

<b>Table 1. Summary of Methods in Key Studies of Fluoride Exposure and Neurodevelopment</b>			
	<b>ELEMENT</b>	<b>MIREC</b>	<b>INMA</b>
Geographic setting	Mexico City	Canada: Vancouver, Montreal, Kingston, Toronto, Hamilton, Halifax	Gipuzkos, Spain
Key publications	Bashash et al., 2017; Bashash et al., 2018; Goodman et al., 2022	Green et al., 2019; Till et al., 2020; Farmus et al., 2021	Ibarluzea et al., 2022 Ibarluzea et al., 2023
Population	Pregnant women recruited from hospitals caring for low to moderate income populations	Pregnant women at participating prenatal clinics	Pregnant women at public referral hospital
Source of fluoride exposure	Naturally occurring fluoride in water, fluoridated salt intake	Fluoridation of drinking water, use of bottled water, use of water-based infant formula	Fluoridation of drinking water, use of bottled water, amount of water consumed
<b>Fluoride in drinking water</b>			
Measures of prenatal exposure	Not assessed	Water fluoride concentration; daily fluoride intake based on tap water consumption and tea	Maternal report of water consumption at end of 1st trimester, 3rd trimester
Exposure mean and range	Estimated range in water of 0.15-1.38 mg/L	Estimated intake - 0.39 mg/day	Mean=0.81 mg/L (standard deviation=0.15) in fluoridated water, <0.1 mg/L in non-fluoridated water
Measures of infant exposure	-	-	Not assessed
<b>Biomarker of fluoride exposure</b>			
Measures of prenatal exposure	Maternal urinary fluoride in 1st, 2nd, and 3rd trimesters as available	Maternal urinary fluoride in 1st, 2nd, and 3rd trimesters as available	Maternal urinary fluoride at end of 1st and 3rd trimesters as available
Exposure mean and range	Mean = 0.82 mg/L	Mean = 0.41 mg/L, 0.93 mg/L in fluoridated communities, 0.30 mg/L in nonfluoridated communities	Mean = 0.91 mg/L with fluoridated water, 0.43 mg/L with non-fluoridated water, 0.62 mg/L with bottled water

Measures of children's exposure	Spot measurement at 6-12 years	Not assessed	Not assessed
<b>Measure of outcome</b>			
Instrument & age at assessment	McCarthy at 4 years for general cognitive index, Wechsler at 6-12 years for verbal, performance, and full-scale IQ	Wechsler at 3-4 years	Bayley at 14.6 months, McCarthy at 4.4 years (average)
Number with complete data on exposure and outcome	287 at 4 years, 211 at 6-12 years	512 with maternal urinary fluoride, 400 with fluoride intake	483 at 1 year, 379 at 4 years
<b>Analytic approach</b>			
	Regression models predicting score at ages 4 and 6-12; change per 0.5 mg/L urinary fluoride (approximate interquartile range)	Multiple linear regression predicting IQ per 1 mg/L and for interquartile range	Multiple linear regression predicting score at ages 1 and 4; change in score per 1 mg/L urinary fluoride
<b>Covariates considered</b>			
	Maternal age, education, marital status, child's age, birth order, birth weight, gestational age, maternal smoking, maternal IQ	Child sex, city, HOME score, maternal education, race/ethnicity, and environmental tobacco smoke	Maternal age, social class, education, country of birth, smoking, alcohol, diet, marker of maternal IQ, deprivation index, child's sex, birth order, preterm birth, weight, family context, neurotoxic chemicals

UNITED STATES DISTRICT COURT  
NORTHERN DISTRICT OF CALIFORNIA

Case Number: 3:17-cv-02162-EMC

PLTF / DEFT EXHIBIT  
NO. **656**

Date  
Admitted: \_\_\_\_\_

By: \_\_\_\_\_

Vicky Ayala, Courtroom Deputy

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