

## **Dr. Elizabeth Neary: If we care about children, we should oppose F-35s in Madison**

By Dr. Elizabeth Neary | guest columnist Oct 31, 2019 | The Cap Times

As a pediatrician, I have dedicated my life to caring for children, which is why I am alarmed by the proposal to base F-35 military jets in our community.

The Air Force concluded in its draft Environmental Impact Statement that locating the F-35s at the Truax Air National Guard Base would have a disparate negative impact on children, people of color and low-income individuals who live in dense populations in and around the Dane County Regional Airport. Approximately a dozen K-12 schools and 15 child day care centers are in and around the areas where the most intense noise is predicted.

From my own experience and research, I believe that many of Madison's children will be harmed by the intense noise generated by these military jets that have no need for placement in a dense residential community. The early years of a child's life are critical for the development of hearing. According to the Office of Disease Prevention at the National Institutes of Health, children's ear canals continue to develop during the early years of life, and loud noises during this stage of development can permanently damage their hearing.

The noise created by the F-35s is an impulse sound — a brief, very loud noise. Impulse noise causes more severe hearing loss than steady state noise. The body has a reflex mechanism which protects the ear when exposed to loud, continuous noise. The reflex is slow, and thus does not provide protection to the ear against sudden impulsive sounds. Hence, the average

day-night noise exposure (DNL) measured over a 24-hour period in the draft EIS does not measure the true impact of noise on children.

Health impacts of noise pollution include overproduction of stress hormones, interruption of sleep, ringing in the ear, negative effects on mental health, increased blood pressure and impacts on cardiovascular disease.

For children, the impacts are far greater. Heightened noise interruptions can lead to delayed speech development, reduced attention, impaired concentration, long-term memory issues and decreased math and reading comprehension. The EIS includes a section on the impact of noise on children, citing studies that have found a linear relation between chronic aircraft noise exposure and impaired reading comprehension and recognition memory.

With about a dozen K-12 schools and approximately 15 day care facilities surrounding Truax Field, this proposal poses potential long-lasting damaging impacts on the children that live within our community. According to the City of Madison's 2018 Neighborhood Indicators Project, the kids who live in the Truax neighborhood are struggling even before they enter school, with only 48% of them considered to be "kindergarten ready."

One of the schools closest to the predicted intense noise is Hawthorne Elementary, where most children are low-income and of color. In a city struggling to overcome persistent racial disparities, flying an intensely noisy aircraft over their elementary school more frequently will only exacerbate these disparities.

If we truly care about the children in our community, we should act to protect them by adamantly opposing the placement of F-35 military jets in Madison.

*Dr. Elizabeth Neary practiced general pediatrics in Madison for 15 years. Neary is a member of the Wisconsin Environmental Health Network, a local group of health professionals dedicated to education and advocacy around environmental health issues, and of the Council on Environmental Health of the American Academy of Pediatrics.*