

The Public Health impact of Urban Blight: Vacant Lot Greening and the Case for Researcher-Practitioner partnerships



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Objectives

- Public health framework
- Health impact of vacant properties
- Vacant lot greening
 - Health benefits
 - Researcher-practitioner partnership with the Pennsylvania Horticulture Society

Changing Places affects “More People for Longer Periods of Time”



Health impact of vacant land: Community perspective

Health Domain

Theme

- | | | |
|-----------------------|---|---|
| • Community Wellbeing |  | <ul style="list-style-type: none">• Fracture ties• Overshadow positives• Financial strain• Crime |
| • Physical Health |  | <ul style="list-style-type: none">• Injury• Trash build up |
| • Mental Health |  | <ul style="list-style-type: none">• Stigma• Negative emotions• Fear of Crime |

On Community Wellbeing . . .

“The abandoned homes just messes up like the beauty of the neighborhood. Like I stated on certain blocks there may be like three or four homes that are like well taken care of. Then you have that vacant lot that just has trash and other things in it, which messes up how beautiful the block really could be. The lots and stuff also draw other attention where, you know, kids playing in the dirt . . . The vacant homes also for example, when it’s raining the kids, like I said 18 to 25, may go on a vacant porch and start to hang out there. And it draws attention to the elderly women next door and things like that.”

On Safety . . .

“I have a toddler. . . . I’d like to take her out more often. I’d like to take her on walks. But there’s so much going on to where I’m scared most of the time to take her out. A lot of times I brave it. But I’m actually scared to take her out to walk the streets of this neighborhood, to go even play in the playground, like I said before. There’s winos and drug addicts and needles, yeah, in the playground.”

On Mental Health . . .

“It makes me feel not important. Like I think that your surroundings like your environment [vacant land] affects your mood, it affects your train of thought, your thought process, your emotions, and seeing vacant lots and abandoned buildings, to me that’s a sign of neglect. So I feel neglected.”

On Rodents and Trash . . .

“When you have nice homes and then you have that one home that’s just vacant or you start to get a mice problem because of the vacant lots and things like that. And then the vacant lots usually turn into littering problems with people throwing trash and things like that.”

Urban blight and health

- **Neighborhood Physical Conditions and Health, Cohen 2003**
 - Ecological study of 107 US cities using administrative data
 - The number of boarded-up units was strongly associated with premature mortality from homicide, suicide, DM, and malignancy
- **Neighborhood Disorder and Marijuana Use, Furr-Holden 2011**
 - 566 adolescents @ 12th grade and 2yrs later
 - Living in neighborhoods with increasing numbers of abandoned properties associated with increasing levels of marijuana use

Greening

Pennsylvania Horticulture Society

Trash/Weed removal



Earthwork,
seeding



Fencing



Tree
planting





Before

After





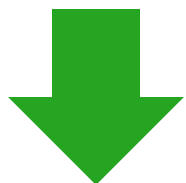
Before ↗

↖ After

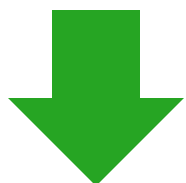


Impact of **Greening**: Quasi-experimental

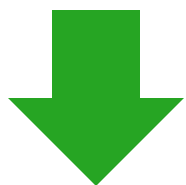
Out of 17 different outcomes:



Gun crime (in all city sections) *



Vandalism (in West Philadelphia) *



Stress (in North Philadelphia) *



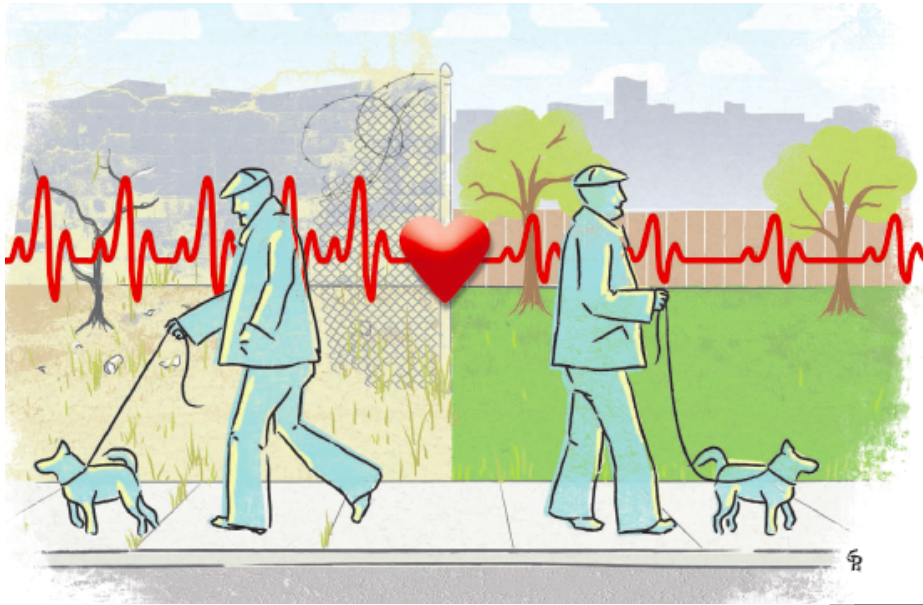
Exercise (in West Philadelphia) *

* $p < 0.01$

Impact of **Greening**: RCT

- People living around greened lots felt **significantly safer** after greening compared to those living around control vacant lots ($p < 0.01$).
- Non-significant decrease in total crimes and gun assaults around greened vacant lots.

Walking Tests



Significant drop in heart rate when walking in view of newly greened lots

“You got to watch yourself walking past the lots because you don’t know who’s out there.”

“It’s not safe walking past [abandoned homes] because the one across from me looks like it’s getting ready to cave in.”

“If I could change things I would. There wouldn’t be so many vacant lots [and] abandoned houses.”





Abandoned House Remediation:
“Doors and Windows”

Urban Blight Remediation

- Urban blight remediation can significantly reduce:
 - Biologic and self-reported stress
 - Depression and serious mental illness
 - Sedentary behavior
 - Serious crimes like gun violence with a high ROI
 - Nuisance crimes
 - Perceptions of high crime and vandalism
- Why?
 - Biologic: stress and poor mental health
 - Sociologic: collective efficacy in impoverished, under-resourced areas
 - Physical: blighted spaces are “storage lockers” for illegal guns

Community Engaged Research

- “Researchers and communities working to establish trust, share power, foster co-learning, strengths and resources, build capacity, and examine and address community-identified needs and health problems”

PHS Partnership

- Relationship fostered over years
- Foundation of communication and mutual respect
- Mutually beneficial
- Sustainability

Discussion



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