

***Public Health Projects
Class of 2015***



***January 23, 2013
University of Vermont College of Medicine***

Welcome to our Poster Session and Community Celebration!

Today, we celebrate our 9th year of public health projects as a part of our curriculum at the UVM College of Medicine. Our collaborative work with our community is part of our mission, because physicians have a role and responsibility in population health. Our educational goal is to help our students become better physicians through their actions in our community to improve public health. In addition to problem solving in public health, our students provide a community-service contribution from the perspective of an academic medical center.

With help from the United Way of Chittenden County Volunteer Center, health needs were identified by our local community agencies, and these 16 projects of the Class of 2015 were designed as "community first" to help meet these needs. Building on leadership skills learned during the first-year, using practical research methods, students worked with faculty and community agencies to find creative ways to put science into practice.

This year's projects cover a broad range of health issues: improving health for seniors, hypertension screening and education during blood donations, promoting nutrition and physical activity in different settings, reducing the impact of tobacco through education and policy, identifying new community and statewide models to improve health, and recommending ways to better connect physicians and their patients with available services in our community. Most of these public health issues are also national priorities, and our students' successes contribute to broader knowledge of community engagement, advocacy, and scholarship in public health.

Our special thanks to the Class of 2015, the United Way of Chittenden County Volunteer Center, Dean Morin, Medical Student Education, COMET, Medical Photography, and our UVM faculty mentors and participating community agencies, for their help, support, and participation.

Please enjoy our poster session and celebrate our students' work!

Jan K. Carney, MD, MPH

*Associate Dean for Public Health
Course Director*

Project: Promoting Screening of Cognitive Impairment and Dementia in Vermont

Community Agency: Alzheimer's Association, Vermont Chapter

Abstract:

Introduction. The prevalence of dementia in Vermont is increasing, and is expected to affect 1 in 8 Vermonters over the age of 65 by 2025. Early detection and diagnosis of dementia is desirable, but is challenging and often overlooked. This study investigated the attitudes of primary care physicians (PCPs) regarding early screening for dementia, and the tools used for screening. We also assessed PCP interest in a mandatory CME hour focused on dementia screening and diagnosis.

Methods. An 8-question survey was distributed to 438 Vermont PCPs. Students also met with Dr. Patricia King of the VT Board of Medical Practice, to discuss the feasibility of instituting a mandatory CME for dementia education.

Results. Of the 72 PCPs who responded to the survey, 81% agreed that there was a solid rationale for conducting dementia screening, with 78% regularly conducting screens. The majority of PCPs conducting screens used a suboptimal screening tool, i.e. the Mini-Mental State Exam. Of surveyed physicians, over half were resistant to a mandatory CME for dementia education, and Dr. King advised that requiring it would be very difficult. She recommended an optional online CME module, for which 75% of surveyed PCPs demonstrated interest.

Conclusion. Vermont primary care physicians are aware of the importance of dementia screening, but demonstrate a lack of knowledge in effective screening strategies. We propose to design a free, online CME module with a carefully planned dissemination strategy to help educate Vermont PCPs in effective dementia screening.

Students: Bryan Brown, Jessica Faraci, Shrey Kanjiya, Elizabeth Landell, Marisa Liu, Emily Rosen, Eli Schned

UVM Faculty Mentor: William Pendlebury, MD, Jeanne Hutchins, MA
Community Faculty: Martha Richardson, Maggie Lewis

Project: Smoke-Free Policy in Vermont Public Housing Authorities

Community Agency: American Lung Association, Vermont Chapter

Abstract:

Introduction. Millions of adults and children living in public housing face exposure to second hand smoke from adjacent apartments. These tenants are less able to escape smoke exposure by moving, and Housing Authorities are beginning to implement smoke-free policies. We assessed the status of smoke-free policy in Vermont public housing, and explored the experience of tenants and managers in Burlington who recently implemented such a policy.

Methods. We contacted Vermont Housing Authorities by telephone to assess the status of smoke-free policy in their multi-unit housing. Tenants living in smoke-free housing completed a survey assessing their opinion about the smoke-free policy. Building managers participated in a structured interview to describe their experience managing a smoke-free building.

Results. Seven out of nine Housing Authorities provided data on 2,464 units in multi-unit buildings. Policy to restrict smoking existed in 14.3% of units serving families, and 39.4% of units serving elderly or disabled tenants. 49 tenants completed the survey. 61% believe smoking still occurs inside. 70% of tenants support the smoking ban in their building. Support was strongest among non-smokers ($p < 0.0001$). The managers estimated >90% compliance. Managers reported difficulty proving policy violations, unexpected building expenses, and criticism from mobility impaired residents.

Conclusion. Despite dangers to tenants, most public housing in Vermont allows smoking. Most concerning, units housing children and families were least likely to restrict smoking. Although there are significant barriers to implementing smoke-free policy, several agencies reported successful implementation. Adherence to policies may increase if accommodations, such as designated outdoor spaces, are provided.

Students: Charles Hackett, Joshua Hood, Jessica Lane, Edith Laryea-Walker, Tyler Lemay, Adam Paine, Monique-Terese Squiers

UVM Faculty Mentors: David Kaminsky, MD
Community Faculty: Rebecca Ryan

Project: Is Blood Donation an Opportunity for Hypertension Awareness?

Community Agency: American Red Cross, Northern New England Region

Abstract:

Introduction. Blood donations centers are required to measure donors' blood pressures before accepting donations and thus provide a unique opportunity for blood pressure screening and education programs.

Objective. Main objectives were to assess the blood pressures of donors, the rate of hypertensive readings amongst donors that have never been identified as hypertensive, and determine the value of an informational sheet about blood pressure given at the time of donation.

Methods. An anonymous survey was completed by blood drive attendees and donor center visitors over two weeks. The survey contained twenty-two questions regarding demographics, blood pressure knowledge and monitoring. Participants then received a hypertension information sheet and assessed its utility with three additional questions.

Results. Based on 836 returned surveys, 46.9% of donors reported blood pressure in the normotensive range, 41.7.4% in the pre-hypertensive range and 11.3% in the hypertensive range. Notably, of donors with hypertensive readings, 45% reported no known history of hypertension. After reading the hypertension pamphlet, 63.9% of donors found it valuable, while 38.9% did not. Furthermore, 67% of donors said they were likely to use the information they learned, while 23% of donors said they were unlikely to do so.

Conclusions. Our data suggests there is an opportunity for increasing hypertension awareness during blood donations. Additionally, our findings indicate that an educational pamphlet at the time of donation is valuable to donors. Overall, findings suggest that increasing hypertension awareness as part of a blood donation screening is not only needed, but useful as a public health measure.

Students: Jason Hao, Colleen Kerrigan, Lauren Kreiger, James McAvoy, Cameron Sikavi, David Swift, Laurel Wickberg

UVM Faculty Mentor: Mark Fung, MD
Community Faculty: Chris Frenette, Carol Dembeck

Project: Establishing A Continuum of Care to Improve Follow-Up Rates for Survivors of Sexual Assault

Community Agency: Burlington Community Justice Center

Abstract:

Introduction. In 2011 there were over 1000 reported sexual assaults in Vermont. Current recommendations suggest that survivors of sexual assault (survivors) receive follow-up care within two weeks after an initial Sexual Assault Nurse Examiner (SANE) exam, but fewer than 15% receive documented follow-up. A published report has demonstrated increased follow-up to over 80% when appointments are scheduled prior to discharge from the emergency department (ED).

Objective. Identify barriers for survivors to follow-up care after a SANE exam.

Methods. A literature review was performed to investigate the barriers to healthcare for survivors. SANE data was reviewed to determine rates/methods of follow-up for survivors seen in the FAHC ED. A focused interview was designed and administered to 13 community workers from 7 regional organizations. Conclusions/recommendations were formulated from the literature review, SANE data, and interviews.

Conclusions. The SANE program is effective and highly valued. SANE nurses make follow-up phone calls when possible and encourage survivors to seek follow-up care. Interview data indicates that most local providers are not completely satisfied with the system of referrals for survivors, consider follow-up very important, and believe it is crucial that SANEs make follow-up phone calls. Further training regarding care for survivors is desired.

Recommendations. Local organizations increase inter-collaboration and public outreach to enhance the visibility of resources available to survivors. Allocation of more resources to the SANEs should be considered so that they can contact more survivors and assist survivors in making follow-up appointments prior to ED discharge. Consider educating healthcare providers in trauma-informed care.

Students: Medhavi Bole, Jonathan Ellis, Whitney Hine, Job Larson, Darrell Nettlow, Joshua Price, Kathleen Root

UVM Faculty Mentor: Janice Gallant, MD
Community Faculty: Karen Vastine

Project: Opiate Prescription Practices and VPMS Use: Impacts of the Vermont Prescription Monitoring System

Community Agency: Burlington Partnership for a Healthy Community

Abstract:

Introduction. Our project assessed prescriber use of the Vermont Prescription Monitoring System (VPMS) and collected suggestions for its improvement, and for reducing opiate diversion.

Methods. We distributed an online anonymous survey to 552 Vermont physicians. Multiple-choice and write-in questions assessed VPMS utilization, physician education on opiate prescribing and patient education around the use of opiates.

Results. 51.8% (29 out of 56) total respondents never or almost never use VPMS. The most common reason indicated was that it takes too much time (37.5% (n=18)). Others mentioned that VPMS is not kept current, has no out-of-state data, and is not well-integrated with electronic medical records.

32.7% (n=16) respondents always or almost always educate patients about the risks and consequences of opiate diversion, versus 38.8% (n=19) who never or almost never educate patients about these risks. Some respondents mentioned they are not reimbursed for, and/or do not have enough time to educate appropriately, while others felt patients should already know that opiate diversion is illegal.

Conclusions. We suggest that the VPMS provides some utility in helping to prevent opiate diversion, yet the wide range of responses indicates there is much that can be done to improve features and access to the system to make it a more reliable and integrated tool. Time-efficiency, ease-of-access, and real-time updates are some areas of deficiency. Additionally, given the impact of diversion on opiate abuse, more research should be done to evaluate the efficacy of various methods of education on opiate diversion.

Students: Joseph Kilch, Nicole Mulheron, Kevin Pelletier, Adam Roberts, Jessica Simon, Casey Wilson

UVM Faculty Mentor: Alan Rubin, MD
Community Faculty: Mariah Sanderson, Ryan Mitofsky

Project: Addressing Health Needs of Burlington Probation and Parole Clients

Community Agency: Burlington Probation and Parole

Abstract:

Introduction. Higher rates of recidivism have been observed in offenders with specific health risks. Criminal justice literature identifies probation/parole as an ideal time to implement health interventions to reduce recidivism, but significant barriers exist.

Objectives. Analyze strategies for disseminating information about resources to address health concerns identified by the 2011 Public Health Project; explore the self-perceived roles of Burlington Probation and Parole (BPP) staff in connecting parolees with health resources and their recommendations for effectively doing so within the Probation and Parole system.

Methods. A questionnaire was developed to assess differential utilization of a health resource sheet given to BPP clients either as part of their intake paperwork or during a discussion with a medical student after the intake meeting. Subsequently, a survey was administered to BPP staff regarding their own health, job responsibilities, and burn-out.

Results. No valid data was gathered from the questionnaire due to low response. The BPP staff survey had a 44% response rate and demonstrated that 91% of staff feels they have a role in helping clients with health concerns. However, staff does not feel that they have the time or knowledge to do so effectively and also feel overwhelmed and underappreciated. BPP employees indicated that implementing supports such as social workers and better information about health resources would help them to improve the health of their clients.

Conclusions. We propose a pilot program to place a social worker at BPP to meet with all clients after intakes and investigate this intervention's effects on recidivism.

Students: Zoe Agoos, Alison Frizell, David Harari, Michael Ma, Jigar Patel, Jordan Perlman, Michael Ursiny

UVM Faculty Mentor: Jill Jemison
Community Faculty: Herb Sinkinson

Project: Evaluating Barriers to Health in Homebound Individuals

Community Agency: Chittenden County Emergency Food Shelf

Abstract:

Introduction. Homebound individuals in Vermont often have multiple comorbidities and can face significant food insecurity. In response to this problem, the Chittenden County Emergency Food Shelf (CEFS) Homebound Delivery Program (HDP) delivers one week of food per month to 130 individuals in Chittenden County, Vermont.

Objective. The aim of this project was to learn about the HDP recipients in order to better meet the needs of these homebound individuals.

Methods. A survey of 35 multiple choice questions assessing demographics, program satisfaction, mobility constraints, health care access and health status was conducted via telephone (n=26) and in-person interviews (n=9). Qualitative data was collected during two additional in-person interviews. Data was analyzed with two-tailed Fisher exact tests using 2012 GraphPad Software, Inc.

Results. 35/130 total HDP participants were interviewed (26.9%). Limited mobility was reported by 80%, and most respondents reported several comorbidities. Of those with greater than 5 chronic illnesses, 63% stated a preference for pre-packaged food (p=0.3). All of the respondents had health insurance. 71% of food recipients were referred to the HDP by the food shelf or friends; physician referrals comprised 11%. Overall satisfaction with the program was excellent.

Conclusions. Health care providers could play a significant role in expanding the homebound population served by the HDP by referring more patients to the program. Given the success of the program, the CEFS HDP serves as a model for addressing the needs of homebound populations.

Students: Benjamin Clements, Tamar Goldberg, Daniel Gorlen, Elyse Goveia, Kelsey Hughes, David Mealiea, Nicole Meredyth

UVM Faculty Mentor: Jan Carney, MD, MPH
Community Faculty: Rob Meehan, Alice Anton

Project: What Are the Barriers and Motivators to Exercise in 50-65 Year-Old Adults?

Community Agency: Greater Burlington YMCA

Abstract:

Introduction. The benefit of exercise in adults has been well established. Research has demonstrated improved cardiovascular health, decreased bone fractures, and increased mental capacity. While the benefits of exercise has clearly been demonstrated, personal barriers to exercise are yet to be fully elucidated. Thus, in collaboration with the YMCA, this study aimed to clarify barriers to exercise in 50-65 year-old adults.

Methods. A survey was created and disseminated at community sites in the Greater Burlington area to a 50-65 year-old demographic. The survey was designed and based on previous participation in Greater Burlington YMCA programs.

Results. Surveys demonstrated that the greatest motivators of physical activity were improving health (78%), reducing stress (64%), losing weight (56%), and boosting energy (56%). Largest barriers to exercise were time (35%), motivation (21%), and cost (15%). Lastly, the areas of greatest interest were outdoor activities (90%), mindfulness activities (50%), aquatic activities (36%), dancing (32%), and volunteering (32%). Research has also shown that having a primary care provider is a positive influence to adopting a healthier and more active lifestyle. 92% of our respondents had a primary care physician.

Conclusion. Outdoor and mindfulness activities were the most popular activities. By using the natural resources in Vermont, the YMCA can provide activities to encourage this demographic to increase their physical activity. Since 92% of the population surveyed had a primary care physician, this would be the ideal location to advertise and provide information for upcoming classes and activities that the YMCA will be organizing.

Students: *Raymond Addante, Patrick Benson, Liqun Chen, Jenna Ford, Jessica Louie, Kenneth Mensch, Dijana Poljak, Kathryn Schlosser*

UVM Faculty Mentor: *Pam Farnham, RN, Jan Carney, MD, MPH*
Community Faculty: *Alexandra Jasinowski*

Project: Screening for Food Insecurity in Primary Care

Community Agency: Hunger Free Vermont

Abstract:

Introduction. Hunger Free VT (HFVT) is a non-profit organization whose mission is to end the injustice of hunger and malnutrition for all Vermonters. HFVT developed an internet-based Continuing Medical Education (CME) course in order to bring awareness to the issue of food insecurity and enhance medical provider training. The CME course entitled Childhood Hunger in Vermont: The Hidden Impacts on Health, Development, and Wellbeing was started by 59 health care providers in VT but only completed by 4.

Objective. Our objective was three-fold – 1) to gain an understanding of why registered users did not complete the course, 2) to investigate patient perspectives and experience on the topic of food insecurity and 3) to develop recommendations for HFVT that will increase participation and completion rates of their CME course.

Methods. Our objectives were accomplished through the use of online surveys for registered course users, paper questionnaires for parents in pediatric offices, and a focus group for nurses and physicians.

Results. Survey participants found the CME course to be valuable, but lengthy. Focus group participants stated that they would prefer for information about food insecurity screening to be delivered in-person. Findings from the survey, questionnaire, and focus group suggest that few patients are being asked about food insecurity by their healthcare providers.

Conclusions. Providers cite length of appointments and sensitivity of the topic as the biggest barriers to screening. Incorporating questions about food insecurity into office intake forms may be a valuable way to identify patients who would benefit from community resources.

Students: *Jenna Arruda, Logan Bartram, Bruno Cardoso, Andrew Jones, Amanda Peel, Darlene Peterson, Justin Van Backer*

UVM Faculty Mentor: *Marianne Burke, MLS*
Community Faculty: *Sarah Weisman*

Project: Pilot Study of the Effects of Tai Chi on Elderly Fall Risks

Community Agency: Living Well Vermont

Abstract:

Introduction. Falls in the elderly are a significant public health concern. Tai Chi has been shown to reduce falls in this population and increase muscle strength, balance, mood, confidence and sleep.

Objectives. 1. Measure fall confidence in participants and non-participants of Tai Chi; 2. Identify barriers to participation at an integrative healthcare assisted-living facility. **Methods:** We completed a 30 minute interview with 9 of 14 residents (age > 60) of Living Well Residential Care Home (men, n = 3; women, n = 6). Interviews with Tai Chi participants included 7 demographic questions and 13 questions about sleep, mood, and confidence. Non-participants were asked 10 questions related to barriers to attending Tai Chi classes. All study participants completed the ABC scale² for assessment of fear of falling.

Results. Tai Chi participants were more confident in performing daily tasks without falling in 11/13 categories on the ABC scale, and reported increased confidence (80%) and balance (80%). Non-participants reported physical limitations and time of class as barriers to participation.

Conclusions. Living Well's reported fall rate of 25% may be lower than the CDC's annual fall rate of 33% for seniors (age > 65). Tai Chi participants report high levels of balance and confidence. Accommodating physical limitations and offering varying class times may increase participation.

Students: Amadna Dauten, Kara Klingman, Kyung Jun Min, Emily Schloff, Vishal Shah, Corey Sheahan, Sarah Vossoughi

UVM Faculty Mentor: Philip Trabulsky, MD

Community Faculty: Devida Deluca, Kathleen Hall, PhD

Project: Analysis of Learning Outcomes in LGBTQ+ Medical School Curriculum

Community Agency: Outright Vermont

Abstract:

Introduction. Lesbian, gay, bisexual, transgender, and queer (LGBTQ+) youth are at increased risk for negative health outcomes and experience increased barriers to health care.

Objective. To assess impact of the current curriculum at University of Vermont College of Medicine on students' knowledge of issues relevant to LGBTQ+ youth and comfort interacting with LGBTQ+ youth in clinical settings.

Methods. Two anonymous, voluntary surveys were distributed to 104 UVM COM 2nd year medical students before and after 3 clinical skills encounters with standardized patients; 96 completed both. The survey contained demographic, knowledge, attitudes and skills questions pertaining to LGBTQ+ youth community. Data analysis utilized JMP/SAS (SAS Institute, Cary NC). Comparison of pre- versus post-curriculum exposure responses were conducted with paired t-tests and McNemar's test for paired samples.

Results. Out of a 4-point score with (4 = disapproval and 1= approval), same sex disapproval decreased significantly between the pre and post encounter surveys ($p = 0.0304$). Discomfort in taking a sexual history decreased significantly for students with gay/lesbians ($p = 0.0136$), bisexuals ($p = 0.072$), and transgender/gender variant people ($p = 0.0098$).

Conclusions. Surveys of medical students demonstrated that the UVM curriculum has a significant positive impact on the attitudes, knowledge and skills regarding LGBTQ+ youth. Improvements seen in this study argue that teaching LGBTQ+ content in the curriculum is beneficial. In addition, given that students reported highest levels of discomfort in taking sexual histories from transgender and gender non-conforming patients, the authors recommend developing a standardized patient encounter that reflects these communities.

Students: Shannon Blaney, Sarah Gardner, Jeyko Garuz, Julia Hobson, John Paul Kelada, Hayley Munroe, Jonathan Pan, John Taylor

UVM Faculty Mentor: Cate Nicholas, EdD, MS, PA

Community Faculty: Melissa Murray

Project: Assessing the Needs of An After-School Program for Burlington's Elementary School Students

Community Agency: Sarah Holbrook Community Center

Abstract:

Introduction. The Sara Holbrook Community Center (SHCC) offers an after school program for 36 elementary students from the diverse North End neighborhood of Burlington. In recent years, disrespectful behavior and bullying have become a growing problem in the program. Through administering a needs assessment to the staff at Sara Holbrook, we examined the strengths and challenges facing the program and devised potential recommendations to address staff-identified issues.

Objective. To conduct a needs assessment of the after school program at Sara Holbrook Community Center.

Methods. A 21-item interview was generated for the 6 SHCC staff members. The interviews were individually administered in a semi-structured format to each of the Center's employees. The interviews ranged in length from 30 to 50 minutes and were transcribed with any identifying information removed. College of Medicine students qualitatively analyzed the transcripts and identified common themes. Using the qualitative interview data, a needs assessment report was generated.

Results. Qualitative interview data indicate that the Sara Holbrook Community Center has several overarching needs. The shared, restricted nature of the physical space at SHCC may be limiting the activities available to the children. The Center may wish to examine the balance of unstructured, "free" time and the structured, programmatic activities offered. The staff may benefit from additional training, collaboration and communication.

Conclusions. The needs assessment revealed myriad strengths of the SHCC's after school program. Addressing 2 or 3 of the challenges identified in the needs assessment will help ensure SHCC's continued and vital role serving Burlington's children.

Students: Elizabeth Abernathy, Meredith Bryden, Kristin Carr, W. Christian Crannell, Colin King, Andrew Nobe, Michelle VanHorne

UVM Faculty Mentor: Stephen Contompasis, MD
Community Faculty: Jenny Kounta

Project: Money Follows the Person: Transitioning Nursing Home Residents into the Community

Community Agency: Vermont Department of Disabilities, Aging, & Independent Living

Abstract:

Introduction. Research has shown that admission to nursing homes (NH) is associated with decline in several measures of well-being; transitioning out of a NH into the community is a positive predictor for quality of life. Currently, the State of Vermont offers several housing options for Medicaid eligible NH residents; however, there are very few opportunities to fully integrate into the community.

Objective. In collaboration with the Vermont Department of Disabilities, Aging, and Independent Living, we aimed to develop a housing model that utilizes the financial support from Money Follows the Person to facilitate transition of NH residents into an Adult Family Home (AFH) and conduct an analysis of the model's feasibility.

Methods. A survey was administered to 38 NHs throughout Vermont to evaluate the population's required level of care. A focus group of current home and service providers from Addison County was conducted to ascertain their experiences regarding transitioning residents into the community from NHs. Lastly, a model for an AFH was constructed using components of pre-existing models (in other states) to address Vermont's specific needs.

Results. Based upon focus group research, a resident's behavioral impairment was the most prohibitive factor for a caregiver's ability to accept clients; however, from our survey of 19 Vermont NHs (50% response rate) only 35% of residents had a behavioral impairment.

Conclusion. With financial support from Money Follows the Person, our model will enable Vermont's sizable population of eligible NH residents to be incorporated into the community and to live a more fulfilling life.

Students: Whitney Creed, Ryan Hendrix, Matthew MacKinnon, Marissa Mendez, Nancy Tran, Shane Verhoef, Hope Yu

UVM Faculty Mentors: William Pendlebury, MD, Jeanne Hutchins, MA
Community Faculty: Linda Martinez, RN, Rio Demers

Project: Heat vs. Health: Wood Smoke in Vermont**Community Agency:** Vermont Department of Health**Abstract:**

Introduction. Given rising energy prices in recent years, wood burning stoves offer an attractive and affordable means of home heating. Unfortunately, wood smoke emissions have been linked to respiratory and cardiovascular disease and, in some cases, premature death. Recent studies have also discovered known carcinogens in wood smoke emissions.

Objective. A survey was developed and administered to assess public concern and knowledge regarding the health impacts of wood smoke emissions. We assessed public awareness about methods to reduce health risks and the best avenues to provide additional information and resources.

Methods. A 2-page survey was designed to assess Vermonters' knowledge and concerns about the potential health impacts of wood smoke. Surveys were collected from 3 polling locations in Chittenden County (n=234): Data were entered into Excel and 10% were randomly selected for a quality control check. Descriptive statistics were analyzed in Excel and statistical significance was determined using Chi-square test.

Results. A majority of respondents (61%) were concerned about the respiratory complications associated with wood smoke emissions. Few (34%) of those heating with wood report using an EPA-certified wood stove. Additionally, amongst those polled, uncertainty persists regarding the efficiency benefits of EPA-certified stoves compared to traditional wood stoves.

Conclusion. Survey respondents were overwhelmingly concerned about the respiratory complications associated with wood smoke, yet divided on the best methods to reduce wood smoke emissions. To address these issues, we recommend promoting available resources about EPA-certified stoves and health effects of wood smoke.

Students: Michael Cunningham, Avanti Golikeri, Ethan Leveillee, Jennifer Makrides, Hank Ng, Janet Trang, Mark Wilkison

UVM Faculty Mentor: Jan Carney, MD, MPH

Community Faculty: Razelle Hoffman-Contois, MS, Heidi Hales, PhD

Project: Review of Sudden Unexpected Infant Deaths in Vermont 2002-2011**Community Agency:** Vermont Department of Health**Abstract:**

Introduction. There are 4500 U.S. Sudden Unexplained Infant Deaths (SUIDs) per year, many of which are potentially preventable. We defined characteristics of SUIDs in Vermont to determine target population(s) for public health recommendations.

Methods. A ten-year chart review of SUIDs was performed at the Vermont Office of the Chief Medical Examiner. Demographics, sleep environment and parental risk behaviors (VT vs. US) were analyzed.

Results. 85.7% of SUIDs deaths in Vermont were infants under six months of age with 62.5% occurring in the first three months. 21% of all Vermont mothers smoke. 44.6% of SUID baby's mothers smoked; 16.1% of mothers did not smoke (data unavailable for 39.3%). 73.5 % of deaths were associated with maternal smoking (p value <0.0001). Most SUIDs occurred in a slightly older maternal age group in VT than in national data (25-29 vs. 20-24 years). Similar to the U.S., the majority of deaths were males; prematurity, bed sharing (p value <0.0001), non-supine position (p value <0.0001) and sleeping in an adult bed were positively associated with risk.

Conclusion. Smoking was the most prevalent, modifiable risk factor and needs to be aggressively addressed in any public health campaign. Due to small sample size and incomplete death scene data gathering, only bed sharing, maternal smoking and non-supine sleep position were shown to be statistically significant risk factors. Comparison to national data is compromised by the lack of a consensus definition of SUIDs. Standardization and improvement in data collection is essential, both nationally and in Vermont.

Students: Stephanie Brooks, Jonathan Hedges, Jennifer Hughes, Chieh Kuo, Matthew Robichaud, Peter Wingfield

UVM Faculty Mentors: Jan Carney, MD, MPH

Community Faculty: Wendy Davis, MD

Project: Assessing Attitudes Towards Tobacco Advertising in Winooski, VT

Community Agency: Winooski Coalition for a Safe and Peaceful Community

Abstract:

Introduction. Smoking rates are 15% in Vermont and higher in low-income populations. Winooski, Vermont is vulnerable to high tobacco use rates given that 23.6% of Winooski residents live below the poverty line. Tobacco advertising, which has been shown to have a direct, dose-dependent association with youth tobacco use, is highly prevalent in stores in Winooski.

Methods. In conjunction with the Winooski Coalition for a Safe and Peaceful Community (WCSPC), we developed a survey to assess the opinions of adult community members towards tobacco advertising and youth tobacco use in Winooski, VT. We administered the survey in three different settings: 1) sent home with students of the Winooski school district, 2) in-person at the parent-teacher conference day at the Winooski school district, and 3) in-person at the Winooski Community Health Fair.

Results. The majority of respondents believe that tobacco advertising should not be allowed inside stores (66%) or outside stores (83%), youth smoking/tobacco use is a problem in Winooski (59%), store owners should show fewer advertisements in their stores (62%), and youth are influenced by tobacco advertising in stores (59%). Additionally, most respondents believe that tobacco products should not be sold in grocery stores (66%) or pharmacies (73%).

Discussion. The majority of respondents believe that youth smoking and tobacco use in Winooski is a problem and that store owners should decrease or eliminate tobacco advertising. This demonstration of community support for reduced tobacco advertising will be instrumental for achieving the goals of the Small Changes, Big Impact initiative in Winooski, VT.

Students: Kristopher Azevedo, Benjamin Brown, Eric Chang, Jessie Evangelista, Ian McDaniels, Olga Kuzina, Anisha Patel

UVM Faculty Mentors: Burton Wilcke, PhD

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