

# Urban vacant lot stabilization and substance abuse outcomes

<b>Submission date</b> 27/02/2017	<b>Recruitment status</b> No longer recruiting	<input type="checkbox"/> Prospectively registered
		<input type="checkbox"/> Protocol
<b>Registration date</b> 03/03/2017	<b>Overall study status</b> Completed	<input type="checkbox"/> Statistical analysis plan
		<input checked="" type="checkbox"/> Results
<b>Last Edited</b> 26/04/2023	<b>Condition category</b> Mental and Behavioural Disorders	<input type="checkbox"/> Individual participant data

## Plain English summary of protocol

### Background and study aims

The aim of this study is to find out whether “greening” vacant land to create little parks near where people live, improves people’s health and safety. Vacant lots are in great abundance, are singled out by community members as important, and are highly modifiable, with the potential for sustained, long-term health and safety benefits at relatively little cost. In 1999, the Pennsylvania Horticultural Society began a program to stabilize and maintain vacant lots in key Philadelphia neighbourhoods. This study tests the impact of such a program on public substance (drug) use, drinking and related behaviours.

### Who can participate?

English and Spanish speaking people aged 19 and over who live in four areas of Philadelphia

### What does the study involve?

420 vacant lots in four areas of Philadelphia are randomly allocated into three groups. The first group of vacant lots undergo stabilization, which involves “cleaning and greening” by removing trash and debris, grading the land, planting grass and a small number of trees to create a park-like setting, and installing low wooden perimeter fences to show that the lot is cared for and deter illegal dumping. This is carried out by well-coordinated teams of workers, many of whom come from local urban neighbourhoods, along with regular monthly maintenance of treated lots including grass cutting, tree pruning, fence repair, and trash clean-up. The second group of vacant lots undergo trash clean-up only, which involves removing trash and debris, mowing existing grass on the lot, and regular monthly maintenance including continued grass cutting and trash clean-up. The third group of vacant lots do not undergo stabilization or clean-up. Substance abuse, drinking and related health and safety outcomes on or near the lots are measured in the years before and after the intervention using data collected from the local police and by interviewing local residents about their health. The cost-effectiveness of vacant lot stabilization is also calculated.

### What are the possible benefits and risks of participating?

The benefits of participating in this study are access to a newly created local park and contributing to a better understanding of the value of greenery and parks in cities. The risks of participating are minimal.

Where is the study run from?

1. University of Pennsylvania (USA)
2. Columbia University (USA)

When is the study starting and how long is it expected to run for?

February 2011 to January 2018

Who is funding the study?

1. National Institutes of Health (USA)
2. Centers for Disease Control and Prevention (USA)

Who is the main contact?

Dr Charles Branas

## Contact information

### Type(s)

Scientific

### Contact name

Dr Charles Branas

### Contact details

Columbia University  
Mailman School of Public Health  
722 West 168th Street, Rm 1508  
New York NY USA 10032  
New York  
United States of America  
10032

## Additional identifiers

EudraCT/CTIS number

IRAS number

ClinicalTrials.gov number

Secondary identifying numbers

R01AA020331

## Study information

### Scientific Title

A randomized trial of urban vacant lot stabilization and substance abuse outcomes

### Study objectives

1. The stabilization of randomly chosen vacant lots will change the public occurrence of illegal drug trafficking and consumption compared with vacant lots that have been randomly chosen to

receive only trash clean-up and lots that have been randomly chosen to receive nothing.

2. The stabilization of randomly chosen vacant lots changes the public occurrence of illegal drunkenness and drinking compared with vacant lots that have been randomly chosen to receive only trash clean-up and lots that have been randomly chosen to receive nothing.
3. The incremental cost-effectiveness of vacant lot stabilization will be high in terms of the cost of vacant lot stabilization per instances of illegal drug trafficking and consumption and illegal public drunkenness and drinking avoided.

### **Ethics approval required**

Old ethics approval format

### **Ethics approval(s)**

University of Pennsylvania Institutional Review Board, 14/07/2015, ref: 816097

### **Study design**

Controlled parallel-group cluster randomized trial

### **Primary study design**

Interventional

### **Secondary study design**

Cluster randomised trial

### **Study setting(s)**

Community

### **Study type(s)**

Prevention

### **Participant information sheet**

No participant information sheet available

### **Health condition(s) or problem(s) studied**

Substance abuse

### **Interventions**

420 vacant lots stratified in four geographic sections of Philadelphia are randomised into three trial arms:

1. Vacant lot stabilization (full treatment)
2. Trash clean-up only (trash control)
3. No vacant lot stabilization or clean-up (no treatment).

The first intervention tested involves the “cleaning and greening” of vacant lots via a standard, reproducible process of removing trash and debris, grading the land, planting grass and a small number of trees to create a park-like setting, and installing low wooden perimeter fences to show that the lot is cared for and deter illegal dumping. This intervention is completed via a well-coordinated teams of workers, many of whom come from local urban neighborhoods affected by vacant land, and an economical grass hydroseeding method that can quickly seed large areas of land by spraying a slurry mixture of seed and mulch. The intervention additionally includes regular monthly maintenance of treated lots including grass cutting, tree pruning, fence repair, and trash cleanup.

A second, simpler vacant lot intervention is also tested that is a standard, reproducible process of removing trash and debris, mowing existing grass on the lot, and regular monthly maintenance including continued grass cutting and trash cleanup.

Both interventions are performed for all study vacant lots to which they are randomly assigned over a two-month period from 01/04/2013 to 31/05/2013.

Both area-wide outcome measures in and around each cluster, as well as participant-level outcome measures are collected and analyzed. Violence and crime data are collected from local police and aggregated by month for 18 pre-intervention months and 18 post-intervention months, for a total of 36 observation periods. These data include the dates and address locations of six outcomes: gun assaults, nongun assaults, burglaries, robberies and thefts, narcotics possession, sales, and trafficking, and nuisances. Nuisances are defined as the summation of curfew violations, disorderly conduct, public drunkenness, illegal dumping, loitering, noise violations, prostitution, and vandalism. The address location of each violence and crime event is geographically assigned to a point-in-space and a kernel density estimate is used to calculate events per square mile for all outcomes at the centroid points representing each vacant lot.

Perceptions of violence, crime, nuisances, and safety are surveyed from participants. The same questions are asked to all participants across all 4 waves of the survey at 2 time points at baseline and at 2 time points post-intervention. Participants are asked to focus their responses to their experiences within the past 30 days to avoid telescoping and over-estimation by participants. Various approaches are used to measure participant-reported outcomes: visual analog scales, Likert scales, and binary true/false questions.

### **Intervention Type**

Other

### **Primary outcome measure**

Illegal drug trafficking and consumption, measured using data collected from local police and aggregated by month for 18 pre-intervention months and 18 post-intervention months

### **Secondary outcome measures**

Illegal drunkenness and drinking, measured using data collected from local police and aggregated by month for 18 pre-intervention months and 18 post-intervention months

### **Overall study start date**

10/02/2011

### **Completion date**

31/01/2018

## **Eligibility**

### **Key inclusion criteria**

Randomly sampled English and Spanish speaking individuals, aged 19 years and older, who lived within the clusters

### **Participant type(s)**

Healthy volunteer

**Age group**

Adult

**Sex**

Both

**Target number of participants**

450

**Key exclusion criteria**

Non-English, non-Spanish speaking, not residents living within clusters

**Date of first enrolment**

01/10/2011

**Date of final enrolment**

01/11/2014

## **Locations**

**Countries of recruitment**

United States of America

**Study participating centre**

**University of Pennsylvania**

Philadelphia

United States of America

19104

**Study participating centre**

**Columbia University**

New York

United States of America

10032

## **Sponsor information**

**Organisation**

National Institutes of Health

**Sponsor details**

9000 Rockville Pike  
Bethesda  
United States of America  
20892

**Sponsor type**

Government

**Website**

<http://www.nih.gov/>

**ROR**

<https://ror.org/01cwqze88>

**Organisation**

Centers for Disease Control and Prevention

**Sponsor details**

1600 Clifton Road  
Atlanta  
United States of America  
30329

**Sponsor type**

Government

**Website**

<https://www.cdc.gov/globalhealth/countries/uganda/default.htm>

**ROR**

<https://ror.org/00qzjvm58>

**Funder(s)**

**Funder type**

Government

**Funder Name**

National Institutes of Health (ref: R01AA020331)

**Alternative Name(s)**

Institutos Nacionales de la Salud, US National Institutes of Health, NIH

**Funding Body Type**

Government organisation

**Funding Body Subtype**

National government

**Location**

United States of America

**Funder Name**

Centers for Disease Control and Prevention (ref: R49CE002474)

**Alternative Name(s)**

United States Centers for Disease Control and Prevention, Centros para el Control y la Prevención de Enfermedades, Centers for Disease Control, U.S. Centers for Disease Control and Prevention, CDC, U.S. CDC

**Funding Body Type**

Government organisation

**Funding Body Subtype**

National government

**Location**

United States of America

## Results and Publications

**Publication and dissemination plan**

Planned publication in a high-impact peer reviewed journal one year after the trial ends.

**Intention to publish date**

31/01/2019

**Individual participant data (IPD) sharing plan**

The current data sharing plans for the current study are unknown and will be made available at a later date.

**IPD sharing plan summary**

Data sharing statement to be made available at a later date

**Study outputs**

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
<a href="#">Results article</a>	results	20/03/2018	07/08/2018	Yes	No
<a href="#">Results article</a>	results	01/01/2019	04/12/2018	Yes	No
<a href="#">Results article</a>	results	06/07/2018	16/01/2019	Yes	No
<a href="#">Results article</a>		08/11/2021	26/04/2023	Yes	No

