

## ABSTRACT: 2014 ELAM Institutional Action Project Poster Symposium

### Tobacco Prevention and Treatment (TPT) Working Group at Indiana University School of Medicine

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Tobacco use is the major risk factor for preventable diseases, which account for the top causes of mortality in the US, such as cardiovascular disease, lung cancer, and COPD. The rates of tobacco use in the state of Indiana are among the highest in the nation, rendering a staggering economical and societal cost due to tobacco-related diseases. The main goal of the TPT working group is to engage a multidisciplinary approach that leverages local talent and resources to prevent the development and improve the outcomes of tobacco-related cancers in Indiana. The working group will address both the societal and individual impact of tobacco exposure and morbidity in Indiana, undertaking epidemiological and biological approaches to study two major areas: Prevention and Early detection as well as Control and Treatment.

**Distinct goals** of the TPT working group are: 1) To increase primary prevention of tobacco and similar carcinogens such as biomass, smokeless tobacco (e-cigarettes), or shisha use in Indiana. 2) To increase the rates of cessation of tobacco use in Indiana. 3) To understand the biology of addiction to tobacco. 4) To optimize local lung cancer screening implementation. 5) To develop individualized management approaches to improve outcomes of tobacco-related cancers. 5) To understand individual risk of developing a specific lung cancer phenotype, and individualized responses to therapy.

**Our approach** is to identify appropriate stakeholders and engage them in a team approach to formulate action and research plans, and pursue their implementation. The following projects have been identified as *initial areas* of action: For Prevention of smoking initiation, we will focus on pre-teen targeting. We will use educational initiatives targeting church groups, youth groups, boys clubs, and sports teams; we will engage school nurses association, community nurses; and student nurses. To enhance Smoking Cessation, we will pursue the integration of current resources on campus, including the Indiana University Health System, VA Medical Center, State Health, and Indiana Cancer Consortium. Planned research studies related to this topic are the pharmacogenomics of nicotine cessation drugs; and the impact of implementation of tele-health in remote rural areas to enhance smoking cessation. Another major area of attention will be the assessment and integration of existent Lung Cancer Screening Initiatives and pursue research such as the impact of endemic histoplasmosis on results; the impact of screening (false positive results) on behavior/PTSD symptoms in veterans; and impact of health disparities in screening on outcomes.

The **short term milestones** of the TPT working group will be the implementation of productive working teams of investigators; successful internal and extramural grant applications; recruitment of junior investigators to the working group; and increased visibility on campus as a useful local resource for tobacco-related policies and initiatives. Ultimately, the working group's **long term milestones** are measurable decreases in rates of tobacco use by the general population and high school students in particular which will likely translate in decreased rates of lung cancer diagnosis and lung cancer mortality in Indiana.



# Tobacco Prevention and Treatment (TPT) Working Group at Indiana University School of Medicine

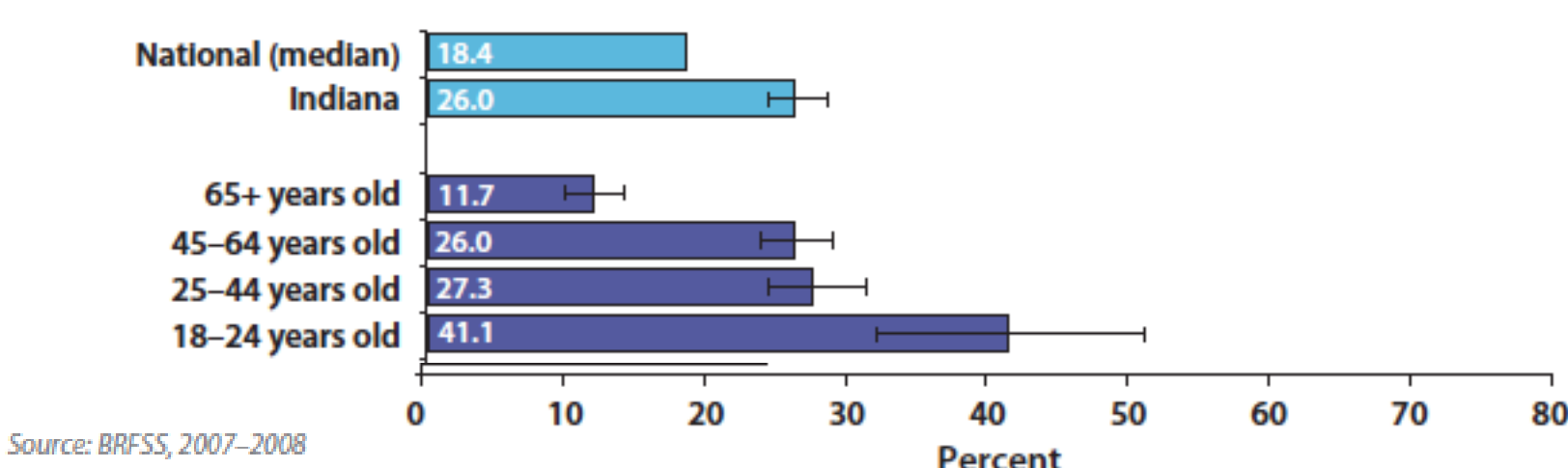
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## BACKGROUND & OPPORTUNITY

Tobacco use is the major risk factor for preventable diseases, which account for the top causes of mortality in the US, such as cardiovascular disease, lung cancer, and COPD.

The rates of tobacco use in the state of Indiana are among the highest in the nation, rendering a staggering economical and societal cost due to tobacco-related diseases.

Current Smoking Among Adults by Demographic Characteristics



## GOALS

Engage a multidisciplinary approach that leverages local talent and resources to **prevent the development and improve the outcomes** of tobacco-related cancers in Indiana.

## METHODS

- Address societal and individual impact of tobacco exposure and morbidity in Indiana
- Focus on two areas:

### *Prevention and Early Detection Control and Treatment*

- Six Specific Aims:
  - To increase primary prevention of tobacco, e-cigarettes or shisha use in Indiana
  - To increase the rates of cessation of tobacco use in Indiana
  - To understand the biology of addiction to tobacco.
  - To optimize local lung cancer screening implementation.
  - To develop individualized management approaches to improve outcomes of tobacco-related cancers.
  - To understand individual risk of developing a specific lung cancer phenotype responses to therapy.

## WORK in PROGRESS

### Pre-teen targeting

- Educational initiatives targeting church groups, youth groups, boys clubs, and sports teams;
- Engage school nurses association, community nurses; and student nurses

### Integration of Smoking Cessation Resources and of Lung Cancer Screening Initiatives on campus

- Indiana University Health
- VA Medical Center
- State Health
- Indiana Cancer Consortium

### Research

- Pharmacogenomics of smoking cessation drugs
- Impact telehealth in rural areas on smoking cessation
- Impact of endemic histoplasmosis on lung cancer screening success
- Impact of lung cancer screening on behavior/PTSD symptoms in Veterans
- Impact of health disparities in screening on outcomes.

## OUTCOMES

### Short term milestones

- Implementation of productive working teams of investigators
- Successful internal and extramural grant applications
- Recruitment of junior investigators to the working group
- Increased visibility on campus as a useful local resource for Tobacco-related policies and initiatives

### Long term milestones

- Significant decreases in rates of tobacco use by the general population and high school students
- Decreased rates of lung cancer diagnosis and lung cancer mortality in Indiana.

