. Indicators of cocaine exposure and preterm birth. Obstetrics and Gynecology 2002;99:458-65.

Case 1:16-cv-00917-LEK-DJS Document 165 Filed 04/06/20 Page 57 of 93

- 216. Savitz DA, Terry JW Jr, Dole N, Thorp JM Jr, Siega-Riz AM, Herring AH. Comparison of pregnancy dating by last menstrual period, ultrasound, and their combination. American Journal of Obstetrics and Gynecology 2002;187:1660-6.
- 217. Siega-Riz AM, Bodnar LM, Savitz DA. What are pregnant women eating? Nutrient and food group differences by race. American Journal of Obstetrics and Gynecology 2002;186:480-6.

<u>2003</u>

- 218. Balu RB, Savitz DA, Ananth CV, Hartmann KE, Miller WC, Thorp JM, Heine RP. Bacterial vaginosis, vaginal fluid neutrophil defensins and preterm birth. Obstetrics and Gynecology 2 003;101:862-8.
- 219. Dole N, Savitz DA, Hertz-Picciotto I, Siega-Riz AM, McMahon MJ, Buekens P. Maternal stress and preterm birth. American Journal of Epidemiology 2003;157:14-24.
- 220. Kaufman JS, Dole N, Savitz DA, Herring AH. Modeling community-level effects on preterm birth. Annals of Epidemiology 2003;13:377-84.
- 221. Peck JD, Hulka BS, Savitz DA, Baird D, Poole C, Richardson BE. Accuracy of fetal growth indicators as surrogate measures of steroid hormone levels during pregnancy. American Journal of Epidemiology 2003; 157:258-66.
- 222. Saldana TM, Siega-Riz AM, Adair LS, Savitz DA, Thorp JM Jr. The association between impaired glucose tolerance and birth weight among black and white women in central North Carolina. Diabetes Care 2003; 26:656-61.
- 223. Savitz DA. Paternal exposure to known mutagens and health of the offspring: ionizing radiation and tobacco smoke. Advances in Experimental Medicine and Biology 2003; 518:49-57.
- 224. Savitz DA. Epidemiologic evidence on the carcinogenicity of metal working fluids. Applied Occupational and Environmetal Hygiene 2003;18:913-20
- 225. Sayle AE, Savitz DA, Williams JF. Accuracy of reporting of sexual activity during late pregnancy. Paediatric and Perinatal Epidemiology 2003; 17:143-7.
- 226. Siega-Riz AM, Promislow JH, Savitz DA, Thorp JM Jr, McDonald T. Vitamin C intake and the risk of preterm delivery. American Journal of Obstetrics and Gynecaology 2003; 189:519-25.
- 227. Van Wijngaarden E, Stewart PA, Olshan Af, Savitz DA, Bunin GR. Parental occupational exposure to pesticides and childhood brain cancer. American Journal of Epidemiology 2003; 157:989-97.

<u>2004</u>

- 228. Cook MN, Olshan AF, Guess HA, Savitz DA, Poole C, Blatt J, Bondy ML, Pollock BH. Maternal medication use and neuroblastoma in offspring. American Journal of Epidemiology 2004 ;159: 721-31.
- 229. Dole N, Savitz DA, Siega-Riz AM, Hertz-Picciotto I, McMahon MJ, Buekens P. Psychosocial factors and preterm birth among African-American and White women in Central North Carolina. American Journal of Public Health 2004; 94:1358-1365.
- 230. Evenson KR, Savitz DA, Huston SL. Leisure-time physical activity among pregnant women in the US. Paediatric and Perinatal Epidemiology 2004; 18:400-7.

Case 1:16-cv-00917-LEK-DJS Document 165 Filed 04/06/20 Page 58 of 93

- 231. Farr SL, Cooper GS, Cai J, Savitz DA, Sandler DP. Pesticide use and menstrual cycle characteristics among premenopausal women in the agricultural health study. American Journal of Epidemiology 2004; 160:194-204.
- 232. Nguyen N, Savitz DA, Thorp JM. Risk factors for preterm birth in Vietnam. International Journal of Gynecology and Obstetrics 2004; 86:70-8.
- 233. Promislow JH, Makarushka CM, Gorman JR, Howards PP, Savitz DA, Hartmann KE. Recruitment for a community-based study of early pregnancy: the Right From The Start study. Paediatric and Perinatal Epidemiology 2004; 18:143-52.
- 234. Savitz DA, Kaufman JS, Dole N, Siega-Riz AM, Thorp JM, Kaczor DT. Poverty, education, race and pregnancy outcome. Ethnicity and Disease 2004; 14:322-9.
- 235. Savitz DA, Kirby RS. Training the next generation of reproductive, perinatal and paediatric epidemiologists. Paediatric and Perinatal Epidemiology 2004; 18:240-2.
- 236. Siega-Riz AM, Savitz DA, Zeisel SH, Thorp JM, Herring A. Second trimester folate status and preterm birth. American Journal of Obstetrics and Gynecology 2004; 191:1851-7.
- 237. Symanski E, Savitz DA, Singer PC. Assessing spatial fluctuations, temporal variability, and measurement error in estimated levels of disinfection by-products in tap water: implications for exposure assessment. Occupational and Environmental Medicine 2004; 61:65-72.
- 238. Vahratian A, Zhang J, Troendle JF, Savitz DA, Siega-Riz AM. Maternal prepregnancy overweight and obesity and the pattern of labor progression in term nulliparous women. Obstetrics and Gynecology 2004; 104:943-51.
- 239. Vahratian A, Siega-Riz AM, Savitz DA, Thorp JM. Multivitamin use and the risk of preterm birth. American Journal of Epidemiology 2004; 160:886-92.
- 240. Vahratian A, Siega-Riz AM, Savitz DA, Zhang J. Maternal pre-pregnancy overweight and obesity and the risk of cesarean delivery in nulliparous women. Annals of Epidemiology 2005; 15:467-74
- 241. Yang J, Hartmann KE, Savitz DA, Herring AH, Dole N, Olshan AF, Thorp JM. Vaginal bleeding during pregnancy and preterm birth. American Journal of Epidemiology 2004; 160:118-25.
- <u>2005</u>
- 242. Ananth CV, Platt RW, Savitz DA. Regression models for clustered binary responses: implications of ignoring the intracluster correlation in an analysis of perinatal mortality in twin gestations. Annals of Epidemiology 2005; 15:293-301.
- 243. Bouzan C, Cohen JT, Connor WE, Kris-Etherton PM, Gray GM, König A, Lawrence RS, Savitz DA, Teutsch SM. A quantitative analysis of fish consumption and stroke risk. American Journal of Preventive Medicine 2005; 29:347-352.
- 244. Cohen JT, Bellinger DC, Connor WE, Kris-Etherton PM, Lawrence RS, Savitz DA, Shaywitz BA, Teutsch SM, Gray GM. A quantitative risk-benefit analysis of changes in population fish consumption. American Journal of Preventive Medicine 2005; 29:325-334.
- 245. König A, Bouzan C, Cohen JT, Connor WE, Kris-Etherton PM, Gray GM, Lawrence RS, Savitz DA, Teutsch SM. A quantitative analysis of fish consumption and coronary heart disease mortality. American Journal of Preventive Medicine 2005; 29:335-346.

Case 1:16-cv-00917-LEK-DJS Document 165 Filed 04/06/20 Page 59 of 93

- 246. Engel SM, Hans CE, Savitz DA, Thorp JM, Chanock SJ, Olshan AF. Risk of spontaneous preterm birth is associated with common pro-inflammatory cytokine polymorphisms. Epidemiology 2005; 16:46-77.
- 247. Engel SM, Olshan AF, Savitz DA, Thorp JM, Erichsen HC, Chanock SJ. Risk of small-forgestational age is associated with common anti-inflammatory cytokine polymorphisms. Epidemiology 2005; 16:478-86.
- 248. Franceschini N, Savitz DA, Kaufman JS, Thorp JM. Maternal urine albumin excretion and pregnancy outcome. American Journal of Kidney Disorders 2005; 45:1010-8.
- 249. Gilboa SM, Mendola P, Olshan AF, Langlois PH, Savitz, DA, Loomis D, Herring AH, Fixler DE. Relation between ambient air quality and selected birth defects, seven county study, Texas, 1997 Epidemiology 2000. American Journal of Epidemiology 2005; 162;238-52.
- Hall SA, Kaufman J, Millikan R, Ricketts T, Herman, Savitz DA. Urbanization and breast cancer Epidemiology incidence in North Carolina, 1995-1999. Annals of Epidemiology 2005; 15:796-803
- 251. McPheeters ML, Miller WC, Hartmann KE, Savitz DA, Kaufman JS, Garrett JM, Thorp JM. The epidemiology of threatened preterm labor: A prospective cohort study. American Journal of Obstetrics and Gynecology 2005; 192:1325-9.
- 252. Messer LC, Dole N, Kaufman JS, Savitz, DA. Pregnancy intendedness, maternal psychosocial factors and preterm birth. Maternal and Child Health Journal 2005; 26:1-10.
- 253. Pompeii LA, Savitz DA, Evenson KR, Rogers B, McMahon M. Physical exertion at work and the risk of preterm delivery and small-for-gestational-age birth. Obstetrics and Gynecology 2005; 106:1279-88.
- 254. Sagiv SK, Mendola P, Loomis D, Herring AH, Neas LM, Savitz DA, Poole C. A time-series analysis of air pollution and preterm birth in Pennsylvania, 1997-2001. Environmental Health Perspectives 2005; 113:602-6.
- 255. Salafia CM, Maas E, Thorp JM, Eucker B, Pezzullo JC, Savitz DA. Measures of placental growth in relation to birth weight and gestational age. American Journal of Epidemiology 2005; 162: 991-998.
- 256. Savitz DA, Dole N, Herring AM, Kaczor D, Murphy J, Siega-Riz AM, Thorp JM, MacDonald TL. Should spontaneous and medically indicated preterm births be separated for studying aetiology? Paediatric and Perinatal Epidemiology 2005; 19:97-105.
- 257. Savitz DA, Dole N, Siega-Riz AM, Kaczor DA, Kaufman J, Herring AH, Thorp JM. Probability samples of area births version clinic populations for reproductive epidemiology studies. Paediatric and Perinatal Epidemiology 2005; 19:315-322.
- 258. Strauss RA, Eucker B, Savitz DA, Thorp JM. Diagnosis of bacterial vaginosis from self-obtained vaginal swabs. Infectious Diseases in Obstetrics and Gynecology 2005; 13:31-35.
- 259. Vahratian A, Siega-Riz AM, Savitz DA, Zhang J. Maternal pre-pregnancy overweight and obesity and the risk of cesarean delivery in nulliparous women. Annals of Epidemiology 2005; 15;467-74.

Case 1:16-cv-00917-LEK-DJS Document 165 Filed 04/06/20 Page 60 of 93

- 260. Yang J, Hartmann KE, Herring AH, Savitz DA. Reducing misclassification in assignment of timing of events during pregnancy. Epidemiology 2005; 16:121-3.
- 261. Yang J, Savitz DA, Dole N, Hartmann KE, Herring AH, Olshan AF, Thorp JM. Predictors of vaginal bleeding during the first two trimesters of pregnancy. Paediatric and Perinatal Epidemiology 2005; 19:276-83.

<u>2006</u>

- 262. Daniels JL, Savitz DA, Bradley C, Dole N, Evenson KR, Eucker B, Herring AH, Siega-Riz AM, Thorp JM. Attitudes toward participation in a pregnancy and child cohort study. Paediatric and Perinatal Epidemiology 2006;20:260-6.
- 263. Engel SM, Olshan AF, Siega-Riz AM, Savitz DA, Chanock SJ. Polymorphisms in folate metabolizing genes and risk for spontaneous preterm and small-for-gestational age birth. American Journal of Obstetrics and Gynecology 2006;195:1231.e1-11.
- Farr SL, Cai J, Savitz DA, Sandler DP, Hoppin JA, Cooper GS. Pesticide exposure and timing of menopause: The Agricultural Health Study. American Journal of Epidemiology 2006; 163:731-42
- 265. Forssen UM, Lonn S, Ahlbom A, Savitz DA, Feychting M. Occupational magnetic field exposure and the risk of acoustic neuroma. American Journal of Industrial Medicine 2006; 49:112-8.
- 266. Gilboa SM, Mendola P, Olshan AF, Harness C, Loomis D, Langlois PH, Savitz DA, Herring AH. Comparison of residential geocoding methods in population-based study of air quality and birth defects. Environmental Research 2006; 256-262.
- 267. Gilboa SM, Mendola P, Olshan AF, Savitz DA, Herring AH, Loomis D, Langlois PH, Keating K. Characteristics that predict locating and interviewing mothers identified by a state birth defects registry and vital records.Birth Defects Research Part A: Clinical and Molecular Teratology 2006; 76:60-5.
- 268. Howard DL, Marshall SS, Kaufman JS, Savitz DA.Variations in low birth weight and preterm delivery among blacks in relation to ancestry and nativity: New York City, 1998-2002. Pediatrics 2006; 118:e1399-405.
- 269. Laraia BA, Messer L, Kaufmann JS, Dole N, Caughy M, O'Campo P, Savitz DA. Direct observation of neighborhood attributes in an urban area of the US south: characterizing the social context of pregnancy. International Journal of Health Geography 2006; 17;5:11.
- 270. Lindsay L, Jackson LA, Savitz DA, Weber DJ, Koch GG, Kong L, Guess HA. Community influenza activity and risk of acute influenza-like illness episodes among healthy unvaccinated pregnant and postpartum women. American Journal of Epidemiology 2006; 163:838-48.
- 271. Messer LC, Kaufman JS, Dole N, Savitz DA, Laraia BA. Neighborhood crime, deprivation and preterm birth. Annals of Epidemiology 2006; 16:455-462.
- 272. Savitz DA, Dole N, Herring AH. Methodologic issues in the design and analysis of epidemiologic studies of pregnancy outcome. Statistical Methods in Medical Research 2006; 15:93-102.
- 273. Savitz DA, Herring AH, Mezei G, Evenson KR, Terry JW Jr., Kavet R. Physical activity and magnetic field exposure in pregnancy. Epidemiology 2006; 17:222-5.
- 274. Savitz DA, Meyer RE, Tanzer JM, Mirvish SS, Lewin F. Public health implications of smokeless tobacco use as a harm reduction strategy. American Journal Public Health 2006; 96:1934-9.

Case 1:16-cv-00917-LEK-DJS Document 165 Filed 04/06/20 Page 61 of 93

- 275. Savitz DA, Singer PC, Herring AH, Hartmann KE, Weinberg HS, Makarushka C. Exposure to drinking water disinfection by-products and pregnancy loss. American Journal of Epidemiolology 2006;164:1043-51.
- 276. Weinberg HS, Pereira VRPJ, Singer PC, Savitz DA. Considerations for improving the accuracy of exposure to disinfection by-products by ingestion in epidemiologic studies. Science of the Total Environment 2006; 354:35-42.
- 277. Wright JM, Murphy PA, Nieuwenhuijsen MJ, Savitz DA. The impact of water consumption, point-of-use filtration and exposure categorization on exposure misclassification of ingested drinking water contaminants. Science of the Total Environment 2006; 366:65-73.

<u>2007</u>

- 278. Forssén UM, Herring AH, Savitz DA, Nieuwenhuijsen MJ, Murphy PA, Singer PC, Wright JM. Predictors of use and consumption of public drinking water among pregnant women. Journal of Exposure Science and Envirnomental Epidemiology 2007; 17:159-69. PMID: 16670711
- Harville EW, Savitz DA, Dole N, Herring AH, Thorp JM, Light KC. Patterns of salivary cortisol secretion in pregnancy and implications for assessment protocols. Biological Psychology 2007; 74:85-91. PMID: 16979811
- 280. Harville EW, Savitz DA, Dole N, Thorp JM Jr, Herring AH. Psychological and biological markers of stress and bacterial vaginosis in pregnant women. BJOG: An International Journal of Obstetrics and Gynaecology 2007; 114:216-23. PMID: 17305894
- 281. Hogan SL, Cooper GS, Savitz DA, Nylander-French LA, Parks CG, Chin H, Jennette CE, Lionaki S, Jennette JC, Falk RJ. Association of silica exposure with anti-neutrophil cytoplasmic autoantibody small-vessel vasculitis: a population-based, case-control study. Clinical Journal of the American Society of Nephrology 2007; 2:290-9. PMID: 17699427
- 282. Kheifets L, Ahlbom A, Johansen C, Feychting M, Sahl J, Savitz D. Extremely low-frequency magnetic fields and heart disease. Scandinavian Journal of Work, Environment and Health 2007; 33:5-12. PMID: 17353960
- 283. Kwok RK, Mendola P, Liu ZY, Savitz DA, Heiss G, Ling HL, Xia Y, Lobdell D, Zeng D, Thorp JM Jr, Creason JP, Mumford JL. Drinking water arsenic exposure and blood pressure in healthy women of reproductive age in Inner Mongolia, China. Toxicology Applied Pharmacology 2007; 222:337-43. PMID: 17509635
- 284. Luben TJ, Olshan AF, Herring AH, Jeffay S, Strader L, Buus RM, Chan RL, Savitz DA, Singer PC, Weinberg HS, Perreault SD. The healthy men study: an evaluation of exposure to disinfection by-products in tap water and sperm quality. Environmental Health Perspectives 2007; 115:1169-76. PMCID: PMC1940094
- 285. Olshan AF, Perreault SD, Bradley L, Buus RM, Strader LF, Jeffay SC, Lansdell L, Savitz DA, Herring A. The healthy men study: design and recruitment considerations for environmental epidemiologic studies in male reproductive health. Fertility and Sterility 2007; 87:554-64. PMID: 17140573

<u>2008</u>

286. Daniels JL, Forssen U, Hultman CM, Cnattingius S, Savitz DA, Feychting M, Sparen P. Parental psychiatric disorders associated with autism spectrum disorders in the offspring. Pediatrics 2008; 121:e1357-62. PMID: 18450879

Case 1:16-cv-00917-LEK-DJS Document 165 Filed 04/06/20 Page 62 of 93

- 287. Elliott P, Savitz DA. Design issues in small-area studies of environment and health. Environmental Health Perspectives 2008; 116:1098-104. PMCID: PMC2516594
- 288. Harville EW, Savitz DA, Dole N, Herring AH, Thorp JM, Light KC. Stress and placental resistance measured by Doppler ultrasound in early and mid-pregnancy. Ultrasound in Obstetrics and Gynecology 2008; 32:23-30. PMID: 18546420
- 289. Hoffman CS, Mendola P, Savitz DA, Herring AH, Loomis D, Hartmann KE, Singer PC, Weinberg HS, Olshan AF. Drinking water disinfection by-product exposure and fetal growth. Epidemiology. 2008; 19:729-37. PMID: 18633330
- 290. Hoffman CS, Mendola P, Savitz DA, Herring AH, Loomis D, Hartmann KE, Singer PC, Weinberg HS, Olshan AF. Drinking water disinfection by-product exposure and duration of gestation. Epidemiology 2008; 19:738-46. PMID: 18633329
- 291. Hoffman CS, Messer LC, Mendola P, Savitz DA, Herring AH, Hartmann KE. <u>Comparison of gestational age at birth based on last menstrual period and ultrasound during the first trimester</u>. Paediatric and Perinatal Epidemiology 2008; 22(6):587-596. PMID: 19000297
- 292. MacLehose RF, Savitz DA, Herring AH, Hartmann KE, Singer PC, Weinberg HS. Drinking water disinfection by-products and time to pregnancy. Epidemiology 2008;19:451-8. PMID: 18379423
- 293. Nomura Y, Halperin JM, Newcorn JH, Davey C, Fifer WP, Savitz DA, Brooks-Gunn J. The risk for impaired learning-related abilities in childhood and educational attainment among adults born near-term. Journal of Pediatric Psychology 2008. PMCID: PMC2722131
- 294. Savitz DA, Chan RL, Herring AH, Howards PP, Hartmann KE. Caffeine and miscarriage risk. Epidemiology 2008; 19:55-62. PMID: 18091004
- 295. Savitz DA, Janevic TM, Engel SM, Kaufman JS, Herring AH. Ethnicity and gestational diabetes in New York City, 1995-2003. BJOG: An International Journal of Obstetrics and Gynaecology 2008; 115:969-78. PMID: 18651880
- 296. Savitz DA, Oxman RT, Metzger KB, Wallenstein S, Stein D, Moline JM, Herbert R. Epidemiologic research on man-made disasters: strategies and implications of cohort definition for World Trade Center worker and volunteer surveillance program. Mount Sinai Journal of Medicine 2008; 75:77-87. PMID: 18500709
- 297. Thorp JM Jr, Dole N, Herring AH, McDonald TL, Eucker B, Savitz DA, Kaczor D. Alteration in vaginal microflora, douching prior to pregnancy, and preterm birth. Paediatric and Perinatal Epidemiology 2008; 22(6):530-537. PMID: 19000290

<u>2009</u>

- 298. Ahlbom A, Feychting M, Green A, Kheifets L, Savitz DA, Swerdlow AJ; ICNIRP (International Commission for Non-Ionizing Radiation Protection) Standing Committee on Epidemiology. Epidemiologic evidence on mobile phones and tumor risk: a review. Epidemiology 2009; 20:639-52. PMID: 19593153
- 299. Chan RL, Olshan AF, Savitz DA, Herring AH, Daniels JL, Peterson HB, Martin SL. Maternal influences on nausea and vomiting in early pregnancy. Maternal Child Health Journal 2009. DOI 10.1007/s10995-009-0548-0. PMID: 20012346.

Case 1:16-cv-00917-LEK-DJS Document 165 Filed 04/06/20 Page 63 of 93

- 300. Engel SM, Janevic TM, Stein CR, Savitz DA. Maternal smoking, preeclampsia, and infant health outcomes in New York City, 1995-2003. American Journal of Epidemiology 2009;169(1):33-40. PMCID: PMC2720705
- 301. Forssén UM, Wright JM, Herring AH, Savitz DA, Nieuwenhuijsen MJ, Murphy PA. Variability and predictors of changes in water use during pregnancy. Journal of Exposure Science and Environmental Epidemiology 2009;19:593-602. PMID: 18830235
- 302. Harville EW, Savitz DA, Dole N, Herring AH, Thorp JM. Stress questionnaires and stress biomarkers during pregnancy. Journal of Womens Health (Larchmount) 2009;18:1425-33. PMCID: PMC2825685
- 303. Hasan R, Olshan AF, Herring AH, Savitz DA, Siega-Riz AM, Hartmann KE. Self-reported vitamin supplementation in early pregnancy and risk of miscarriage. American Journal of Epidemiology 2009; 169:1312-8. PMCID: PMC2727248
- 304. Laughlin SK, Baird DD, Savitz DA, Herring AH, Hartmann KE. Prevalence of uterine leiomyomas in the first trimester of pregnancy: an ultrasound-screening study. Obstetrics & Gynecology 2009; 113(3):630-635. PMID: 19300327
- 305. Moline JM, Herbert R, Crowley L, Troy K, Hodgman E, Shukla G, Udasin I, Luft B, Wallenstein S, Landrigan P, Savitz DA. Multiple myeloma in World Trade Center responders: a case series. Journal of Occupational and Environmental Medicine 2009; 51:896-902. PMID: 19620891
- 306. Nomura Y, Halperin JM, Newcorn JH, Davey C, Fifer WP, Savitz DA, Brooks-Gunn J. The risk for impaired learning-related abilities in childhood and educational attainment among adults born near-term. Journal of Pediatric Psychology 2009; 34:406-18. PMCID: PMC2722131
- 307. Stein CR, Ellis JA, Savitz DA, Vichinsky L, Perl SB. Decline in smoking during pregnancy in New York City, 1995-2005. Public Health Reports 2009;124: 841-9. PMCID: PMC2773948
- Stein CR, Savitz DA, Dougan M. Serum levels of perfluorooctonoic acid and perfluorooctone sulfonate and pregnancy outcome. American Journal of Epidemiology 2009; 170:837-46. PMID: 19692329
- 309. Stein CR, Savitz DA, Janevic T, Ananth CV, Kaufman JS, Herring AH, Engel SM. Maternal ethnic ancestry and adverse perinatal outcomes in New York City. American Journal of Obstetrics and Gynecology 2009; 201:584.e1-9. PMCID: PMC2789914
- 310. Trasande L, Lee M, Liu Y, Weitzman M, Savitz D. Incremental charges, costs, and length of stay associated with obesity as a secondary diagnosis among pregnant women. Medical Care 2009; 47:1046-52. PMID: 19820612

<u>2010</u>

- 311. Chan RL, Olshan AF, Savitz DA, Herring AH, Daniels JL, Peterson HB, Martin SL. Severity and duration of nausea and vomiting symptoms in pregnancy and spontaneous abortion. Human Reproduction 2010 Nov;25(11):2907-12. PMID: 20861299
- 312. Frisbee SJ, Shankar A, Knox SS, Steenland K, Savitz DA, Fletcher T, Ducatman AM. Perfluorooctanoic acid, perfluorooctanesulfonate, and serum lipids in children and adolescents:

Case 1:16-cv-00917-LEK-DJS Document 165 Filed 04/06/20 Page 64 of 93

results from the C8 Health Project. Archives of Pediatric and Adolescent Medicine 2010;164:860-9. PMID: 20819969

- 313. Janevic T, Borrell LN, Savitz DA, Herring AH, Rundle A. Neighborhood food environment and gestational diabetes in New York City. Paediatric and Perinatal Epidemiology 2010 May;24(3):249-54. PMID: 20415754
- 314. Janevic T, Stein CR, Savitz DA, Kaufman JS, Mason SM, Herring AH. Neighborhood deprivation and adverse birth outcomes among diverse ethnic groups. Annals of Epidemiology 2010 Jun;20(6):445-51. PMID: 20470971
- 315. Laughlin SK, Herring AH, Savitz DA, Olshan AF, Fielding JR, Hartmann KE, Baird DD. Pregnancy-related fibroid reduction. Fertility and Sterility 2010 Nov;94(6):2421-3. PMID:20451187
- 316. Mason SM, Kaufman JS, Emch ME, Hogan VK, Savitz DA. Ethnic density and preterm birth in African-, Caribbean-, and US-Born Non-Hispanic Black populations in New York City. American Journal of Epidemiology 2010 Oct 1;172(7):800-8. PMID:20801865
- 317. Sakr CJ, Taiwo OA, Galusha DH, Slade MD, Fiellin MG, Bayer F, Savitz DA, Cullen MR. Reproductive outcomes among male and female workers at an aluminum smelter. Journal of Occupational and Environmental Medicine 2010;52:137-43. PMCID: PMC2830270
- 318. Savitz DA, Murnane P. Behavioral influences on preterm birth: a review. Epidemiology 2010;21:291-9. PMID: 20386169
- Steenland K, Fletcher T, Savitz DA. Epidemiologic evidence on the health effects of perfluorooctanoic acid (PFOA). Environmental Health Perspectives 2010;118:1100-8. PMCID: PMC2920088
- 320. Wright JM, Hoffman CS, Savitz DA. The relationship between water intake and foetal growth and preterm delivery in a prospective cohort study. BMC Pregnancy & Childbirth 2010 Aug 24;10:48. PMCID: PMC2940790
- 321. Wright JM, Hoffman CS, Savitz DA. The relationship between water intake and foetal growth and preterm delivery in a prospective cohort study. BMC Pregnancy & Childbirth 2010; 10(1):48. PMCID: PMC2940790

<u>2011</u>

- 322. Chan RL, Olshan AF, Savitz DA, Herring DA, Daniels JL, Peterson HB, Martin SL. Maternal influences on nausea and vomiting in early pregnancy. Maternal and Child Health Journal 2011 Jan; 15, (1): 122-7. PMID: 20012346
- 323. Horton BJ, Luben TJ, Herring AH, Savitz DA, Singer PC, Weinberg HS, Hartmann KE. The effect of water disinfection by-products on pregnancy outcomes in two southeastern US communities. Journal of Occupational and Environmental Medicine 2011 Oct; 53, (10): 1172-8. PMID: 21915074
- 324. Janevic T, Savitz DA, Janevic M. Maternal education and adverse birth outcomes among immigrant women to the United States from Eastern Europe: a test of the healthy migrant hypothesis. Social Science and Medicine 2011 Aug; 73, (3): 429-35. PMID: 21724312
- 325. Kaufman JS, MacLehose RF, Torrone EA, Savitz DA. A flexible Bayesian hierarchical model of preterm birth risk among US Hispanic subgroups in relation to maternal nativity and education. BMC Medical Research Methodology 2011 11, 51. PMID: 21504612

Case 1:16-cv-00917-LEK-DJS Document 165 Filed 04/06/20 Page 65 of 93

- 326. La Merril M, Stein CR, Landrigan P, Engel SM, Savitz DA. Prepregnancy body mass index, smoking during pregnancy, and infant birth weight. Annals of Epidemiology 2011Jun;21(6):413-20PMID: 21421328
- 327. Mason SM, Kaufman JS, Daniels JL, Emch ME, Hogan VK, Savitz DA. Neighborhood ethnic density and preterm birth across seven ethnic groups in New York City. Health & Place 2011 Jan;17(1):280-8PMID: 21130677
- 328. Mason SM, Kaufman JS, Daniels JL, Emch ME, Hogan VK, Savitz DA. Black preterm birth risk in nonblack neighborhoods: effects of Hispanic, Asian, and non-Hispanic white ethnic densities. Annals of Epidemiology 2011 Aug; 21, (8): 631-8. PMID: 21737050
- Savitz DA, Stein CR, Siega-Riz AM, Herring AH. Gestational weight gain and birth outcome in relation to prepregnancy body mass index and ethnicity. Annals of Epidemiology 2011 Feb; 21(2):78-85. PMID: 20702110
- Savitz DA, Stein CR, Ye F, Kellerman L, Silverman M. The epidemiology of hospitalized postpartum depression in New York State, 1995-2004. Annals of Epidemiology 2011 Jun; 21, (6): 399-406. PMID: 21549277
- 331. Stein CR, Savitz DA. Serum perfluorinated compound concentration and attention deficit/hyperactivity disorder in children 5-18 years of age. Environmental Health Perspectives 2011 Oct; 119, (10): 1466-71. PMID: 21665566
- 332. Swerdlow AJ, Feychting M, Green AC, Leeka Kheifets LK, Savitz DA. Mobile phones, brain tumors, and the interphone study: where are we now? Environmental Health Perspectives 2011 Nov; 119, (11): 1534-8. PMID: 22171384
- Werner EF, Janevic TM, Illuzzi J, Funai EF, Savitz DA, Lipkind HS. Mode of delivery in nulliparous women and neonatal intracranial injury. Obstetrics and Gynecology 2011 Dec; 118, (6): 1239-46. PMID: 22105252.

<u>2012</u>

- 334. Edwards DR, Aldridge T, Baird DD, Funk MJ, Savitz DA, Hartmann KE. Periconceptional overthe-counter nonsteroidal anti-inflammatory drug exposure and risk for spontaneous abortion. Obstetrics and Gynecology 2012 Jul; 120(1): 113-22. PMID: 22914399
- 335. Gong J, Savitz DA, Stein CR, Engel SM. Maternal ethnicity and pre-eclampsia in New York City, 1995-2003. Pediatric and Perinatal Epidemiology 2012 Jan; 26, (1): 45-52. PMID: 22150707
- 336. Kim H, Herbert R, Landrigan P, Markowitz SB, Moline JM, Savitz DA, Todd AC, Udasin IG, Wisnivesky JP. Increased rates of asthma among World Trade Center disaster responders. America Journal of Industrial Medicine 2012 Jan; 55, (1): 44-53. PMID: 22068920
- 337. Mocarski M, Savitz DA. Ethnic differences in the association between gestational diabetes and pregnancy outcome. Maternal and Child Health Journal 2012 Feb,16(2):364-73 Mar. PMID: 21365298
- 338. Rivera-Núñez Z, Wright JM, Blount BC, Silva LK, Jones E, Chan RL, Pegram RA, Singer PC, Savitz DA. Comparison of trihalomethanes in tap water and blood: a case study in the United States. Environmental Health Perspectives 2012 May; 120(5): 661-7. PMID: 22281753

Case 1:16-cv-00917-LEK-DJS Document 165 Filed 04/06/20 Page 66 of 93

- 339. Savitz DA, Harmon Q, Siega-Riz AM, Herring AH, Dole N, Thorp JM Jr. Behavioral influences on preterm birth: integrated analysis of the pregnancy, infection, and nutrition study. Maternal Child Health Journal 2012 Aug; 16(6):1151-63. PMID: 21989675
- 340. Savitz DA, Harmon Q, Siega-Riz AM, Herring AH, Dole N, Thorp, JM. Behavioral Influences on Preterm Birth: Integrated Analysis of the Pregnancy, Infection, and Nutrition Study. Maternal Child Health Journal 2012 Aug:16(6):1151-63 PMID: 21989675
- 341. Savitz DA, Stein CR, Bartell SM, Elston B, Gong J, Shin HM, Wellenius GA. Perfluorooctanoic acid exposure and pregnancy outcome in a highly exposed community. Epidemiology 2012 May; 23(3): 386-92. PMID: 22370857
- 342. Savitz DA, Stein CR, Elston B, Wellenius GA, Bartell SM, Shin HM, Vieira VM, Fletcher T. Relationship of perfluorooctanoic Acid exposure to pregnancy outcome based on birth records in the mid-ohio valley. Environmental Health Perspectives 2012 Aug; 120(8): 1201-7. PMID: 22450153
- 343. Velez-Edwards DR, Baird DD, Hasan R, Savitz DA, Hartmann KE. First-trimester bleeding characteristics associate with increased risk of preterm birth: data from a prospective pregnancy cohort. Human Reproduction 2012 Jan; 27, (1): 54-60. PMID: 22052384
- 344. Werner EF, Savitz DA, Janevic TM, Ehsanipoor RM, Thung SF, Funai EF, Lipkind HS. Mode of delivery and neonatal outcomes in preterm, small-for-gestational-age newborns. Obstetrics and Gynecology 2012 Sep; 120(3): 560-4. PMID: 22914464
- <u>2013</u>
- 345. Engel SM, Scher E, Wallenstein S, Savitz DA, Alsaker ER, Trogstad L, Magnus P. Maternal active and passive smoking and hypertensive disorders of pregnancy: risk with trimester-specific exposures. Epidemiology 2013 May;24(3):379-86. doi: 10.1097/EDE.0b013e3182873a73. PMID: 23429405 [PubMed in process]
- 346. Mukherjee S, Velez Edwards DR, Baird DD, Savitz DA, Hartmann KE. Risk of miscarriage among black women and white women in a U.S. Prospective Cohort Study. American Journal of Epidemiology 2013 Jun 1;177(11):1271-8. PMID: 23558353
- 347. Ness RB, Bodnar L, Holzman C, Platt RW, Savitz DA, Shaw GM, Klebanoff M. Thoughts on the future of reproductive and perinatal epidemiology. Paediatric and Perinatal Epidemiology 2013 Jan; 27(1): 11-9. PMID: 23215705
- 348. Nguyen NC, Evenson KR, Savitz DA, Chu H, Thorp JM, Daniels JL. Physical activity and maternal-fetal circulation measured by Doppler ultrasound. Journal of Perinatology 2013 Feb;33(2):87-93. PMID: 22678142
- 349. Savitz DA. Reconciling theory and practice regarding p values. Epidemiology 2013
 Sep;24(5):781-2. doi: 10.1097/EDE.0b013e31829f39d9. No abstract available. PMID: 23903887
 [PubMed indexed for MEDLINE]
- 350. Savitz DA, Bobb JF, Carr JL, Clougherty JE, Dominici F, Elston B, Ito K, Ross Z, Yee M, Matte TD. Ambient fine particulate matter, nitrogen dioxide, and term birth weight in New York, New York. American Journal of Epidemiology 2014 Feb 15;179(4):457-66. PMID: 24218031
- 351. Savitz DA, Danilack VA, Engel SM, Elston B, Lipkind HS. Descriptive Epidemiology of Chronic Hypertension, Gestational Hypertension, and Preeclampsia in New York State, 1995-2004. Maternal and Child Health Journal 2014 May;18(4):829-38PMID: 23793484

Case 1:16-cv-00917-LEK-DJS Document 165 Filed 04/06/20 Page 67 of 93

- Stein CR, Savitz DA, Bellinger DC. Perfluorooctanoate and neuropsychological outcomes in children. Epidemiology 2013 Jul;24(4):590-9. doi: 10.1097/EDE.0b013e3182944432. PMID: 23680941 [PubMed - in process]
- 353. Stein CR, Savitz DA, Bellinger DC. Perfluorooctanoate exposure in a highly exposed community and parent and teacher reports of behaviour in 6-12-year-old children. Paediatric and Perinatal Epidemiology 2014 Mar;28(2):146-56. PMID: 24320613
- 354. Trasande L, Wong K, Roy A, Savitz DA, Thurston G. Exploring prenatal outdoor air pollution, birth outcomes and neonatal health care utilization in a nationally representative sample. Journal of Exposure Science and Environmental Epidemiology 2013 May-Jun;23(3):315-21. PMID: 23340702
- 355. Watkins DJ, Josson J, Elston B, Bartell SM, Shin HM, Vieira VM, Savitz DA, Fletcher T, Wellenius GA. Exposure to perfluoroalkyl acids and markers of kidney function among children and adolescents living near a chemical plant. Environmental Health Perspectives 2013 May;121(5):625-30. PMID: 23482063
- 356. Werner EF, Han CS, Savitz DA, Goldshore M, Lipkind HS. Health outcomes for vaginal compared with cesarean delivery of appropriately grown preterm neonates. Obstetrics and Gynecology 2013 Jun;121(6):1195-200. doi: 10.1097/AOG.0b013e3182918a7e. PMID: 23812452 [PubMed in process]

<u>2014</u>

- 357. James-Todd T, Janevic T, Brown FM, Savitz DA. Race/ethnicity, educational attainment, and pregnancy complications in New York City women with pre-existing diabetes. Paediatric and Perinatal Epidemiology 2014 Mar;28(2):157-65. PMID: 24354778
- 358. Michels KA, Velez Edwards DR, Baird DD, Savitz DA, Hartmann KE. Uterine leiomyomata and cesarean birth risk: a prospective cohort with standardized imaging. Annals of Epidemiology 2014 Feb;24(2):122-6. PMID: 24321612
- 359. McKenzie LM, Guo R, Witter RZ, Savitz DA, Newman LS, Adgate JL. Birth outcomes and maternal residential proximity to natural gas development in rural Colorado. Environmental Health Perspectives 2014 Apr;122(4):412-7. PMID: 24474681
- 360. Prasodjo A, Pfeiffer CM, Fazili Z, Xu Y, Liddy S, Yolton K, Savitz DA, Lanphear BP, Braun JM. Serum cotinine and whole blood folate concentrations in pregnancy. Annals of Epidemiology 2014 Jul;24(7):498-503.PMID: 24854185
- 361. Romano ME Savitz DS, Braun JM. Challenges and future directions to evaluating the association between prenatal exposure to endocrine-disrupting chemicals and childhood obesity. Current Epidemiology Reports 2014 Jun;1(2):57-66 PMID 25328860
- 362. Savitz DA, Danilack VA, Elston B, Lipkind HS. Pregnancy-induced hypertension and diabetes and the risk of cardiovascular disease, stroke, and diabetes hospitalization in the year following delivery. American Journal of Epidemiology 2014 Jul 1;180(1):41-4 PMID: 24879314
- 363. Savitz DA, Klebanoff MA, Wellenius GA, Jensen ET, Longnecker MP. Persistent organochlorines and hypertensive disorders of pregnancy. Environmental Research 2014 Jul;132:1-5 .PMID: 24742720
- 364. Stein CR, Savitz DA, Elston B, Thorpe PG, Gilboa SM. Perfluorooctanoate Exposure and Major Birth Defects. Reproductive Toxicology 2014 Aug;47:15-20 PMID: 24803403

Case 1:16-cv-00917-LEK-DJS Document 165 Filed 04/06/20 Page 68 of 93

- 365. Stroustrup A, Plafkin C, Savitz DA. Impact of physician awareness on diagnosis of fetomaternal hemorrhage. Neonatology 2014;105(4):250-5. PMID: 24526231
- <u>2015</u>
- 366. Avanasi R, Shin HM, Vieira VM, Savitz DA, Bartell SM. Impact of exposure uncertainty on the association between perfluorooctanoate and preeclampsia in the C8 Health Project population. Environmental Health Perspectives 2016 Jan;124(1):126-32. doi: 10.1289/ehp.1409044.
- 367. Lewis RC, Evenson KR, Savitz DA, Meeker JD. Temporal variability of daily personal magnetic field exposure metrics in pregnant women. Journal of Exposure Science and Environmental Epidemiology 2015 Jan;25(1):58-64. doi: 10.1038/jes.2014.18. Epub 2014 Apr 2. PMID: 24691007
- 368. Savitz DA, Elston B, Bobb JF, Clougherty JE, Dominici F, Ito K, Johnson S, McAlexander T, Ross Z, Shmool JL, Matte TD, Wellenius GA. Ambient fine particulate matter, nitrogen dioxide, and hypertensive disorders of pregnancy in New York City. Epidemiology 2015 Sep;26(5):748-57. PMID: 26237745
- 369. Savitz DA, Fell DB, Ortiz JR, Bhat N. Does influenza vaccination improve pregnancy outcome? Methodological issues and research needs. Vaccine. 2015 Aug 28. pii: S0264-410X(15)01168-8. doi: 10.1016/j.Vaccine 2015.08.041. PMID: 26319740
- 370. Shmool JL, Bobb JF, Ito K, Elston B, Savitz DA, Ross Z, Matte TD, Johnson S, Dominici F, Clougherty JE. Area-level socioeconomic deprivation, nitrogen dioxide exposure, and term birth weight in New York City. Environmental Research 2015 Aug 26;142:624-32. doi: 10.1016/j.envres.2015.08.019. PMID: 26318257

<u>2016</u>

- 371. Borrell LN, Rodriguez-Alvarez E, Savitz DA, Baquero MC. Parental race/ethnicity and adverse birth outcomes in New York City: 2000-2010. American Journal of Public Health 2016 Aug;106(8):1491-7. doi: 10.2105/AJPH.2016.303242. Epub 2016 Jun 16.
- 372. Casey JA, Savitz DA, Rasmussen SG, Ogburn EL, Pollak J, Mercer DG, Schwartz BS. Unconventional natural gas development and birth outcomes in Pennsylvania, USA. Epidemiology 2016 Mar;27(2):163-72. doi: 10.1097/EDE.00000000000387. PMID: 26426945
- 373. Danilack VA, Muri JH, Savitz DA, Caldwell DL, Wood CL. Hospital differences in special care nursery use for newborns of gestational diabetic mothers. Journal of Maternal and Fetal Neonatal Medicine 2016 Sep;29(18):3045-50. doi: 10.3109/14767058.2015.1114083. Epub 2015 Dec 23. PMID: 26700740
- 374. Danilack VA, Triche EW, Dore DD, Muri JH, Phipps MG, Savitz DA. Comparing expectant management and spontaneous labor approaches in studying the effect of labor induction on cesarean delivery. Annals of Epidemiology 2016 Jun;26(6):405-11.e1. doi: 10.1016/j.annepidem.2016.04.009. Epub 2016 Apr 27. PMID: 27211604
- 375. Hutcheon JA, Fell DB, Jackson ML, Kramer MS, Ortiz JR, Savitz DA, Platt RW. Detectable risks in studies of the fetal benefits of maternal influenza vaccination. American Journal of Epidemiology 2016 Aug 1;184(3):227-32. doi: 10.1093/aje/kww048. Epub 2016 Jun 30. PMID: 27365363
- 376. Johnson S, Bobb JF, Ito K, Savitz DA, Elston B, Shmool JL, Dominici F, Ross Z, Clougherty JE, Matte T. Ambient fine particulate matter, nitrogen dioxide, and preterm birth in New York City.

Case 1:16-cv-00917-LEK-DJS Document 165 Filed 04/06/20 Page 69 of 93

Environmental Health Perspectives 2016 Aug;124(8):1283-90. doi: 10.1289/ehp.1510266. Epub 2016 Feb 5. PMID: 26862865

- 377. Savitz DA. Commentary: response to environmental pollution: more research may not be needed. Epidemiology 2016 Nov;27(6):919-20. doi: 10.1097/EDE.000000000000526. PMID: 27299193
- 378. Stroustrup A, Plafkin C, Tran TA, Savitz DA. Demographic and behavioral predictors of severe fetomaternal hemorrhage: a case-control study. Neonatology 2016;109(4):248-54. doi: 10.1159/000442082. Epub 2016 Feb 10. PMID: 26859152
- 379. Xia W, Hu J, Zhang B, Li Y, Wise JP Sr, Bassig BA, Zhou A, Savitz DA, Xiong C, Zhao J, du X, Zhou Y, Pan X, Yang J, Wu C, Jiang M, Peng Y, Qian Z, Zheng T, Xu S. A case-control study of maternal exposure to chromium and infant low birth weight in China. Chemosphere 2016 Feb;144:1484-9. doi: 10.1016/j.chemosphere.2015.10.006. Epub 2015 Oct 23. PMID: 26498095

<u>2017</u>

- 380. Cheng L, Zhang B, Zheng T, Hu J, Zhou A, Bassig BA, Xia W, Savitz DA, Buka S, Xiong C, Braun JM, Zhang Y, Zhou Y, Pan X, Wu C, Wang Y, Qian Z, Yang A, Romano ME, Shi K, Xu S, Li Y. Critical Windows of Prenatal Exposure to Cadmium and Size at Birth. International Journal of Environmental Research and Public Health 2017 Jan 9;14(1). pii: E58. doi: 10.3390/ijerph14010058. PMID: 28075368
- 381. Etzel TM, Calafat AM, Ye X, Chen A, Lanphear BP, Savitz DA, Yolton K, Braun JM. Urinary triclosan concentrations during pregnancy and birth outcomes. Environmental Research 2017 Jul;156:505-511. doi: 10.1016/j.envres.2017.04.015. Epub 2017 Apr 26. PMID: 28427038
- 382. Fell DB, Azziz-Baumgartner E, Baker MG, Batra M, Beauté J, Beutels P, Bhat N, Bhutta ZA, Cohen C, De Mucio B, Gessner BD, Gravett MG, Katz MA, Knight M, Lee VJ, Loeb M, Luteijn JM, Marshall H, Nair H, Pottie K, Salam RA, Savitz DA, Serruya SJ, Skidmore B, Ortiz JR; WHO taskforce to evaluate influenza data to inform vaccine impact and economic modelling. Influenza epidemiology and immunization during pregnancy: Final report of a World Health Organization working group. Vaccine 2017 Oct 13;35(43):5738-5750. doi: 10.1016/j.vaccine.2017.08.037. Epub 2017 Sep 1. PMID: 28867508
- 383. Fell DB, Bhutta ZA, Hutcheon JA, Karron RA, Knight M, Kramer MS, Monto AS, Swamy GK, Ortiz JR, Savitz DA. Report of the WHO technical consultation on the effect of maternal influenza and influenza vaccination on the developing fetus: Montreal, Canada, September 30-October 1, 2015. Vaccine 2017 Apr 25;35(18):2279-2287. doi: 10.1016/j.vaccine.2017.03.056. Epub 2017 Mar 24. PMID: 28343772
- 384. Hartmann KE, Velez Edwards DR, Savitz DA, Jonsson-Funk ML, Wu P, Sundermann AC, Baird DD. Prospective cohort study of uterine fibroids and miscarriage risk. American Journal of Epidemiology 2017 Jun 7:1-9. doi: 10.1093/aje/kwx062. [Epub ahead of print] PMID: 2859
- 385. Kingsley SL, Eliot MN, Glazer K, Awad YA, Schwartz JD, Savitz DA, Kelsey KT, Marsit CJ, Wellenius GA. Maternal ambient air pollution, preterm birth and markers of fetal growth in Rhode Island: results of a hospital-based linkage study. Journal of Epidemiology and Community Health 2017 Dec;71(12):1131-1136. doi: 10.1136/jech-2017-208963. Epub 2017 Sep 25. PMID: 28947670

Case 1:16-cv-00917-LEK-DJS Document 165 Filed 04/06/20 Page 70 of 93

- 386. Romano ME, Hawley NL, Eliot M, Calafat AM, Jayatilaka NK, Kelsey K, McGarvey S, Phipps MG, Savitz DA, Werner EF, Braun JM. Variability and predictors of urinary concentrations of organophosphate flame retardant metabolites among pregnant women in Rhode Island. Environmental Health 2017 Apr 11;16(1):40. doi: 10.1186/s12940-017-0247-z. PMID: 28399857
- 387. Silverman ME, Reichenberg A, Savitz DA, Cnattingius S, Lichtenstein P, Hultman CM, Larsson H, Sandin S. The risk factors for postpartum depression: A population-based study. Depression and Anxiety 2017 Feb;34(2):178-187. doi: 10.1002/da.22597. Epub 2017 Jan 18. PMID: 28098957

<u>2018</u>

- 388. Chenwi HF, Savitz DA. Distribution of preventive dental care during pregnancy in Rhode Island, 2012 to 2015. Rhode Island Medical Journal 2013; 2018 Nov 1;101(9):19-22. PMID: 30384514
- 389. Choe SA, Kauderer S, Eliot MN, Glazer KB, Kingsley SL, Carlson L, Awad YA, Schwartz JD, Savitz DA, Wellenius GA. Air pollution, land use, and complications of pregnancy. Science of the Total Environment 2018; Dec 15;645:1057-1064. doi: 10.1016/j.scitotenv.2018.07.237. PMID: 30248831
- 390. Glazer KB, Eliot MN, Danilack VA, Carlson L, Phipps MG, Dadvand P, Savitz DA, Wellenius GA. Residential green space and birth outcomes in a coastal setting. Environmental Research 2018; May;163:97-107. doi: 10.1016/j.envres.2018.01.006. Epub 2018 Feb 22. PMID: 29433021
- 391. Guelfo JL, Marlow T, Klein DM, Savitz DA, Frickel S, Crimi M, Suuberg EM. Evaluation and management strategies for per- and polyfluoroalkyl substances (PFASs) in drinking water aquifers: perspectives from impacted U.S. northeast communities. Environmental Health Perspectives 2018 Jun 15;126(6):065001. doi: 10.1289/EHP2727. PMID: 29916808
- 392. Katon JG, Zephyrin L, Meoli A, Hulugalle A, Bosch J, Callegari L, Galvan IV, Gray KE, Haeger KO, Hoffmire C, Levis S, Ma EW, Mccabe JE, Nillni YI, Pineles SL, Reddy SM, Savitz DA, Shaw JG, Patton EW. Reproductive health of women Veterans: a systematic review of the literature from 2008 to 2017. Seminars in Reprodive Medicine 2018 Nov;36(6):315-322. doi: 10.1055/s-0039-1678750. Epub 2019 Apr 19. PMID: 31003246
- 393. Mason SM, Schnitzer PG, Danilack VA, Elston B, Savitz DA. Risk factors for maltreatmentrelated infant hospitalizations in New York City, 1995-2004. Annals of Epidemiology 2018 Sep;28(9):590-596. doi: 10.1016/j.annepidem.2018.05.010. Epub 2018 Jun 2. PMID: 30153909
- Savitz DA. When is epidemiological research a helpful response to industrial contamination? Epidemiologia & Prevenzione 2018 Sep-Dec;42(5-6S1):89-92. doi: 10.19191/EP18.5-6.S1.P089.091. PMID: 30322239
- 395. Steenland K, Barry V, Savitz D. Serum perfluorooctanoic acid and birthweight: an updated metaanalysis with bias analysis. Epidemiology 2018 Nov;29(6):765-776. doi: 10.1097/EDE.000000000000903. PMID: 30063543

<u>2019</u>

396. Bengtson AM, Sanfilippo AM, Hughes BL, Savitz DA. Maternal immunisation to improve the health of HIV-exposed infants. Lancet Infect Dis. 2019 Apr;19(4):e120-e131. doi: 10.1016/S1473-3099(18)30545-0. PMID: 30529212 Case 1:16-cv-00917-LEK-DJS Document 165 Filed 04/06/20 Page 71 of 93

- 397. Choe SA, Eliot MN, Savitz DA, Wellenius GA. Ambient air pollution during pregnancy and risk of gestational diabetes in New York City. Environmental Research 2019 Aug;175:414-420. doi: 10.1016/j.envres.2019.04.030. Epub 2019 May 24. PMID: 31154231
- 398. Drucker AM, Li WQ, Savitz DA, Weinstock MA, Han J, Li T, Qureshi AA, Cho E. Association between health maintenance practices and skin cancer risk as a possible source of detection bias. JAMA Dermatology 2019 Mar 1;155(3):353-357. doi: 10.1001/jamadermatol.2018.4216. PMID: 30586131
- 399. Savitz DA, Wellenius GA, Trikalinos TA. The problem with mechanistic risk of bias assessments in evidence synthesis of observational studies and a practical alternative: assess the impact of specific sources of potential bias. American Journal of Epidemiology 2019 May 30. pii: kwz131. doi: 10.1093/aje/kwz131. PMID: 31145434

BOOKS

Bertollini R, Lebowitz MD, Saracci R, Savitz DA (editors). Environmental epidemiology. Exposure and disease. Proceedings of an international workshop on priorities in environmental epidemiology. Boca Raton, FL: Lewis Publishers, 1995.

Steenland K, Savitz DA (editors). Topics in environmental epidemiology. New York, NY: Oxford University Press, 1997.

Savitz DA. Interpreting epidemiologic evidence: strategies for study design and analysis. New York, NY: Oxford University Press, 2003.

Savitz DA, Wellenius GA. Interpreting epidemiologic evidence: connecting research to applications, Second Edition. New York, NY: Oxford University Press, 2016.

Invited Editorials/Commentaries

Savitz DA. Measurements, estimates, and inferences in reporting study results. American Journal of Epidemiology 1992;135:223-4.

Savitz DA. Health effects of low-frequency electric and magnetic fields. Environmental Science and Technology 1993;27:52-4.

Feychting M, Ahlbom A, Savitz D. Electromagnetic fields and childhood leukemia. Epidemiology 1998;9:225-6.

Savitz DA. Invited commentary: what can we infer from author order in epidemiology? American Journal of Epidemiology 1999;149:401-3.

Savitz DA. Reply: comment by S. Milham. Bioelectromagnetics 2000; 21:412.

Savitz DA. Commentary: Prior specification of hypotheses: cause or just a correlate of informative studies? International Journal of Epidemiology 2001;30:957-58.

Savitz DA. Environmental exposure and childhood cancer: Doing our best may not be good enough. American Journal of Public Health 2001;91:562-63.

Case 1:16-cv-00917-LEK-DJS Document 165 Filed 04/06/20 Page 72 of 93

Savitz DA. Invited commentary: Electromagnetic fields and cancer in railway workers. American Journal of Epidemiology 2001;153:836-38.

Savitz DA. Occupational exposure to magnetic fields and brain cancer. Occupational and Environmental Medicine 2001;58:617-18.

Savitz DA. Commentary: Magnetic fields and miscarriage. Epidemiology 2002;13:1-3

Savitz, DA. Commentary: Health effects of electric and magnetic fields: Are we done yet? Epidemiology 2003;14:15-17.

Savitz, DA Commentary: Ethnic differences in gestational age exist, but are they 'normal'? International Journal of Epidemiology 2004; 33:114-5

Savitz DA. Mixed signals on cell phones and cancer. Epidemiology 2004; 15:651-2.

Savitz DA. Why senior epidemiologists should write and publish papers. Epidemiology 2004; 15:381-2.

Savitz DA. Delimiting the role of ethical reasoning in epidemiology. European Journal of Epidemiology 2007;22:211-3.

Savitz DA. Guest editorial: biomarkers of perfluorinated chemicals and birth weight. Environmental Health Perspectives 2007; 115:A528-9.

Savitz DA. Delimiting the role of ethical reasoning in epidemiology. European Journal of Epidemiology 2007; 22:211-3.

Savitz DA. Disaggregating preterm birth to determine etiology. American Journal of Epidemiology 2008; PMID: 18756017.

Savitz DA. Low prior + frightening implications = inflammatory epidemiology? Epidemiology 2008; 19:534-5.

Samet JM, Savitz DA. Education in epidemiology: "The times they are a-changin". Epidemiology 2008; 19:345-6.

Savitz DA. How far can prenatal screening go in preventing birth defects? Journal of Pediatrics 2008;152:3-4.

Wilcox AJ, Savitz DA, Samet JM. A tale of two toxicants: lessons from Minamata and Liaoning. Epidemiology 2008;19:1-2.

Savitz DA. Disaggregating preterm birth to determine etiology. American Journal of Epidemiology 2008; 168:990-2.

Savitz DA, Ness RB. Saving the National Children's Study. Epidemiology 2010;21:598-601. PMID: 20631622

Savitz DA. The etiology of epidemiologic perseveration: when enough is enough. Epidemiology. 2010;21:281-3. PMID: 20386168

Savitz DA, Engel LS. Lessons for study of the health effects of oil spills. Annals of Internal Medicine. Oct 19;153(8):540-1. PMID: 20733179
Case 1:16-cv-00917-LEK-DJS Document 165 Filed 04/06/20 Page 73 of 93

Savitz DA. Biomarkers of exposure to drinking water disinfection by-products--are we ready yet? American Journal of Epidemiology 2011 Dec. [Epub ahead of print] PMID: 22156021

Savitz DA. Registration of observational studies does not enhance validity. Clinical Pharmacology and Therapeutics 2011 Nov; 90, (5): 646-8. PMID: 22012311

Savitz DA. Commentary: A niche for ecologic studies in environmental epidemiology. Epidemiology. 2012 Jan; 23(1): 53-4. PMID: 22157303

Savitz DA. Invited commentary: biomarkers of exposure to drinking water disinfection by-products--are we ready yet? American Journal of Epidemiology 2012 Feb; 15, 175(4): 276-8. PMID: 22156021

Savitz DA. Sample Selection for the National Children's Study: Form Must Follow Function. Paediatric and Perinatal Epidemiology 2013 Jan; 27(1): 31-3. PMID: 23215709

Savitz DA. Sample selection for the National Children's Study: form must follow function. Paediatric and Perinatal Epidemiology 2013 Jan; 27(1):31-3. PMID: 23215709

Savitz DA. Commentary: reconciling theory and practice: what is to be done with P values? Epidemiology 2013 Mar;24(2):212-4. PMID: 23377090

Hernán MA, Savitz DA. From "big epidemiology" to "colossal epidemiology": when all eggs are in one basket. Epidemiology 2013 May;24(3):344-5. PMID: 23549177

Savitz DA. Invited commentary: interpreting associations between exposure biomarkers and pregnancy outcome. American Journal of Epidemiology 2014 Mar 1;179(5):545-7. PMID: 24401560

Steenland K, Savitz DA, Fletcher T. Commentary: class action lawsuits: can they advance epidemiologic research? Epidemiology 2014 Mar;25(2):167-9. PMID: 24487199

Savitz DA, Werner EF. Invited commentary: isolating preterm birth to assess its impact. American Journal of Epidemiology 2015 Nov 1;182(9):759-61. PMID: 26409236

Hutcheon JA, Savitz DA. Invited Commentary: influenza, influenza immunization, and pregnancy-it's about time. American Journal of Epidemiology 2016 Aug 1;184(3):187-91. PMID: 27449413

Savitz DA, Wellenius GA. Exposure biomarkers indicate more than just exposure. American Journal of Epidemiology 2017 Nov 16. doi: 10.1093/aje/kwx333. [Epub ahead of print]PMID: 29155925

Savitz DA, Westreich D. Editorial: innovations in study design--a call for creative solutions. American Journal of Epidemiology 2017 Nov 1;186(9):1024-1025. doi: 10.1093/aje/kwx320. PMID: 29040350

BOOK CHAPTERS

Cornaby BW, Savitz DA, Pomerantz L, Murthy KS. Development of environmental objectives based on health and ecological effects. In C. Bliss (ed), Proceedings of the Fifth International Conference on Fluidized-Bed Combustion, Mitre Technical Document, 1978.

Savitz DA. Potential uses of a Synthetic Fuels Worker Registry. In final report of the Committee on Synthetic Fuels Facilities Safety, Safety Issues Related to Synthetic Fuels Facilities, pp. 265-8. Washington, D.C.: National Academy Press, 1982.

Case 1:16-cv-00917-LEK-DJS Document 165 Filed 04/06/20 Page 74 of 93

Savitz DA. A critical review of the Hanford worker studies: Cancer risk and low-level radiation. In Epidemiology Applied to Health Physics, Proceedings of the Sixteenth Midyear Topical Symposium of the Health Physics Society, CONF-830101, pp. 495-503. Albuquerque: Health Physics Society, 1983.

Savitz DA, Marine WM, Gratt LB, Perry BW. Hydrocarbon-induced cancer risks in oil shale processing. In JH Gary (ed), Seventeenth Oil Shale Symposium Proceedings, pp. 426-32. Golden, Colorado: Colorado School of Mines Press, 1984.

Gratt LB, Perry BW, Marine WM, Savitz DA. High risk groups in an oil shale workforce. In JH Gary (ed), Seventeenth Oil Shale Symposium Proceedings, pp. 403-13. Golden, Colorado: Colorado School of Mines Press, 1984.

Marine WM, Savitz DA, Gratt LB, Perry BW. Risk of dust-induced lung disease in oil shale workers. In JH Gary (ed), Seventeenth Oil Shale Symposium Proceedings, pp. 414-25. Golden, Colorado: Colorado School of Mines Press, 1984.

Savitz DA. The role of medical records in evaluating hazardous chemical exposures. In J Saxena (ed), Hazard Assessment of Chemicals--Current Developments, Volume 3, pp. 111-39. New York: Academic Press, 1984.

Savitz DA. Basic concepts of epidemiology. In WR Hendee (ed), The Health Effects of Low-Level Radiation Exposure, pp. 47-56. Norwalk, Connecticut: Appleton-Century-Crofts, 1984.

Savitz DA. Review of epidemiologic studies of Hanford workers: Cancer risk and low-level radiation. In WR Hendee (ed), The Health Effects of Low-Level Radiation Exposure, pp. 57-76. Norwalk, Connecticut: Appleton-Century-Crofts, 1984.

Savitz DA. Childhood cancer. In ZA Stein, MC Hatch (eds), Reproductive Problems in the Workplace, pp. 415-29. Philadelphia:Hanley and Belfis, 1986.

Savitz DA. Human health effects of extremely low frequency electromagnetic fields: critical review of clinical and epidemiological studies. IEEE Publication, 1986.

Savitz DA, Pearce NE. Occupational leukemias and lymphomas. In PW Brandt-Rauf (ed), Occupational Cancers. Seminars in Occupational Medicine 1987;2:283-9.

Savitz DA, Arbuckle TE, Harlow SD. Epidemiologic considerations in conducting studies of reproductive effects and environmental exposures: study design and analysis. EPA Reproductive Epidemiology Planning Workshop, U.S. EPA, Cincinnati, Ohio, 1988.

Savitz DA (Contributor). U.S. Department of Health and Human Services. The Health Benefits of Smoking Cessation. U.S. DHHS, PHS, CDC, Office on Smoking and Health. DHHS Publication No. (CDC) 90-8416, 1990.

Savitz DA. The use of epidemiology for establishing hazards and risk. IEEE Transactions on Education 1991;34:211-5.

Savitz DA, Harris RP, Brownson RC. Methods in chronic disease epidemiology. In: Brownson RC, Remington PL, Davis JR (eds), Chronic disease epidemiology and control. Washington, DC: American Public Health Association 1993;19-36.

Savitz DA, Ahlbom A. Epidemiologic evidence on cancer in relation to residential and occupational exposures. In Carpenter DO, Ayrapetyan S (eds), Biological Effects of Electric and Magnetic Fields, Volume 2. San Diego, CA: Academic Press, 1994:233-61.

Case 1:16-cv-00917-LEK-DJS Document 165 Filed 04/06/20 Page 75 of 93

Arbuckle T, Savitz DA. The Ontario Farm Family Health Study: development of survey instruments. In McDuffie HH, Dosman JA, Semchuk KM, Olenchock SA, Senthilselvan A (eds), Supplement to agricultural health and safety: workplace, environment, sustainability. Chelsea, Michigan: Lewis Publishers 1995;149-155.

Savitz DA. Overview of evidence and research needs concerning electromagnetic fields and health. In Bertollini R, Lebowitz MD, Saracci R, Savitz DA (eds), Environmental Epidemiology. Exposure and Disease. Boca Raton, Florida: Lewis Publishers, 1995:99-112.

Savitz DA. Residential magnetic fields and cancer: issues in exposure assessment. In Steenland K, Savitz DA (eds), Topics in Environmental Epidemiology. New York, NY. Oxford University Press, 1997;295-313.

Savitz DA, Moe C. Drinking water. In Steenland K, Savitz DA (eds), Topics in Environmental Epidemiology. New York, NY. Oxford University Press, 1997;89-118.

Savitz DA, Pastore LM. Causes of prematurity. In McCormick MC, Siegel JE (eds.), Prenatal Care. Effectiveness and implementation. Cambridge, University Press, UK 1999; 63-104.

Savitz DA, Trichopoulos D. Brain cancer. In Adami H-O, Hunter D, Trichopoulos D (eds.), Textbook of Cancer Epidemiology. New York, NY. Oxford University Press 2002; 486-503.

Savitz DA, Ahlbom A. Electromagnetic fields and radiofrequency radiation. In Schottenfeld D, Fraumeni Jr JF (Eds.), Cancer Epidemiology and Prevention, Third Edition. New York, NY: Oxford University Press 2006; 3066-321.

LETTERS

Savitz DA. Methodological error cited in SIDS study. American Journal of Public Health 1979;69: 178-9.

Savitz DA. Comment on principal component analysis of health indicators. American Journal of Epidemiology 1980;112:574-5.

Savitz DA. Criteria for evaluating epidemiologic research. Journal of Occupational Medicine 1983;25:787-8.

Calle EG, Savitz DA. Leukemia in occupational groups with the potential for electric and magnetic field exposure. New England Journal of Medicine 1985;313:1476-7.

Savitz DA, Moure R. Authors Response to H. Checkoway "Identifying Unexposed Workers from Occupational Cohorts." Journal of Occupational Medicine 1985;27:240.

Savitz DA. Comments received on statistical testing and confidence intervals. American Journal of Public Health 1987;77:237-8.

Case 1:16-cv-00917-LEK-DJS Document 165 Filed 04/06/20 Page 76 of 93

Savitz DA, Moure R. Treatment of subjects lost to follow-up: Effect on cancer risks. Journal of Occupational Medicine 1988; 30:89-91.

Savitz DA, Kelsey JL. Response to Feinstein. Epidemiology 1991;2:61-3.

Savitz DA. Comment on "Associations are not effects." American Journal of Epidemiology 1991;134:442-3.

Whelan EA, Savitz DA. Parental occupation and risk of prematurity. Lancet 1991;2:1082.

Stevens R, Savitz D. Electromagnetic fields and cancer: is it an issue worthy of study? Cancer 1992;69:603-6.

Savitz DA. Response to Mundt letter re: "Exposure to residential electric and magnetic fields and risk of childhood leukemia" and "Case-control study of childhood cancer and exposure to 60-Hz magnetic fields." American Journal of Epidemiology 1992;135:1071-3.

Savitz DA, Kaune WT. Response: potential bias in Denver childhood cancer study. Environmental Health Perspectives 1993;101:369-70.

Savitz DA. Re: Validation studies using an alloyed gold standard. American Journal of Epidemiology 1994;139:853-4.

Savitz DA, Swenson IE. Response to Smith and Zaidi letter re: The possible effect of emigration on infant and child mortality from the Vietnam War." American Journal of Public Health, 1994;84:499-500.

Savitz DA, Ahlbom A. Power lines, viruses, and childhood leukemia. Cancer Causes and Control 1994;5:589-80.

Savitz DA. Re: "Breast cancer and serum organochlorines: a prospective study among white, black, and Asian women." Journal of the National Cancer Institute 1994;86:1255-6.

Loomis DP, Savitz DA, Ananth CV (Letter). Re: Breast cancer mortality among female electrical workers in ther United States. Journal of the National Cancer Institute 1994;86:1801-1802.

Savitz DA, Sonnenfeld NL, Olshan AF. Reply to Dr. Magos. American Journal of Industrial Medicine 1995;27:609-10.

Savitz DA, Sonnenfeld NL, Olshan AF. Reply to Olsen, Ramlow, and Hearn. American Journal of Industrial Medicine 1995;27:615-6.

Savitz DA, Olshan AF. Re: "Male and female factors in infertility." American Journal of Epidemiology 1995;141:1107-8.

Poole C, Savitz DA. Response to Witte, Thomas, and Langholz letter re: Statistical significance testing in the American Journal of Epidemiology, 1970-1990." American Journal of Epidemiology 1995;142:102.

Savitz DA. Response to Chiu and Bayliss letter re: "Black Box Epidemiology." Epidemiology 1995;6:464-5.

Olshan AF, Savitz DA. Paternal smoking and low birthweight: the routes of exposure. American Journal of Public Health 1995;85:1169.

Leiss JK, Savitz DA. Response to Bukowski and Meyer letter re: "Reevaluating the evidence on pesticide safety." American Journal of Public Health, 1995;85:1587.

Case 1:16-cv-00917-LEK-DJS Document 165 Filed 04/06/20 Page 77 of 93

Pearce N, de Sanjose S, Boffetta P, Saracci R, Kogevinas M, Savitz D. Response to Schulte, Rothman, Perera and Talaska letter re: "Biomarkers of exposure in cancer epidemiology." Epidemiology 1995;6:638.

Savitz DA, Andrews KW. Re: "Risk of myelogenous leukemia and multiple myeloma in workers exposed to benzene." Occupational and Environmental Medicine 1996;53:357.

Savitz DA, Olshan AF. Re: "Multiple comparisons and related issues in the interpretation of epidemiologic data." American Journal of Epidemiology 1997;145:84-5.

Savitz DA, Curtis KM, Kaczor D. Re: "Male pesticide exposure and pregnancy outcome." American Journal of Epidemiology 1999;149:291.

Savitz DA, Poole C, Miller WC. Reassessing the role of epidemiology in public health. American Journal of Public Health 1999;89:1158-61.

Savitz DA. Can children's health be predicted by perinatal health? International Journal of Epidemiology 2000;29:189.

Savitz DA. Reply: Comment by S Milham. Bioelectromagnetics 2000;21:412.

Cohen JT, Bellinger DC, Connor WE, Kris-Etherton PM, Lawrence RS, Savitz DA, Shaywitz BA, Teutsch SM, Gray GM. Fish Consumption. Author's Response. American Journal of Prevevntive Medicine 2006; 30:441-3.

Savitz DA. Re: Moderate alcohol intake during pregnancy and risk of fetal death. International Journal of Epidemiology 2012 Oct; [Epub ahead of print]. PMID: 23064503

McKenzie LM, Guo R, Witter RZ, Savitz DA, Newman LS, Adgate JL. Birth outcomes and natural gas development: McKenzie et al. respond. Environ Health Perspect. 2014 Sep;122(9):A232-3. doi: 10.1289/ehp.1408647R. No abstract available. PMID: 25180489

BOOK REVIEWS

Savitz DA. Electric current and health. Review of "Currents of Death: Power Lines, Computer Terminals, and the Attempt to Cover Up their Threat to Health" by Paul Brodeur. Journal of the American Medical Association 1990;264:636-7.

Savitz DA, McMahon MJ, Olshan AF. Review of "Occupational and Environmental Reproductive Hazards: A Guide for Clinicians" edited by Maureen Paul. New England Journal of Medicine 1993;329:1588-9.

Savitz DA. Review of "Basic Epidemiology" by Beaglehole, Bonita, and Kjellstrom. Epidemiology 1994;5:634-5.

Savitz DA. Finding the Silver Lining: Review of 'False Premises False Promises: Selected Writings of Petr Skrabanek. International Journal of Epidemiology 2001;30:403-05.

Savitz DA. Hyping Health Risks: Environmental Hazards in Daily Life and the Science of Epidemiology: By Goeffrey C. Kabat. American Journal of Epidemiology 2009;169:1039-41.

INVITED LECTURES/PRESENTATIONS (Selected, 1985-Present)

Invited Presentations in the United States

Universities

Baylor College of Medicine Boston University Brown University Dartmouth University Drexel University Eastern Virginia Medical School **Emory University** Harvard University Johns Hopkins University Memorial Sloan Kettering Cancer Center Mount Sinai School of Medicine Michigan State University New York State Department of Health Ohio State University Oregon State University Robert Wood Johnson Medical School State University of New York School of Public Health University of Alabama at Birmingham University of California, San Francisco University of Buffalo University of Chicago University of Cincinnati University of Connecticut University of Michigan University of Minnesota University of Pittsburgh University of Texas Vanderbilt University

Other Organizations/Research Meetings

American College of Epidemiology American Conference of Governmental and Industrial Hygienists Center for Urban Epidemiologic Studies Health Effects Institute Annual Conference International Society for Environmental Epidemiology National Academy of Sciences National Cancer Center National Institute of Child Health and Human Development National Institute of Occupational Safety and Health Norwegian Epidemiological Society Population Association of America Society for Epidemiologic Research SERTalks Teratology Society

Invited International Presentations

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Electromagnetic Fields and Childhood Cancer. Department of Environmental Epidemiology Seminar, Karolinska Institute, Stockholm, 1987

Epidemiologic Studies of Electromagnetic Fields and Cancer. Plenary Presentation, International Society for Environmental Epidemiology, Stockholm, Sweden 1993

Epidemiology of Childhood Cancer, Central Pediatric Hospital, Mexico City, Mexico, 1995

Epidemiologic Research on Health Effects of Electric and Magnetic Fields. Benelux Conference on Electromagnetic Fields, Brussels, Belgium, January 1997.

Methodologic Issues in Reproductive Epidemiology. Department of Community Health, University of Newcastle School of Medicine, Newcastle-Upon-Tyne, England, September 1997

Epidemiologic Research on Health Effects of Electric and Magnetic Fields. Workshop on Power Lines and Cancer, London, England, 1999

Health Effects of Electromagnetic Fields. World Health Organization Conference, Florence, Italy, August 1999.

Paternal Exposure to Known Mutagens and Health of the Offspring: Ionizing Radiation and Tobacco Smoke. Second International Conference on Male Mediated Developmental Toxicity, Montreal, Quebec, Canada, June 2001

Strengths and Limitations in Ecological Exposure Measures in Environmental Epidemiology. International Conference on Spatial Epidemiology, London, England, May 2006

Air Pollution and Preterm Birth, Seminar, Statens Serum Institut, Copenhagen, Denmark, December 2010

Does Influenza Vaccination Prevent Preterm Birth? Methodological Issues and Research Needs. World Health Organization, March 2015

Influenza Vaccine: Observational Studies Assessing Birth Outcome. Montreal, Canada, September 2015

Interpreting Epidemiologic Evidence: The Art of Using Research Wisely. Norwegian Epidemiology Society Annual Meeting, Bergen, Norway, September 2016

When Is Epidemiologic Research a Helpful Response to Environmental Pollution and When Is It Not? First International Training School on Environmental health in industrially contaminated sites COST Action IS1408 Industrially Contaminated Sites and Health Network, February, 2017 Case 1:16-cv-00917-LEK-DJS Document 165 Filed 04/06/20 Page 80 of 93

EXHIBIT B

SAVITZ EXHIBIT B

Bibliography

- 1. Alexander BH, Olsen GW. Bladder cancer in perfluorooctanesulfonyl fluoride manufacturing workers. Ann Epidemiol 2007;17: 471–478.
- 2. Alexander BH, Olsen GW, Burris JM, Mandel JH, Mandel JS. Mortality of employees of a perfluorooctanesulphonyl fluoride manufacturing facility. Occup Environ Med 2003;60:722–729.
- 3. Andersen CS, Fei C, Gamborg M, et al. Prenatal exposures to perfluorinated chemicals and anthropometric measures in infancy. Am J Epidemiol 2010; 172:1230-7.
- 4. Apelberg BJ, Witter FR, Herbstman JB, et al. Cord serum concentrations of perfluorooctane sulfonate (PFOS) and perfluorooctanoate (PFOA) in relation to weight and size at birth. Environ Health Perspect 2007;115:1670-6.
- 5. Barry V, Darrow LA, Klein M, Winquist A, Steenland K. Early life perfluorooctanoic acid (PFOA) exposure and overweight and obesity risk in adulthood in a community with elevated exposure. Environ Res. 2014 Jul;132:62-9. doi: 10.1016/j.envres.2014.03.025. PubMed PMID: 24742729.
- Barry V, Winquist A, Steenland K. Perfluorooctanoic acid (PFOA) exposures and incident cancers among adults living near a chemical plant. Environ Health Perspect. 2013 Nov-Dec;121(11-12):1313-8. doi: 10.1289/ehp.1306615. PubMed PMID: 24007715; PubMed Central PMCID: PMC3855514.
- 7. Bonefeld-Jorgensen EC, Long M, Bossi R, et al. Perfluorinated compounds are related to breast cancer risk in Greenland Inuit: a case control study. Environ Health 2011;10: 88.
- 8. Buck-Louis GM, Sapra KJ, Barr DB, Lu Z. Preconception perfluoroalkyl and polyfluoroalkyl substances and incident pregnancy loss, LIFE study. Repro Toxicol 2016;65:11-7.
- 9. Buser MC, Scinicariello F. Perfluoroalkyl substances and food allergies in adolescents. Environ International 2016;88:74-79.
- Campbell S, Raza M, Pollack AZ. Perfluoroalkyl substances and endometriosis in US women in NHANES 2003-2006. Reprod Toxicol. 2016 Oct;65:230-235. doi: 10.1016/j.reprotox.2016.08.009. Epub 2016 Aug 17.
- 11. Chan E, Burstyn I, Cherry N, et al. Perfluorinated acids and hypothyroxinema in pregnant women. Environ Res 2011 May;111(4):559-64.
- 12. Coperchini F, Awwad O, Rotondi M, Santini F, Imbriani M, Chiovato L. Thyroid disruption by perfluorooctane sulfonate (PFOS) and perfluorooctanoate (PFOA). J

Endocrinol Invest 2016 Nov 11. [Epub ahead of print] Review. PubMed PMID: 27837466.

- 13. Costa G, Sartori S, Consonni D. Thirty years of medical surveillance in perfluooctanoic acid production workers. J Occup Environ Med. 2009 Mar;51(3):364-72.
- 14. Dalsager L, Christensen N, Husby S, Kyhl H, Nielsen F, Høst A, Grandjean P, Jensen TK. Association between prenatal exposure to perfluorinated compounds and symptoms of infections at age 1-4years among 359 children in the Odense Child Cohort. Environ Int. 2016 Nov;96:58-64. doi: 10.1016/j.envint.2016.08.026. PubMed PMID: 27608427.
- Darrow LA, Howards PP, Winquist A, Steenland K. PFOA and PFOS serum levels and miscarriage risk. Epidemiology. 2014 Jul;25(4):505-12. doi:10.1097/EDE.00000000000103. PubMed PMID: 24807698.
- Darrow LA, Stein CR, Steenland K. Serum perfluorooctanoic acid and perfluorooctane sulfonate concentrations in relation to birth outcomes in the Mid-Ohio Valley, 2005-2010. Environ Health Perspect. 2013 Oct;121(10):1207-13. doi: 10.1289/ehp.1206372. PubMed PMID: 23838280; PubMed Central PMCID: PMC3801459.
- Darrow LA, Groth AC, Winquist A, Shin HM, Bartell SM, Steenland K. Modeled Perfluorooctanoic Acid (PFOA) exposure and liver function in a Mid-Ohio Valley community. Environ Health Perspect. 2016 Aug;124(8):1227-33. doi: 10.1289/ehp.1510391. Epub 2016 Mar 15.
- 18. DeCock M, de Boer MR, Lamoree M, Legler J, van de Bor M. Prenatal exposure to endocrine disrupting chemicals in relation to thyroid hormone levels in infants a Dutch prospective cohort study. Environ Health 2015;13:106.
- 19. Dhingra R, Lally C, Darrow LA, et al. Perfluorooctanoic acid and chronic kidney disease: longitudinal analysis of a mid-Ohio Valley community. Environ Res 2016;145:85-92.
- Dhingra R, Darrow LA, Klein M, Winquist A, Steenland K. Perfluorooctanoic acid exposure and natural menopause: A longitudinal study in a community cohort. Environ Res. 2016 Apr;146:323-30. doi: 10.1016/j.envres.2015.12.037. PubMed PMID: 26802619.
- 21. Dhingra R, Lally C, Darrow LA, et al. Perfluorooctanoic acid and chronic kidney disease: longitudinal analysis of a mid-Ohio Valley community. Environ Res 2016;145:85-92.
- 22. Ducatman A, Zhang J, Fan H. Prostate-specific antigen and perfluoroalkyl acids in the C8 Health Study Population. J Occup Environ Med 2015;57:111-5.

- 23. Eriksen KT, Sørensen M, McLaughlin JK, et al. Perfluorooctanoate and perfluorooctanesulfonate plasma levels and risk of cancer in the general Danish population. J Natl Cancer Inst 2009;101: 605–609.
- 24. Fei C, McLaughlin JK, Tarone RE, Olsen J. Fetal growth indicators and perfluorinated chemicals: a study in the Danish National Birth Cohort. Am J Epidemiol 2008;168:66-72.
- 25. Fei C, McLaughlin JK, Tarone RE, Olsen J. Perfluorinated chemicals and fetal growth: a study within the Danish National Birth Cohort. Environ Health Perspect.2007 Nov;115(11):1677-82. PubMed PMID: 18008003; PubMed Central PMCID:PMC2072850.
- 26. Fei C, McLaughlin JK, Lipworth L, Olsen J. Maternal concentrations of perfluorooctanesulfonatae (PFOS) and perfluorooctanoate (PFOA) and duration of breastfeeding. Scand J Work Environ Health 2010;36:413-21.
- 27. Fei C, McLaughlin JK, Lipworth L, Olsen J. Maternal levels of perfluorinated chemicals and subfecundity. Hum Repro 2009;1:1-6.
- Fei C, McLaughlin JK, Lipworth L, Olsen J. Prenatal exposure to perfluorooctanoate (PFOA) and perfluorooctanesulfonate (PFOS) and maternally reported developmental milestones in infancy. Environ Health Perspect 2008;116:1391-5.
- 29. Fei C, McLaughlin JK, Lipworth L, Olsen J. Prenatal exposure to PFOA and PFOS and risk of hospitalization for infectious diseases in early childhood. Environ Res 2010;110:773-7.
- 30. Fei C, Olsen J. Prenatal exposure to perfluorinated chemicals and behavioral or coordination problems at age 7 years. Environ Health Perspect 2011;119:573-8.
- 31. Fisher M, Arbuckle TE, Wade M, Haines DA. Do perfluoroalkyl substances affect metabolic function and plasma lipids?--Analysis of the 2007-2009, Canadian Health Measures Survey (CHMS) Cycle 1. Environ Res. 2013 Feb;121:95-103. doi: 10.1016/j.envres.2012.11.006. Epub 2012 Dec 22.
- Fitz-Simon N, Fletcher T, Luster MI, Steenland K, Calafat AM, Kato K, Armstrong B. Reductions in serum lipids with a 4-year decline in serum perfluorooctanoic acid and perfluorooctanesulfonic acid. Epidemiology. 2013 Jul;24(4):569-76. doi: 10.1097/EDE.0b013e31829443ee. Erratum in: Epidemiology. 2013 Nov;24(6):941. PubMed PMID: 23685825; PubMed Central PMCID: PMC4724201.
- 33. Fleisch AF, Rifas-Shiman SL, Mora AM, Calafat AM, Ye X, Luttmann-Gibson H, Gillman MW, Oken E, Sagiv SK. Early Life Exposure to Perfluoroalkyl Substances and Childhood Metabolic Function. Environ Health Perspect. 2016 Sep 2. [Epub ahead of print] PubMed PMID: 27586368.

- 34. Frisbee SJ, Shankar A, Knox SS, Steenland K, Savitz DA, Fletcher T, Ducatman AM. Perfluorooctanoic acid, perfluorooctanesulfonate, and serum lipids in children and adolescents: results from the C8 Health Project. Arch Pediatr Adolesc Med. 2010 Sep;164(9):860-9. doi: 10.1001/archpediatrics.2010.163. PubMed PMID: 20819969; PubMed Central PMCID: PMC3116641.
- 35. Fu Y, Wang T, Fu Q, Wang P, Lu Y. Associations between serum concentrations of perfluoroalkyl acids and serum lipid levels in a Chinese population. Ecotoxicol Environ Saf. 2014 Aug;106:246-52. doi: 10.1016/j.ecoenv.2014.04.039. PubMed PMID: 24863755.
- 36. Gallo V, Leonardi G, Genser B, Lopez-Espinosa MJ, Frisbee SJ, Karlsson L, Ducatman AM, Fletcher T.Serum perfluorooctanoate (PFOA) and perfluorooctane sulfonate (PFOS) concentrations and liver function biomarkers in a population with elevated PFOA exposure. Environ Health Perspect. 2012 May;120(5):655-60. doi: 10.1289/ehp.1104436. Epub 2012 Jan 30.
- Gallo V, Leonardi G, Brayne C, Armstrong B, Fletcher T. Serum perfluoroalkyl acids concentrations and memory impairment in a large cross-sectional study. BMJ Open. 2013 Jun 20;3(6). pii: e002414. doi: 10.1136/bmjopen-2012-002414. PubMed PMID: 23794579; PubMed Central PMCID: PMC3686223.
- 38. Geiger SD, Xiao J, Shankar A. Positive association between perfluoroalkyl chemicals and hyperuricemia in children. Am J Epidemiol. 2013 Jun 1;177(11):1255-62.
- Geiger SD, Xiao J, Ducatman A, Frisbee S, Innes K, Shankar A. The association between PFOA, PFOS and serum lipid levels in adolescents. Chemosphere. 2014 Mar;98:78-83. doi: 10.1016/j.chemosphere.2013.10.005. Epub 2013 Nov 13.
- 40. Gilliland FD, Mandel JS. Mortality among employees of a perfluorooctanoic acid production plant. J Occup Med 1993;35: 950–954.
- 41. Gilliland FD, Mandel JS. Serum perfluorooctanoic acid and hepatic enzymes, lipoproteins, and cholesterol: a study of occupationally exposed men. Am J Industr Hyg 1996;29:560-8.
- 42. Gleason JA, Post GB, Fagliano JA. Associations of perfluorinated chemical serum concentrations and biomarkers of liver function and uric acid in the US population (NHANES), 2007-2010. Environ Res. 2015 Jan;136:8-14.
- Grandjean P, Andersen EW, Budtz-Joregensen E, et al. Serum vaccine antibody concentrations in children exposed to perfluorinated compounds. JAMA 2012;307:391-7.
- 44. Grandjean P, Jorgensen EB. Immunotoxicity of perfluorinated alkylates: calculation of benchmark doses based on serum concentrations in children. Environ Res 2013;12:35.

- 45. Grandjean P, Heilmann C, Weihe P, Nielsen F, Mogensen UB, Budtz-Jørgensen E. Serum Vaccine Antibody Concentrations in Adolescents Exposed to Perfluorinated Compounds. Environ Health Perspect. 2017 Jul 26;125(7):077018. doi: 10.1289/EHP275.
- 46. Granum B, Haug LS, Namork E, Stølevik SB, Thomsen C, Aaberge IS, van Loveren H, Løvik M, Nygaard UC. Pre-natal exposure to perfluoroalkyl substances may be associated with altered vaccine antibody levels and immune-related health outcomes in early childhood. J Immunotoxicol. 2013 Oct-Dec;10(4):373-9. doi: 10.3109/1547691X.2012.755580. PubMed PMID: 23350954.
- 47. Grice MM, Alexander BH, Hoffbeck R, Kampa DM. Self-reported medical conditions in perfluorooctanesulfonyl fluoride manufacturing workesr. J Occup Environ Med 2007;49:722-9.
- 48. Gump BB, Wu Q, Dumas AK, Kannan K. Perfluorochemical (PFC) exposure in children: associations with impaired response inhibition. Environ Sci Technol 2011;45:8151-9.
- 49. Halldorsson TI, Rytter D, Haug LS, et al. Prenatal exposure to perfluorooctonoate and risk of overweight at 20 years of age: a prospective cohort study. Environ Health Perspect 2012;xxx
- 50. Hamm MP, Cherry NM, Chan E, Martin JW, Burstyn I. Maternal exposure to perfluorinated acids and fetal growth. J Expo Sci Environ Epidemiol. 2010 Nov;20(7):589-97. doi: 10.1038/jes.2009.57. PubMed PMID: 19865074.
- 51. Hardell E, Karrman A, van Bavel B, et al. Case-control study of perfluorinatead alkyl acids (PFAAs) and the risk of prostate cancer. Environ International 2014;63:35-9.
- 52. Hoffman K, Webster TF, Weisskopf MG, et al. Exposure to polyfluoroalkyl chemicals and attention deficit/hyperactivity disorder in U.S. children 12-15 years of age. Environ Health Perspect 2010;118:1762-7.
- 53. Høyer BB, Ramlau-Hansen CH, Obel C, Pedersen HS, Hernik A, Ogniev V, Jönsson BA, Lindh CH, Rylander L, Rignell-Hydbom A, Bonde JP, Toft G. Pregnancy serum concentrations of perfluorinated alkyl substances and offspring behaviour and motor development at age 5-9 years--a prospective study. Environ Health. 2015 Jan 7;14:2. doi: 10.1186/1476-069X-14-2. PubMed PMID: 25567242; PubMed Central PMCID:PMC4298045.
- 54. Innes KE, Ducatman AM, Luster MI, Shankar A. Association of osteoarthritis with serum levels of the environmental contaminants perfluorooctanoate and perfluorooctane sulfonate in a large Appalachian population. Am J Epidemiol 2011; 174:440-50.
- 55. Jain RB. Association between thyroid profile and perfluoroalkyl acids: data from NHNAES 2007-2008. Environ Res. 2013 Oct;126:51-9. doi: 10.1016/j.envres.2013.08.006. PubMed PMID: 24053974.

- 56. Jensen TK, Andersen LB, Kyhl HB, Nielsen F, Christesen HT, Grandjean P. Association between perfluorinated compound exposure and miscarriage in Danish pregnant women. PLoS One. 2015 Apr 7;10(4):e0123496. doi:10.1371/journal.pone.0123496. Erratum in: PLoS One. 2016;11(2):e0149366. PubMed PMID: 25848775; PubMed Central PMCID: PMC4388566.
- 57. Joensen UN, Bossi R, Leffers H, et al. Do perfluoroalkyl compounds impair human semen quality? Environ Health Perspect 2009;117:923-7.
- 58. Kang DH, Chen W. Uric acid and chronic kidney disease: new understanding of an old problem. Semin Nephrol. 2011 Sep;31(5):447-52.
- Karnes C, Winquist A, Steenland K. Incidence of type II diabetes in a cohort with substantial exposure to perfluorooctanoic acid. Environ Res. 2014 Jan;128:78-83. doi: 0.1016/j.envres.2013.11.003. PubMed PMID: 24299613.
- 60. Kataria A, Trachtman H, Malaga-Dieguez L, Trasande L. Association between perfluoroalkyl acids and kidney function in a cross-sectional study of adolescents. Environ Health. 2015 Nov 21;14:89.
- 61. Kielsen K, Shamim Z, Ryder LP, Nielsen F, Grandjean P, Budtz-Jørgensen E, Heilmann C. Antibody response to booster vaccination with tetanus and diphtheria in adults exposed to perfluorinated alkylates. J Immunotoxicol. 2016;13(2):270-3. doi: 0.3109/1547691X.2015.1067259. Epub 2015 Jul 16.
- 62. Knox SS, Jackson T, Javins B, et al. Implications of early menopause in women exposed to perfluorocarbons. J Clin Endocrinol Metab 2011;96:xxxx.
- 63. Lam J, Koustas E, Sutton P, Johnson PI, Atchley DS, Sen S, Robinson KA, Axelrad DA, Woodruff TJ. The Navigation Guide evidence-based medicine meets environmental health: integration of animal and human evidence for PFOA effects on fetal growth. Environ Health Perspect. 2014 Oct;122(10):1040-51. doi: 10.1289/ehp.1307923. Epub 2014 Jun 25.
- 64. La Rocca C, Tait S, Guerranti C, et al. Exposure to endocrine disrupters and nuclear receptor gene expression in infertile and fertile women from different Italian areas. Int J Environ Res Public Health 2014;11:10146-10164.
- 65. Lee YJ, Kim M-K, Bae J, Yang J-H. Concentrations of perfluoroalkyl compounds in maternal and umbilical cord sera and birth outcomes in Korea. Chemosphere 2013 Feb;90(5):1603-9.
- 66. Leonard RC, Kreckman KH, Sakr CJ, et al. Retrospective cohort mortality study of workers in a polymer plans including a reference population of regional workers. Ann Epidemiol 2008;18:15-22.

- 67. Lien GW, Huang CC, Shiu JS, Chen MH, Hsieh WS, Guo YL, Chen PC. Perfluoroalkyl substances in cord blood and attention deficit/hyperactivity disorder symptoms in seven-year-old children. Chemosphere. 2016 Aug;156:118-27. doi: 10.1016/j.chemosphere.2016.04.102. PubMed PMID: 27174824.
- 68. Lin CY, Lin LY, Chiang CK, Wang WJ, Su YN, Hung KY, Chen PC. Investigation of the associations between low-dose serum perfluorinated chemicals and liver enzymes in US adults. Am J Gastroenterol. 2010 Jun;105(6):1354-63. doi: 10.1038/ajg.2009.707. Epub 2009 Dec 15.
- 69. Lin LY, Wen LL, Su TC, Chen PC, Lin CY. Negative association between serum perfluorooctane sulfate concentration and bone mineral density in US premenopausal women: NHANES, 2005-2008. J Clin Endocrinol Metab. 2014 Jun;99(6):2173-80. doi: 10.1210/jc.2013-3409. PubMed PMID: 24606077.
- 70. Louis GM, Peterson CM, Chen Z, Hediger ML, Croughan MS, Sundaram R, Stanford JB, Fujimoto VY, Varner MW, Giudice LC, Kennedy A, Sun L, Wu Q, Kannan K. Perfluorochemicals and endometriosis: the ENDO study. Epidemiology. 2012 Nov;23(6):799-805. doi: 10.1097/EDE.0b013e31826cc0cf.
- 71. Looker C, Luster MI, Calafat AM, Johnson VJ, Burleson GR, Burleson FG, Fletcher T. Influenza vaccine response in adults exposed to perfluorooctanoate and perfluorooctanesulfonate. Toxicol Sci. 2014 Mar;138(1):76-88. doi: 10.1093/toxsci/kft269. Epub 2013 Nov 27.
- 72. Lundin JI, Alexander BH, Olsen GW, Church TR. Ammonium perfluorooctanoate production and occupational mortality. Epidemiology. 2009;20:921–928.
- MacNeil J, Steenland NK, Shankar A, Ducatman A. A cross-sectional analysis of type II diabetes in a community with exposure to perfluorooctanoic acid (PFOA). Environ Res. 2009 Nov;109(8):997-1003. doi: 10.1016/j.envres.2009.08.002. PubMed PMID: 19740462.
- 74. Melzer D, Rice N, Depledge MH, Henley WE, Galloway TS. Association between serum perfluoroctonoic acid (PFOA) and thyroid disease in the U.S. National Health and Nutrition Examination Survey. Environ Health Perspect 2010; 118: 686-92.
- 75. Min J-Y, Lee K-J, Park J-B. Perfluorooctanoic acid exposure is associated with elevated homocysteine and hypertension in US adults. Occup Environ Med 2012; 69:658-62.
- 76. Mora AM, Oken E, Rifas-Shiman SL, Webster TF, Gillman MW, Calafat AM, Ye X, Sagiv SK. Prenatal Exposure to Perfluoroalkyl Substances and Adiposity in Early and Mid-Childhood. Environ Health Perspect. 2016 Jun 28. [Epub ahead of print] PubMed PMID: 27352404.
- 77. Nelson JW, Hatch EE, Webster TF. Exposure to polyfluoroalkyl chemicals and cholesterol, body weight, and insulin resistance in the general U.S. population. Environ

Health Perspect. 2010 Feb;118(2):197-202. doi: 10.1289/ehp.0901165. PubMed PMID: 20123614; PubMed Central PMCID: PMC2831917.

- 78. Nolan LA, Nolan JM, Shofer FS, et al. Congenital anomalies, labor/delivery complications, maternal risk factors and their relationship with perfluorooctanoic acid (PFOA)-contaminateaad public drinking water. Repro Toxicol 2010;29:147-55.
- 79. Nolan LA, Nolan JM, Shofer FS, et al. The relationship between birth weight, gestational age and perfluorooctanoic acide (PFOA)-contaminated public drinking water. Repro Toxicol 2009;27:231-8.
- Okada E, Sasaki S, Saijo Y, et al. Prenatal exposure to perfluorinated chemicals and relationship with allergies and infectious diseases in infants. Environ Res 2012;112:118-25.
- Olsen GW, Burris JM, Burlew MM, Mandel JH. Plasma cholecystokinin and hepatic enzymes, cholesterol and lipoproteins in ammonium perfluorooctanoate production workers. Drug Chem Toxicol. 2000 Nov;23(4):603-20.
- 82. Olsen GW, Zobel LR. Assessment of lipid, hepatic, and thyroid parameters with serum perfluorooctonate (PFOA) concentrations in fluorochemical production workers. Int Arch Occup Environ Health 2007;81:231-46.
- 83. <u>Pirali B</u>, Negri S, Chytiris S, et al. Perfluorooctane sulfonate and perfluorooctanoic acid in surgical thyroid specimens of patients with thyroid disease. Thyroid 2009;19:1407-12.
- 84. Qin XD, Qian Z, Vaughn MG, Huang J, Ward P, Zeng XW, Zhou Y, Zhu Y, Yuan P, Li M, Bai Z, Paul G, Hao YT, Chen W, Chen PC, Dong GH, Lee YL. Positive associations of serum perfluoroalkyl substances with uric acid and hyperuricemia in children from Taiwan. Environ Pollut. 2016 May;212:519-24. doi: 10.1016/j.envpol.2016.02.050. PubMed PMID: 26970855.
- Raleigh KK, Alexander BH, Olsen GW, et al. Mortality and cancer incidence in ammonium perfluorooctanoate production workers. Occup Environ Med. 2014;71:500– 506.
- 86. Sakr CJ, Kreckmann KH, Green JW, Gillies PJ, Reynolds JL, Leonard RC. Crosssectional study of lipids and liver enzymes related to a serum biomarker of exposure (ammonium perfluorooctanoate or APFO) as part of a general health survey in a cohort of occupationally exposed workers. J Occup Environ Med. 2007 Oct;49(10):1086-96.
- Sakr CJ, Symons JM, Kreckmann KH, Leonard RC. Ischaemic heart disease mortality study among workers with occupational exposure to ammonium perfluorooctonoate. Occup Environ Med 2009;66:699-703.
- 88. Savitz DA, Stein CR, Bartell SM, Elston B, Gong J, Shin HM, Wellenius GA. Perfluorooctanoic acid exposure and pregnancy outcome in a highly exposed community.

Epidemiology 2012 May;23(3):386-92. doi: 10.1097/EDE.0b013e31824cb93b. PMID: 22370857.

- Savitz DA, Stein CR, Elston B, Wellenius GA, Bartell SM, Shin HM, Vieira VM, Fletcher T. Relationship of perfluorooctanoic acid exposure to pregnancy outcome based on birth records in the mid-Ohio Valley. Environ Health Perspect. 2012 Aug;120(8):1201-7.doi:10.1289/ehp.1104752. PubMed PMID: 22450153; PubMed Central PMCID: PMC3440089.
- 90. Shankar A, Xiao J, Ducatman A. Perfluoroalkyl chemicals and elevated serum uric acid in US adults. Clin Epidemiol. 2011;3:251-8.
- 91. Shrestha S, Bloom MS, Yucel R, Seegal RF, Wu Q, Kannan K, Rej R, Fitzgerald EF. Perfluoroalkyl substances and thyroid function in older adults. Environ Int 2015 Feb;75:206-14. doi: 10.1016/j.envint.2014.11.018. PubMed PMID: 25483837; PubMed Central PMCID: PMC4272864.
- 92. Simpson C, Winquist A, Lally C, Steenland K. Relation between perfluorooctanoic acid exposure and strokes in a large cohort living near a chemical plant. Environ Res. 2013 Nov;127:22-8. doi: 10.1016/j.envres.2013.10.002. PubMed PMID: 24199934.
- 93. So MK, Yamashita N, Taniyasu S, et al. Health risks in infants associated with exposure to perfluorinated compounds in human breast milk from Zhoushan, China. Environ Sci Technol 2006;40:2924-9.
- 94. Soltani Z, Rasheed K, Kapusta DR, Reisin E. Potential role of uric acid in metabolic syndrome, hypertension, kidney injury, and cardiovascular diseases: is it time for reappraisal? Curr Hypertens Rep. 2013 Jun;15(3):175-81.
- 95. Starling AP, Engel SM, Whitworth KW, Richardson DB, Stuebe AM, Daniels JL, Haug LS, Eggesbø M, Becher G, Sabaredzovic A, Thomsen C, Wilson RE, Travlos GS, Hoppin JA, Baird DD, Longnecker MP. Perfluoroalkyl substances and lipid concentrations in plasma during pregnancy among women in the Norwegian Mother and Child Cohort Study. Environ Int. 2014 Jan;62:104-12. doi: 10.1016/j.envint.2013.10.004. Epub 2013 Nov 2.
- 96. Steenland K, Tinker S, Frisbee S, Ducatman A, Vaccarino V. Association of perfluorooctanoic acid and perfluorooctane sulfonate with serum lipids among adults living near a chemical plant. Am J Epidemiol. 2009 Nov 15;170(10):1268-78. doi: 10.1093/aje/kwp279. PubMed PMID: 19846564.
- 97. Steenland K, Tinker S, Shankar A, Ducatman A. Association of perfluorooctanoic acid (PFOA) and perfluorooctane sulfonate (PFOS) with uric acid among adults with elevated community exposure to PFOA. Environ Health Perspect. 2010 Feb;118(2):229-33. doi: 10.1289/ehp.0900940. PubMed PMID: 20123605; PubMed Central PMCID: PMC2831922.

- Steenland K, Woskie S. Cohort mortality study of workers exposed to perfluorooctanoic acid. Am J Epidemiol. 2012 Nov 15;176(10):909-17. doi:10.1093/aje/kws171. PubMed PMID: 23079607.
- 99. Steenland K, Zhao L, Winquist A, Parks C. Ulcerative colitis and perfluorooctanoic acid (PFOA) in a highly exposed population of community residents and workers in the mid-Ohio valley. Environ Health Perspect. 2013 Aug;121(8):900-5. doi: 10.1289/ehp.1206449. PubMed PMID: 23735465; PubMed Central PMCID: PMC3734500.
- 100. Steenland K, Zhao L, Winquist A. A cohort incidence study of workers exposed to perfluorooctanoic acid (PFOA). Occup Environ Med. 2015 May;72(5):373-80. doi: 10.1136/oemed-2014-102364. PubMed PMID: 25601914.
- 101. Stein CR, Savitz DA. Serum perfluorinated compound concentration and attention deficit/hyperactivity disorder in children 5-18 years of age. Environ Health Perspect 2011;119:1466-71.
- 102. Stein CR, Savitz DA, Bellinger DC. Perfluorooctanoate and neuropsychological outcomes in children. Epidemiology 2013 Jul;24(4):590-9. doi: 10.1097/EDE.0b013e3182944432. PMID: 23680941.
- 103. Stein CR, Savitz DA, Bellinger DC. Perfluorooctanoate exposure in a highly exposed community and parent and teacher reports of behaviour in 6-12-year-old children. Paediatr Perinat Epidemiol. 2014 Mar;28(2):146-56. doi: 10.1111/ppe.12097. PubMed PMID: 24320613.
- 104. Stein CR, McGovern KJ et al. Perfluoroalkyl and polyfluoroalkyl substances and indicators of immune function in children aged 12-19 y: National Health and Nutrition Examination Survey. Pediatr Res 2016a;79:348-57.
- 105. Stein CR, Ge Y, Wolff MS, et al. Perfluoroalkyl substance serum concentrations and immune response to FluMist vaccination among healthy adults. 2016b Environ Res 149:171-178. 10.1016/j.envres.2016.05.020.
- 106. Strøm M, Hansen S, Olsen SF, Haug LS, Rantakokko P, Kiviranta H, Halldorsson TI. Persistent organic pollutants measured in maternal serum and offspring neurodevelopmental outcomes--a prospective study with long-term follow-up. Environ Int. 2014 Jul;68:41-8. doi: 10.1016/j.envint.2014.03.002. PubMed PMID:24704638.
- 107. Su TC, Kuo CC, Hwang JJ, Lien GW, Chen MF, Chen PC. Serum perfluorinated chemicals, glucose homeostasis and the risk of diabetes in working-aged Taiwanese adults. Environ Int. 2016 Mar;88:15-22. doi: 10.1016/j.envint.2015.11.016. PubMed PMID: 26700417.
- 108. Uhl SA, James-Todd T, Bell ML. Association of Osteoarthritis with Perfluorooctanoate and Perfluorooctane Sulfonate in NHANES 2003-2008. Environ Health Perspect. 2013

Apr;121(4):447-52. doi: 10.1289/ehp.1205673. PubMed PMID: 23410534; PubMed Central PMCID: PMC3620767.

- 109. Vélez MP, Arbuckle TE, Fraser WD. Maternal exposure to perfluorinated chemicals and reduced fecundity: the MIREC study. Hum Reprod. 2015 Mar;30(3):701-9. doi: 10.1093/humrep/deu350. PubMed PMID: 25567616; PubMed Central PMCID: PMC4325673.
- 110. Vested A, Ramlau-Hansen CH, Olsen SF, et al. Associations of in utero exposure to perfluorinated alkyl acides with human semen quality and reproductive hormones in adult men. Environ Health Perspect 2013; 121:453-8.
- 111. Vieira VM, Hoffman K, Shin HM, Weinberg JM, Webster TF, Fletcher T. Perfluorooctanoic acid exposure and cancer outcomes in a contaminated community: a geographic analysis. Environ Health Perspect. 2013;121:318–323.
- 112. Wang I-J, Hsieh W-S, Chen C-Y, et al. the effect of prenatal perfluorinated chemicals exposures on pediatric atopy. Environ International 2011;111:783-91.
- 113. Watkins DJ, Josson J, Elston B, Bartell SM, Shin HM, Vieira VM, Savitz DA, Fletcher T, Wellenius GA. Exposure to perfluoroalkyl acids and markers of kidney function among children and adolescents living near a chemical plant. Environ Health Perspect. 2013 May;121(5):625-30.
- 114. Whitworth KW, Haug LS, Baird DD, et al. Perfluorinated compounds in relation to birth weight in the Norwegian Mother and Child Cohort Study. Am J Epidemiol 2012;175:1209-16.
- 115. Winquist A, Steenland K. Modeled PFOA exposure and coronary artery disease, hypertension, and high cholesterol in community and worker cohorts. Environ Health Perspect. 2014 Dec;122(12):1299-305. doi: 10.1289/ehp.1307943. PubMed PMID: 25260175; PubMed Central PMCID: PMC4256699.
- 116. <u>Winquist</u> A, Steenland K. Perfluorooctanoic acid exposure and thyroid disease in community and worker cohorts. Epidemiology. 2014 Mar;25(2):255-64.
- 117. Wu K, Xu X, Peng L, Liu J, Guo Y, Huo X. Association between maternal exposure to perfluorooctanoic acid (PFOA) from electronic waste recycling and neonatal health outcomes. Environ Int. 2012 Nov 1;48:1-8. doi: 10.1016/j.envint.2012.06.018. PubMed PMID: 22820015.
- 118. Zeng XW, Qian Z, Emo B, Vaughn M, Bao J, Qin XD, Zhu Y, Li J, Lee YL, Dong GH. Association of polyfluoroalkyl chemical exposure with serum lipids in children. Sci Total Environ. 2015 Apr 15;512-513:364-70. doi: 10.1016/j.scitotenv.2015.01.042. PubMed PMID: 25638651.

- 119. Ballesteros V, Costa O, Iñiguez C, Fletcher T, Ballester F, Lopez-Espinosa M-J. 2017. Exposure to perfluoroalkyl substances and thyroid function in pregnant women and children: A systematic review of epidemiologic studies. Environ Int 2017 Feb;99:15-28.
- 120. Lopez-Espinosa M-J, Mondal D, Armstrong B, Bloom MS, Fletcher T. Thyroid function and perfluoroalkyl acids in children living near a chemical plant. Environ Health Perspect 2012;20(7):1036-41.
- 121. Andersson EM, Scott K, Xu YY, Li Y, Olsson DS, Fletcher T, Jakobsson K. High exposure to perfluorinated compounds in drinking water and thyroid disease. A cohort study from Ronneby, Sweden. Environ Res 2019;176:108540.
- 122. Xu Y, Li Y, Scott K, Lindh C, Jakobsson K, Tony Fletcher T, Ohlsson B, Andersson E, Inflammatory bowel disease and biomarkers of gut inflammation and permeability in a community with high exposure to perfluoroalkyl substances through drinking water, in press, 2019.
- 123. Raleigh KK, Alexander BH, Olsen GW, Ramachandran G, Morey SZ, Church TR, Logan PW, Scott LL, Allen EM. Mortality and cancer incidence in ammonium perfluorooctanoate production workers. Occup Environ Med. 2014;71(7):500-6.
- 124. Knutsen HK, Alexander J, Barregård L, Bignami M, Brüschweiler B, Ceccatelli S, et al.. Risk to human health related to the presence of perfluorooctane sulfonic acid and perfluorooctanoic acid in food. EFSA 2018 ;16(12):e05194.
- 125. Fitz-Simon N, Fletcher T, Luster MI, Steenland K, Calafat AM, Kato K, Armstrong B. Reductions in serum lipids with a 4-year decline in serum perfluorooctanoic acid and perfluorooctanesulfonic acid. Epidemiology. 2013 Jul;24(4):569-76.
- 126. Huang R, Chen Q, Zhang L, Luo K, Chen L, Zhao S, Feng L, Zhang J. Prenatal exposure to perfluoroalkyl and polyfluoroalkyl substances and the risk of hypertensive disorders of pregnancy. Environ Health. 2019;18(1):5.
- 127. Wikström S, Lindh CH, Shu H, Bornehag CG. Early pregnancy serum levels of perfluoroalkyl substances and risk of preeclampsia in Swedish women. Sci Rep. 2019 Jun 24;9(1):9179.
- 128. Rappazzo KM, Coffman E, Hines EP. Exposure to Perfluorinated Alkyl Substances and Health Outcomes in Children: A Systematic Review of the Epidemiologic Literature. Int J Environ Res Public Health 2017;201; 14(7).
- 129. Liew, Z, Goudarzi H, Oulhote Y. Developmental Exposures to Perfluoroalkyl Substances (PFASs): An Update of Associated Health Outcomes. Curr Environ Health Rep 2018;5(1): 1-19.

- 130. Impinen A., Longnecker MP, Nygaard UC, London SJ, Ferguson KK, LHaug LS, Granum B. Maternal levels of perfluoroalkyl substances (PFASs) during pregnancy and childhood allergy and asthma related outcomes and infections in the Norwegian Mother and Child (MoBa) cohort. Environ Int 2019; 124: 462-472.
- 131. Impinen A, Nygaard UC, Lodrup Carlsen KC, Mowinckel P, Carlsen KH, Haug LS, Granum B. Prenatal exposure to perfluoralkyl substances (PFASs) associated with respiratory tract infections but not allergy- and asthma-related health outcomes in childhood. Environ Res 2018;160: 518-523.
- 132. Steenland K, Zhao L, Winquist A. A cohort incidence study of workers exposed to perfluorooctanoic acid (PFOA). Occup Environ Med. 2015;72(5):373-80.
- 133. Shin HM, Vieira VM, Ryan PB, Steenland K, Bartell SM. Retrospective exposure estimation and predicted versus observed serum perfluorooctanoic acid concentrations for participants in the C8 Health Project. Environ Health Perpect. 2011 Dec; 119(12):1760-5.
- 134. Frisbee SJ, Brooks AP Jr, Maher A, Flensborg P, Arnold S, Flecther T, Steenland K, Shankar A, Knox SS, Pollard C, Halverson JA, Vieira VM, Jin C, Leyden KM, Ducatman AM. The C8 health project: design, methods, and participants. Environ Health Perspect. 2009 Dec; 117(12):1873-82.