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Public Health Abstracts 2004

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Avery, G. (2004). Bioterrorism, fear, and public health reform: Matching a policy solution to the wrong window. *Public Administration Review*, 64, 275-284.

Advances in public health in the early 1900s decreased the threat of epidemic disease to such an extent that by the late 1980s the public health system was subjected to significant social discounting along with subsequent deterioration and neglect. In 1988, the Institute of Medicine warned of the risks of this deterioration and suggested a need to rebuild the infrastructure of the system. During the 1990s, terrorist actions using biological weapons and the fear that rogue states possessed such weapons placed bioterrorism on the political agenda. Policy researcher John Kingdon describes the process in which problems, policies, and political actors join together into a policy solution as a 'policy window'. The merger of public health and political interests occurred during the late 1990s. This article explores how advocates for improving the public health system attempted to use this "window" to obtain resources necessary for modernization of the public health system. However, significant problems arose from a mismatch between the goals of public health policy makers and the policy window used to address them. According to the author, although bioterrorism preparedness and public health response to infectious disease share many similarities, the major difference is in the focus. The bioterrorism program falls into the anticipation model of risk management which attempts to identify and prevent problems. The emerging infections falls into the resiliency model which assumes that because the specific threat is unknown, building capacity to respond to a variety of threats is of greater utility. The result of pairing these initiatives resulted in a bioterrorism initiative that targets specific agents but may not be effective in dealing with non-bioterrorist public health problems.

Borak, J., Fiellin, M., & Chemerynski, S. (2004). Who is Hispanic? Implications for epidemiologic research in the United States. *Epidemiology*, 15, 240-244.

This article provides an epidemiologic perspective on the classification of populations by race and ethnicity. The authors point out the interplay of

statistical, demographic, and sociologic factors that complicates the analysis of the "Hispanic" population. It is difficult to identify and measure race and ethnicity in a nation characterized by population mobility and assimilation. Over the years, the U.S. Census Bureau has revised the criteria for identifying and characterizing people of differing races and ethnic groups, especially Hispanics. These changes reduce the value of longitudinal census comparisons and have potentially important implications for monitoring disease incidence and interpreting disease rates over time. Health surveillance often relies on data derived from multiple sources. The criteria used to characterize subpopulations can vary from source to source. Combining data from these sources will introduce statistical uncertainty and confusion. Possible effects of criteria differences should be considered before data from various sources are combined. Although census-to-census differences have been well described, criteria used by other organizations and agencies, such as cancer registries, are less well recognized. In the past, the categorization of populations into racial or ethnic groups has proved useful to epidemiologists for discerning associations between risk factors and disease. However, ethnic categories may be more likely than racial categories to suffer from ambiguous definition, leading to greater risks of misclassification. Disagreement exists even among those who would be labeled "Hispanic" as to whether that term defines ethnicity or race and who should be included. Analyses based on such categorization may have limited informational value. Researchers studying such groups should detail their criteria for identifying members and characterizing populations. The criteria must be regularly subjected to analysis and validation. According to the census in 2000, Hispanics have become the largest minority group in the United States, comprising 12.5% of the population. The percentage in Florida is even higher, averaging 17.2% across the state and ranging from 25.3% to 59.6% in the five counties that have the highest Hispanic population. Understanding the challenges of using data sources with different criteria for identifying this population and its subpopulations are imperative in epidemiologic, medical, and social science research involving Floridians.

Boscarino, J.A., & Adams, R.E. (2004). Public perceptions of quality care and provider profiling in New York: Implications for improving quality care and public health. *Journal of Public Health Management and Practice*, 10, 241-50.

Despite advances in assessing quality and the availability of performance data, consumer recall and use of the data has not kept pace with the development and availability of these data. The purpose of this study was to assess how different demographic factors and consumer experiences within the health care system were related to evaluation and use of health care information. The study documented experiences with medical errors, medical misconduct, and trust in different sources of health care information. It also included other factors such as fears or concerns about the economy and terrorism. The goal was to improve the quality of care in the state by enhancing consumer decision-making. This study was conducted in New York State; however, the state of Florida has also adopted strategies to provide more health information to consumers. The authors used random sampling to select 1001 adults for interview. Six months later a cross-section of 500 additional respondents were selected for interview. These participants were surveyed on the household's health care utilization. Results indicated that 32.8% of the participants had a high level of concern about the quality of health care. Only 22.6% were confident about their health care decisions and less than 20% used quality of care information when making a medical decision. However, 49.5% said that they would use quality of care information if more were available. In addition, 21.1% of the participants reported that they or others in their household experienced a medical error. The analyses also revealed that demographic factors tended to be associated with concerns about health care, particularly in African-Americans. The implications of the study were that greater confidence in health care quality information is needed. In addition, greater dissemination from public health agencies would aid in this cause.

Boydell, K.M., & Volpe, T. (2004). A qualitative examination of the implementation of a community-academic coalition. *Journal of Community Psychology*, 32, 357-374.

With the growing requirement of coalition building in most grant applications, it is imperative for the academic community to be aware of and understand the factors and barriers associated with coalition building. Whereas there have been numerous efforts to empirically examine effective coalition building, *Florida Public Health Review*, 2004; 1: 67-78
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most of the research in this arena has taken a quantitative approach. Little research exists that utilizes a qualitative approach to the exploration of the implementation process. This article qualitatively explores the early development and implementation of The Parenting Alliance. Using an ethnographic approach, data was obtained via participant observations and in-depth interviews. Analysis of the data highlighted key elements of the members' perspectives regarding the process and functioning of the Alliance. The most prominent, overall themes included issues related to determining membership, establishing structure, achieving leadership, ensuring communication, and securing funding. Sub-themes were also identified for each of the five overall themes. For example, specific concerns related to determining membership include developing inclusionary strategies, ensuring a wide variety of levels of involvement, involving nonprofessionals, and providing incentives for participation. Under establishing structure, alliance members expressed concerns related to identifying a clear vision and mission statement, developing goals, and establishing a conflict resolution process. Establishing leadership structure and developing a mechanism for decision-making were key elements associated with achieving leadership. Key aspects of ensuring communication include instituting a continuous evaluative feedback mechanism and developing formal and informal communication strategies. Achieving stable, long-term funding and ensuring a diversified resource base were the most prevalent concerns related to securing funding. Lastly, the article provides some strategies to enhance coalition success within each of the five key dimensions. Whereas the key dimensions outlined in the article are not new, the methods used to obtain the information is. By taking a qualitative, longitudinal approach to understanding coalition formation and implementation, this article adds a unique perspective to the coalition building literature.

Cottrell, B.H., & Shannahan, M. (2004). Maternal bacterial vaginosis and fetal/infant mortality in eight Florida counties, 1999 to 2000. *Public Health Nursing*, 21, 395-403.

Bacterial vaginosis (BV) is a common vaginal infection in women of childbearing age. It is caused by a change of flora in the vagina, the normal *Lactobacillus* species being replaced by high concentrations of *Gardnerella vaginalis*, *Mycoplasma hominis*, and anaerobic bacteria. In this study, the authors determined the prevalence of BV with fetal and infant loss in eight rural Northwest Florida counties. They also examined the prevalence in relation to fetal or infant age at death, and to local

racial disparity in fetal and infant mortality. They used 1999 and 2000 data from the state-funded Panhandle Fetal and Infant Mortality Review project. They found that 68.8% of 176 mothers with fetal or infant deaths had some infection and 31% of the mothers with infection had BV. Women with BV were significantly more likely to be non-white (primarily black), single, less than 24 years of age, and had less than 12 years of education. The majority of women with fetal or infant loss had histories of prior loss, low birthweight infant, and preterm delivery. Infection was a common factor in the subsequent pregnancy and the BV rate among these women ranged between 26% and 36%. Citing previous studies, the authors state that the practice of vaginal douching may contribute to the disparity in BV rates between black and white women. Providers and nursing staff should assess clients for douching practices during well-woman and prenatal care and discourage the practice. Nurses should work with and educate the community regarding racial disparities in fetal and infant mortality, provide information about practices that can reduce these disparities, and support access to well-woman and pregnancy care for all women. There are several limitations to the study. It is a retrospective study with a small sample size from a predominately rural geographic location. It has some missing data. Since inconsistencies existed as to whether providers screened only symptomatic women or both symptomatic and asymptomatic women, the true incidence of BV may be underestimated. Infant mortality is an indicator of the overall health of a population. The United States achieved a record low rate in 2000 and 2001, when the rate for both years was 6.9 deaths per 1,000 live births. The average annual rate for Florida for 1998-2000 was 7.2, higher than the national rate. Racial disparity was evident for the country and for the state. The Florida rate for non-Hispanic whites was 5.8, whereas the rate for non-Hispanic blacks or African Americans was 12.6. Fetal mortality exhibits a similar differential. Based on the results of this study, health education and early screening and treatment for women with the risk factors identified will help to reduce the overall fetal and infant mortality rates and the racial disparity.

Cunningham, P., & Hadley, J. (2004). Expanding care versus expanding coverage: How to improve access to care. *Health Affairs*, 23, 234 – 244.

This paper describes variations in insurance coverage and community health center (CHC) availability across different U.S. population subgroups and

communities, and examines the relative effects of increasing insurance coverage versus CHC expansions on access to care for low-income people. For the past 40 years policymakers have increased access to care for the uninsured by increasing the number of people who have health insurance and increasing the availability of lower-cost services for those who remain uninsured. The Bush administration proposed tax credits to make private health insurance more affordable and developed or expanded 1,200 community health centers. These strategies represent two ways of addressing access issues. Insurance coverage removes financial barriers that uninsured individuals face while community health centers target geographic areas that are medically underserved. The study examined data from the 1998-99 Community Tracking Study household survey and CHC information from the Uniform Data System from the Bureau of Primary Health Care. Regression models were used to estimate the effect of individual insurance coverage and the CHC capacity on the measures of access to care. Study results suggest insurance coverage expansions are a more effective and efficient way to increase access to care among low-income populations, since it is consistent with the fact that lack of money-rather than lack of doctors-is the major reason why low-income people, and uninsured people in particular, have poor access to medical care. Greater investment in CHCs increases overall service use and may improve access to primary medical care (such as through more low-income people having a usual source of care), continued lack of access to specialty services and providers may explain why high CHC capacity does not reduce use of the emergency department or unmet medical needs.

Diamant, A.L., Hays, R.D., Morales, L.S., Ford, W., Calmes, D., Asch, S., Duan, N., Fielder, E., Kim, S., Fielding, J., Sumner, G., Shapiro, M.F., Hayes-Bautista, D., & Gelberg, L. (2004). Delays and unmet need for health care among adult primary care patients in a restructured urban public health system. *American Journal of Public Health*, 94, 783-789.

After facing serious financial problems in 1995, the Los Angeles County Department of Health Services reorganized, placing a greater emphasis on primary care services. In this article, the authors discuss the prevalence of delayed and unmet health care needs among adult LAC-DHS patients, perceived barriers for delayed care, and factors that place patients at increased risk for having delayed care and unmet health care needs. Using a cross-sectional study

design, probability sampling, and survey methods, 2564 patients completed the main interview, of which 1819 were included in the final analysis sample. Based on Los Angeles' diverse population, interviews were conducted in six languages, including English, Spanish, Armenian, Chinese, Korean, and Tagalog. Over two-thirds of the sample was comprised of women and Hispanics/Latinos were the largest racial/ethnic group, accounting for 56% of the sample. One-third of adult patients reported delaying seeking medical care at least once in the past 12 months and 25% had gone without medical care. Common reasons for delaying health care include: not being able to take time off from work, having to care for someone else, not having transportation, and being too sick. The top reason people went without medical care was because they had to spend their money for food, shelter, and clothing. A limitation of this study is that patients may have underestimated or overestimated services they received. However, despite the self-report issues associated the survey research, the public health implications are important. Patients that delay or forego seeking medical care are at increased risk for developing serious health conditions, in turn, placing more financial burden on limited health care budgets. This study should be considered the beginning of a critical analysis process that will allow urban health care systems to continually monitor and remove their patients' barriers to seeking and receiving timely medical care.

Dziura, J., Mendez de Leon, C., Kasl, S., & DiPietro, L. (2004). Can physical activity attenuate aging-related weight loss in older people? The Yale health and aging study, 1982-1994. *American Journal of Epidemiology*, 159, 729-767.

This article reports an original research to determine the longitudinal relation between physical activity and the trajectory of weight change in a cohort of 2,812 persons 65 years and older, who participated in the Established Populations for the Epidemiologic Study of the Elderly between 1982 and 1994. The response rate of eligible participants was 82%. After 12 years, 35% reported the necessary information. Attrition was primarily due to death. The authors hypothesized that body weight would decline over the 12-year follow-up and that physical activity would play an important role in minimizing weight loss over time. At baseline and each 3-year interval, interviews were conducted face-to-face in the participant's home. Interviews for the other annual contacts were conducted by telephone. Physical activity was assessed based on the frequency of four activities at baseline: walking, gardening/housework,

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physical exercise, and active sports or swimming. The authors used random effects modeling to predict the trajectory of body weight change over time and its dependence on physical activity. The model was adjusted for baseline-centered age, sex, height, race, education, housing, functional disability score, mobility, smoking, and the prevalence of chronic conditions. Multivariable random effects regression demonstrated a curvilinear trajectory of weight loss per year with an accelerated loss at older ages. Each 1-unit increase in baseline total activity score significantly attenuated aging-related weight loss by nearly 0.1 lb (0.04 kg) per year among the entire cohort (beta = 0.09, 95% CI: 0.02, 0.15), but this relation was observed only among those with chronic disease. These data suggest that, among frail older people, even modest levels of physical activity can attenuate the rate of aging- and disease-related weight loss. Limitations to the study include the self-report of body weight, the recall of physical activity, and diet as a potential confounder for which no information was collected. The percentage of persons 65 years old or above is much higher in Florida (17.6%) than the U.S. average (12.4%). Although the study population used by Dziura et al. lived in Connecticut, the findings are relevant to Florida as the model controlled for potential confounding factors such as education and housing. The study suggests that a physically active lifestyle can help older Floridians with chronic disease maintain a higher degree of health and function.

Foshee, V.A., Bauman, K.E., Ennett, S.T., Linder, G.F., Benefield, T., & Suchindran, C. (2004). Assessing the long-term effects of the Safe Dates Program and a booster in preventing and reducing adolescent dating violence victimization and perpetration. *American Journal of Public Health*, 94, 619-624.

This article focuses on the four-year post-intervention effects of the Safe Dates Project. The Safe Dates Project is a randomized controlled trial that tests the effectiveness of a school-based adolescent dating violence prevention program. Previous research has shown that one-month after the intervention, the Project had positively changed both actual acts of dating violence, as well as cognitive mediating variables that were presented in the program content. Cognitive risk factor effects were still observed one year after the intervention, but the behavioral changes disappeared. In this study, the authors investigated the effects of the Safe Dates Project and the booster on psychological, physical, and sexual dating violence victimization and perpetration. Gender, race, and pre-program involvement in the problem

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behavior were included as moderating variables in the present analysis. Adolescents were randomly assigned to the booster and nonbooster conditions, so not everyone that participated in the Safe Dates Project received the booster intervention. Instead, this study had 3 groups, Safe Dates only, Safe Dates plus booster, and control. Gender and race did not have any moderating effects on Safe Dates or the booster effects, but prior involvement in dating violence behavior did. Compared to the control group, adolescents in the Safe Dates only group reported perpetrating less physical and sexual dating violence at the four-year follow-up. However, psychological abuse was moderated by prior involvement in dating violence. In terms of victimization, prior involvement in dating violence also moderated the effects of physical victimization at four-year follow up. Safe Dates had a significant effect on sexual victimization and no effect on psychological abuse victimization. Lastly, the booster did not improve the effectiveness of the Safe Dates Project. In fact, adolescents that received both the Safe Dates intervention and the booster experienced more negative outcomes than those in the Safe Dates only group. Regarding perpetration, adolescents in the Safe Dates and booster group reported engaging in more psychological abuse. Victimization was also higher in the Safe Dates and booster group. Compared to adolescents that only received the Safe Dates intervention, when prior dating violence victimization was high, adolescents who were exposed to the booster intervention reported more serious physical and sexual victimization. These results have important public health implications. The Safe Dates Project appears to be a promising program in preventing dating violence. Furthermore, because the program effects were not moderated by race or gender, the program may be effective across various populations.

Fulkerson, J.A., Sherwood, N.E., Perry, C.L., Neumark-Sztainer, D., & Story, M. (2004). Depressive symptoms and adolescent eating and health behaviors: A multifaceted view in a population-based sample. *Preventive Medicine*, 38, 865-875.

This article describes the relationship between depressive symptoms and a variety of health-compromising and health-promoting behaviors among an ethnically diverse population based sample of adolescents. Participants in this study were a subset of adolescents who participated in Project EAT, in the Minneapolis/St. Paul metropolitan area. Adolescent participants completed the 221-item Project EAT survey that assesses a range of factors

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related to dietary intake and weight concerns. Specific concepts and constructs measured in the survey include: depressive symptoms, eating attitudes, weight and BMI, weight concerns and weight control behaviors, meal and snacking frequency, nutritional intake, substance use, and physical and sedentary behavior. Results showed that depressive symptoms were significantly positively associated with health compromising attitudes such as perceived barriers to healthy eating and weight concerns, and health compromising behaviors such as unhealthy weight-control behaviors and substance use among both male and female adolescents. Adolescents who reported more depressive symptoms were also less likely to engage in health-promoting behaviors such as eating breakfast, lunch, and dinner. These results corroborate previous findings related to depressive symptoms and a range of adolescent health behaviors. They also add to the literature by investigating the relationship between depressed mood and health-related attitudes and behaviors regarding healthy eating. The cross-sectional is a limitation, but the new information it provides regarding adolescent depressive symptoms and eating behaviors is helpful to the public health community. This new relationship warrants further investigation and provides new information that may be helpful in fighting obesity and other disordered eating behaviors among American youth.

Gallup-Black, A., & Weitzman, B.C. (2004). Teen pregnancy and urban youth: Competing truths, complacency, and perceptions of the problem. *Journal of Adolescent Health* 34, 366-375.

This article investigated differences in community leader, general adult, and youth perceptions about teen pregnancy in Baltimore, Detroit, Philadelphia, Oakland, and Richmond. The results show divergence between each group's perceptions. Most community leaders did not report teen pregnancy as a serious problem in their city, whereas over half of adults surveyed believed teen pregnancy was a serious problem in their community and half of youth reported that being a teen parent was considered acceptable. The authors discuss the difference in perceptions and offer possible explanations why this may be occurring. First the authors engage the reader by highlighting two different truths they feel may be responsible for the observed discrepancy in perceptions. They then discuss teen pregnancy in relation to the cyclical pattern that many public health problems experience – crisis to improvement to complacency, then back to crisis. Limitations of the study include that the analysis is not longitudinal and

that the authors do not have comparable data for other areas. However, even with these limitations, the implications of the findings are still important. Funding for social service programs is always limited, and by only looking to key community leaders to help determine funding priorities and policies can be detrimental to a community's health. Too often people blindly accept that community leaders have their pulse on social and health issues affecting their residents, but this study is a good example of how that is not always the case. Given these results, in the future, funding decisions should be weighed by talking with community members, and not just key informants in the community.

Gee, G.C., & Takeuchi, D.T. (2004). Traffic stress, vehicular burden, and well-being: A multilevel analysis. *Social Science and Medicine*, 59, 405-414.

This study examined both individual perceptions of traffic stress and objectively measured environmental characteristics related to traffic. To test the interaction between individuals and their environments, researchers analyzed data from the Chinese American Psychiatric Epidemiologic Study (CAPES) and 1990 census data. Independent variables included traffic stress and perceived environment, covariates were education, family income, occupational status, gender, and acculturation, neighborhood variables included neighborhood poverty and vehicular burden, and depended variables were mental health and self-perceived general health. Using hierarchical linear modeling, results showed an interaction between individually perceived traffic and objective neighborhood conditions for both mental health and general physical health. The effect of traffic stress on health is worse for persons living in environments with more vehicle use, compared to those living in areas with less vehicle use. The authors suggest that based on the findings from this study, traffic stress may explain some of the association between the perceived environment and health, reported in other studies. However, to understand the potential contributions of general environmental stress and traffic stress specifically, future studies need to measure the two concepts distinctly. One limitation with the study is that due to the cross-sectional design, firm conclusions as to the causal direction between variables cannot be determined. This limitation notwithstanding, the results still have great public health implications. For example, many researchers feel that individual factors related to health are more important than neighborhood factors, but this study reveals that there is no simple dichotomy between individuals and their

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environments, but instead, an interaction, thus, making it important to examine health related factors at both levels.

Gold, M.A., Sucato, G.S., Conrad, L.E., & Adams Hillard, P.J. (2004). Provision of emergency contraception to adolescents. *Journal of Adolescent Health*, 35, 66-70.

In this position paper, the Society for Adolescent Medicine (SAM) asserts its support for increasing awareness of and improving timely access to emergency contraception (EC). They discuss and provide support regarding anticipatory guidance, provisions of emergency contraception, as well as emergency contraception accessibility and advocacy. Under anticipatory guidance, SAM states that adolescent health care providers should routinely provide information and counseling about EC to adolescents, regardless of gender or current contraceptive method. Furthermore, SAM suggest that the counseling should include a description of the method, the mechanisms of action, indications for use, efficacy, safety, common side effects, time limits for use, and where and how to obtain emergency contraception. Under provisions of emergency contraception, one thing that SAM suggests is that adolescent health care providers prescribe progestin-only EC because of higher efficacy and lower-side effects. They also stress that adolescent health care providers and pharmacist need to maintain the same degree of confidentiality when providing EC as they do when providing other reproductive health care. For accessibility and advocacy, until EC is available over-the-counter, SAM urges adolescent health care providers to offer all female adolescents an advance prescription or medication to take home for future use.

Guendelman, S., & Pearl, M. (2004). Children's ability to access and use health care. *Health Affairs*, 23, 235 - 243

The purpose of this study was to compare the extent to which child-only and family coverage (child and parent insured) ensure health care access and use for children in working-poor families. Almost ten million children (13%) and more than twenty-six million adults (16%) lacked health insurance coverage in 1999. Working-poor families faced the highest risk in securing access to care. Extending coverage to parents may benefit their personal access and use but not that of their children. Alternatively, since children depend on parents to enroll them in insurance programs and to arrange for care, health care financing to meet parents' needs may be an effective

way to improve access and use for their children. The data was collected by the National Center for Health Statistics in a longitudinal study of the civilian, noninstitutionalized U.S. population. The study used chi-square tests to determine statistical significance between the three study groups. Logistic regression was also used to determine if differences persisted after controlling for socio-demographic factors. The study found, as expected, children without family coverage were far more likely than the two groups of insured children to experience difficulties in access to and use of health care.

Holmes, M.D., Liu, S., Hankinson, S.E., Colditz, G.A., Hunter, D.J., & Willett, W.C. (2004). Dietary carbohydrates, fiber, and breast cancer risk. *American Journal of Epidemiology*, 159, 732-739.

The authors hypothesized that high carbohydrate or glycemic load intake would increase breast cancer risk primarily in overweight women. They prospectively examined the association of dietary fiber, fiber fractions, carbohydrate, glycemic index, and glycemic load with the risk of breast cancer during 18 years of follow-up in 88,678 women (age 34-59 years at baseline) in the Nurses' Health Study. Data collection for this study began in 1980, when a 61-item food frequency questionnaire designed to assess dietary intake was included in the questionnaires sent to Nurses' Health Study participants. In 1984, 1986, 1990, and 1994, an expanded food frequency questionnaire was used. Follow-up of the initial cohort for this analysis was 96 percent complete through 1998. Included were 4,092 invasive breast cancer cases. Overall, the authors found no significant association between intake of carbohydrates, dietary glycemic index and glycemic load, total fiber, and risk of incident breast cancer. The relative risks for the highest versus the lowest quintile of intake were 0.97 (95% confidence interval (CI): 0.87, 1.08) for carbohydrates, 1.08 (95% CI: 0.97, 1.19) for glycemic index, 0.99 (95% CI: 0.89, 1.10) for glycemic load, and 0.98 (95% CI: 0.87, 1.11) for fiber. The relative risk comparing those in the highest 0.7% of fiber intake (>30 g/day) with those in the lowest 10% of fiber intake (<=10 g/day) was 0.68 (95% CI: 0.43, 1.06). The authors also performed secondary analyses, stratified by menopausal status and body mass index, and sensitivity analyses looking at the exposure in many different ways, and were unable to find an association between fiber intake and breast cancer risk. A potential limitation is that dietary intakes may be measured with error. However, the authors point out that high intakes of cereal fiber and a low dietary glycemic load measured in the same population with

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the same dietary assessment have been associated with a reduced risk of both coronary heart disease and type 2 diabetes. According to the National Center for Health Statistics, breast cancer is the most frequently diagnosed cancer among females. The incidence rate was more than 130 new cases per 100,000 population in every year between 1995 and 1999. Meanwhile, in 1999-2000, 62% of females between the ages of 20 and 74 were overweight. There is evidence of an association between weight gain and breast cancer. Many diets for weight control advocate or restrict the intake of certain nutrients. Knowledge gained from studies such as this one is relevant in the choice of diets.

Isaacs, S.L., & Schroeder, S.A. (2004). Class – the ignored determinant of the nation's health. *New England Journal of Medicine*, 351, 1137 – 1142.

Much attention has been given to racial and ethnic disparities in health while large differences between the haves and have-nots have been ignored. A 2003 Institute of Medicine report concluded that compared to the early 1900's, Americans today are healthier, live longer, and enjoy lives that are less likely to be marked by injuries, ill health, or premature death. However, according to the authors, all members of the society do not share equally this improvement in health. People in upper classes - those who have a good education, hold high-paying jobs, and live in comfortable neighborhoods - live longer and healthier lives than do people in lower classes, many of whom are black or members of ethnic minorities. And the gap is widening. The authors contend that although race and class both have an effect on health, the effect of class is even more powerful than the effect of race. The authors suggest that the nation's health policy should be redirected to target the poorest citizens in order to improve overall health. This re-focusing would require the following policy steps: 1) collecting better data on class; 2) understanding how class influences health; and 3) advancing social and economics policies that will improve health. The authors conclude that if the nation is serious about improving health of its people, we will have to go beyond expanding medical care, changing unhealthy behavior, and improving the environment and give more attention to social policies that address class - as well as the racial and ethnic - differences that underlie illness and premature death.

Johnson, C.E., Hedgecock, D.K., Oakley, M.L., Dobalian, A., Salmon, J.R., Hyer, K., &

Polivka, L. (2004). Predictors of lawsuit activity against nursing homes in Hillsborough County, Florida. *Health Care Management Review*, 29, 150-158.

This article examined the effects of quality, nursing levels, size and ownership on the litigation experiences of twenty-eight nursing homes in Hillsborough County, Florida. On May 21, 2001, Florida Governor Jeb Bush signed into law Senate Bill 1202, which was designed to reform the way long-term care was provided in the state. The growing elderly population, shrinking Medicaid budgets, and concerns about the quality of care in nursing homes were at the forefront of the legislative agenda. Nursing home and assisted living facility (ALF) industry complaints about increasing litigation and liability costs further motivated state government action to ensure the future viability of Florida's long-term care system. The data used in the study were gathered as part of the Hillsborough County Courthouse Project that was funded under the Florida legislature's "Task Force on Availability and Affordability of Long-Term Care." Variables were analyzed using autoregressive time series techniques to determine the influence of nursing home quality and structure on the number of lawsuits filed against a facility over time. The authors hypothesized that nursing homes would have more lawsuits filed against them if the home (1) has poor quality of care, (2) has more financial resources available to them, and (3) is more exposed due to the size of the facility. The study controlled for the acuity level of the residents. The results of the analysis showed that quality did not show any significant effect on reducing litigation. However having the recommended levels of registered nurses did reduce the likelihood of litigation but other nursing staff (i.e. CNAs, LPNs) did not effect litigation. Additionally, the study found that being a member of a system or chain and the size of the nursing home were significant elements in increasing the likelihood of litigation. Both of these resource-related variables indicated that system membership and large nursing homes were more likely to be sued in Hillsborough County. For-profit status was not significant and neither was an increased presence of Medicaid residents in the nursing homes. The data in this study provide insights about litigation activity against nursing homes in Hillsborough County, Florida, but the small number included in the study limits the generalizability of these findings to other contexts.

Lytle, L.A., Murray, D.M., Perry, C.L., Story, M., Birnbaum, A.S., Kubik, M.Y., & Varnell,

S. (2004). School-based approaches to affect adolescents' diets: Results from the TEENS study. *Health Education & Behavior*, 31, 270-287.

The Teens Eating for Energy and Nutrition at School (TEENS) was a two-year randomized trial conducted in 16 middle schools in the Twin Cities, Minnesota, from 1997-2000. The eight intervention sites received the TEENS program for two years – 1998 to 1999 when the study participants were in seventh grade and continuing through 1999 to 2000, when participants were in 8th grade. The control schools received the program materials and trainings in Fall 2000, after the follow-up survey had been conducted in the intervention schools. The TEENS intervention was a multi-level intervention that was developed using a Social Cognitive Theory framework with a primary goal of increasing students' fruit, vegetable, and lower fat food intake. The program had three intervention levels – the classroom, the family, and school wide components, and after the first year, the program showed positive effects on students' fruit and vegetable consumption. The focus of this article is on the outcomes of the TEENS program at the end of the two-year intervention period. In particular, this article reports on the student level outcomes of the TEENS intervention. Fruit and vegetable scores, food choice scores, and 24-hour recalls were all used to measure the outcomes. The data did not show many statistically significant differences between the control schools and the intervention schools. The original improvement in students' fruit and vegetable consumption after one year was not maintained at the end of the intervention. The only statistically significant difference between intervention and control samples was students' food choice scores. Students in the experiment schools had higher food choice scores, indicating making lower fat food choices more often. Possible explanations for these findings are discussed, including poor training of the teachers and program implementation infidelity. Despite the disappointing findings, the TEENS intervention still has important public health implications. For example, the TEENS intervention was one of the first nutrition focused, multilevel, school based studies conducted in middle schools. Its creation and implementation have made an important contribution to the field, and because the seventh grade curriculum is available on the Web, utilizing the authors' recommendations, the TEENS intervention can be implemented and tested in other communities.

Mays, G.P., McHugh, M.C., Shim, K., Lenaway, D., Halverson, P.K., Moonesinghe, R.H.

(2004). Getting what you pay for: public health spending and the performance of essential public health services. *Journal of Public Health Management and Practice*, 10, 435-443.

Increasing evidence suggests that the quality and availability of public health services vary widely across communities but little is known about why these variations exist. One plausible reason is the amount of funding available for public health services, but funding alone does not explain the variation in performance. This study used data from local public health systems that participated in the National Public Health Performance Standards Program pilot tests between 1999 and 2001 to examine the association between public health spending and the performance of essential public health services. Results showed that performance varies significantly even after controlling for system and community characteristics. The authors suggest that a better understanding of the relationships between public health spending and performance will allow policy makers and administrators to make more informed decisions about the nation's investments in public health. This is particularly important during periods of change when resources may become more limited.

McDowall, I., Spasoff, R., & Kristjansson, B. (2004). On the classification of population health measurements. *American Journal of Public Health*, 94, 388-393.

The emerging field of population health has been influenced by a variety of academic traditions. Consequently, there are diverse approaches and much debate over definitions and conceptual models. Growing attention has been paid to the field of measuring population health status. There are currently two contrasting approaches to population health measurement. The first approach, called the descriptive model, considers the equity of the distribution of health in the population. The second is referred to as the analytic model and uses a conceptual and analytic approach to explain why some people are healthy and others are not. These authors argue that there should be a full array of measures classified into those that fit the descriptive model and those that are relevant to the conception of population health as a broader, analytic field of study. The three dominant conceptualizations of health are the biomechanical model, in which the body is viewed as a machine; the holistic model, which emphasizes multidimensionality and the concept of positive health; and the dynamic model, which sees

health as a process. The authors suggest that the first step in selecting measures is to arrange the potential indicators into a framework that clarifies their appropriateness for various purposes. They recommend that the biomechanical model be used for descriptive and evaluative measurement. Possible indicators include mortality and morbidity as well as disease-specific clinical care outcomes. The holistic and dynamic models were combined to be used for predictive and analytic measurements. Indicators for this model of health include risk factor rates, screening for early disease, and genetic profiling. The framework portrayed suggests that population health measurement be expanded beyond aggregated individual indicators.

Mellor, J., & Milyo, J. (2004). Individual health status and racial minority concentration in US states and counties. *American Journal of Public Health*, 94, 1043-1048.

Persistent disadvantages in all cause mortality have been documented in African Americans of both genders at various ages and are mirrored in cause-specific mortality rates associated with numerous conditions such as cardiovascular disease and cancer. Several ecological studies have reported that mortality rates are significantly greater in states, metropolitan areas, counties, and zip codes where African Americans comprise a higher proportion of the population. This study examined whether the positive association between mortality rate and racial concentration found in ecological studies would be found for health status after controlling for race/ethnicity, socioeconomic status, and region of residence. The region of residence was categorized as New England, Mid-Atlantic, East North Central, West North Central, South Atlantic, East South Central, West South Central, Mountain, or Pacific. The data was derived from the Current Population Survey that surveyed over 185,889 individuals. With the exception of older whites, results revealed that the racial minority concentration was not associated with health status after controlling for individual characteristics and regional factors. The authors concluded that racial concentration may not be a determinant of individual health and migration patterns may explain the results found for older whites.

Reichert, T.A., Simonsen, L., Sharma, A., Pardo, S.A., Fedson, D.S., & Miller, M.A. (2004). Influenza and the winter increase in mortality in the United States, 1959-1999. *American Journal of Epidemiology*, 160, 492-502.

This study evaluated the occurrence and cause of winter excess mortality, defined as the number of deaths above the summer trough. Using National Center for Health Statistics data, the authors analyzed monthly mortality in the United States during a 40-year period for four major disease classes: pneumonia and influenza, ischemic heart disease, cerebrovascular disease, and diabetes. These diseases accounted for a large percentage of annual all-cause mortality and about 80% of excess all-cause mortality during winter seasons. The authors generated mortality rates from census data and adjusted them to the age distribution of the 1970 U.S. population. They also used a statistical method to remove long-term trends and to standardize variations in disease-attributed mortality over time. They found these results: (1) In approximately 85% of comparisons among the disease classes, the monthly peaks for ischemic heart disease, cerebrovascular disease, and diabetes coincided with the peak for pneumonia and influenza. (2) Time series analyses pointed to a high likelihood that the process underlying the seasonal component of mortality for the diseases studied was the same. (3) There was a strong correlation between the magnitude of the seasonal component of mortality and both the severity and the dominant influenza subtype of each influenza epidemic. (4) A shift in age distribution to younger ages (less than 75 years) during influenza pandemic seasons coincided with similar shifts in age distribution for the other diseases. The authors conclude that influenza is most likely the single cause of winter-season excess mortality. Temperature and other environmental factors are not primary factors in the winter-season increase in mortality, although they may be modulating variables. In 2000, the age-adjusted death rates for ischemic heart disease, cerebrovascular disease, diabetes, and influenza in the United States were 186.8, 60.9, 25.0, and 23.7 per 100,000 population, respectively. These four diseases caused approximately 35% of all deaths. If it is known that the cause of excess winter seasonal mortality is influenza, better prevention of and control measures for influenza will help control excess mortality not only in the case of influenza but also for the other diseases.

Rosenblatt, R. (2004). A view from the periphery – health care in rural America. *New England Journal of Medicine*, 351, 1049-1051.

This article examines some of the challenges faced by the health care system in rural America. According to 2000 U.S. census, 20 percent of the nation's population resides in rural areas. Rural inhabitants are generally older, poorer, and less likely

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to have health insurance than inhabitants of urban areas. A documented characteristic of the rural health system is the shortage of health care professionals. Although the flow of physicians to rural areas can be increased by selecting students from rural areas for medical school training, because of the weak public schools in rural areas, the number of students from these areas gaining admission to medical schools has decreased by 50% over the last 10 years. In addition to growing physician shortages, rural hospitals have been greatly affected by the shift in Medicare reimbursement. However in an effort to rescue rural hospitals, Congress established a rural inpatient facility known as the Critical Care Facility in 1997. By 2005, the majority of the rural hospitals will be classified as Critical Care Facilities. According to the author, ensuring stability is a challenge. Because of the small size of many rural delivery systems, the loss of a hospital or a provider can undermine an entire local system. Congress has temporarily created an island of fiscal equilibrium for smaller rural hospitals through the Critical Access Hospital program. However, a concerted national policy to sustain strong rural health care institutions - and the personnel to staff them - is needed to ensure that access to and quality of care to populations in rural areas.

Rowitz, L. (2004). Ten tools for practice learning. *Journal of Public Health Management and Practice*, 10, 368-370.

Public health leaders believe that it is important for professionals to develop a toolkit filled with techniques to enhance public health practice skills. Teachers of public health practitioners find and use special learning skills and tools for individuals who spend their day to day lives working in public health with communities. This paper explores ten tools used to enhance the learning of public health practitioners. These tools include: *Case studies*: A case study often uses a real-life incident sometimes disguised in order to demonstrate how public health professionals handle an event or series of events. *Stories*: Stories are variations of the case study but are written from the vantage point of one public health professional who describes his/her experiences and career in the public health field. *Exercises and games*: These tools are useful in demonstrating critical skills such as problem-solving. They also make learning fun by using an interactive approach. *Site visits*: Many training programs have adopted site visits to demonstrate public health in action. *Practicum and work study*: This tool, used by schools of public health, involves the learner in an actual work situation where the learner becomes a participant in

his or her learning experience. *Participative research methods*: This method involves community partners in research to learn about which programs work and why. *Team building*: Participants learn the differences between traditional work groups that are dominated by the group leader who assigns work to the members and a team in which the leadership is shared and work assignments are developed and assigned in a participative manner. *Learning contracts*: This idea provides a tool to lay out a personal learning agenda for professionals who wish to pursue a lifelong learning approach to their professional development. *Systems thinking tools*: The specific tools of systems thinkers are archetypes that are systems models that learners use to analyze social processes. *Mentoring*: Mentoring and learning to be one is a critical set of skills for the practice teacher and the practice learner. The mentor learns as much as his or her mentee from the mentoring relationships.

Stettler, N. (2004). The global epidemic of childhood obesity: Is there a role for the paediatrician? *Obesity Reviews*, 5, 91-92.

Stettler cited a report of the International Obesity Task Force to the World Health Organization estimating that about 10% of young people age 5-17 years are overweight, among which 2-3% are obese. This amounts to 30 to 45 millions of obese children worldwide in the year 2000. The author points out that the pediatrician has an important role in this global epidemic of childhood obesity. When parents and the society are concerned about child health, they turn to health professionals caring for children and adolescents, such as pediatricians. Along with families, pediatric practices are one of the few institutions to follow children from birth to age 18 years. However, most pediatricians feel unprepared, ill-equipped, and ineffective to address the problem. They often do not have the training and skills for weight management using behavior modification. Such programs are difficult to implement in the office setting under the classic acute pediatric care model. In many countries without socialized medicine, these programs are not financially compensated. One solution may be to involve partners, such as nurses, teachers, and parents. Some guidelines exist on how to use the pediatric primary care setting for obesity prevention, but empirical research in this setting is lacking. The author suggests that optimization of children's health should use the chronic care model and include increases in physical activity and improvement in nutrition. Simple screening and treatment guidelines suitable for children and adolescents should be developed for

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conditions previously limited to adults, such as insulin resistance, hypertension, and psychosocial complications of obesity. Pediatricians are in a good position to advocate in the name of children for environmental and political changes that will be necessary for effective prevention. According to the Florida Department of Health, the prevalence of obesity is increasing at an alarming rate in Florida. From 1998 to 2003, the prevalence almost doubled, from 10.4% to 19.9%. In the 2003 Florida Youth Risk Behavior Survey, 29.1% of high school students perceived themselves as slightly or very overweight. Because childhood and adolescent behavior often carries over to adult life, active involvement of pediatricians in fighting the epidemic of childhood obesity, along the lines suggested by Stettler, will be beneficial in the prevention of obesity overall.

Tilson, H., & Gebbie, K.M. (2004). The public health workforce. *Annual Review of Public Health*, 25, 341-56.

This article discusses steps necessary for the development of a competent public health workforce, as well as likely barriers that will be encountered along the way. The review is organized into nine sections: Introduction, Defining the Workforce, Documenting the Workforce, Competencies, Training the Workforce, Certifying the Workforce, Accreditation of Agencies and Systems, Researching the Workforce: The Research Agenda, and Advancing the Workforce: The Way Forward. In the "Defining the Workforce" section of the article, the authors discuss how in order to measure and evaluate the workforce, a strong definition of the nature, scope, and extent of the work performed is necessary. Several key questions raised include how is public health work defined? Is it defined by the setting in which one works? Or is it defined by the credential one carries? Is public health a profession? And if so, who among the workforce should be considered a "professional"? To document the public health workforce, the article reveals a 2000 estimate that 44% are professionals and over 50% of the workforce has at least a college education. Furthermore, 34% of identified workers were at the local level, 33% state, and 19% federal, with the other 14% consisting of the faculty and students in the schools of public health, as well as staff at three voluntary organizations. In the "Competencies" section, the IOM's current and future recommendations regarding competencies are discussed. In the "Training the Workforce" section, the authors report the results of the IOM committee that studied education for the 21st-century of public health, including eight new educational areas in

which to achieve competency. Other information presented in the article include: barriers to requiring the public health workforce to be certified, including financial cost; the need for the Secretary of HHS to appoint a commission to investigate the feasibility and usefulness of an agency accreditation system; and the need to address the lack of systematic understanding of dozens of areas related to competent public health workforce. Because the workforce is the backbone to our countries public health infrastructure, this article has implications for the future of public health. It synthesizes several IOM reports, and puts the urgency of a competent workforce in the forefront of the profession.

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