

Executive Summary

What's in a Name? Examination of Light and Intermittent Smokers

Helping to Set a Tobacco Control Research Agenda

August 11–12, 2005

American Legacy Foundation

Washington, DC



 WHAT'S IN A NAME? 

EXAMINATION OF LIGHT AND INTERMITTENT SMOKERS

HELPING TO SET THE TOBACCO CONTROL RESEARCH AGENDA

August 11–12, 2005
American Legacy Foundation
Washington, DC

CONFERENCE CO-CHAIRS AND PLANNING COMMITTEE

CO-CHAIRS

Pebbles Fagan, Ph.D., M.P.H.
National Cancer Institute
Bethesda, MD

Deirdre Lawrence, Ph.D., M.P.H.
National Cancer Institute
Bethesda, MD

Donna Vallone, Ph.D., M.P.H.
American Legacy Foundation
Washington, DC

Kerri McGowan Lowrey, J.D., M.P.H.
NOVA Research Company
Bethesda, MD

Patricia L. Mabry, Ph.D.
National Institute of Health
Bethesda, MD

Stephen Marcus, Ph.D.
National Cancer Institute
Bethesda, MD

PLANNING COMMITTEE

Darrell Anderson
Scientific Consulting Group Corporation
Gaithersburg, MD

Cathy Backinger, Ph.D., M.P.H.
National Cancer Institute
Bethesda, MD

Kinetta Diggs
American Legacy Foundation
Washington, DC

Vanessa Johnson
American Legacy Foundation
Washington, DC

Michelle L. Murray
NOVA Research Company
Bethesda, MD

Stephanie Nelson, Ph.D.
Scientific Consulting Group Corporation
Gaithersburg, MD

David Tran
Scientific Consulting Group Corporation
Gaithersburg, MD

Danell Watkins, M.S.P.H.
National Cancer Institute
Bethesda, MD

CONFERENCE PARTICIPANTS AND CONTRIBUTORS TO THE REPORT

PLANNING COMMITTEE

Neal Benowitz, M.D.
University of California, San Francisco
San Francisco, CA

Judith Brook, Ed.D.
New York University School of Medicine
New York, NY

David Burns, M.D.
University of California, San Diego
San Diego, CA

Ralph Caraballo, Ph.D., M.P.H.
Centers for Disease Control and Prevention
Atlanta, GA

Matthew Carpenter, Ph.D.
Medical University of South Carolina
Charleston, SC

Allison Chausmer, Ph.D.
National Institute on Drug Abuse
Bethesda, MD

Stuart Ferguson, Ph.D.
University of Pittsburgh
Pittsburgh, PA

Peter Gariti, Ph.D.
University of Pennsylvania
Philadelphia, PA

Gary Giovino, Ph.D.
University of Buffalo
Buffalo, NY

Anne Hartman, M.S.
National Cancer Institute
Bethesda, MD

Kristen Hassmiller, M.H.S.A.
University of Michigan
Ann Arbor, MI

Corinne Husten, M.D., M.P.H.
Centers for Disease Control and Prevention
Atlanta, GA

Scott Leischow, Ph.D.
University of Arizona
Tucson, AZ

Jon Macy, M.P.H.
Indiana University
Bloomington, IN



PLANNING COMMITTEE

Mary O'Connell, M.S.
SAIC-Frederick
Bethesda, MD

Kolawole Okuyemi, M.D., M.P.H.
University of Minnesota
Minneapolis, MN

John P. Pierce, Ph.D.
University of California, San Diego
San Diego, CA

Clark Presson, Ph.D.
Arizona State University
Tempe, AZ

Beverly Pringle, Ph.D.
National Institute on Drug Abuse
Bethesda, MD

Saul Shiffman, Ph.D.
University of Pittsburgh
Pittsburgh, PA

John Tauras, Ph.D.
University of Illinois at Chicago
Chicago, IL

Stephen T. Tiffany, Ph.D.
University of Utah School of Medicine
Salt Lake City, UT

Elisa Tong, M.D., M.A.
University of California, San Francisco
San Francisco, CA

Shu-Hong Zhu, Ph.D.
University of California, San Diego
San Diego, CA

SPONSORS

National Cancer Institute
Division of Cancer Control and Population Sciences

The American Legacy Foundation

EXECUTIVE SUMMARY

What defines a smoker? On national surveys, a smoker used to be defined as someone who smoked “every day.” In 1992, the Centers for Disease Control and Prevention changed the definition of a smoker on the National Health Interview Survey to include those who indicated that they smoke “some days.”¹ The meaning of “smoker” now encompasses a variety of smoking patterns, including the notion of “light” and “occasional” smoking.² However, research and public health efforts aimed at reducing light smoking have been obscured by the broad perception among researchers, health practitioners, and the public that smoking a few cigarettes per day is “less harmful” than smoking many cigarettes per day.

Smoking at any level is harmful. Light and intermittent tobacco smokers (LITS) comprise a significant proportion of the smoking population, and several studies show that they are at increased risk for heart disease³⁻⁶ and cancer.^{7,8} The majority of African Americans and Hispanics who smoke often fall into the category of light smokers⁹, and the prevalence of intermittent smokers is increasing in both the United States^{10,11} and Finland.¹² In order to reduce smoking and create a smoke-free society, it is important that we create an open dialogue and begin to raise the appropriate research questions to address smoking behavior among light and intermittent smokers.

In August 2005, the National Cancer Institute and the American Legacy Foundation convened 29 scientists to:

- ★ Review the state of the science on light and intermittent smokers.
- ★ Summarize research progress.
- ★ Identify gaps, limitations, and challenges in research.
- ★ Develop and prioritize recommendations to advance research related to this growing subgroup of smokers.

Eight areas of research were examined during the one-and-a-half day meeting: (1) definitions of light and intermittent smoking; (2) initiation of tobacco use and transition to light and intermittent smoking; (3) sociodemographic and psychosocial characteristics; (4) morbidity and mortality

outcomes; (5) concurrent use of cigarettes and other tobacco products, potentially reduced-exposure products (PREPs), and nicotine replacement therapy (NRT); (6) tobacco dependence; (7) patterns of quitting tobacco use; and (8) demand for, availability of, and access to policy and programmatic interventions. More than 80 research recommendations were proposed at the meeting. Participants also suggested the use of several methods of scientific inquiry to address the recommendations, which included:

- ★ Conducting **focus groups** to determine appropriate questions for measuring LITS and for developing an understanding of smoking patterns.
- ★ Using **existing data sets** to examine the relationships between LITS and other variables for understanding smoking patterns, cigarette exposure, health outcomes, and the impact of policies.
- ★ Developing **longitudinal data** to identify LITS patterns (i.e. stability/instability of smoking and quitting and processes of quitting and relapse).
- ★ Conducting **laboratory and clinical studies** to test measures of LITS, examine cognitions, validate dependence measures, and examine smoking cessation processes.
- ★ Developing **funding mechanisms** to support scientific research on LITS.

Specific high priority research recommendations and action steps to accomplish the recommendations are highlighted in the following table.

High Priority Research Recommendations

| Research Topic | Priority Recommendations | Action Steps |
|---|---|---|
| Definitions of light and intermittent smoking | <ul style="list-style-type: none"> ★ Explore measures beyond quantity and frequency to determine appropriate measures for defining LITS. <ul style="list-style-type: none"> • Among LITS, develop measures to assess tobacco use abstinence behaviors. | <ul style="list-style-type: none"> ★ Add assessments of dependence to surveys. ★ Create a workgroup to: <ul style="list-style-type: none"> • Review literature to determine what we know about differences among LITS. • Mine data sets and determine who has them. • Hold focus groups to develop appropriate questions for LITS. • Cognitively test questions and construct the survey instruments. |
| Initiation of tobacco use and transition to light and intermittent smoking | <ul style="list-style-type: none"> ★ Investigate shapes and triggers of transitions and obtain more detailed trajectory information. ★ Develop an understanding of the processes by which people transition, including trajectories and factors that impact transitions. ★ Expand initiation and cessation time frames for studying transitions. | <ul style="list-style-type: none"> ★ Identify available longitudinal data sets to identify stable and unstable patterns of smoking. ★ Plan a major longitudinal study with sufficient samples of traditionally small sample size populations (e.g., ethnic groups). ★ Fund more micro or nested studies, especially within longitudinal studies. |
| Sociodemographic and psychosocial characteristics | <ul style="list-style-type: none"> ★ Study social norms that influence individual cognition about smoking and quitting in the larger psychosocial context. | <ul style="list-style-type: none"> ★ Create a workgroup to identify the best measures of social norms for different types of smokers. <ul style="list-style-type: none"> • Convene sociologists, social psychologists, and epidemiologists to define social norms. • Identify existing data sets to look at the relationship between social norms and LITS. ★ Examine the appropriateness of theories and models for LITS. |

| Research Topic | Priority Recommendations | Action Steps |
|---|---|---|
| Morbidity and mortality outcomes | <ul style="list-style-type: none"> ★ Analyze existing data sets or conduct studies to assess the influence of low-level cigarette exposure, distinguishing between non-daily use and low-level daily use on: <ul style="list-style-type: none"> • acute onsets (e.g., respiratory infections); pregnancy outcomes; biomarkers of disease (e.g., inflammation, cholesterol); diseases with rapid trajectory of increased risk at low levels of tobacco exposure (e.g., coronary heart disease); and measures of well-being (e.g., depression, anxiety, achievement, work performance, quality of life). | <ul style="list-style-type: none"> ★ Develop Funding Opportunity Announcements or Request For Proposals. |
| Concurrent use of cigarettes and other tobacco products, potentially reduced-exposure products (PREPs), and nicotine replacement therapy (NRT) | <ul style="list-style-type: none"> ★ Conduct population level surveillance that includes measures of concurrent use of tobacco products, NRT, and PREPs. ★ In clinical trial interventions, include studies that encourage sustained reduction among those who have failed to quit smoking as a possible means of promoting successful cessation on subsequent attempts. | <ul style="list-style-type: none"> ★ Develop plans for analyses of data. ★ Assemble a working group and publish a paper on this research topic. ★ Develop a Request for Applications for secondary analyses. |

| Research Topic | Priority Recommendations | Action Steps |
|---|---|---|
| Patterns of quitting tobacco use | <ul style="list-style-type: none"> ★ Develop a basic understanding of light and intermittent behavior to support a rational basis for treating LITS. ★ Study the natural history of cessation and relapse among LITS to capture detailed information on interest in cessation, quit attempts, methods used to quit, reasons for relapse, and patterns of relapse. | <ul style="list-style-type: none"> ★ Make use of new and existing longitudinal and cross-sectional data to address priority recommendations. ★ Conduct qualitative focus groups. ★ Collect more basic laboratory data on smoking and cessation processes (e.g., craving, cues, aspects of pharmacotherapy, behavioral therapy). ★ Fund clinical trials on quitting. ★ Establish a subsample of the longitudinal study. ★ Examine a subsample of 2003 Tobacco Use Supplement to the Current Population Survey. ★ Convene a working group to determine what detailed survey questions should be asked and publish the recommendations. ★ Encourage researchers to add detailed survey items about quitting experiences. |
| Demand for, availability of, and access to policy and programmatic interventions | <ul style="list-style-type: none"> ★ Understand the impact of policies on transitions into and out of LITS by analyzing more recent and complete data at the local levels. | <ul style="list-style-type: none"> ★ Establish a working group to assess existing data sources and identify needs and gaps in data. |
| Tobacco dependence | <ul style="list-style-type: none"> ★ Develop measures of actual smoking behavior and patterns. ★ Examine motivations to smoke and quit among LITS. ★ Develop and validate measures of dependence that are sensitive across the full range of dependence and are capable of assessing change. | <ul style="list-style-type: none"> ★ Conduct new laboratory and field studies relevant to motives for smoking and quitting among LITS smokers (e.g., perform assessments of cognitive processes specific to LITS). ★ Conduct analyses of existing data sets (e.g., National Survey on Drug Use and Health). <ul style="list-style-type: none"> • Include several measures of dependence in prospective longitudinal studies. |

CONCLUSIONS

Changes to national survey items in the early 1990s were sparked by the need to answer the question: What defines a smoker? Before then, current smoking had been documented with little regard to recognizing the diversity in smoking frequency and intensity. Today, we know that any level of smoking is harmful, and as a result, the interest and demand for understanding light and intermittent smoking is increasing. This Executive Summary recognizes the increasing interest in LITS and aims to stimulate new research that will ultimately help all smokers abstain from tobacco use.

The recommendations outlined in this Executive Summary challenge researchers to address an understudied research topic—light and intermittent smoking. There is a demand to understand the characteristics of LITS, including patterns of initiation, dependence, methods for quitting, and health outcomes. Taking on the research challenges outlined in this Executive Summary will promote alternative models for examining the constructs of smoking and dependence. The recommendations in this Executive Summary frame the next generation of research on LITS and call on both experienced and new researchers to build intergenerational bridges of knowledge and innovation in tobacco control.

Researchers, practitioners, policymakers, and advocates are needed to help integrate the examination of light and intermittent smoking into the public health, health care, policy, prevention, and treatment agendas. Smoking rates have declined since 1965, but we still have more work to do to reach the Healthy People goal of reducing tobacco use to 12 percent by the year 2010 in the United States¹³ and much more progress to make to reduce smoking globally, since LITS may be common in poor and developing countries. As we move toward benchmarking our own progress, it is critical that we track light and intermittent smoking to determine if projected progress in reducing smoking is also observed among LITS. The tobacco control community can answer this and other research questions with openness as we engage in developing innovative research questions, support others in this journey, and consider the idea that learning more about LITS will help us learn more about all smokers.

REFERENCES

1. Centers for Disease Control and Prevention (1994). Cigarette smoking among adults--United States, 1992, and change in the definition of current cigarette smoking. *Morbidity and Mortality Weekly Report*, 43(19), 342-346.
2. Okuyemi KS, Ahluwalia JS, Richter KP, Mayo MS, & Resnicow K (2001). Differences among African American light, moderate, and heavy smokers. *Nicotine & Tobacco Research*, 3(1), 45-50.
3. Willett WC, Green A, Stampfer MJ, Speizer FE, Colditz GA, Rosner B, Monson RR, Stason W, & Hennekens CH (1987). Relative and absolute excess risk of coronary heart disease among women who smoke cigarettes. *New England Journal of Medicine*, 317(21), 1303-1309.
4. Luoto R, Uutela A, & Puska P (2000). Occasional smoking increases total and cardiovascular mortality among men. *Nicotine & Tobacco Research*, 2(2), 133-139.
5. Rosengren A, Wilhelmsen L, & Wedel H (1992). Coronary heart disease, cancer and mortality in male middle-aged light smokers. *Journal of Internal Medicine*, 231(4), 357-362.
6. Kawachi I, Colditz GA, Stamfer MJ, Willett WC, Manson JE, Rosner B, Speizer FE, & Hennekens CH (1994). Smoking cessation and time course of decreased risks of coronary heart disease. *Archives of Internal Medicine*, 154(2), 169-175.
7. Walter SD, & Iwane M (1983). Interaction of alcohol and tobacco in laryngeal cancer. *American Journal of Epidemiology*, 117(5), 639-641.
8. Bjartveit K, & Tverdal A (2005). Health consequences of smoking 1-4 cigarettes per day. *Tobacco Control*, 14, 315-320.
9. Centers for Disease Control and Prevention (1998). *Tobacco Use Among U.S. Racial/Ethnic Minority Groups—African Americans, American Indians and Alaska Natives, Asian Americans and Pacific Islanders, and Hispanics: A Report of the Surgeon General*. Atlanta: U.S. Department of Health and Human Services.
10. Centers for Disease Control and Prevention (2003). Prevalence of current cigarette smoking among adults and changes in prevalence of current and some day smoking--United States, 1996-2001. *Morbidity and Mortality Weekly Report*, 52(14), 303-307.
11. Hennrikus DJ, Jeffery RW, & Lando HA (1996). Occasional smoking in a Minnesota working population. *American Journal of Public Health*, 86(9), 1260-1266.
12. Helakorpi S, Uutela A, Prättälä R, Berg MA, & Puska P (1997). *Healthy Behaviour Among The Finnish Adult Population*. Helsinki, Finland: National Public Health Institute.
13. U.S. Department of Health and Human Services. (2002). *Healthy People 2010: Understanding and Improving Health* (2nd ed.). Washington, DC: U.S. Government Printing Office.



NIH Publication
Publication No. 07-6253
Printed February 2008

To download a PDF of this document, use the web address below:
<http://cancercontrol.cancer.gov/tcrb/LITSExecutiveSummary.pdf>



Legacy
American Legacy Foundation

