I’d like to begin this issue of The Connection by saying Happy New Year to you all! It truly seems as if the last year flew by at record speed.

Last month was especially busy. Our research group submitted a grant application for the Community Networks Program–Centers for Reducing Cancer Disparities through Outreach, Research, and Training. Our overarching goal of this application is to establish a Regional Community Networks Program (CNP) Center to increase knowledge of, access to, and utilization of evidence-based programs for reducing and ultimately eliminating cancer disparities in racial/ethnic minorities. We will do so utilizing the principles of Community-Based Participatory Research (CBPR). Based on expressed needs and priorities of our community partners, the proposed CNP Center will focus on promoting breast and cervical cancer screening among new immigrant and refugee populations in Minnesota, specifically Latino and Somali. This project also aims to recruit, train and mentor students, faculty scientists, and community members to incorporate CBPR methods into their cancer disparity research and promote their capacity to achieve (continue on page 4)

Smoking Costs for African Americans in California

Cigarette smoking and exposure to tobacco smoke are associated with premature death from chronic diseases, economic loss to society, and a substantial burden on our health care system. According to the Centers for Disease Control and Prevention, smoking is the primary causal factor for at least 30% of all cancer deaths, for nearly 80% of deaths from chronic obstructive pulmonary disease, and for early cardiovascular disease and death. Minority groups have the highest smoking-related illness and mortality rates, and among them, African Americans bear the greatest burden. In addition to high rates of smoking-related cancer, African American adults are more likely to die from three leading causes of smoking-related death—coronary heart disease, stroke, and lung cancer—than other adults.

In the January 2010 American Journal of Public Health, Max and colleagues estimated the economic impact of smoking on African Americans in California in 2002, including smoking-attributable health care expenditures and productivity losses from smoking-caused mortality. Researchers estimated smoking-attributable expenditures for different types of health care services. Using epidemiological models, the investigators estimated three measures of smoking-attributable mortality: deaths, years of potential life lost, and productivity losses for Californians over age 35.

Investigators found a higher smoking prevalence among African American adults compared with all Californians, and the total health care cost of smoking was $626 million for the African American community. A total of 3,013 African American Californians died of smoking-attributable illness in 2002, representing a loss of over 49,000 years of life and $784 million in productivity. The total cost of smoking for this community amounted to $1.4 billion.

Internal documents from the major tobacco companies and organizations were made available (accessible at: http://legacy.library.ucsf.edu) through litigation that resulted in the Master Settlement Agreement. Among other findings, these documents reveal the tobacco industry markets cigarette brands specifically for the African American community and has identified African Americans and Hispanics as demographic growth sectors. In light of declining smoking rates for the nation as a whole, including California’s overall progress in reducing tobacco use, Max and colleagues’ work finds that not all Americans are benefiting equally from smoking prevention and cessation public health efforts. <<<
Clinician bias is increasingly implicated for a probable contributing role to racial and ethnic disparities in health care. A growing body of research details that some health care providers hold stereotypes based on patient characteristics that influence their interpretation of behaviors and symptoms, and their clinical decisions. Research also suggests that in most cases the application of such stereotypes is unintentional and occurs outside conscious awareness. While still a relatively new area of research, several investigators are emerging as leaders in the development of the theory and measurement of unintentional bias among health care providers—including University of Minnesota faculty and Program in Health Disparities Research members Diana Burgess, Ph.D., and Michelle van Ryn, Ph.D., M.P.H.

Their research has found that while overt expressions of prejudice and negative racial stereotypes have declined greatly over time, it is still possible for individuals to hold negative racial and ethnic views of which they may not be fully conscious of, which can then introduce bias into the treatment of different groups of patients.

In 2002, van Ryn integrated research evidence on unconscious bias from social psychology with findings from health services research to develop a conceptual framework that details the ways unintentional bias and stereotyping influences (and is influenced by) patient behavior, encounter characteristics, and provider behavior and decision-making. In a 2007 conceptual paper Burgess, van Ryn, and colleagues Jack Dovidio and Som Saha advanced this work by using lessons from research in social-cognitive psychology to provide recommendations aimed at informing and accelerating efforts to reduce unintentional bias among health care providers. These recommendations are based off promising evidence in social cognitive psychology which indicates that with sufficient motivation, resources, and effort, people are able to focus on the unique qualities of individuals, rather than on the groups they are often characterized by, in forming impressions and behaving towards others. Says van Ryn, “We are now developing an Internet-based educational intervention that translates these recommendations into practical strategies to help providers deliver more equitable care to their patients and reduce their own level of job-related stress.”

Burgess and van Ryn’s continuing work in understanding and measuring health care provider bias is truly cutting edge research aimed at reducing and ultimately eliminating health disparities.

Research Brief

Secondhand Smoke in Multi-Unit Housing

Secondhand tobacco smoke (SHS) contains many poisons, including nicotine (a pesticide), carbon monoxide, ammonia, formaldehyde, hydrogen cyanide, nitrogen oxides, phenol, sulfur dioxide, and others. Reviews of the medical and scientific literature have established a wide range of adverse health effects from SHS including cardiovascular disease, lung, breast and nasal sinus cancer, and asthma and other respiratory illnesses. Furthermore, childhood SHS exposure is a cause of lower respiratory tract infections (such as bronchitis and pneumonia, middle-ear disease), symptoms of upper respiratory tract irritation, wheezing, reduced lung function, and low birth weight and sudden infant death syndrome in newborns.

Residents of low-income, multi-unit housing may be exposed to elevated levels of SHS because of higher smoking rates and building factors such as poor ventilation and infiltration between units, and unit size. In the December 2009 journal Tobacco Control, Kraev and colleagues analyzed residential exposure to SHS in 49 low-income, multi-unit residences across the Greater Boston area. Nicotine concentrations were determined using passive air nicotine monitors placed in homes over a one-week period for a direct measure and air exchange rates were also determined. Residents were (continued on page 3)
Depression and Post Traumatic Stress Disorder in Military Personnel

Major depressive disorder (MDD) affects approximately 14.8 million American adults, or about 6.7 percent of the U.S. population age 18 and older in a given year. Further, even persons with elevated depressive symptoms but without MDD have higher levels of impairment based on measures of functional status and social health, and incur higher rates of medical services utilization.

Military personnel are exposed to high rates of traumatic events during participation in both combat and peacekeeping operations. Current evidence suggests deployment to combat operations is associated with increased psychological distress and decreased health-related quality of life.

Researchers from the Minneapolis Veterans Affairs Medical Center, Center for Chronic Disease Outcomes Research, Minnesota National Guard, and University of Minnesota’s Departments of Psychiatry and Psychology recently have examined the rates of distress of military personnel during war zone deployment. Their work, available online before publication in the Journal of Psychiatric Research, sought to (a) identify rates of self-reported posttraumatic stress disorder (PTSD) and depression symptoms during combat deployment, (b) characterize higher order dimensions of emotional distress experienced by soldiers during deployment, and (c) identify predictors of these dimensions of emotional distress.

The participants were 2,677 National Guard soldiers deployed as part of Operation Iraqi Freedom in 2006-2007. Ferrier-Auerbach and colleagues performed an analysis on items of the Beck Depression Inventory to identify depressive symptoms and the PTSD Checklist (Military Version) for emotional distress. Rates of PTSD and depression in their sample were 7% and 9%, respectively. The rates of soldiers screening positive for depression were comparable to rates found in previous studies of troops deployed to Iraq during the same time period. In analysis they found that soldiers’ distress could be characterized by five interrelated dimensions: a) negative affect/cognitions, b) trauma-specific symptoms, c) vegetative (unaware of self and the environment) symptoms, d) loss of interest/numbing symptoms, and e) arousal/irritability. Two dimensions, trauma-specific symptoms and arousal/irritability, appeared to be more indicative of trauma conditions, while the other three dimensions were more indicative of depressive symptoms.

This work contributes to the growing body of research detailing the physical and mental burden of recent conflicts on military personnel. Previous research conducted after other military conflicts have shown that deployment and exposure to combat result in increased risk of PTSD, major depression, substance abuse, functional impairment in social and employment settings, and the increased use of health care services.

Of the participants enrolled in the study, 69% were non-smokers and 31% were smokers. However, detectable levels of nicotine were measured in 94% of the residences. Comparing the homes in which smoking was not allowed with those in which it was allowed (by residents and/or visitors), nicotine was detected in 89% of non-smoking homes and 95% of smoking homes. The participants’ frequent reporting of tobacco smoke odor coming from other apartments or hallways resulted in increased levels of nicotine concentrations and effective smoking rates in the non-smoking homes, suggesting SHS infiltration from neighboring units.

This study by Kraev and colleagues shows that SHS contamination is not limited to homes with active smokers and may infiltrate into homes if cigarettes are smoked outside or in neighboring residences. These findings have important implications for smoking regulations in multi-unit homes and highlight the need to reduce involuntary exposure to tobacco smoke among low-income housing residents.
success as community-engaged health disparity researchers and community members. This grant application was submitted in collaboration with the Minnesota Cancer Alliance, American Cancer Society, Centro Campesino, New American Community Services, Aquí Para Ti, and several other community-based organizations. I would like to thank all our University of Minnesota and community partners for their contributions. We look forward to a successful outcome sometime this Spring.

Our final Community Dialogue Series of the year was held in Saint Paul and the topic chosen by community members was type 2 diabetes. This event was hosted by the Urban Partnership and Community Development Center and co-sponsored by the Center for Health Equity. I would like to extend my sincere gratitude to Karen Blanchard, R.D., from NorthPoint Health and Wellness Center for the excellent presentation and discussion on food preparation and living with this disease.

I hope that your new year is off to a pleasant and peaceful start, and that you will also enjoy reading this issue of The Connection. We look forward to receiving any feedback or suggestions that you may have. Feel free to visit us on the Web or contact us at: healthdisparities@umn.edu. <<<

Fairly Healthy

The Cost of Inaction

by Rachel Hardeman, M.P.H., School of Public Health and Eduardo Miguel Medina,
Medical School, School of Public Health

In a previous column we sought to answer the question: what are the economic impacts of health disparities? At that time we concluded that while we can surmise that health inequalities result in substantial costs from lost productivity, excess mortality and morbidity—the complete and final cost of health disparities remained undetermined.

With the recent publication of the report “The Economic Burden of Health Inequalities in the United States” (available online at www.jointcenter.org) by the Joint Center for Political and Economic Studies, we now have a clearer understanding of the true economic toll of inequality in health outcomes. The authors examined both the direct costs associated with the provision of care to sicker and more disadvantaged populations, and the indirect costs of health inequalities associated with lost productivity, lost wages and premature death.

The report findings are a clarion call to action. From 2003 to 2006, eliminating health disparities for minority populations would have reduced direct medical care expenditures by $229.4 billion and reduced indirect costs associated with illness and premature death by more than $1 trillion. The authors also conclude that between the same years, nearly 31% of direct medical care expenditures for African Americans, Asians, and Hispanics were excess costs due to health inequalities. To put these numbers into context, the estimated cost of the current (as of this writing) senate health care reform bill is $849 billion over ten years.

It is clear from these findings that the costs of inaction are tremendous. Maintaining an inequitable health care system contributes significantly to our health care costs. Resolving health care inequalities would represent a significant cost savings in a time when we are looking to control costs as a key element of health care reform.

In addition to a moral and civic imperative often advanced in conversations about health disparities, it is clear there is also an economic imperative to eliminate inequities in health care delivery and outcomes. <<<