

Teaching Environmental Justice Through a Community Soil Lead Testing Project

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The Ongoing Problem of Childhood Lead Exposure

- Over half a million American children are being harmed
 - Disproportionately Black and brown kids
- Lead causes permanent damage to developing brains
- Various sources
 - Pipes
 - Paint
 - **Soil**



Community-Based Environmental Science Project

1. I contact childcare centers.
2. Students collect soil samples
3. Our collaborator at Penn's The Center of Excellence in Environmental Toxicology measures lead concentrations.
4. Students present results to community partners, along with recommended actions
5. Kids are protected!



Partnerships



- County childcare organizations
- Individual childcare centers
- Center of Excellence in Environmental Toxicology (CEET) at Penn's Perelman School of Medicine
 - They test our samples using an X-Ray Fluorescence Spectrometer
 - We contribute results to their GIS project



Our Results So Far

- 18 out of 20 centers tested safe
- One had high levels under a window
 - Put down mulch
- One had high levels throughout
 - Students started a GoFundMe to raise money for sod



Who Benefits

- Students
 - Learning
 - Engagement
- University partner
- Childcare centers
 - Staff
 - Kids!
- Me



Thank you!

➔ Please feel free to contact me:
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➔ Also check out
CEET.Upenn.edu

