

New Jersey Public Health Practice-Based Research Network- DACS 71156

Product Type: Meeting and Conference Presentation

Presenter Name(s): Susan German

Presenter Affiliations: Rutgers New Jersey Medical School

Title of Presentation: Determining the Public Health Costs of Tobacco Prevention and Control: A Comparison of 5 New Jersey Local Health Departments

Meeting: Public Health PBRN DACS Methods Development Workshop

Sponsor Organization: National Coordinating Center for PHSSR and PH PBRN

Date: September 27, 2013

Location: Lexington, Kentucky

Determining the Public Health Costs of Tobacco Prevention and Control: A Comparison of 5 New Jersey Local Health Departments

Susan German, MPH

New Jersey Public Health Practice-Based Research Network

DACS Capacity Building Workshop

September 26-27, 2013

Background

- Deemed by the CDC as “The Nation’s Leading Killer”, tobacco use is the single largest preventable cause of disease and death in the US.
- Economic burden of tobacco use is an estimated \$193 billion/year in direct medical expenses and lost productivity combined.
- The decline in the adult smoking rate in NJ has plateaued at 16%.¹
- 22% of NJ high school students report tobacco use; 48% report being exposed to secondhand smoke²

Background

- Hence, a need for more far-reaching implementation of evidence-based public health activities.
- NJ local health departments (LHDs) have diminished ability to operate tobacco control programs due to redirection of tobacco sales tax-generated and Master Settlement revenue that was previously directed to LHD programs.

New Jersey LHDs

- 95 LHDs covering 566 municipalities
- All 95 LHDs are units of local government
- Over 50% of LHD revenue is from local sources
- Four jurisdictional structures:
 - Municipal (34)
 - Inter-local (contracting) (36)
 - County (18)
 - Regional Health Commission (7)

Study Objective

- To estimate the total costs of local public health activities comprising tobacco prevention and control
- To describe the cost structure, in order to understand the resources and costs involved in delivering this set of public health services.
- To compare costs of common activities and overall costs across practice settings.

Study Scope

- 15 LHDs expressed interest in being study participants in response to a “blast” e-mail
- 5 of the 15 LHDs selected as study participants
- Remaining 10 invited to participate in an advisory group meeting regularly to review progress and results

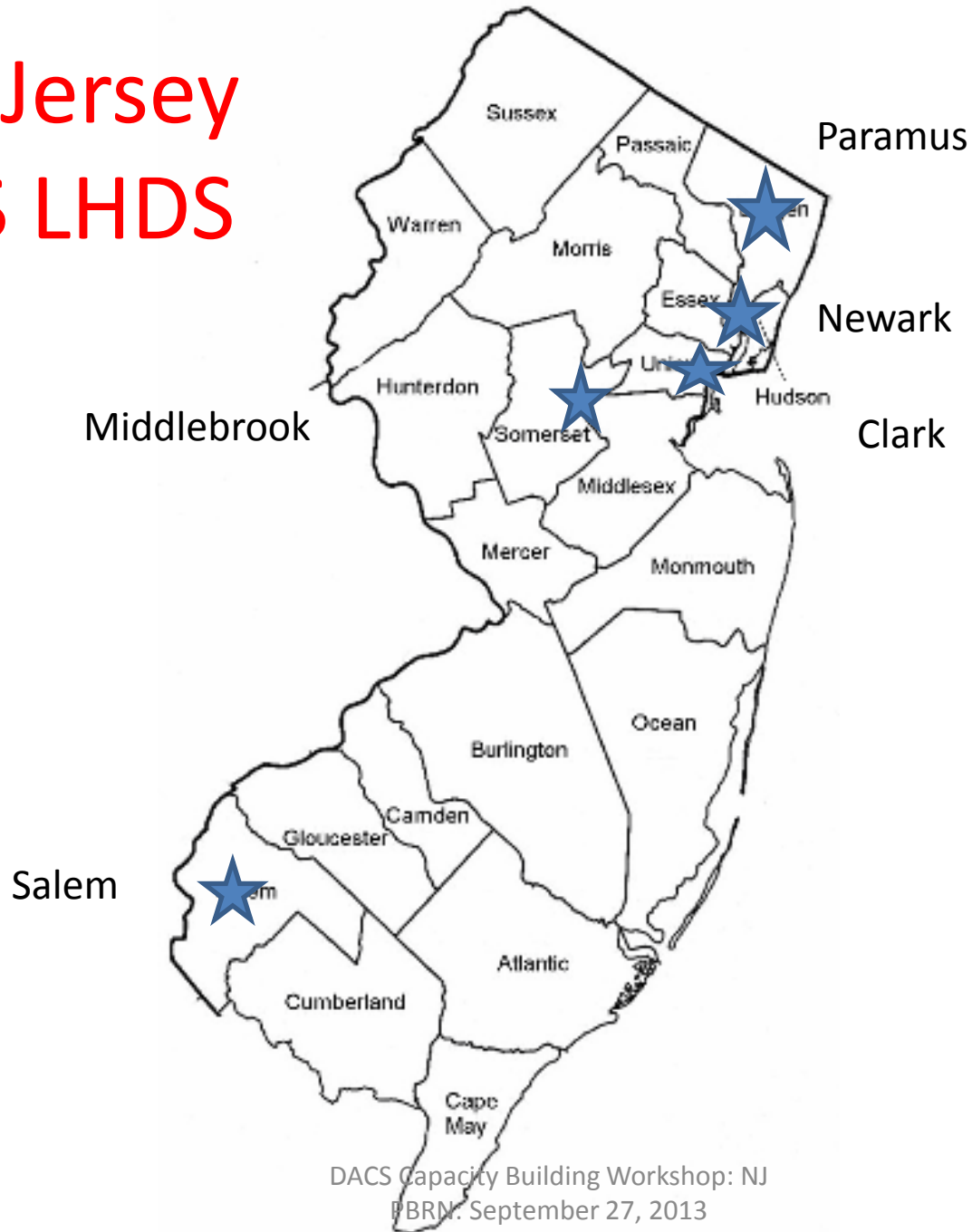
Methods

- Study Practice Settings
- Study Design
- Data Analysis

Methods: Study Practice Settings

- Five local health departments selected for their diversity of population characteristics, geographic jurisdiction level, and administrative structure.
- NJDOH member and state health officer association member liaised on selection process and are co-investigators
- Participating LHDs
 - Clark Health Department
 - Middle-Brook Regional Health Commission
 - Newark Department of Child & Family Well-Being
 - Paramus Board of Health
 - Salem County Department of Health.

New Jersey DACs LHDS



Methods: Study Design

- Costing work plan will be developed in consultation with economic / budget analysis consultant.
- Study documents to be created include a resource use data collection form, unit cost data collection form and separate labor data collection form.
- Work plan and forms will be piloted in 1 of 5 LHD participants, modified as needed, then applied to all study sites.
- One-year time horizon.
- Economic opportunity costs (“true value” or “shadow” costs) measured.

Methods: Study Design

- Inventory of relevant activities will be developed
- Cost elements for each activity will be identified and measured for Fiscal Year 2013 (July 2012-June 2013)
- Cost collection will include fixed, variable, capital, and recurrent cost categories

Methods: Study Design

- Anticipated steps in the work plan
 1. Inventory of activities developed through in-person structured interviews with health officers and department personnel
 2. Algorithms (production functions) will be developed from these inventories and interviews for each activity, including description of sites, offices, personnel, equipment, and other resources used to carry out inventoried activities

Methods: Study Design

- Anticipated steps in the work plan (cont'd)
 3. A line list of available secondary data sources for each site will be developed and data acquired.
 4. For each activity, counts of units of resources used will be obtained, using secondary data sources supplemented by key informant interviews where necessary.
 5. Unit costs will be obtained from secondary data sources.
 6. Counts of resources and unit costs will be multiplied to estimate cost for resource.
 7. Rules of thumb and other gross costing approaches will only be used to supplement this approach where absolutely necessary.

Methods: Study Design

- Secondary data sources may include:
 - Price lists
 - Expenditure data
 - Budget data
 - State, regional or local reports (e.g., annual reports)
 - Grant reports
 - Other (e.g. payroll databases)

Methods: Study Design

- Costs measured will include --
 - Supplies and materials
 - Contracted services
 - Buildings and facilities
 - Personnel
 - Utilities and maintenance
 - Equipment (e.g. office and other)
 - Transportation
 - Training

Methods: Study Design

- Other data collected will include --
 - Demographics and characteristics of the population served by the LHD.

Methods: Study Design

- Tobacco prevention, reduction, and control activity measures for which cost will be analyzed may include:
 - Enforcement of the NJ Smoke-Free Air Act
 - Acting as enforcers of the Tobacco Age of Sale (TASE) program, which prohibits the sale of tobacco to persons under 19 years of age.
 - Smoking cessation programs and nicotine patch giveaways.
 - Smoking prevention education
 - Anti-tobacco media
 - Roles in the restriction of tobacco advertising, promotion and sponsorship

Methods: Data Analysis

- Cost structures will be examined by activity and cost component.
- Costs will be compared across the 5 practice settings.
- Differences and similarities will be described using standard tabular and graphical approaches
- Comparative analyses will be made on common activities and overall tobacco-related costs.
- Examine relationships between cost of tobacco-related activities and both demographics and geographic location.

References

1. New Jersey Department of Health, Center for Health Statistics, State Health Assessment Data Website (http://www4.state.nj.us/dhss-shad/indicator/view/CigSmokAdlt.Ut_US.html) [accessed September 24, 2013].
2. Bover Manderski MT, Delnevo CD, Hrywna M. The 2010 New Jersey Youth Tobacco Survey: A Statewide Report. New Brunswick, NJ: University of Medicine and Dentistry of New Jersey-School of Public Health; May 2011.

Acknowledgements

- Funded by the Robert Wood Johnson Foundation
- Coordinated by the Public Health Practice-Based Research Network (PH PBRN) program
- Co-Project Directors:
 - Natalie Pawlenko, MSW, *Director, NJDOH Office of Local Public Health*
 - Pauline Thomas, MD, *Associate Professor, Rutgers New Jersey Medical School, Department of Preventive Medicine and Community Health*
- Research Team:
 - Susan German, MPH, *Project Coordinator, Rutgers New Jersey Medical School, Department of Preventive Medicine and Community Health*
 - Anushua Sinha, MD, MPH, *Associate Professor, Rutgers New Jersey Medical School, Department of Preventive Medicine and Community Health*
 - Kevin Sumner, *Health Officer, Middle-Brook Regional Health Commission*
- Collaborators include New Jersey PH PBRN members