

7th ICO-WHO
SYMPOSIUM
ON TOBACCO CONTROL

Smoke-Free Private Places: Homes and Vehicles

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Exposure to Secondhand Smoke

Overall Good News:

- Secondhand smoke (SHS) exposure in the U.S. declined significantly

Problems Remain:

- **Home is now a major source of exposure** since most worksites are smoke-free
- Over 90% of households with only nonsmokers report a smoke-free home, but just **53.7% of households \geq one person who smokes**
- Notable disparities in smoke-free homes by **SES and race/ethnicity**

Tsai J, Homa DM, Gentzke AS, Mahoney M, Sharapova SR, Sosnoff CS, Caron KT, Wang L, Melstrom PC, Trivers KF. Exposure to Secondhand Smoke Among Nonsmokers - United States, 1988-2014. MMWR Morb Mortal Wkly Rep. 2018 Dec 7;67(48):1342-1346. doi: 10.15585/mmwr.mm6748a3. PMID: 30521502; PMCID: PMC6329485.

Homa DM, Neff, L.J., King, B.A., Carballo, R.S., Bunnell, R.E., Babb, S.D., Garrett, B.E., Sosnoff, C.S., Wang, L. Vital Signs: Disparities in Nonsmokers' Exposure to Secondhand Smoke- United States, 1999-2012. MMWR. 2015; 64:6.

Smoke-Free Homes: Some Things are Better Outside (evidence-based)



NIH NATIONAL CANCER INSTITUTE

Evidence-Based Cancer Control Programs (EBCCP)

HOME SEARCH FOR PROGRAMS PROGRAM AREAS CASE STUDIES HELP & RESOURCES NEWSLETTER ABOUT Search All EBCCP

home Smoke-Free Homes: Some Things are Better Outside

Smoke-Free Homes: Some Things are Better Outside

PROGRAM SYNOPSIS

Designed to promote home smoking bans to reduce second-hand smoke exposure in the home, this intervention consists of various mailed materials (including a guide describing the steps to establishing a smoke-free home) and one coaching call that together apply strategies of persuasion, role modeling, goal setting, environmental cues, and written and verbal reinforcement of actions taken to create smoke-free homes. The studies showed higher implementation of a full home smoking ban and decreased exposure to second-hand smoke.

PROGRAM HIGHLIGHTS

Purpose: The program is designed to promote home smoking bans to reduce second-hand smoke exposure in the home. (2015)

Ages: 19-39 years (Young Adults), 40-65 years (Adults), 65+ years (Older Adults)

Sex: Female, Male

Race/Ethnicity: Alaska Native, American Indian, Asian, Black - not of Hispanic or Latino origin, Hispanic or Latino, Pacific Islander, White - not of Hispanic or Latino origin

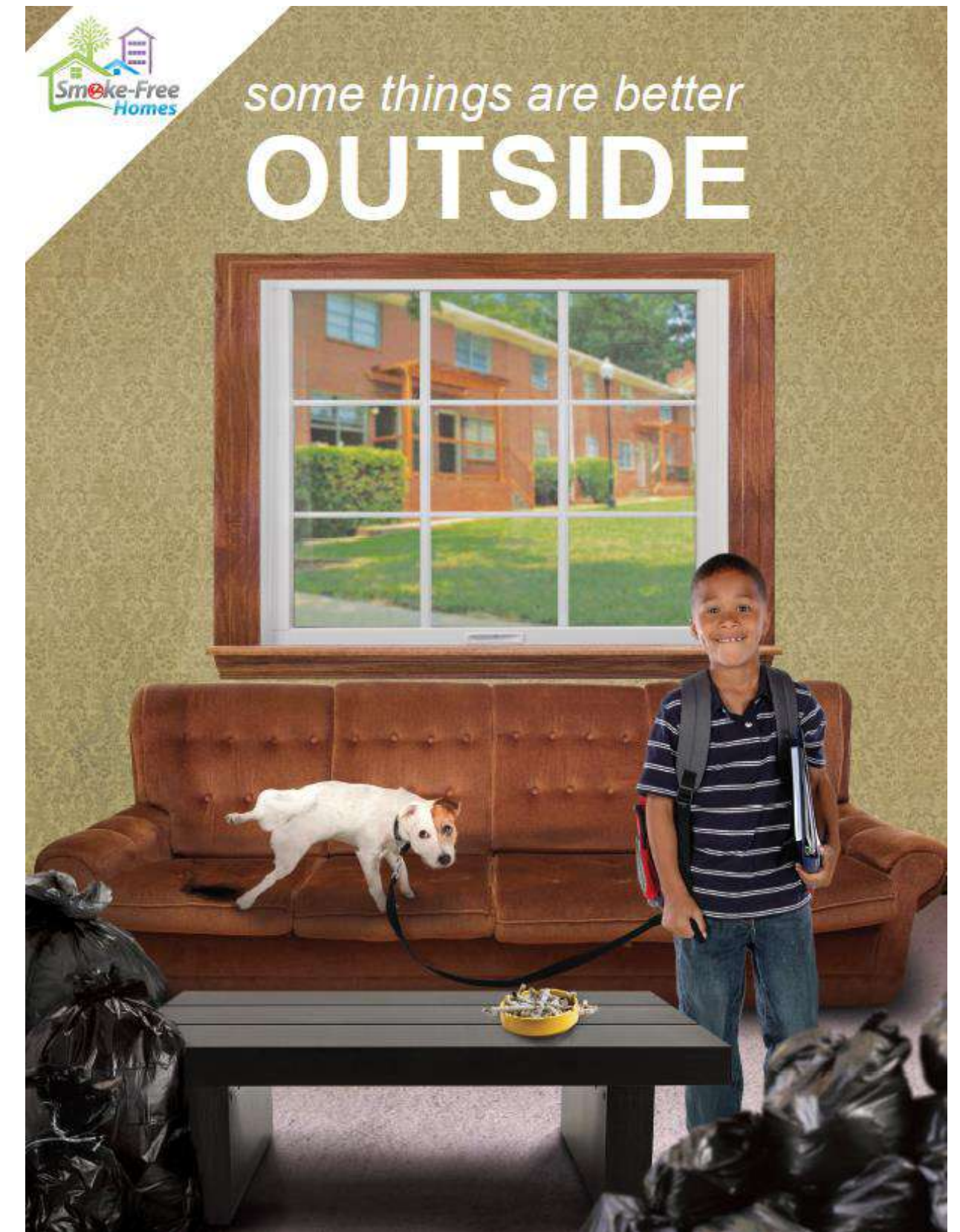
Program Focus: Awareness of impact of second-hand smoke exposure in the home, Behavior Modification and Smoke-free Environment

Population Focus: This information is not available.

Program Area: Tobacco Control

Delivery Location: Home, Other Settings

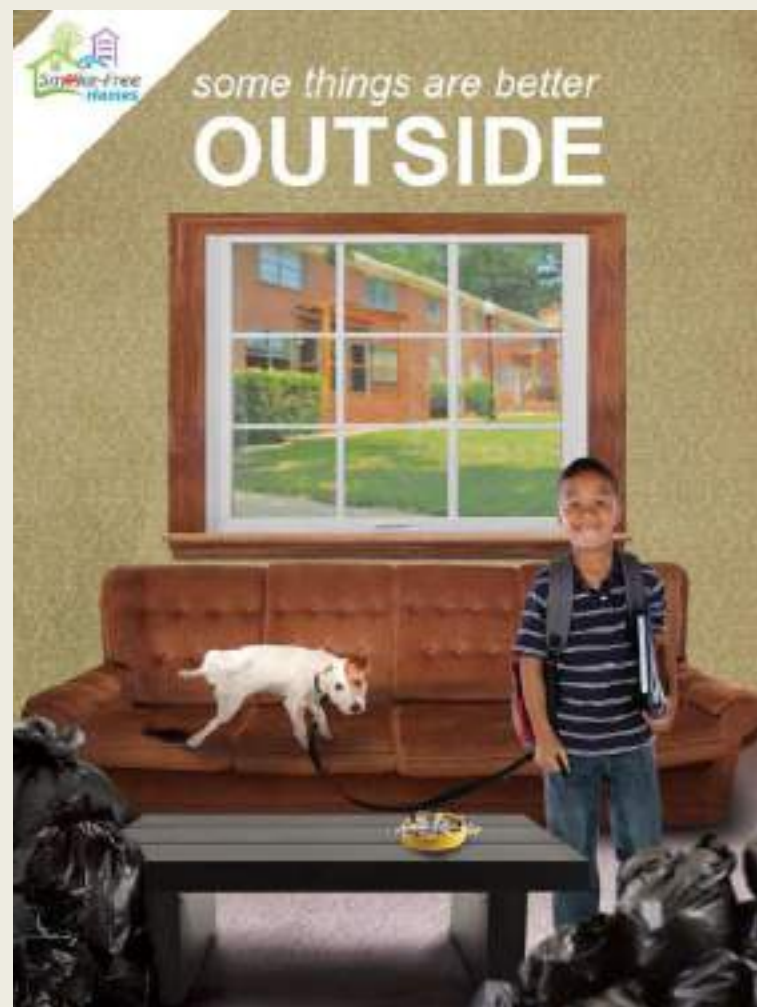
Community Type: Rural, Suburban, Urban/Inner City



<https://ebccp.cancercontrol.cancer.gov/programDetails.do?programId=28303637>

“Brief” Intervention to Create a Smoke-Free Home

Component	Timing	Description
1	Week 0	First mailing of print materials
2	Week 2	Coaching call
3	Week 4	Second mailing of print materials
4	Week 6	Third mailing of print materials



Coaching Call

Based on stage of change and motivational interviewing

15–20 minutes

Guides through the 5-steps of creating a smoke-free home

Works through specific challenges and discuss solutions

Negotiates goals/action plan based on stage

Why a “Brief” Intervention?

Easier to deliver in a range of settings

Higher potential for scalability and greater reach

Even if less effective than a more intensive intervention, a greater reach can allow for greater public health impact

Comparison of Primary Outcomes Across Trials (Efficacy, Effectiveness, Generalizability)

Result	Georgia	North Carolina	Texas
Three month full ban	I: 30.4% C: 14.9% Diff: 15.5%	I: 38.1% C: 19.3 Diff: 18.8%	I: 46.6% C: 25.4% Diff: 21.2%
Six month full ban	I: 40.0% C: 25.4% Diff: 14.6%	I: 43.2% C: 33.2% Diff: 10.0%	I: 62.9% C: 38.4% Diff: 24.5%
Six month OR from ITT	1.56	1.72	2.19

Steps Taken by Smoking Status (Georgia Trial)

Question	% Yes	Smoker	Non-smoker	p-value
		% Yes	% Yes	
Did you ...				
come up with a list of reasons for SFH?	76.0	74.6	79.6	.48
have a family talk?	92.7	91.5	95.9	.31
sign the pledge?	50.3	45.4	63.3	.03
post the pledge?	50.8	50.8	51.0	.98
put up signs?	60.3	59.2	63.3	.66
use stickers?	65.9	64.6	69.4	.63
call smoking cessation services?	19.6	21.5	14.3	.28

Adaptation Process underway in:

Tribal communities
Armenia and Georgia
Spain
Brazil

TBM

ORIGINAL RESEARCH

A scoping study of frameworks for adapting public health evidence-based interventions

Cam Escoffery,¹ Erin Lebow-Skelley,¹ Hallie Udelson,¹ Elaine A. Böing,¹ Richard Wood,² Maria E. Fernandez,² Patricia D. Mullen²

Table 1 | Key adaptation steps and descriptions

Step name	Step descriptions
1. Assess community	<ul style="list-style-type: none">Identify behavioral determinants and risk behaviors of the new target population using focus groups, interviews, needs assessments, and logic modelsAssess organizational capacity to implement the program
2. Understand the intervention	<ul style="list-style-type: none">Identify and review relevant EBPs and their program materialsUnderstand the theory behind the programs and their core elements
3. Select intervention	<ul style="list-style-type: none">Select the program that best matches the new population and context
4. Consult with experts	<ul style="list-style-type: none">Consult content experts, including original program developers, as neededIncorporate expert advice into program
5. Consult with stakeholders	<ul style="list-style-type: none">Seek input from advisory boards and community planning groups where program implementation takes placeIdentify stakeholder partners who can champion program adoption in new setting and ensure program fidelity
6. Decide what needs adaptation	<ul style="list-style-type: none">Decide whether to adapt or implement original programTheater test selected EBP using new target population and other stakeholders to generate adaptationsDetermine how original and new target population/setting differ in terms of risk and protective factorsIdentify areas where EBP needs to be adapted and include possible changes in program structure, content, provider, or delivery methodsRetain fidelity to core elementsSystematically reduce mismatches between the program and the new context
7. Adapt the original program	<ul style="list-style-type: none">Develop adaptation planAdapt the original program contents through collaborative effortsMake cultural adaptations continuously through pilot testingCore components responsible for change should not be modified
8. Train staff	<ul style="list-style-type: none">Select and train staff to ensure quality implementation
9. Test the adapted materials	<ul style="list-style-type: none">Pretest adapted materials with stakeholder groupsConduct readability testsPilot test adapted EBP in new target populationModify EBP further if necessary
10. Implement	<ul style="list-style-type: none">Develop implementation plan based on results generated in previous stepsIdentify implementers, behaviors, and outcomesDevelop scope, sequence, and instructionsExecute adapted EBP
11. Evaluate	<ul style="list-style-type: none">Document the adaptation process and evaluate the process and outcomes of the adapted intervention as implementedWrite evaluation questions; choose indicators, measures, and the evaluation design; plan data collection, analysis, and reportingEmploy empowerment evaluation approach framework to improve program implementation



A Qualitative Study about Creating Smoke-free Home Rules in American Indian and Alaska Native Households

Michelle C. Kegler^{1,6} · Katherine Anderson¹ · Lucja T. Bundy¹ · Deana Knauf² · June Halfacre³ · Cam Escoffery¹ · Andre Cramblit⁴ · Patricia Henderson⁵

Theme:

Some Things are Better Outside (General Population) →

Respect our Past, Protect our Future (Tribal)

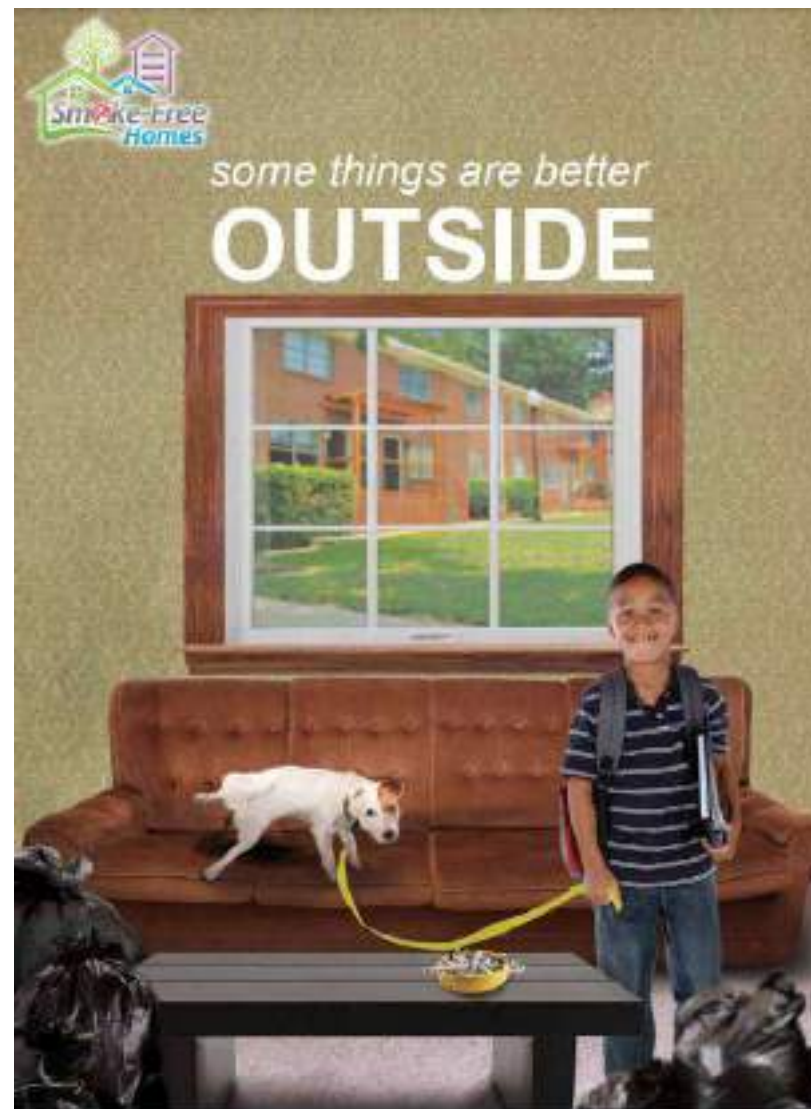
RESEARCH ARTICLE

Open Access



Adaptation of a brief smoke-free homes intervention for American Indian and Alaska Native families

Katherine M. Anderson¹, Michelle C. Kegler^{1*}, Lucja T. Bundy¹, Patricia Henderson², June Halfacre³ and Cam Escoffery¹





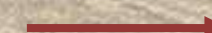
Pre-Testing Materials

Purpose: pre-test and refine materials to prepare for specific tribe



The collage includes several items:

- A poster titled "RESPECT OUR PAST PROTECT OUR FUTURE" with a landscape background.
- A poster titled "some things are better OUTSIDE" with a forest scene.
- A poster titled "Challenges and Solutions Keeping Your Home Smoke-Free" with a photo of two children.
- A poster titled "Value our tradition. Keep tobacco sacred." with a close-up of hands holding tobacco.
- A poster titled "How Can You Make Your Home Smoke-Free? Steps to Make Your Home Smoke-Free" with a checklist.
- A circular logo with the text "DO IT FOR US TAKE IT OUTSIDE" and a photo of a woman and child.
- A comic strip titled "QUEST FOR A SMOKE-FREE HOME" with several panels showing characters in a dialogue.



- NCI grant to adapt and test the Smoke-Free Homes intervention in Georgia and Armenia
- Partners include
 - Georgia National Center for Disease Control (NCDC)
 - Armenia National Institute of Health (NIH)
 - American University of Armenia (AUA)

GATHER-II will use a community-engaged approach to address:

- Aim 1:**
 - Adapt the SFHs intervention to be culturally appropriate for GE and AM and develop community capacity for intervention delivery.
- Aim 2:**
 - Examine the effectiveness of the adapted intervention on SFH adoption among households in AM and GE.
- Aim 3:**
 - Assess intervention reach, adoption, implementation, and sustainability.



GATHER

Georgia & Armenia Teams
for Healthy Environments & Research



Georgia

თაბაქოს კვალიდან თავისუფალი სახლის ისტორია

ეს ტრიბუნა დატარებული დღეა ქუთაისში. საინჟინერო სამუშაო დღის მეორე მას დავითი უკრძალავს, შემოწმებანე მიბრუნებს.

კვლევი დავითის სახლშია?

კა... მამაჩემი ღვინოზე ვიყავი და ის ეწვეა!

სახლი ეწვეა!

კვლევი კარგაა, მაგრამ...

მამაჩემი ვაშლი ზეზევდას ზეზევდას დაღამ სახლით ავირავი დაღამ ვაშლით ვაშლით.

მამა!

შარსაჩრაც #5

რით გნოსახეც გქსაძირე ჯნე დ ჯნე კაროი თოს ხამარ კანონხერ სახმანხე:

ლიზიჩი

ხქს ანდამ გნოსახეც გქსაძირე ჯნე, კაროი ხე მთამხე, ქს ხნეკანე აკაჯთ-აკანხე ღხერ დ გნოსახეც მქოს ანოკამ-ხერე ათოივიქოინდ: სახე ჯქსელი მასხს გოიყეღ სქსელიგ ათაგ ღსაკერაქე გქსაძირე ქასათარქსხერე:

შარსაჩრაც #6

ღნოსახეც ღქოი ანოკამხს როი ჯი გაქის კანონხე, თასი ანთხთამ ლ:

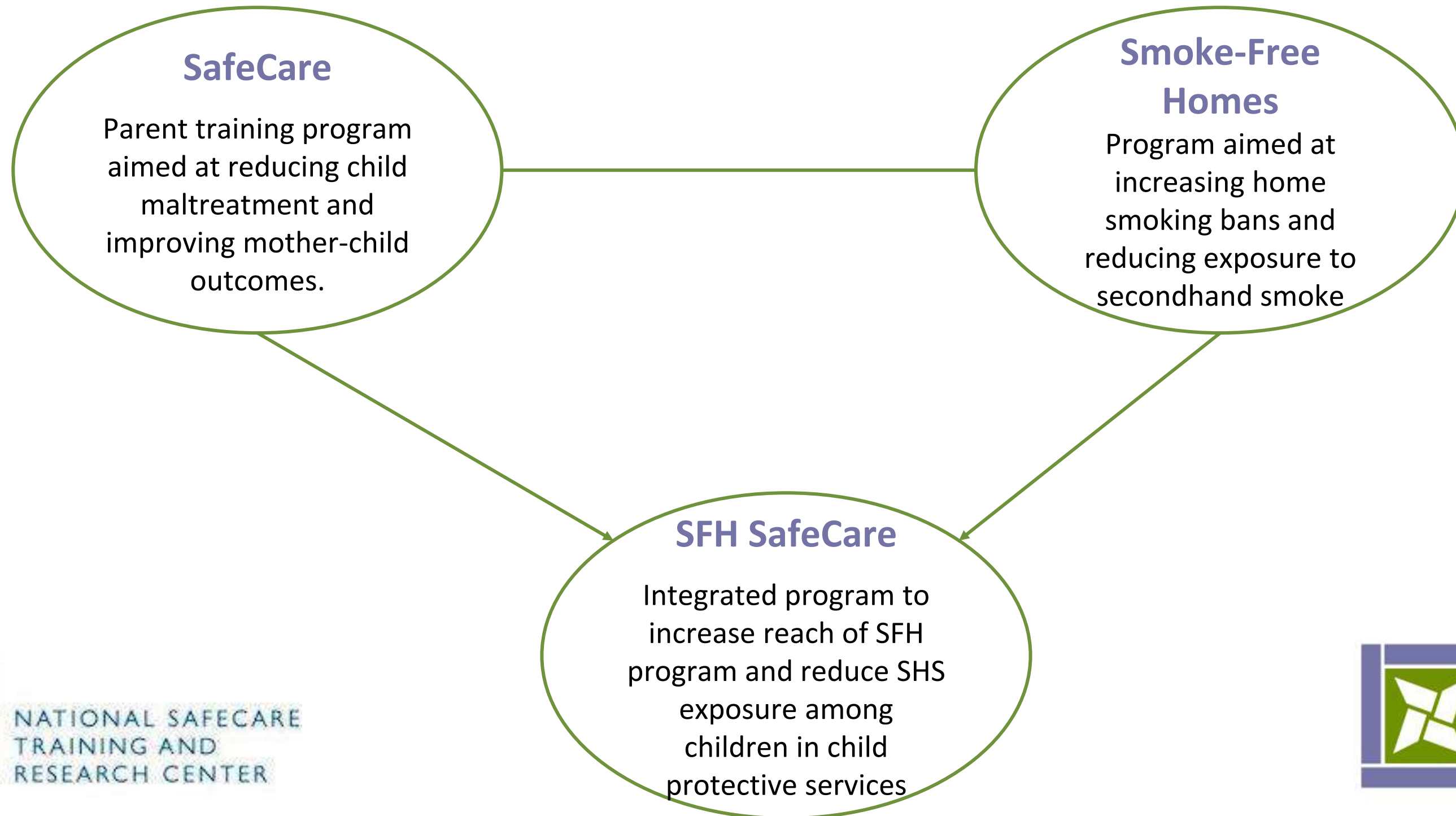
ლიზიჩი

2ხე კვირედი, თასი ანთხთამ ლ:

Armenia



Establishing Smoke-Free Homes With Families Involved in Child Protective Services: An Effectiveness-Implementation Trial of an Integrated Program



Population-Level Approaches to Promoting Smoke-Free Homes

- Smoke-free legislation can increase prevalence of smoke-free homes
- Community education on smoke-free homes shown to increase smoke-free homes in some studies...

Research paper

Association between clean indoor air laws and voluntary smokefree rules in homes and cars

Kai-Wen Cheng¹, Cassandra A Okechukwu², Robert McMillen¹, Stanton A Glantz⁴

Correspondence to Dr Kai-Wen Cheng, College of Public Health, Institute of Health Policy and Management, National Taiwan University, No. 17 Xu-Chow Rd, Room 621, Taipei 100, Taiwan; kwcheng19@ntu.edu.tw



Abstract

Objectives This study examines the influence that smokefree workplaces, restaurants and bars have on the adoption of smokefree rules in homes and cars, and whether there is an association with adopting smokefree rules in homes and cars.

Methods Bivariate probit models were used to jointly estimate the likelihood of living in a smokefree home and having a smokefree car as a function of law coverage and other variables. Household data were obtained from the nationally representative Social Climate Survey of Tobacco Control 2001, 2002 and 2004–2009; clean indoor air law data were from the American Nonsmokers' Rights Foundation Tobacco Control Laws Database.

Results 'Full coverage' and 'partial coverage' smokefree legislation is associated with an increased likelihood of having voluntary home and car smokefree rules compared with 'no coverage'. The association between 'full coverage' and smokefree rule in homes and cars is 5% and 4%, respectively, and the association between 'partial coverage' and smokefree rules in homes and cars is 3% and 4%, respectively. There is a positive association between the adoption of smokefree rules in homes and cars.

Conclusions Clean indoor air laws provide the additional benefit of encouraging voluntary adoption of smokefree rules in homes

Original research

BMJ Global Health

Examining local smoke-free coalitions in Armenia and Georgia: context and outcomes of a matched-pairs community-randomised controlled trial

Carla J Berg ,¹ Regine Haardörfer,² Arevik Torosyan,³ Ana Dekanosidze,^{4,5} Lilit Grigoryan,³ Zhanna Sargsyan,⁶ Varduhi Hayrumyan,⁶ Lela Sturua,^{4,7} Marina Topuridze,^{4,7} Varduhi Petrosyan,⁶ Alexander Bazarchyan,³ Michelle C Kegler²

Public Health Sector Active in Promoting Smoke-Free Multi-Unit Housing

- As of October 1, 85 municipalities have enacted a law at the city or county level that prohibits smoking in 100% of private units of rental multi-unit housing properties.
- The majority prohibit smoking in 100% of private units of both rental and owner-occupied multi-unit housing properties.
- All in California! *Source: Americans Nonsmokers' Rights Foundation (2024)*
- U.S. Department of Housing and Urban Development (HUD) funded conventional public housing implemented smoke-free rule in 2017. *Excludes vaping.*



GOAL:
Increase the number of smoke-free apartment communities in Georgia by promoting, recognizing, and providing education on smoke-free multi-unit housing.

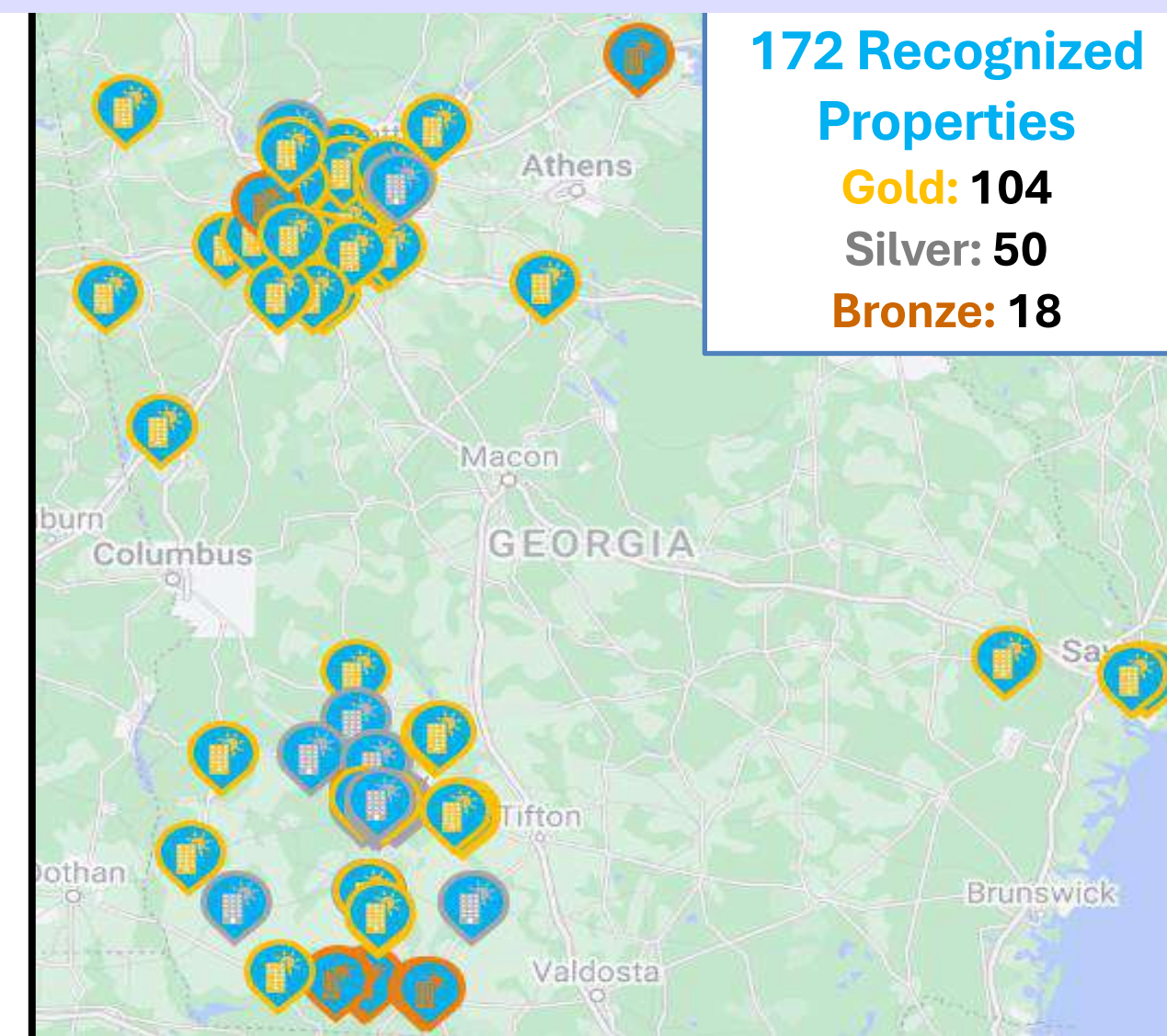
Breatheeasygahomes.org

Resources & TA

Recognition Program

Marketing & Promotion

Learning Community & Partnerships



121 Link clicks; 128 Engagements



100 Link clicks; 104 Engagements

Supporting Compliance: Helping residents follow their property's smoke-free policy

- Tips for compassionate policy enforcement
- Integrating [Smoke-free Homes](#) to support resident compliance.



Keeping your property smoke-free



HOW TO ENCOURAGE COMPLIANCE WITH YOUR SMOKE-FREE POLICY

Whether your smoke-free policy is old or new, we've put together some tips to help you maintain a smoke-free environment.

1

Inform & Educate Residents

Publish and post a written policy and clear signage in visible areas, making it clear where smoking is allowed and prohibited

Meet with residents to clarify and answer questions about the policy

Develop monthly poster campaigns about the importance of smoke-free homes

Collaborate with local partners to provide health education sessions

“... the advance notice times helped... we didn't tell anybody you've got to stop tomorrow, and we also made it clear... that, you know, we're not telling you that you can't smoke, we're just telling you can't smoke indoors.”

2

Implementation

Create a clear enforcement plan:

Detail the roles of staff members, how to report a violation, and the enforcement steps.

Train staff to implement and enforce the policy like any other rule.

“Consistency, absolutely. If you're not - if you're not consistent and fair - I mean, I don't warn some people three times and some people 20 times - if you're not fair and consistent, you may as well not have the policy.”

3

Monitor & Enforce

Create a simple reporting system to track violations

If you receive reports of violations, distribute policy reminders to all residents

Use a graduated enforcement policy (see example on right)



4

Community Building & Support

Provide residents with tools, resources, and guidance to support them. For example:

- Provide cessation resources
- Work with residents to identify and address barriers to compliance
- Build a peer support system



Eliminating Tobacco-Related Disease and Death: Addressing Disparities

A Report of the Surgeon General



U.S. Department of Health and Human Services

“Future efforts should employ a three-pronged approach aimed at promoting:

- the voluntary adoption of rules for a smokefree home at the household level;
- smokefree policies in multi-unit housing, and
- comprehensive smokefree policies at the tribal, territorial, state, and local levels.”

U.S. Department of Health and Human Services. Eliminating Tobacco-Related Disease and Death: Addressing Disparities—A Report of the Surgeon General. Atlanta, GA: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health, 2024

Smoke-Free Vehicles

- Some international momentum in legislation that prohibits smoking in personal vehicles, particularly to protect children
- 12 states in the U.S. prohibit smoking in personal vehicles with a child present



Some Evidence of Spillover Effect from Smoke-Free Homes on Smoke-Free Vehicles

- Atlanta trial, not significant in intent to treat analysis (25.8% control versus 31.9% intervention group at six months)
- NC trial, significant in intent-to-treat analysis (25.3% control versus 37.9% intervention at six months)
- National Grants Program: 18.5% to 49% at two months (no control group)



Smoke-Free Car NEWSLETTER

DO IT FOR THE KIDS

 Smoking or vaping inside a car traps secondhand smoke and vape aerosol in a small space. This makes the toxic chemicals stronger than they would be outside, in open air. The chemicals are especially unhealthy for children because they cause breathing problems and make asthma worse.

Children are vulnerable to the harmful effects of secondhand smoke and they don't have a voice to protect themselves. Many U.S. states have a law that prohibits smoking in vehicles transporting children under 18. These laws help protect them. —Public health expert

You can protect children by not smoking or vaping in your car.

DID YOU KNOW?

- Smoking in a car with the windows open does NOT get rid of secondhand smoke.
- Holding a lit cigarette outside the car window does NOT get rid of secondhand smoke.

"The smoke smell would come through the vents."

I would sneak a smoke in the car when my wife wasn't around. I thought it was okay if I smoked with the windows down, used air freshener and cleaned everything before she got in. But she could always tell! As soon as she turned on the air or heat, the smell came through the vents.

Tips for keeping a smoke-free car:

- Keep gum, candy, or healthy snacks in your car
- Put smoke-free reminders inside and outside your car
- Remind people how harmful secondhand smoke is
- Put your cigarettes in the trunk
- Cover your ashtray or fill it with coins

"My son kept getting ear infections!"

I only smoked in the car when the kids weren't around or with the windows open. When my son kept getting ear infections, I learned I could protect him by NEVER smoking in the car.

"She never wanted to ride with me!"

My granddaughter never wanted me to pick her up from school. She said she always smelled like 'stinky' cigarettes after riding with me. Since making my car smoke-free, she likes me to pick her up!

SMOKE-FREE CAR NEWSLETTER • SHOPPI PREVENTION RESEARCH CENTER



Smoke-Free Car PLEDGE

OUR TOP REASONS TO HAVE A SMOKE-FREE CAR

- For the health and comfort of nonsmokers, children, and pets
- For the safety of myself and passengers
- For the appearance and resale value of my car

I pledge to protect myself and my passengers from the dangers of secondhand smoke. I will make my car(s) 100% smoke-free beginning on

Date: _____

Signed by: _____



Reflection and Discussion

- Some households are “ready” to create a smoke-free home, just need a nudge and some concrete tools
- Disseminating a household-level intervention can be challenging, especially when smoking prevalence is low
- Need to find families that admit to smoking in the home
- May require incentivizing participation
- Hard to get existing systems (i.e., health care, health departments) to prioritize a program that requires staff time to deliver; referrals may work better
- More public health energy around smoke-free multi-unit housing policies in the U.S.
- Government regulation of privately-owned rental housing is tricky in conservative environments; property owners are key players
- How to handle vaping/aerosol in messaging and policies (harm reduction versus clean messaging)

Thank You!

<https://web1.sph.emory.edu/eprc/>



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Lots of partners!

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Shadé Owolabi
Regine Haardörfer

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Partnering with communities and leveraging research to prevent cancer and promote health equity
With a strong emphasis on rural Georgia

7th ICO-WHO
SYMPOSIUM
ON TOBACCO CONTROL



Institut d'Investigació
Biomèdica de Bellvitge



Co-funded by
the European Union