

Microplastics in American Children

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Problem We inhale and ingest about a credit card's worth of plastic every week Nicroplastics contain toxic and carcinogenic chemicals such as Polyvinylch and Phalates

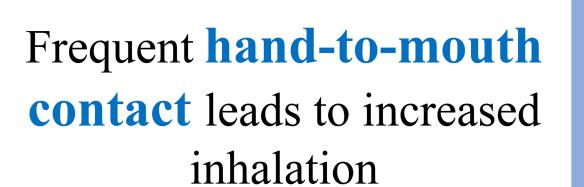
Child Health Risks

Polyvinylch can cause
genetic changes and
can be found in vinyl
flooring and crib bumpers

Phalates are linked to
respiratory/
developmental issues
and can be found in toys

Particles smaller than 1um can enter the bronchial epithelium or lining of the lungs

Health & Risks

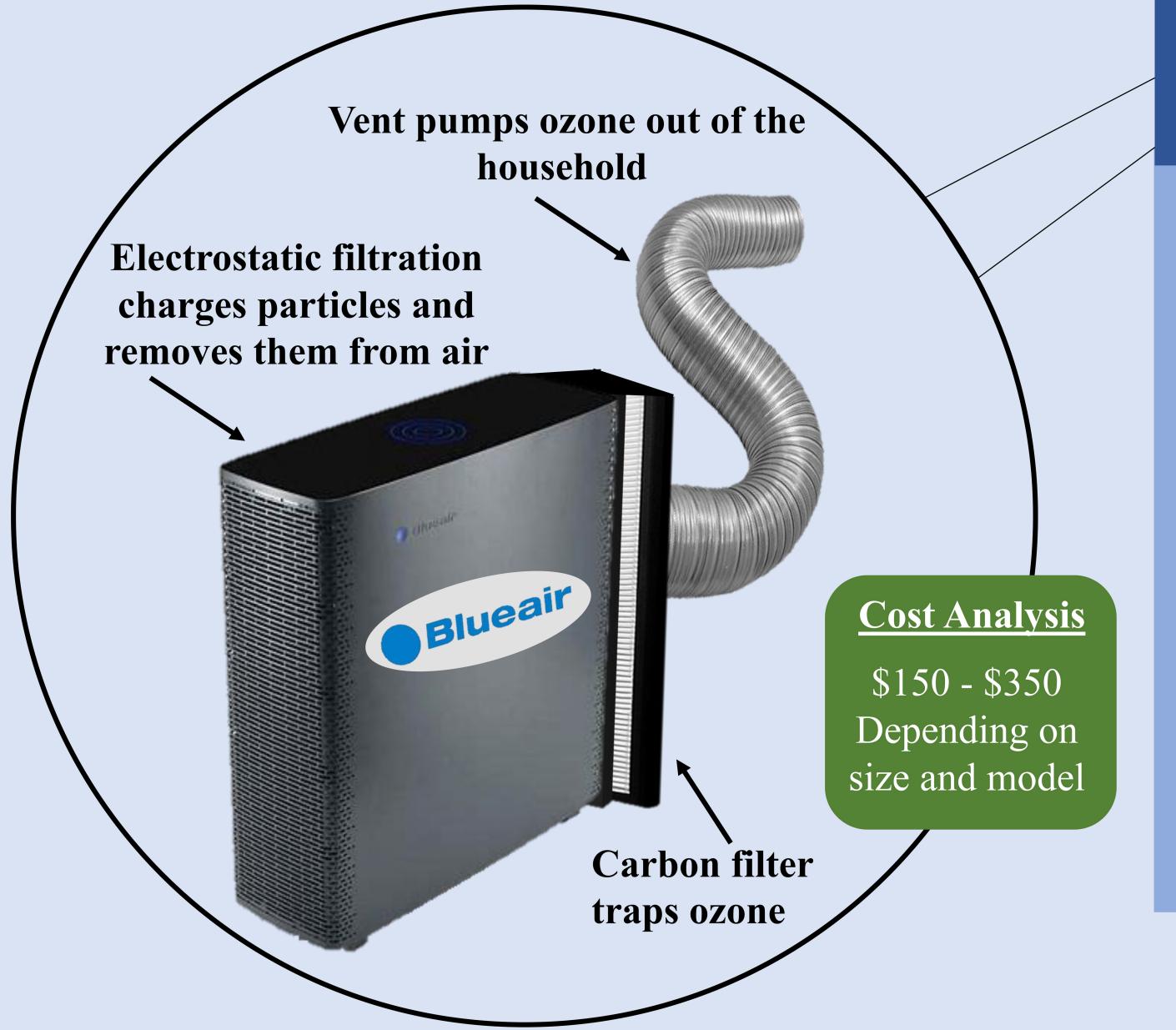




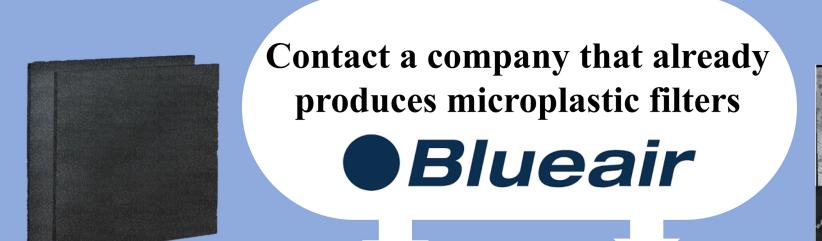
small airway diameters

Children breathe closer
to the ground where
there is a higher
concentration of MP's





Implementation



Introduce idea for carbon filter and vent to trap and remove ozone from the home

Introduce idea to scan particles and differentiate between organic and inorganic

Come out with a version of Blue Air 2.0

Come out with a test version of a microplastic detector using visual scanning

Key References

ffects of plastics | ecology center. (2015)

Adverse health effects of plastics | ecology center. (2015). Phthalates factsheet | national biomonitoring program | CDC. (20 Prata, J. C. (2017). ScienceDirect. (10), 125-126.