



San Francisco Replaces Toxic Nap Mats for City's Most Vulnerable Young Residents

In 2019, San Francisco became the first US city to ban flame retardants.
Why?

Flame retardants are chemicals applied to materials to prevent the start or slow the growth of fire. They have been included in consumer and industrial products like furniture, sleepwear, TVs, and others since the 1970s. Due to health and environmental concerns, several US states banned flame retardants (known as polybrominated diphenyl ethers or PBDEs). [These chemicals stopped being made in the US between 2004 and 2013.](#) Even though PBDEs are no longer made in the US, products made with them remain in our homes, childcare centers, schools, and workplaces.

Exposure to flame retardants is linked to neurodevelopmental and endocrine system harm and cancer.¹ Though these chemicals actually do little to slow or prevent fire, they leach into house dust, creating a [major exposure route for babies and young children](#) who spend lots of time playing on the ground and putting their hands in their mouths.

To keep kids healthy, the City of San Francisco took a hands-on approach to reducing exposure to flame retardants in childcare centers and family homes that serve San Francisco's most vulnerable children.

The San Francisco Department of the Environment and The Department of Public Health—in partnership with Wu Yee Children's Services and the Children's Council of San Francisco (both childcare resource and referral agencies in the city)—replaced flame retardant-containing nap mats with nap mats free of flame retardants for child care providers serving low-income households. Funding for the project came from Healthy Babies Bright Futures, the Mayors Innovation Project, and the California Environmental Protection Agency.

BRIGHT CITY: SAN FRANCISCO, CA

CONCERNS:

- Toxic products in childcare centers and family childcare homes

PROJECT OUTPUT:

- Training for 225 childcare providers
- Distribution of 900 non-toxic nap mats
- Distribution of 25 goodie bags for providers with a safer (non-asthmogenic) disinfectant, sponges, children's books, health and safety fact sheets, and a gift card
- Two child care providers certified as green businesses

KIDS IMPACTED:

- More than 39,000 kids under 5 years old live in San Francisco



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Over 225 child care providers participated in a training with information about how to reduce toxic exposures that harm babies' brain development and more than 900 nap mats were replaced.

Five online training sessions were hosted in English, Spanish, Cantonese, and Mandarin in 2021. [Community Playthings nap mats](#) (~\$50/mat) were purchased for this project because they are flame retardant-free, PVC-free, and PFAS-free. The mats are also foldable, stackable, and can be wiped down easily. [More and more companies offer safer mats.](#)

Two training videos are available! The first provides information about [how to reduce exposure to flame retardants](#) and touches upon lead prevention; the second shares information about [safer cleaning and disinfecting](#) during the COVID-19 pandemic without using asthma-causing chemicals. This work builds on existing written materials, i.e., the "[Bleach-Free Toolkit](#)," and product recommendations for [safer COVID-19 cleaning products and disinfectants](#).

What Was the Biggest Challenge?

Besides moving to a virtual format, a significant challenge was the amount of time and resources needed to serve the providers in their language of choice. The majority of the providers spoke English as a second language, and were most comfortable communicating in Cantonese, Mandarin, or Spanish. Staff from SF Environment and the Department of Public Health were recruited to provide the training in these preferred languages.

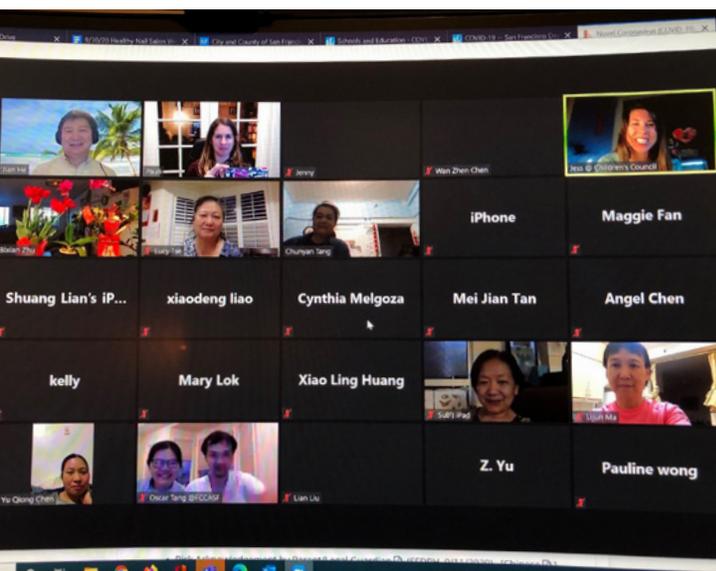
Language assistance was needed for creating the event flyers, capturing RSVPs, training follow-up, email Q&A, and providing evaluations and nap mat order forms in three languages. Remember to build in more time and support for all the smaller, often overlooked but necessary methods of communication.

"During a Cantonese training, I saw over 20 providers on my computer screen fully engaged in the virtual experience, and I felt such joy and satisfaction," recounted Pauli Ojea, Senior Coordinator in the Commercial Toxics Reduction Program at the San

Francisco Department of the Environment. "It took so much hard work to get to this point. Before our training, most of the providers didn't have an email address let alone the capacity to join a virtual meeting. The Wu Yee counselors worked with the providers to increase their familiarity with Zoom, and over the course of 4 workshops, 123 providers joined us! As a parent, it warmed my heart to see so many providers take time away from their day-to-day responsibilities to try an unfamiliar training method to learn how to better protect kids."

"We know how important years 0–5 are for a child's brain development. It's critical that we eliminate harmful exposure to chemicals like lead and flame retardants from our everyday lives, and especially from places where children live, learn, and play. This project is empowering child care providers to create a healthier environment so that every child in their care can thrive."

Debbie Raphael,
Director of the
Department of the
Environment,
San Francisco, CA



What's Next?

More training: The City's two key partners—the [Children's Council of San Francisco](#) and [Wu Yee Children's Services](#)—requested annual toxic-free childcare trainings and napmat exchange programs per funding availability. Recorded training sessions are available. City staff are also working with the state licensing agency to determine how providers can earn continuing education credits after participating in the *Healthy Homes, Healthy Child Cares* training.

Expand the reach: SF Environment and the Department of Public Health are leading the [Fix Lead SF Project](#) that provides funding for families and childcare providers to do home upgrades to remove lead-based paint hazards. SF Environment plans to reach out to all childcare providers that took the toxic-free childcare training to engage them in [Fix Lead SF](#).

Grow green business: Though not an intended outcome of this project, several of the childcare providers who participated in the training signed up to become a certified Green Business. Four childcare providers—engaged by the training—are now getting Green Business certified. These providers will receive technical support and financial incentives to save water and energy, recycle and compost, properly dispose of toxics, and purchase healthier, more sustainable products.

"This project helped our staff and family childcare providers learn about the new-to-them concept of flame retardants and how to create a safer home environment for children and ourselves. Our providers liked the training a lot and appreciated all the useful information and materials shared."



Conny Zhu, Child Care Provider Services Manager at Wu Yee Children's Services



Three Keys to Kick-Off A Toxic Free Childcare Training & Napmat Exchange

1 Partner with childcare resource and referral agencies in your city.

Many cities and/or counties have a childcare resource and referral agency that helps families find childcare. These organizations are good groups to connect with because they often work closely with providers. If there is not one in your town, try reaching out to the community college, the childcare licensing agency, or any local agency focusing on early childcare and education.

2 Survey childcare providers to understand needs.

To reduce toxics in a childcare center, find out what products and furniture the childcare center has and what can be replaced. Since this project focused on flame retardants in nap mats, it was helpful to get a sense of how many providers were using mats versus cots, how old the mats were, and what preferences the providers had when choosing napping equipment. Other products to consider replacing are cleaning products, foam gym mats, foodware items, and other furniture. Purchasing vacuums with HEPA filters or stand-alone air purifiers are also very helpful to improve indoor air quality in a child care.

Determining the language needs and day/time scheduling preferences of providers was also helpful in successfully scheduling the training sessions.

3 Learn about the childcare licensing requirements in your state.

Determine if your local training is eligible for continuing education credits as required by most childcare licensing guidelines. Pay particular attention to cleaning and disinfection guidelines so that your messaging is aligned with state guidance.

What Have Other Cities Done to Make Childcare Centers Healthier?

Bright City [Anchorage, Alaska](#), designed a training, “[Healthy Children in Toxic-Free Child Care](#),” with practical advice about why and how to affordably reduce toxic exposures in childcare facilities. This training was approved for 2.5 hours of continuing education credits by the Alaska System for Early Education Development. After the training, providers exchanged their existing nap mat for a flame retardant and phthalate-free alternative, the [Community Playthings M65](#).

Anchorage also [passed an ordinance](#) banning four groups of chemical flame retardants from children’s products and upholstered home furniture starting 2020. Anchorage joins California, Hawaii and [other cities and states across the country](#) that have banned flame retardants or specific chemicals commonly used in flame retardants.

The Children’s Environmental Health Network has many [factsheets filled with pragmatic tips to reduce toxic exposures in the childcare setting](#). [Healthy Babies Bright Futures Safe Product Guide](#) gives parents simple steps to reduce children’s exposures to neurotoxic chemicals at home, in childcare, and outdoors.

Interested in learning more about this project?

Contact Pauli Ojea, Senior Coordinator in the Commercial Toxics Reduction Program at the San Francisco Department of the Environment at pauli.ojea@sfgov.org.



The Bright Cities program provides up to \$35,000 in grant funding for US cities and community based partner organizations to reduce exposures — in pregnant women and children under 2 years — to the nine neurotoxins with the strongest associations to developmental delay. These neurotoxins are arsenic, flame retardants, lead, mercury, combustion byproducts called PAHs, banned industrial chemicals PCBs, organophosphate pesticides, a rocket fuel component and fertilizer contaminant called perchlorate, and plastic additives called phthalates.

Curious about funding and technical support to reduce neurotoxic exposures in your city? Contact **Kyra Naumoff Shields**, Bright Cities Program Director, at knaumoff@hbbf.org



The Mayors Innovation Project is a national learning network for mayors committed to shared prosperity, environmental sustainability, and efficient democratic government. Around the country, mayors are taking the lead on pressing issues— climate change, racial equity, economic revitalization, housing, and more. The Mayors Innovation Project supports mayors by providing cutting-edge thinking and concrete examples that mayors can implement.

Looking for peer networking and best practices for city leaders focused on equity, sustainability, and democracy? Contact **Katya Spear**, Mayors Innovation Project Managing Director, knspear@mayorsinnovation.org.

ENDNOTES

- 1 Bennett D et al. [Project TENDR: Targeting Environmental Neuro-Developmental Risks The TENDR Consensus Statement](#). Environ Health Perspect. 2016 Jul 1;124(7):A118-22.