COMMUNICATING SCIENCE:

GIVING RESEARCH A VOICE

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"I know firsthand the importance of science to public policy... the key to the creation of effective policy is access to the best available scientific research."

~ Congressman Henry Waxman

Feb. 16, 2005, addressing the National Association of Science Writers, Washington, D.C.

Communicating Science: Giving Research A Voice is a guide for increasing the impact and value of scientific findings through communications. This report is intended for a broad audience of health-related researchers, especially those who participate in multi-unit or multi-disciplinary projects at research centers. It is also directed at policy makers and decision makers involved in the funding of research on health and health care. Included in this report are specific suggestions, lessons learned, best practices, and case examples that illustrate communications activities and experiences.

The information presented in *Communicating Science* is based on the experiences gained from the Partners with Tobacco Use Research Centers (Partners) initiative. The Partners program is funded by the Robert Wood Johnson Foundation (RWJF) and is a research and communications collaboration with the Transdisciplinary Tobacco Use Research Centers (TTURCs). These combined initiatives sought to advance knowledge about tobacco use and to translate evidence-based findings into practice and policy.

In the first round of the TTURC initiative, 7 major institutions were funded by the National Cancer Institute (NCI) and the National Institute on Drug Abuse (NIDA) to conduct tobacco use research. Through the Partners initiative, the Robert Wood Johnson Foundation funded a communications component at each of the research centers. The aim of the communications effort was to accelerate the transfer of new knowledge to a broad audience of stakeholders beyond the scientific community, including public policy and public health audiences.

We hope that *Communicating Science: Giving Research a Voice* will be a valuable resource for individuals interested in increasing the impact of scientific findings and ultimately improving health and health care for all.

Kim Kobus, PhD
Robin Mermelstein, PhD
Prabhu Ponkshe, MA, LLB

INTRODUCTION:
WHY BROADEN THE REACH OF SCIENCE?

Every day researchers discover important information about health and health behaviors through scientific inquiry. The value of this information is told not in its statistical significance, but in its ability to be translated into improvements in health-related behaviors, practices, and policies. Researchers who take the time to communicate their findings to interested audiences greatly increase the likelihood that their work will improve public health.

In this report, communications refers to the transfer of scientific knowledge from researchers and research institutions to individuals and audiences who can make informed decisions about health and healthy behaviors.

Reasons for researchers to participate in science communications include:

• **Informing the public.** The public has a growing interest in health and science. Access to scientific information helps build a more informed public that is better able to address many of the health-related problems facing society today.

• **Making health information meaningful.** On a daily basis, the public is exposed to health information from many sources. Findings from different studies can lead to confusion. Communications can help the public and policy makers understand that a single study must be considered in the context of the broader body of scientific evidence.

• **Translating research into action.** Policy makers, health care providers, and health consumers rely on research findings to promote best practices in health and health care, such as encouraging and establishing evidence-based policies, practices, and public health initiatives. Taking the time to communicate findings to interested audiences makes research count.

• **Informing other scientists.** Research results that are broadly disseminated reach not only the public, but also other scientists. This is especially helpful for informing researchers outside the primary discipline of the original researcher.

• **Building good community relations.** Media attention to scientific findings helps establish the identity of researchers and their research center as having a specific expertise and fosters a sense of trust in the institution. In addition it helps researchers fulfill their responsibility to report findings from their work back to the public, whose taxpayer dollar funds much of their work.

• **Helping secure future research funding.** Media attention can create greater awareness among the public, legislators, and policy makers about the need for research, and create the impetus for continued funding of health-related research.

• **Developing a partnership with funders.** Keeping funding institutions fully informed of all research-related communications activities helps build a partnership between the research institution and the funding agency.

Building a science communications program begins with the commitment of the principal investigator and the research leadership of an organization. Allocating funds and other resources to the communications function clearly demonstrates this commitment. The most effective communications programs are those that are championed by senior researchers and include communications professionals as key members of the team. When communications is recognized as an integral part of the research endeavor, the likelihood increases that researchers can build a successful communications program.

An effective way to build communications capacity is to establish a communications committee, including researchers, outside consultants, research project staff, and communications staff. The contributions of this team are helpful throughout the communications program, from developing a communications mission statement and goals through identifying communications opportunities and reaching out to key audiences.

Mission Statements

Developing a communications mission statement is a critical early step for guiding the communications infrastructure and setting the stage for future external communications efforts. A research center with a clear vision is better able to prioritize or select communications opportunities, and to create such opportunities.

The mission statement for the *Partners with Tobacco Use Research Centers* communications program is:

> *To deliver basic and policy-oriented tobacco research results to key researchers, policy makers, health care providers, and health care delivery systems in a coordinated manner that will advance the science and facilitate the development of new programs and policies to reduce tobacco use.*

This mission statement identifies the *action* (to deliver basic and policy-oriented research results), the *primary purpose* (to reduce tobacco use), and high priority *audiences* (key researchers, policy makers, health care providers, and health care delivery systems).

Communications Goals

Goals for a communications program include:
- Increasing public awareness about health-related topics;
- Reaching influential audiences, e.g., policy makers and health care practitioners;
- Increasing visibility and name recognition of the research center;
- Increasing awareness of the need for research funding; and,
- Ensuring that public policy making is guided by science.

Strategic Communications

Successful communications programs require a comprehensive written **Strategic Communications Plan**. The plan should include goals, key audiences, budget, time lines, and creative strategies. The communications plan affirms, supports, and drives the organization's goals as expressed in its mission statement, and is vital to daily operations. The plan should propose a broad set of strategic approaches to effectively disseminate research findings and key messages to desired target audiences. This plan should be widely shared with researchers.

Best Practices

Steps in Developing a Strategic Communications Plan

1 **Situational Analysis/Environmental Scan.** Researchers and communications professionals need to identify the overall mission of the research and research center and understand the relevance of the research within the larger sociopolitical context (e.g., mortality, morbidity, health, health care). The scan should evaluate public opinion and policy debates around the health/research topic, including past media coverage and legislative activity, and identify outside researchers, organizations, and activities involved in the research topic.

2 **Key Audiences.** The plan should identify and prioritize relevant stakeholder. This is perhaps one of the most important aspects of planning. It is more important to have a solid understanding of key audiences and how to engage them effectively than to communicate to general audiences. Once key audiences are identified, communications professionals can establish links with other communications groups/programs that reach the same audiences. This is especially helpful when budgets and resources are limited.

3 **Communications Goals & Objectives.** Goals are simply what an organization wants to achieve in a communications plan. Objectives are the specific, measurable steps to meet these goals. Thinking through goals and objectives early, and stating them clearly, can help ensure communications activities are focused and effective.

4 **Key Messages & Themes.** Key messages are the concepts, research outcomes, and specific information that you want audiences to remember from a communications campaign. These messages should be woven through all of the communications products and repeated often.

5 **Budget & Resources.** The amount of communications activity is dependent upon the organization's investment. A budget must be established before implementation begins, as the dollar and staff availability dictates what can or cannot be done.

6 **Evaluation.** Communications activities should be evaluated to determine their effectiveness. The communications team can evaluate effectiveness by tracking visits to web pages, inquires about research findings, citations counts, and popular media articles and interviews. They should also track the impact of research on public opinion and policies.

Staffing the Communications Function

When hiring communications staff, it is important to consider the maturity of the research program. Newly established research programs have different communications needs than active programs. Communications resources should be allocated to reflect activity level across the life of the research program and should last beyond the publication of research results. Other staffing considerations include identifying one-time, start-up activities (such as Web site development and graphic design for logos and brochures) versus long-term operations that should be maintained over the duration of the program (such as science writing and media relations). One-time tasks can be accomplished through the use of consultants, with arrangements made for follow-up contractual work on an as-needed basis. Long-term tasks are often best accomplished through the hiring of permanent staff.

The size of a communications program varies according to need and budget. A communications program can involve a part-time freelance science writer or consultant, one full-time staff communications specialist, or a communications director and staff. Starting small and building a larger communications program as demand increases is also an option. Other factors that affect communications staffing include the availability of university or institution-wide resources, relationships between research departments and the institution's central administration, and the size of the media market in which the institution is located.

Best Practices

Job Responsibilities of Communications Staff

- Develop a strategic communications plan in consultation with researchers within the first six months.

- Maintain regular contact with investigators to stay apprised of research progress and to anticipate and identify research-related communications opportunities.

- Develop a wide range of products to communicate the work of the research group to external audiences, including the media, policy makers, and public health professionals. These products may include news releases, Web announcements, op eds, editorials, policy briefs, and science briefs.

- Facilitate the exchange of information among researchers and across disciplines.

- Continuously monitor the media and policy environment to share developments with researchers.

- Identify opportunities to connect researchers with reporters, policy makers, and other key decision makers.

- Provide communications training and training resources for improving the communications skills of researchers with a variety of audiences.

- Develop and maintain contacts with major local, regional, national, and specialty media.

- Develop and maintain contacts with local, state, and national policy groups and advocacy organizations.
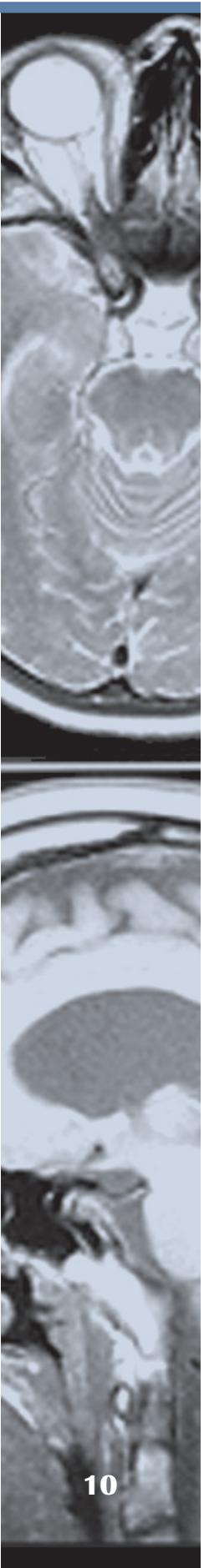
Communications professionals are most effective at advancing research goals when they are an integral part of the team. They should be encouraged to develop close ties with hands-on research staff, including project directors, and with peers at the institution's central communications office.

When hiring communications professionals, the main qualifications are training and experience in science writing, public relations, and media relations. Given the importance of writing skills, asking for a writing sample, such as a 400- to 600-word news article based on a research paper, is recommended. Additional qualifications include strategic communication planning and experience in managing a Web site.

Jobs for communications professionals and science writers are often advertised in job banks managed by the Public Relations Society of America, National Association of Science Writers, and International Association of Business Communicators.

Best Practices

Qualifications for Communications Staff

Educational Background and Experience:

- Undergraduate degree in journalism, public relations, or related field, with Master's degree or continuing education/training preferred.

- Newspaper/magazine writing experience for 2-5 years.

- Knowledge and understanding of major public health issues.

- Relevant computer skills, e.g., Web-writing experience preferred.

- Science and policy communications experience preferred.

Specific Skills:

- Ability to read and analyze scientific documents or reports and write up the findings in formats for a variety of audiences while maintaining scientific integrity and credibility.

- Creative approach identifying opportunities that will enhance the research program through communications efforts.

- Ability to be a part of a team of communications professionals and researchers.

- Ability to be persuasive in oral and written communications.

Communications Functions and Outcomes
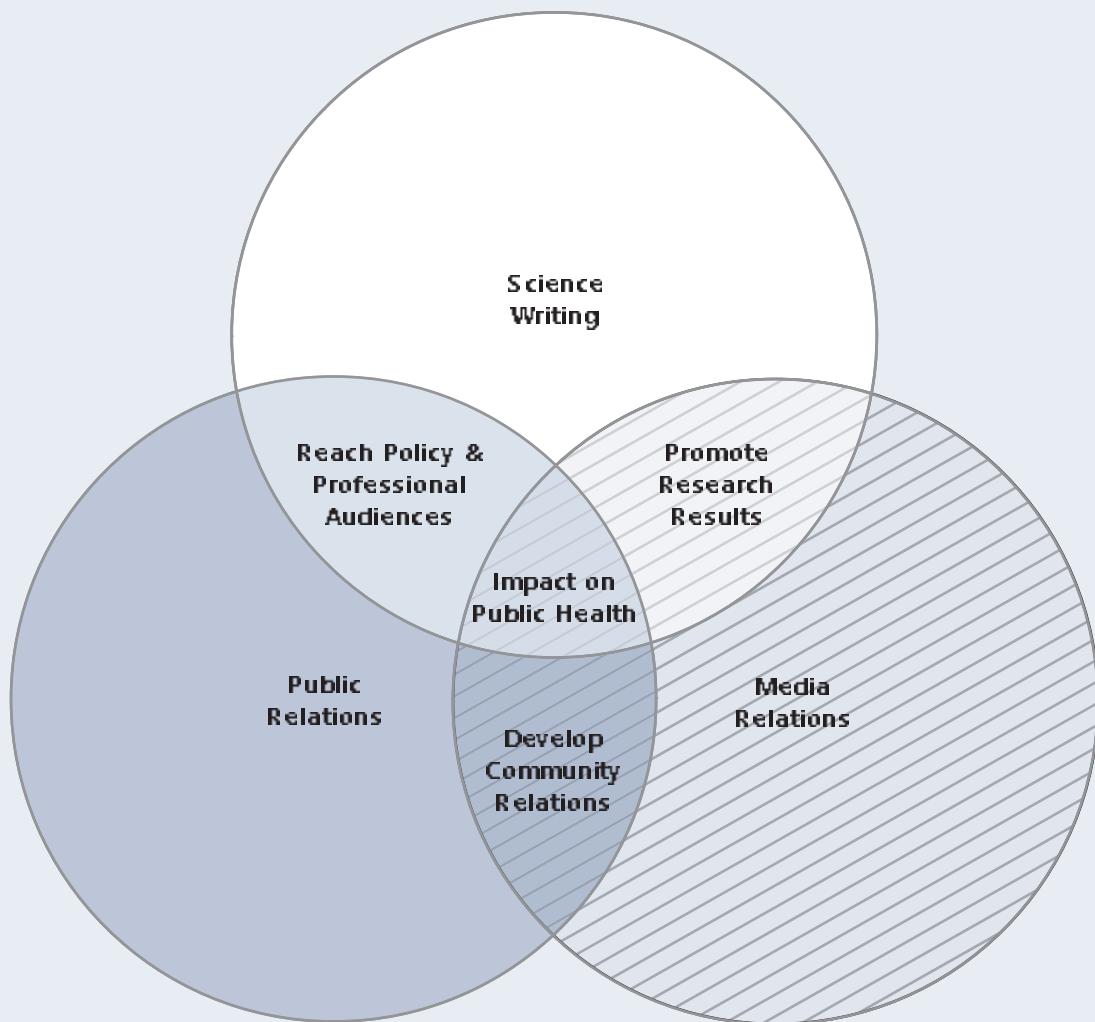
Science writing is the translation of complicated science into easily understandable language for lay audiences. **Public relations** involves gaining recognition for an organization's performance and ensuring a strong public image – in this case, regarding research efforts. **Media relations** involves the ability to understand the needs of the media, develop communications products to meet those needs, and maintain regular contact with reporters and editors. When applied in a research environment, these three communications functions can be combined to promote research results, reach policy and professional audiences, develop community relations, and, ultimately, impact public health.

Communications Budget

Factors to consider when budgeting for communications include the volume of research output, the types of communications products needed to translate and disseminate research results, and the nature of targeted audiences. Communications budgets include costs for salaries and consulting fees, as well as funds for special reports, policy briefs, and other printed materials. Other budgetary needs include: continuing education for communications staff, media training, software, design consultation, books, journals, media lists, and Web site development and maintenance fees. (See Appendix A for an example of a communications budget.)

Research centers can cover costs for communications by integrating them with grant proposals, so that several projects support the communications staff. For example, direct funds on a research grant for recruitment efforts may include coverage of a communications coordinator and print materials for outreach. Similarly, funds for research dissemination may be budgeted as direct costs. However, institutional funds will likely be needed to initially support portions of the communications staff.

Time Line for a Communications Program

The focus of the communications function evolves as research projects progress from the conceptual stage through design, development, data collection and analysis, and the publication of research results. While it may take years for results to be ready to report, communications has a role to play throughout the research process. Appropriately, resource allocation will vary at each phase and likely increase as there are more results to report.

During the initial phase of a communications program, there are relatively few research results to communicate. The focus should be on:

- Developing and implementing a strategic plan for internal and external communications.
- Recruiting participants for studies through the mass media using advertisements or news announcements.
- Building the internal communications program by developing stronger relationships among researchers and between researchers and stakeholders.
- Developing a Web site, logo, and other materials that convey institutional goals and research objectives to key audiences.

Case Example

Participant Recruitment

For a smoking cessation study comparing the transdermal patch to the nicotine nasal spray, the University of Pennsylvania TTURC distributed a press release to local media sources regarding the free smoking cessation program. The release was picked up by a local health reporter for ABC news and featured on a "Health Watch" report. Over 200 people called in response to the TV spot. The media interest that was generated helped draw attention to future news releases.

During the middle phase, when results of scientific studies are still largely forthcoming, the focus should shift toward:

- Developing a method for monitoring the research pipeline (i.e., tracking publication status).
- Creating forums for two-way dialogue between researchers and stakeholders, including policy makers, patients, and family members.
- Establishing the research program or research center as a source of expertise on the research topic. This can be done by increasing researchers' contact with reporters, health care providers, community members, public health professionals, and health advocates.
- Identifying selected researchers who are trained and willing to be "experts" for the media and other key audiences.

During the later phase, when research results begin to emerge, the focus is on:

- Communicating results based on their relevancy and scientific merit. This is when knowledge about the research publication pipeline becomes useful in assessing current and future communications opportunities and challenges.
- Maintaining open dialogue with program staff at funding agencies about *in press* publications and communications activities.
- Producing news releases, briefings, and other communications products appropriate to the audiences targeted in the communications plan.
- Ensuring the research enters relevant public policy debates by communicating research results to advocacy groups and policy makers. If appropriate, researchers should be prepared to discuss the policy implications of their findings.
- Evaluating the impact of the research on the public and on policy debates by monitoring the influence of research results on behavior and policy decisions.

Case Example

Dissemination of Research Findings

The University of Wisconsin, Madison TTURC maintains a strong relationship with the Wisconsin Department of Health and Family Services (DHFS) and local tobacco control coalitions. When a research finding has wide application, the TTURC and DHFS coordinate two things:

1) an e-mail distribution of a news release and talking points about the research to tobacco control advocates; and,
2) a phone conference with local coalition leaders and, depending on the topic, local health departments, healthcare providers, and others who may be interested in the research.

For news releases, the center:

1) faxes the release to all news outlets in the state and appropriate nation-wide and specialty media for use in local newspapers, radio, and television;
2) mails a copy of research results to target audiences, including health care providers, advocates, and legislators; and,
3) places information about the research findings on the center's Web site for further distribution.

Communicating to Internal and External Audiences

Internal communications help to improve the exchange of information within an organization, promote a sense of belonging among a diverse group of researchers, and provide a foundation for supporting future external communications efforts. This is especially valuable when researchers come from different disciplinary backgrounds or are located in various buildings across campuses, universities, cities, and even countries.

Internal communications activities include:

- Sharing information on research progress and products, including the release of reports, publications, presentations, and community service activities.
- Providing information about developments in the policy and public debates that relate to the research topic, as well as keeping up on new findings from other research teams.
- Maintaining a database of all research products (e.g., publications, abstracts).

Communications staff can schedule regular meetings, write internal newsletters, maintain listservs, and organize retreats to facilitate information exchange among researchers.

Case Examples

Communicating to Internal Audiences

Web Site

The University of Southern California Pacific Rim Transdisciplinary Tobacco & Alcohol Use Research Center (PR TTAURC) created a password-protected Web site where researchers at three USC campuses and collaborators in China could post and respond to information including survey data, scholarly citations, and in-process papers for downloading. The site includes a discussion forum organized by research project; a calender of events; archives of presentations, photographs, and scholarly articles; and a data center to assist researchers in creating and administering surveys, and in collecting and analyzing data.

Electronic Newsletter

Because the University of Pennsylvania TTURC involved a collaboration of researchers across three universities, there was a unique challenge to maintaining open internal communications across sites. An internal electronic newsletter was created as one way to address this challenge. The internal newsletter is distributed on a monthly basis.

Center Retreats

To facilitate cross-fertilization across research and outreach staff, the University of Wisconsin TTURC held two retreats each year including research and outreach specialists. The retreats facilitate strategic planning, help everyone gain an understanding of research objectives, and broaden the dissemination of research findings.

External communications translate and deliver the latest scientific findings to targeted audiences outside the university. Achieving this goal involves a collaborative effort between the researcher and communications expert. The researcher's role is to identify the scientifically robust studies. The communicator's role is to help the researcher assess the external communications value of individual studies and develop creative ways to reach interested audiences.

The value of the research results to various audiences determines the amount of communications effort. Particular communications emphasis and effort should be placed on those studies that directly affect public policy, health practices, or lifestyles.

Increasing the Effectiveness of External Communications

External communications efforts are most effective when they have been carefully prepared and actively reach out to targeted audiences. In order to communicate findings in a timely manner, researchers must keep the communicator informed of research progress and products. Communicators are best able to prepare communications activities when they have advanced knowledge of journal articles being prepared for publication and presentations planned for major meetings or conferences. In larger research centers, communications professionals should develop a system to track the status of papers and presentations, getting quarterly updates on what papers are under review, being revised, or accepted for publication. It is also important to inform the program and communications staff within funding agencies of dissemination activities planned around published research studies.

Tailoring messages to specific audiences based on their interests and needs enhances the likelihood that the information will have an impact. It is critical for communications staff to stay informed about how research topics are discussed by the public and in policy debates, as well as who is taking part in those debates. Communications professionals can ensure that researchers know who the interested stakeholders are, and can see how the research fits into the broader policy landscape. Both of these factors are critical in developing key messages used to communicate research findings.

Another way to increase the impact of research findings is by linking studies and coordinating publications. For example, back-to-back publications in a journal, multiple articles in a special issue of a journal, or companion pieces that more fully address a specific topic all increase the value of research.

Table 1 on page 17 provides examples of audiences for health-related research and how to reach them through communications vehicles.

Table 2 on pages 18-20 presents examples of specific communications products and the rationale, audience, and outcomes of these communications efforts. (Most of these products were developed through the TTURC Partners initiative.)

Communicating to External Audiences

Recruiting Study Participants

Communications professionals can help with the recruitment of participants into research projects. Ways in which communicators can be helpful include:

- **Using unpaid media.** Using news releases, interviews with reporters, and news conferences as recruitment tools can reduce the necessity for paid advertising. An experienced communicator will know how to construct messages, prepare materials for print and broadcast media, determine timing, and arrange logistics in order to maximize the effectiveness of this recruitment strategy.
- **Developing Web sites.** Web sites offer potential time-saving methods for providing quick responses and reducing the number of call backs to potential participants. Web sites can offer FAQs or send automatically generated e-mail responses. Communications experts can help develop Web sites for these purposes.
- **Using paid advertising.** Using radio, TV, and newspapers ads to recruit study participants can be expensive. A communications professional can help determine the most effective use of paid advertising for recruitment.

Identifying Dates for Release of Publications

Tracking down dates for when publications will be released can be a difficult task. Some journals are published abroad and are hard to reach. Other journals are reluctant to provide a time line for publication, even to authors. Often researchers are unaware of publication dates until they receive final proofs for an article, which can be too late to plan a significant communications effort. Ways to enhance efforts to track publication time lines include:

- **Develop a system** for working with researchers to track manuscripts as they are submitted, reviewed, and accepted for publication.
- **Learn about the journals** that researchers submit to. Know the names and contact information of editors and key people at the publishing company.
- **Establish contacts** at journals and follow up with them often to know when a publication date has been set.

Writing News Releases or Press Releases

New releases are written as "news stories" that capture the implications of emerging research by describing study results, significance, and methodologies. They also provide information about researchers, research institutions, and funders. New releases are written to highlight the results of research studies and their implications, and state this information upfront. Journalists routinely use news releases to determine the news value of the research to their readers, viewers, or listeners. Researchers tend to rely on a professional communications expert to write and distribute news releases. Releases are written using language that is easily understood by 8th graders and avoids the use of scientific jargon. (See Appendix B for a sample news release.)

Distributing News Releases

Research centers within an academic institution can develop their own media lists or rely on university-based media offices to distribute news releases. The latter option is best suited for new research centers. Once a relationship with the university media relations office is established and their protocols understood, the research center communications staff should build their own relationships with reporters and media outlets. This includes sending out additional releases, making phone calls, and sending emails to individual reporters to alert them to new developments.

Table 1. Reaching Audiences with Health-Related Research			
Audience	**Who's included?**	**Why reach them?**	**How to reach them?**
Policy Makers	• Legislators at national, state, and local levels • Decision makers for health care policies, practices, insurers • School officials • Advocacy groups	• Play a key role in health and health care policy at local and national levels. • Make decisions about health care options, funding, treatments, prevention strategies, regulations, and taxation that can have great impact on large numbers of people.	• Personal contact • Targeted mailings • Policy briefs • Reports • Educational forums • Workshops • News releases • Web sites • Newsletters
Health Care Practitioners and Providers	• Physicians • Nurses • Pharmacists • Dentists • Psychologists, mental health providers • Substance abuse counselors • Allied health professionals (nutritionist, PT, OT)	• Have direct contact with patient populations and those at risk for disease. • Implement treatment and prevention practices. • Provide health education to patients.	• Direct mailings • Trade publications • Educational forums • Workshops • Conferences • Web sites
Public	• Disease-afflicted or at-risk populations • Hard to reach populations • Caregivers • General public	• Need access to up-to-date information about medical treatments, disease risk, and preventive actions in order to make informed choices. • Have the capacity to make changes in their own health and in the health practices of those for whom they care.	• TV • Radio • Print media • Internet • Popular magazines • Web sites
Media	• Newspapers • Magazines • Television • Radio • Internet	• Communicate information to general public. • Gain attention of policy makers and other targeted audiences. • Frame dialogue and debate on issues.	• News releases • Policy briefs • Reports • Scientific conferences • Media conferences • Media interviews • Web sites • Personal contact
Researchers	• Same discipline • Other disciplines	• Inform about latest research findings. • Advance science. • Encourage collaborations.	• Scientific publications • Conferences • Newsletters

Table 2. Examples of Communications Products and Activities

Type of Product	Specific Product	Goals	Audiences	Outcomes
Science Summary Reports	*Hope or Hazard? What research tells us about "potentially reduced-exposure" tobacco products* www.tturc.umn.edu	• Review science on potentially reduced-exposure tobacco products • Comment on whether marketing claims are supported by research • Outline gaps in knowledge about these products	• U.S. Attorneys General • Members of Congress • Researchers • General public • Health advocacy organizations (e.g., American Lung Assoc., American Heart Assoc.)	• Editorial in USA Today • TV Health series release on www.rwjf.org • 74 airings on TV news programs reaching millions of viewers • Used by health advocacy organizations to promote youth tobacco control
	Closing the Gap on Youth Tobacco Use through Transdisciplinary Research www.tturc.uci.edu	• Disseminate findings on youth tobacco use • Establish research center as information resource on topic of youth tobacco use • Launch external communication program	• State, county, city health departments • Youth advocates • Tobacco control advocacy organizations • Policy makers	• News features aired on ABC, NBC, & CBS reaching millions of viewers • Special feature in NY Times • Media coverage in 7 countries • Educational DVD created from report
	Special Report: Tobacco Treatment Coverage by Wisconsin Health Plans www.ctri.wisc.edu	• Disseminate findings about insurance coverage of tobacco cessation • Provide recommendations to encourage increased coverage of tobacco treatment • Inform smokers about potential for insurance coverage of quit attempt	• Insurers • Smokers • Media • Legislators • Businesses	• Coverage in business publications • Coverage through coalitions by way of teleconference
Research Briefs *(See Appendix C)*	*Reducing cigarette smoking: Does it reduce cancer?* *Environmental tobacco smoke and carcinogen exposure* www.tturc.umn.edu	• Present timely information on emerging tobacco research • Discuss policy implications of research findings	• Policy makers • Legislators • Researchers • Health care providers • Public health professionals	• Informed public about research results and their policy implications • Increased visibility of center and its research activities
Policy Briefs *(See Appendix D)*	*Cigarette Taxes and Kids* www.impacteen.org	• Disseminate research findings to policymakers on preventing adolescent smoking • Discuss policy implications of research findings	• Policy makers • Legislators • Public health professionals	• Informed targeted audience about research results and their policy implications

Method	Title/Source	Purpose	Audiences	Results
Web Sites	*Yale TTURC Web site* www.quitwithyale.org *University of Wisconsin CTRI/TTURC Web site* www.ctri.wisc.edu *University of California at Irvine TTURC Web site* www.tturc.uci.edu	• Disseminate information about center and its research • Enhance recruitment of participants to studies • Promote the adoption of research findings into health practices • Present timely information on tobacco research	• Researchers • Funders • Health care providers • Smokers • Employers • Insurers • Advocates • University community • Media • Teachers • Parents • Policy makers	• Each month on average 2,459 page requests and 446 distinct hosts served at Yale TTURC Web site over 1 year • Improved recruitment efforts (650 Web-based versus 150 phone inquires) at Wisconsin TTURC • UC Irvine TTURC site ranked in top 10 on Google, AOL, Dogpile, Yahoo, MSN, AltaVista for Web searches on youth "tobacco use" and "TTURC"
News-Letters	*University of Wisconsin CTRI Update (internal)*	• Provide important information for employees, including: a calendar of events; updates on research; and profiles on employees, champions, and former smokers	• Employees • Collaborators	• Surveys continually show employees value the newsletter
	University of Wisconsin CTRI News (external)	• Provide update on center activities	• Researchers • Health care providers • Media • Legislators • Current and former smokers	• Assisted in fund raising • Increased public's awareness of center activities
News Conference	*News conference at National Press Club on National Action Plan* (University of Wisconsin)	• Announce availability of the national quitline • Gain national attention for report and recommendations • Bring attention to research	• Government officials • Media • Health care providers • Advocates	• Media coverage (over 500 news hits)
	Recruitment news conference (University of Wisconsin TTURC)	• Announce new study • Recruit participants into studies • Gain media attention • Improve reputation of center	• Smokers • Media • Health care providers • Family and friends of smokers	• Received calls from more than 800 potential study participants • Improved center's reputation
Policy Meetings	*Setting Priorities for Connecticut Tobacco Control: Agenda for Action* www.info.med.yale.edu/century/	• Evaluate how to reduce smoking in Connecticut • Identify key players in reaching tobacco control goals	• Key local and national players in tobacco and cancer control	• Contributed to preparation of *The Connecticut Comprehensive Cancer Control Plan: 2005-2008*

Table 2. Examples of Communications Products and Activities (continued)

Type of Product	Specific Product	Goals	Audiences	Outcomes
News Release (See Appendix B)	Press releases from the Yale TTURC June 2004 - June 2005	• Recruit participants for studies • Disseminate information about research results • Position researchers as experts in field of tobacco research	• Potential research participants • Smokers • Local and national media	• Media coverage (29 hits) • Boosted recruitment to clinical trials
	University of California, Irvine press releases http://www.tturc.uci.edu/media/news.html	• Disseminate research findings • Increase awareness of the UCI TTURC and research outcomes	• Media (science and health reporters) • Teachers • Parents • Tobacco control advocates • Policy makers • Community leaders • Researchers	• Newspaper coverage in Wall Street Journal, NY Times, Orange County Register, • TV coverage on the Discovery Channel, CNN, CBS, and ABC • Web coverage in Canada, China, India, Japan, Mexico
	Too Few Doctors Ask Teens About Smoking University of Wisconsin TTURC	• Disseminate research findings • Inform physicians, parents, and adolescents about research results	• Physicians • Media • Teens • Parents • Researchers	• CBS radio news coverage • NBC TV news coverage • Other national media attention
Op-ed	Double the Cigarette Tax, 1/24/02 op-ed, The Hartford Courant Connecticut Should Ban Smoking in Public Places, 5/02/03 op-ed, The Hartford Courant	• Provide scientific perspective on state policy proposals • Encourage state legislators to pass legislation to improve public health • Inform general public	• Connecticut state legislators • Readers of The Hartford Courant, Connecticut's largest paper • Smokers • Restaurant owners	• Published in The Hartford Courant with daily circulation of 212,000 • Published on newspaper Web site with 500,000 unique users/month
Annual Reports	"Helping Smokers Quit" 2004 Annual Report for Center for Tobacco Research and Intervention, U. Wisconsin	• Highlight center activities and accomplishments • Inform legislators and others that the center brings money into the state • Fundraising	• Employees • Researchers • Health care providers • University officials • Legislators • Funders • Current/former smokers	• Provided information about research center and research activities to interested audiences

COMMUNICATIONS OPPORTUNITIES AND CHALLENGES

Peer-reviewed Empirical Articles

Articles published in peer-reviewed journals provide excellent communications opportunities for researchers and research organizations. Articles in first-tier publications, such as the *Journal of the American Medical Association* (JAMA), *New England Journal of Medicine*, *Nature*, and *Science*, obviously present major communications opportunities. These publications have their own internal communications staff charged with promoting select articles in each issue. While smaller journals do not have their own communications program, research center communications staff can gain significant media coverage for articles in these journals with well-written news releases and outreach to key reporters and other audiences.

Comparative Studies

As a subset of peer-reviewed articles, comparative studies are of interest to popular and specialized media because they put research into context. Studies that present a comprehensive picture of before-and-after scenarios, compare treatments or events (such as policies and their effects), or look at differences among ethnic groups are often of particular interest to the media.

State-of-the-Science Review Papers

Publications that outline the current findings in a given area are not newsworthy in themselves, but they are a tremendous resource for communications professionals and journalists who track the development of knowledge in a given area. When multiple authors are involved (either from multiple disciplines or when there are several authors who are recognized leaders in the field, such as JAMA collaborative papers), state-of-the-science papers gain even more attention.

Controversial Topics

When a topic area or result is controversial or suggests a position on an issue, such as findings that drinking alcohol has health benefits, researchers may be uncomfortable discussing potential implications and interpretations of their work. It is best for researchers to maintain their roles as scientists, presenting the results clearly and letting others draw their own conclusions. Researchers are justifiably concerned that if they are perceived as advocates or activists, they may lose their credibility and their research may be viewed as biased. Careful discussions between the communications personnel and researchers are needed to be clear about how results on controversial topics are presented.

Managing Communications Crises and Opportunities

Research and researchers are not isolated from public scrutiny. As such, researchers should work with a communications professional who is fully informed about their work to develop a plan for dealing with sensitive or controversial research results. Similarly, a communications professional can identify opportunities that might arise from current and major news events, and develop strategies to effectively use these opportunities to promote the researchers and their relevant work.

DEVELOPING THE MEDIA COMMUNICATIONS SKILLS OF RESEARCHERS

Researchers who are interested in learning how to communicate more effectively with the media and those whose research findings have broad appeal are ideal candidates for media training.

Media training can be done as a general session for researchers and also on an as-needed basis, usually in preparation for a specific event, such as the publication of a major paper in a top-tier, peer-reviewed journal.

General training on the media process should include information on deadlines and embargoes, and what reporters are looking for, as well as practice in interviewing and presentation skills. Staff communications professionals or other consultants can provide such training in a 3- to 4-hour workshop. An important goal of this training is to increase researchers' comfort with the media.

Specific training on an upcoming publication prepares researchers to succinctly answer questions, know key message points, and articulate research findings in brief sentences. Such training often involves conducting practice interviews.

Best Practices

Communications Tips for Researchers

- Be easily accessible to reporters at all times and return calls as quickly as possible.

- Develop one main message and repeat it.

- Conduct practice interviews.

- Prepare 20- and 90-second explanations of the research, its goals, and findings.

- Describe research findings in a way that 8th graders can understand.

- Avoid jargon.

- Develop analogies and metaphors that help explain the research.

- Make it personal by giving examples from real life.

- Be comfortable in politely declining to answer a question that falls outside the research area.

- Refer to other experts when necessary, even those at other institutions.

- Learn how to stay on message even when pressed to comment on other topics.

Enhancing the Media Communication Skills of Researchers

1 **View communications as an integral part of research.** By viewing communications as integral to the research process and not as an add-on activity, its potential impact, reach, and effect are increased. The more communications opportunities and potentials are planned for and thought through early, the better the end result.

2 **Increase understanding of the media.** Researchers often fear that they will be misquoted or that their work will be misunderstood by the media. Such fears do not reflect typical media experiences. The reporter who covers science is as much a professional as the researcher, and is interested in depicting research results accurately. By reaching out to reporters, researchers can gain control over and help shape the accuracy of their message.

3 **Gain media skills.** Working with the media requires a skill set that is not typically acquired during the normal course of a researcher's training. Communications training can help researchers gain necessary skills, and increase their comfort in working with the media. Communications professionals, who are often former reporters, can be brought in to lead workshops on how to work with the media.

4 **Be cautious and clear, but not timid.** Researchers are typically aware of the limitations of their findings and do not want to overstate their results. As such, they may be concerned that media attention may place "undue" emphasis on a finding. While this cautious stance is valuable to the research process and important in considering communication opportunities, too much caution can result in limited willingness to communicate a finding that is perceived as not yet definitive or not yet empirically replicated. By understanding the importance of communicating results and working with the media, researchers can get the necessary information out and help educate the media about how to weigh the results of the latest research in the context of available knowledge.

5 **Stay focused on communications goals.** Science communications takes time. It also can bring about great results, such as media attention to a health topic that garners interest from policy makers, resulting in a policy change that improves health. Researchers who stay focused on the overall aim of the research and the desired communications goals will more easily understand the necessity of taking the time and effort to communicate and the value it adds to the research. This is also true during a specific interview, when researchers should have one message or point in mind and repeat that message.

WEB SITES AS COMMUNICATIONS TOOLS
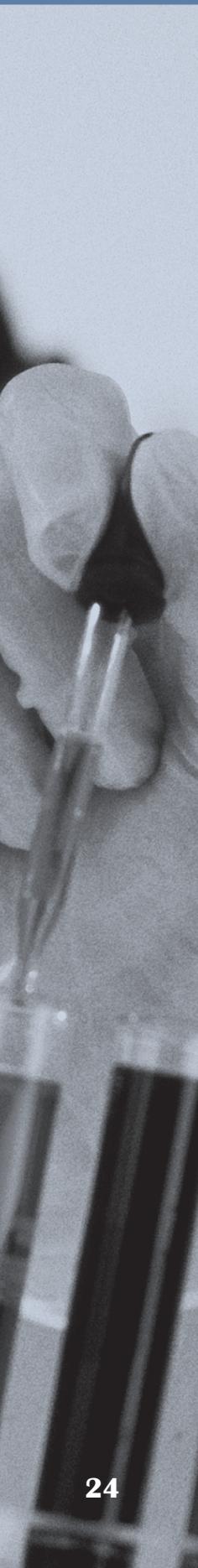
Web sites are invaluable and versatile communications tools. They allow organizations to keep interested audiences informed with up-to-date information and respond quickly to changing circumstances. Web sites can also provide comprehensive information, including the purpose of the research center, a description of research projects, recruitment for studies, dissemination of news releases, and bios and contact information for researchers and staff. Many people go first to a Web site for information.

Budgeting for a Web Site

Initial cost for a Web site is about $4,000 to $7,000 (based on 2006 cost estimates) depending on the extent of the design. Web sites that collect data or offer other special functions cost more. Maintenance contracts cost about $1,000 per year. In the event that changes need to be made to the structure of an existing site, a redesign can cost $2,000 to $6,000 or more. Editing or altering existing Web documents is less costly.

Value of a Web Site

The advantage of a Web site is in its versatility and timeliness. These advantages greatly offset its cost. Traditional print pieces may cost about the same, but have a shorter shelf life, may be difficult to disseminate, and cannot be as comprehensive. The Web site serves as an efficient and accurate means of keeping people up to date on many topics, including newly reported research findings or new grant awards. Print publications can be added as PDF files to a Web site, increasing distribution and decreasing printing costs. The Web also provides users with access to other relevant research and institutional links.

Challenges in Web Site Development and Maintenance

Those new to Web design tend to underestimate the amount of content that will be needed to develop the site and to keep it up to date, as well as underestimating how long it will take to develop a new site. They may also spend too much time on relatively insignificant details, such as deciding the appropriate size for a logo.

Organizations can also make the mistake of delegating the job of maintaining the Web site to an administrative person who often has neither experience with the Web nor the time needed to to and oversee its design, and make updates. This is especially true when this person is teamed with a consultant or Web designer who can create and maintain the more technical aspects of the site.

Evaluation of a Web Site

Web site tracking software is helpful in evaluating the effectiveness of a site, including how a site is used, how the information is received, and the experience that the reader takes away from the visit. This software allows for assessing traffic to the Web site, including information about the most popular pages, the source of visitors, and commonly used search terms. Evaluation software is usually available though Web service providers and included in standard pricing.

Lessons Learned

Web Site Development

1 **Carefully think through Web site structures and identify the content areas needed for the life of the research project.** Once a Web site structure is in place, it can be expensive to revise. Taking time to think through structure and content carefully at the onset is critical, including consideration of how to organize content to reach diverse audiences, such as patients, researchers, and reporters.

2 **Develop content early.** It's best to have as much content for the Web site available early so that all parties involved in development understand what the Web site is about. This may mean buying a digital camera, conducting a photo shoot, and writing text for the secondary pages early in the Web design process.

3 **Take time to hire the right Web site designer or consultant.** Finding a good fit between a Web site designer and goals for the Web site can save time and money in the long run. It is important that the designer understands the overall aim of the site and is willing to make this aim a priority (even if it means foregoing the development of fancy Web elements). The designer should also understand the skills of your staff and take these into consideration when designing the site.

4 **Identify two or three Web sites whose look and organization you like.** Use these as a template for development and share with the Web designer.

5 **Think through animation and other state-of-the-art Web techniques carefully.** While these features look great, they can be expensive to create and often require viewers to have the current versions of browsers and a high-speed Internet connection.

6 **Have dedicated and trained staff responsible for updating content and maintaining the Web site.** A Web site is a "live" entity that is most effective as a communications tool when it is frequently updated. Having staff on hand to make these changes and keep the "face to the world" current is extremely valuable.

7 **Choose Web software wisely.** Certain software can add flexibility to Web site management, including the ability to make simple changes to the site without needing to rely on the designer.

8 **Think through Web site addresses.** The Web site address is important. If possible develop multiple URLs, including traditional ones (university addresses) and URLs that could be easily remembered between hearing a radio ad in the car and the opportunity to write it down (such as www.quitwithyale.org).

9 **Allow time to develop the Web site.** It is not uncommon for Web site development to take longer than expected. Plan on needing 3 to 6 months to develop and launch a Web site.

Role of Funders, Research Institutions, and Researchers

Making a commitment to include the communications function as a part of a research effort is a shared responsibility among researchers, funders, and program staff. When funders and key research personnel champion the communications function at an institutional level, individual researchers are better able to incorporate communications into the research process.

Funders

Funders have a tremendous opportunity to leverage their research investment by setting aside dedicated dollars for communications support. Research programs funded across multiple institutions and focused on a well-defined problem are prime targets for funding communications that are not biased toward any one institution. Large grants made to individual institutions can be accompanied by a communications budget supplement that is awarded separately on a competitive basis. Research centers can be encouraged to designate specific funds for communications in their grant applications. Because this would be a new approach to research funding, funders may have to try different models in order to identify a set of successful strategies to fund communications along with research grants.

Universities and Research Institutions

Most universities already have institution-wide news and information offices that can be helpful as general resources, such as in providing distribution lists for press releases. It may not be practical to rely on these entities to develop targeted and strategic communications efforts that reach out to specific audiences, as their goals tend to focus on distributing information to a large, heterogenous audience and promoting the institution as a whole.

Researchers

The individual researcher is the key element in the success of a scientific communications program. Communications goals are best achieved when researchers recognize that the end point of gathering and analyzing data is not just publication in a peer-reviewed journal, but also informing the public debate and educating the policy process, wherever appropriate. At the same time, researchers who have had access to and worked with skilled communications professionals have often gained recognition among their peers for being able to promote science in an accurate and credible manner.

Justifying Communications Funding

Given tight resources for funding research, it may seem hard to justify putting money towards communications. However, more funders are recognizing the importance of communications, and plans for dissemination of research findings are increasingly called for in grant proposals.

By keeping an eye on the long-range visions and the mission of the research and research center, and on the goal of changing public policy and practice, the value of the communications dollar is better recognized. Attention generated as a result of communications activities also may help to secure future funding.

The need to communicate research results to the public, policy makers, and scientists beyond one's own discipline is a real and important responsibility for both researchers and research organizations. There are multiple forces encouraging researchers to widely disseminate the results of their work: funding institutions want researchers to communicate to a wide range of audiences; the media is primed to deliver research findings; policy makers and health care professionals use this information to improve health care; and, importantly, a good portion of the public is interested in hearing about scientific advances.

Communications brings increased attention to health-related issues. This awareness promotes improved public health at broad policy and individual levels, allowing policy makers and consumers to make decisions based on scientific evidence. In turn, this attention increases recognition of the need for research funding.

Communications helps advance science by building bridges across disciplines. Many scientific advances in the future are likely to come from transdisciplinary collaborations; innovations are sparked by the intersection of different disciplines. But individual researchers often have neither the time nor the technical understanding to search for and read scientific papers outside their own area. By learning from the popular media about scientific advances in other fields, researchers may find their own interests informed by new ideas.

> "When I first began a program of communications, I thought it would be a distraction. Now I have an understanding that communications is a separate discipline and that it has value to our research. I have a much greater appreciation for the need to reach out and share my research with a broader audience."
>
> Frances Leslie, PhD
> Professor
> Department of Pharmacology
> School of Medicine
> University of California, Irvine

Communications fosters the development of a sense of community and belonging within a research organization or university. It can be the glue that facilitates the exchange of information and knowledge. It also provides a repository of institutional history, maintaining a record of accomplishments that can be used to develop the research program into the future.

Despite the increasing demand to present scientific findings to the public, most researchers have little experience or training in dealing directly with nonscientific audiences, or even with researchers outside their own fields. We need not expect, though, that researchers become experts in communications. Rather, a strong collaboration between researchers and communications professionals can extend the reach and impact of scientific inquiry.

Annual Communications Budget*	
Personnel	
Communications director	$50,000 - $70,000 for a full-time employee
OR	
Science writer	$50-$70/hour
Communications/Marketing	
Print products (policy briefs, reports, press kits, and other promotional materials)	$4,000 - $12,000
Web site (more money for development; less money for maintenance)	$2,000 - $7,000
Mailing/Distribution of Communications Products	$500 - $3,000
Media Lists	$2,000
Office Operations	
Supplies, books, journals	
Telephone	
Postage	$2,000-$5,000
Software	
Duplicating	
Training/Professional development	
Media training for researchers	$1,000 - $3,000
Continuing education & professional development for communications staff	$1,000 - $2,500
Consultation	
Logo Development	$500-$2,000
Graphics/Design	$500-$2,000

*Based on 2006 Cost Estimates.

Embargoed until 8:00 am CT
Thursday, June 24, 2004

uw-tturc *News Release*

FOR RELEASE: Thurs., June 24, 2004   **Contact:** Gloria Meyer
Phone number, e-mail address

Too Few Doctors Ask Teens about Smoking
New Study Documents Missed Opportunities

Doctors are failing to identify smoking status in about half of the adolescent patients seen according to a just-published University of Wisconsin study. Physicians addressed tobacco use even less often with younger teens, missing an opportunity to intervene with those experimenting with tobacco use.

Based on an audit of Wisconsin Medicaid medical records, researchers found those least likely to be asked about their smoking status were younger patients, patients who were not pregnant and those from rural areas. Just 55 percent of adolescent patients seeing a physician in a two-year period were asked about their smoking status and only five percent of patients' charts included smoking status as a vital sign, a government-backed recommendation.

"Previous studies may have overestimated interventions with adolescents because they were based on physician self-report," said Tammy Sims, M.D., M.S., the study's lead author from University of Wisconsin Transdisciplinary Tobacco Use Research Center. "Through analysis of patient charts, we have found that physicians are losing a golden opportunity to intervene with current teen smokers and to dissuade potential smokers among the younger teen population."

Information for the study, published in the journal *Health Services Research*, was gleaned from patient charts randomly selected from Wisconsin Medicaid HMO eligibility files from January 1997 to January 1999. The study, focused on individuals 11 to 21 years old, found that tobacco use was documented on 55 percent of patient charts. Of those documented, 35 percent were current tobacco users (99.3 smokers and 0.7 percent smokeless tobacco users), 8 percent former smokers and 57 percent never smokers...

...The study found that older adolescents were more likely to have their smoking status recorded than younger adolescents. In fact, the odds of having smoking status documented in their charts increased by 21 percent for every one-year increase in the patient's age. Smoking status was less likely to be recorded in charts of patients from rural areas. Patients in urban or suburban areas were almost twice as likely as rural patients to have smoking status recorded.

"We also saw a failure to address tobacco status at more than one visit," said Sims. "This coupled with their reluctance to ask younger adolescents about smoking status means that physicians were unlikely to identify early experimenters–another missed opportunity..."

...Researchers acknowledge that a gap may exist between what a physician discusses during an office visit and what is written in the patient's medical record. However, paper documentation is vital for reimbursement of services as well as for quality control and medical-legal reasons.

The University of Wisconsin Transdisciplinary Tobacco Use Research Center (TTURC) is one of seven centers funded by the National Cancer Institute and the National Institute on Drug Abuse to investigate new ways to combat tobacco use and nicotine addiction, using an innovative, integrated approach. The Robert Wood Johnson Foundation also funds the TTURCs at these institutions through the Partners with Tobacco Use Research Centers program. The Partners program supplements the TTURC research by supporting tobacco-related policy research and communications activities.

Contents of a News Release

1 Headline and first sentence should catch reader's interest and state results in clear, everyday language.

2 Briefly describe study methods to help the reader understand how research was conducted.

3 Highlight what the finding means, who should care, and why.

4 Identify journal where study is published. If it is a leading journal, give the name in the first two paragraphs.

5 Provide details to substantiate study findings, including quotes from study authors.

6 State limitations of the study.

7 Identify the institution where research was conducted and be sure to name funders.

TTURC

TRANSDISCIPLINARY TOBACCO USE RESEARCH CENTER

www.tturc.umn.edu

UNIVERSITY OF MINNESOTA
Cancer Center

umn**tturc**researchbrief

MAY 12, 2004

transdisciplinary tobacco use research center

Research summary

To assess whether cutting back on cigarettes reduces the amount of tobacco-specific carcinogens in the body, scientists at the University of Minnesota measured the level of carcinogen uptake in smokers who were reducing their cigarette consumption over 26 weeks. Overall reductions in carcinogen levels were seen, but the levels were modest and were proportionally less than the amount of cigarettes reduced per day.

Policy implications

Quitting smoking is the only proven way to reduce morbidity and mortality. Smokers who are unwilling and uninterested in quitting should be encouraged to reduce their smoking. However, the primary goal should be quitting cigarette smoking.

About umn**tturc**researchbrief

The UMN TTURC Research Brief is a quarterly publication that provides timely information on emerging tobacco research from the University of Minnesota. The core aims of UMN TTURC are to examine approaches for reducing tobacco toxin exposure, determine the most effective methods for treating smokers who are unable or unwilling to quit smoking, and outline public policy implications for interventions that reduce exposure to tobacco toxins.

University of Minnesota TTURC
2701 University Avenue Southeast
Suite 201
Minneapolis, MN 55414
612.627.1857

Reducing cigarette smoking: Does it reduce cancer risk?

Preventing lung cancer is important for controlling the prevalence of cancer and improving the health of the public. Because 90 percent of lung cancers are caused by cigarette smoking, prevention and cessation of smoking is a key strategy for staving off future incidence of the disease. Amidst this reality, however, more than 1 billion people worldwide still smoke.[1] For those who are unwilling or unable to quit smoking, reducing consumption of cigarettes may be an important stepping stone to abstinence.

Whether cutting back on cigarette smoking would potentially reduce lung cancer risk, however, remains unclear. In attempts to address this issue, researchers at the University of Minnesota Transdisciplinary Tobacco Use Research Center (UMN TTURC) measured the level of carcinogen uptake in those smokers who were reducing their cigarette use.

Honing in on cancer-causing agents

Over 150 smokers were involved in the UMN TTURC study. About a third of the participants (49) were initially on a waitlist, while the remaining participants (102) were immediately enrolled in a smoking cessation program. These smokers were expected to reduce their use of cigarettes by 25% in weeks 0 to 2, 50% in weeks 2 to 4, and 75% in weeks 4 to 6. For the remaining 20 weeks, they were asked to maintain the level of reduction they had reached by the first 6 weeks or to reduce even further. Smokers in the waitlist group were also enrolled in the reduction program, which began about 8 weeks after the study was initiated.

At set times throughout the study, researchers collected urine samples from participants who reduced their smoking by 40% to 70%. The purpose was to assess the presence of two tobacco-specific lung carcinogen metabolites: 4-(methylnitrosamino)-1-(3-pyridyl)-1-butanol (NNAL) and its glucuronides (NNAL-Gluc). Presence of these metabolites is highly specific to tobacco exposure and indicates that a potent carcinogen, NNK, has been absorbed in the body. NNK has been shown to cause lung cancer in rats, mice, and hamsters.

Modest reductions

As smokers reduced their intake of cigarettes, researchers did observe statistically significant reductions in NNAL and NNAL-Gluc. But the decreases were modest in magnitude, particularly when compared with the number of cigarettes reduced per day. For instance, a 55% to 90% reduction in cigarettes during weeks 4 to 12 after baseline produced a total NNAL (NNAL plus NNAL Gluc) reduction of only 27% to 51%. Even when

smokers reduced their daily cigarette use by 90%—from a mean of 24.7 cigarettes per day at baseline to 2.60 cigarettes per day at week 12 of the study—total NNAL levels were reduced by an average of only 46%.

Therefore, although the study results show that reductions in lung carcinogen metabolites can be achieved by reducing smoking, the reductions are always proportionally less than reduction in cigarettes per day (see table below, which shows mean percent reduction of cigarettes and the mean percent reduction in total NNAL). That said, the 30 smokers who were able to reduce their smoking by more than 70% at weeks 8 to 12 did achieve about a 50% reduction in NNAL during that same time period. This finding is important, because it demonstrates that reductions in carcinogen uptake that may be clinically significant can be achieved by reducing cigarette smoking.

Reduction Results*

	Mean % reduction in cigarettes per day compared to baseline	Mean % reduction in total NNAL
Week 6 (N=65)	74	33
Week 12 (N=65)	74	29

*Includes only those who reduced their self-reported smoking by 40% or more during weeks 4 to 12.

What the results mean

For most participants, significantly reducing cigarettes smoked per day may not necessarily have beneficial effects in reducing cancer risk. The results indicate that when trying to reduce cigarette use, smokers are changing their smoking behavior—by taking larger puffs or puffing more often—which may offset the advantages from smoking reduction.

The individuals in this study reduced their smoking with the help of nicotine replacements (nicotine gum and in some cases, a nicotine patch) and quit-smoking tips and instruction. But less than 30 of the 151 participants were able to achieve about a 50% reduction in total NNAL in 12 weeks, and if this goal was achieved, it required an average daily cigarette reduction of more than 70% and even as much as 90%. However, whether a substantial number of smokers can sustain this low rate of smoking (without quitting) is uncertain. The purpose of this study was not to test the effectiveness of certain smoking cessation tools but rather to examine whether a reduction in the number of cigarettes smoked per day would lead to reductions in NNAL and NNAL-Gluc levels. For many people, significantly cutting NNAL levels would require more aggressive smoking cessation treatment.

Key policy implications

Smokers who are unwilling and uninterested in quitting should be encouraged to reduce their smoking. However, the primary goal should be abstinence. Abstinence is the only proven way to reduce morbidity and mortality. •

The findings from this study were published in the following article: Hecht S et al. Effects of reduced cigarette smoking on the uptake of a tobacco-specific lung carcinogen. J Natl Cancer Inst 2004;96:107-15

For more information about this study, please contact Jeanne Mettner, UMN TTURC's communications consultant, at 612.627.1857.

References

(1) Mackay J, Eriksen M. World Health Organization. The tobacco atlas. Geneva (Switzerland): World Health Organization; 2002.

POLICY BRIEFS

UIC Health Research and Policy Centers

April 2001

CIGARETTE TAXES AND KIDS

Research conducted by the University of Illinois at Chicago, Health Research and Policy Centers indicates that if you want to keep kids from smoking, raise excise taxes.

BACKGROUND

Members of congress, legislators, and other policymakers across the nation are very concerned with the high level of adolescent smoking. While a wide range of legislative proposals have been pursued, conflicting research on the impact public policy has on preventing youth smoking initiation has hampered major adolescent anti-smoking initiatives, including those which propose increases in cigarette taxes. Despite past beliefs – the fundamental laws of economics do apply to the demand for tobacco products, and the five studies presented in this brief, together with other related research, explicitly find a strong relationship between price and consumption.

> The fact is, raising tobacco prices is no longer solely a means of generating revenue, rather, a proven measure to reduce smoking.

RESEARCH HIGHLIGHTS

• Increases in the real price of cigarettes (which can be achieved through excise taxation) will decrease the number of adolescents who start smoking.

• Higher cigarette prices are effective in preventing youth from becoming heavier smokers.

• Higher cigarette prices would result in substantial reductions in the number of high school students who smoke, as well as the average cigarette consumption among this population.

• Higher cigarette prices are associated with substantially reducing adolescents' probability of becoming daily, addicted smokers, helping prevent moving from lower to higher stages of smoking.

• Higher cigarette prices are associated with lower smoking participation and lower levels of use among college student smokers.

DISCUSSION

General conclusions on the effects of cigarette prices on smoking can be drawn from the studies presented in this policy brief, as well as other related studies. First, the price of tobacco has an important influence on the demand for tobacco products, particularly among adolescents and young adults; and, second, substantial increases in the excise taxes on cigarettes would have considerable impact on the prevalence of smoking and, in the long-term, reduce the adverse health effects caused by tobacco. Of the major approaches that have been used to reduce tobacco use (education, clinical, regulatory, economic, and comprehensive), increasing the price of tobacco products serves as one of the strongest in helping adolescents and young adults resist or abandon the use of tobacco. The growing volume of research, combined with strong public support, provide a compelling reason for legislatures across the country to consider tax increases. Simply put, if you want to keep kids from smoking then raise excise taxes – it's a valuable tool that works.

State Cigarette Excise Taxes

January, 2001

Ranked by State Excise Taxes per Pack

Average State Tax = $.419

$.50+ HIGH		$.25-.49 MED		< $.25 LOW	
1.11	New York	.48	Minnesota	.24	Delaware
1.00	Alaska	.44	North Dakota	.24	Kansas
1.00	Hawaii	.44	Vermont	.24	Louisiana
.87	California	.41	Texas	.24	Ohio
.825	Washington	.36	Iowa	.23	Oklahoma
.80	New Jersey	.35	Nevada	.21	New Mexico
.76	Massachusetts	.34	Nebraska	.20	Colorado
.75	Michigan	.339	Florida	.18	Mississippi
.74	Maine	.33	South Dakota	.18	Montana
.71	Rhode Island	.315	Arkansas	.17	Missouri
.68	Oregon	.31	Pennsylvania	.17	West Virginia
.66	Maryland	.28	Idaho	.165	Alabama
.65	District of Columbia			.155	Indiana
.59	Wisconsin			.13	Tennessee
.58	Arizona			.12	Wyoming
.58	Illinois			.12	Georgia
.52	New Hampshire			.07	South Carolina
.515	Utah			.05	North Carolina
.50	Connecticut			.03	Kentucky
				.025	Virginia

Source: Federation of Tax Administrators (January 2001)

PUBLIC OPINION

Public opinion can be critical to the success, or failure, of legislative initiatives, particularly those which propose tax increases – including those imposed on tobacco products. Legislatures across the country have raised excise taxes on tobacco products with strong constituency support. Further demonstration of the growing public support for these measures is seen by a number of voter-initiated tobacco tax increases. For instance, *Arizona* voters approved a 40-cent increase in the state cigarette tax. In *Michigan*, voters approved, 69% to 31%, a school finance reform package that included a cigarette tax increase of 50 cents per pack, and a tax on non-cigarette tobacco products of 16% of wholesale price. *Oregon* voters increased the tax on each pack of cigarettes from 38¢ to 68¢ and the tax on non-cigarette tobacco products from 35% to 65% of wholesale price. Voters in *Massachusetts* raised the state cigarette tax from 26¢ to 51¢ per pack and increased the state tax on chewing tobacco by 25%. *California* voters raised state cigarette tax twice; the first time, by 25¢ per pack; and 50¢, the second.

CIGARETTE TAXES AND KIDS

About the Research . . . and the Researchers

Research presented in this policy brief is part of the UIC Health Research and Policy Centers' **ImpacTeen Project**, a five-year project designed to improve the understanding of how policies and other environmental factors influence youth substance abuse. ImpacTeen has led the way in conducting research on the effects of price on the demand for tobacco, alcohol and illicit drugs. An essential goal of the project is to provide researched-based evidence that will assist elected officials and other policymakers in efforts to develop effective laws, policies and programs to reduce tobacco use among youth. Directed by UIC economics professor Frank J. Chaloupka, PhD, the ImpacTeen Project is funded by The Robert Wood Johnson Foundation, the nation's largest health philanthropy. The five studies listed below are the focus of the first in a series of policy briefs (complete text can be found under "Papers & Presentations" at www.uic.edu/orgs/impacteen). Of particular importance, the UIC research provides the strongest evidence yet that raising excise taxes on cigarettes will decrease the number of adolescent who start smoking.

- *Effects of Price and Access Laws on Teenage Smoking Initiation: A National Longitudinal Analysis*; John A. Tauras, PhD, Lloyd Johnston, PhD, and Patrick O'Malley, PhD.

- *Differential Effects of Cigarette Price on Youth Smoking Intensity*; Lan Liang, PhD, Frank J. Chaloupka, PhD, and Michael Grossman, PhD.

- *The Effect of Cigarette Prices on Youth Smoking*; Hana Ross, PhD, and Frank J. Chaloupka, PhD.

- *Youth Smoking uptake Progress: Price and Public Policy Effects*; Hana Ross, PhD, Frank J. Chaloupka, PhD, and Melanie Wakefield, PhD.

- *The Impact of Prices and control policies on Cigarette Smoking Among College Students*; Christina Czart, PhD, Rosalie Liccardo Pacula, PhD, Frank J. Chaloupka, PhD, and Henry Wechsler, PhD.

POLICY BRIEFS

UIC Health Research and Policy Centers' **BRIEFS**   Volume I: Cigarette Taxes and Kids

The University of Illinois at Chicago Health Research and Policy Centers

UIC Health Research and Policy Centers is a cluster of five university centers administered by the School of Public Health. The Centers were created to meet the challenge of addressing complex health issues, with a focus on the development of new knowledge and its application through the conduct of research. The UIC Policy Brief Series was established to disseminate the implications of current, policy-related research to those individuals most able to effectively put it to good use – nationally influential policymakers and analysts. Briefs are sent to governors, congressional members and legislators and their staff members, federal and state agency employees, public policy researchers, as well as advocacy, political action and special interest groups. The content and format was developed with input and advice from policymakers across the country.

**For more information, or to request expert testimony, call (312)413-0475,
Email impcteen@uic.edu, or visit www.uic.edu/orgs/impacteen.**

UIC Health Research and Policy Centers welcomes your comments on how to improve the usefulness of its Policy Brief Series.

University of Illinois at Chicago
Health Research and Policy Centers
850 West Jackson Boulevard, Suite 400
Chicago, Illinois 60607-3025

REFERENCES/RESOURCES

Resources – Books

Bonk, K., Griggs, H., & Tynes, E. (1999). *The Jossey-Bass guide to strategic communications for non-profits.* San Francisco, CA: Jossey-Bass.

Bray, R. (2002). *Spin works! A media guidebook for communicating values and shaping opinion.* U.S.A.: Independent Media Institute.

Cappon, R.J. (2000). *Associated Press Guide to news writing* (3rd edition). Lawrenceville, NJ: Petersons.

DiFranza, J.R., & Staff of the Advocacy Institute. (1996). *A researcher's guide to effective dissemination of policy-related research.* Technical assistance guide No. 11. Princeton, NJ: The Robert Wood Johnson Foundation.

Kotler, P., Roberto, N., & Lee, N. (2002). *Social marketing: Improving the quality of life* (2nd edition). Thousand Oaks, CA.: Sage Publications.

National Association of Science Writers. (1996). *Communicating science news: A guide for public information officers, scientists and physicians.* Greenlawn, NY: National Association of Science Writers, Inc. (Currently out of print, but available online at: http://nasw.org/csn/.)

Radtke, J.M. (1998). *Strategic communications for nonprofit organizations: Seven steps to creating a successful plan.* New York: John Wiley & Sons, Inc.

Resources – Web sites:

American Medical Writers Association
www.amwa.org

Association of Health Care Journalist
www.healthjournalism.org

Health Behavior News Service
www.hbns.org

International Association of Business Communicators
www.iabc.com

National Association of Science Writers
www.nasw.org

Public Relations Society of America
www.prsa.org

Authors

Kim Kobus, PhD
Institute for Health Research and Policy
University of Illinois at Chicago

Robin Mermelstein, PhD
Institute for Health Research and Policy
University of Illinois at Chicago

Prabhu Ponkshe, MA, LLB
Health Matrix, Inc., McLean, VA

Institute for Health Research and Policy

University of Illinois at Chicago, M/C 275
Westside Research Office Building
1747 West Roosevelt Road
Chicago, IL 60608

Graphic Designer

Jenny Bondi
Institute for Health Research and Policy
University of Illinois, Chicago

Who we are: TTURC Partners

The *Transdisciplinary Tobacco Use Research Centers* (TTURC) and *Partners with Tobacco Use Research Centers* (Partners) programs are a collaborative effort to study tobacco use and nicotine addiction, and to help translate the results and implications of this work for policy makers, practitioners, and the public. The first round of the TTURC initiative was funded by the National Cancer Institute (NCI), the National Institute on Drug Abuse (NIDA), and the Robert Wood Johnson Foundation (RWJF). Seven research centers were funded through the TTURC initiative in 1999, including: Brown University, University of California at Irvine, University of Minnesota, University of Pennsylvania/Georgetown University, University of Southern California, University of Wisconsin, and Yale University. The NIH funding supported the establishment of the overall research centers (the TTURCs), and the RWJF funding established grant mechanisms to develop communications and policy research components at the TTURCs. RWJF also provided funds to establish a national program office, Partners, at the University of Illinois at Chicago.

Through the communications component of the TTURC Partners initiative, each of the TTURCs applied for and received grants from the RWJF to support five years of communications activities at the research center. These grants established internal communications infrastructures, including the hiring of a communications director, and supported external communications activities. In addition, the Partners office facilitated communications activities by coordinating activities across the centers, providing initial and on-going training to the communications directors, and offering communications direction and expertise through the use of a communications consultant.

partners

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