

Preventing illness, preserving health

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“We know that preventing disease before it starts is critical to helping people live longer, healthier lives and keeping health-care costs down. Poor diet, physical inactivity, tobacco use and alcohol misuse are just some of the challenges we face. We also know that many of the strongest predictors of health and well-being fall outside of the health-care setting. Our housing, transportation, education, workplaces and environment are major elements that impact the physical and mental health of Americans. This is why the National Prevention Strategy helps us understand how to weave prevention into the fabric of our everyday lives.” —DR. REGINA BENJAMIN, U.S. SURGEON GENERAL

The epicenter of public health is prevention—vaccinations to avoid diseases, hand washing to stop germs from spreading, nutritional guidelines to keep bodies strong.

Today, the definition of public health must be even broader and deeper as people become more aware of the benefits of staying healthy, says Elizabeth Mayer-Davis, PhD, professor of nutrition in the UNC Gillings School of Global Public Health.

“We know more about prevention now,” she says. “It’s not just about vaccines. It’s about lifestyle—nutrition, activity levels, avoiding drugs and tobacco. The cost of health care is a big factor, too, making prevention even more critical.”

Mayer-Davis is a member of the President’s Advisory Group on Prevention, Health Promotion and Integrative and Public Health. (Sharon Van Horn, MD, MPH, alumna of the School’s epidemiology department, also is a member.) The group, headed by U.S. Surgeon General Regina Benjamin, MD, is debuting the recently completed National Prevention Strategy. (See <http://tinyurl.com/prevention-strategy>.)

Schools of public health—especially ours—are well positioned to leverage the momentum toward greater prevention.



Dr. Jennifer Smith, Dr. Peggy Bentley (holding Anneliese Bell) and former N.C. state health director and Gillings Visiting Professor Dr. Leah Devlin conduct prevention activities locally, across the state and around the world.

“Much of our research is consistent with the National Prevention Strategy,” Mayer-Davis says. “We find ways to improve health—like making better food choices to prevent or control diabetes—and then develop ways to translate that research into practice in our communities. As we move across the spectrum from basic research to implementation, we think about the entire context of improved health. Prevention is a huge part of that.”

This issue of *Carolina Public Health* focuses upon prevention advances being made by our faculty members and students. It features our work in infectious diseases; cancer; chronic, obesity-related illness; accidents, injuries and violence; environment; reproductive and family health; genetics; and preparedness. Other significant prevention activities include:

- **Tobacco use**—Kurt Ribisl, PhD, professor of health behavior and health education,

has shown that stricter enforcement of laws banning online purchase of cigarettes will keep more teens from smoking, preventing long-term health consequences.

- **Breastfeeding**—Mother’s milk increases immunity to various diseases and helps prevent conditions, including asthma, as children age. Professor of the Practice and director Miriam Labbok, MD, and others in the Carolina Global Breastfeeding Institute advocate for rights of mothers to breastfeed.



PHOTO BY LINDA KASTLEMAN

- **Access to clean water**—Jamie Bartram, PhD, environmental sciences and engineering professor, directs the School’s Water Institute at UNC, which partners with diverse others to solve critical global issues in water and sanitation. The institute’s annual conference brings together world experts to share research and brainstorm solutions for public health challenges, including global climate change.
- **Better vaccines**—Drs. Noel Brewer and Jennifer Smith conduct research on and advocate for cervical cancer prevention and screening. Studies of the human papillomavirus (HPV) vaccine have shown it to be a safe and effective preventive



Dr. Kurt Ribisl



Dr. Noel Brewer



Dr. Jamie Bartram



Dr. Beth Mayer-Davis

for cervical cancer. (Read more about their Cervical Cancer-Free NC program at www.ccfnc.org.) Brewer is associate professor of health behavior and health education; Smith is research associate professor of epidemiology.

- **Dental health**—Health policy and management professor Gary Rozier, DDS, has shown that when physicians screen for caries in youngsters and apply fluoride, they can prevent several poor health outcomes that start with early-onset tooth decay.
- **Healthy Spaces**—Active Living By Design, directed by Sarah Strunk, MHA, collaborates with local and national partners to build a culture of active living and healthy eating. Whether it’s a playground in Burnsville, N.C., or a corner store providing healthy food in Baldwin Park, Calif., this program collaborates with communities to find specific ways to improve health. Established by the Robert Wood Johnson Foundation, ALBD is part of the School’s North Carolina Institute for Public Health.

Carla Smith Chamblee Distinguished Professor of Global Nutrition Margaret (Peggy) Bentley, PhD, associate dean for global health, has conducted nutrition projects with children in India, Malawi, Peru, eastern North Carolina and many other places.

“I have been so privileged to study infant feeding, growth and development across cultures, both within North Carolina and around the world,” Bentley says. “This has given me a unique perspective for understanding the problems and how to address them through prevention. What we learn locally makes us smarter as we approach similar problems globally. Part of prevention is learning from experience in one place and avoiding the same problems in another.”

—Ramona DuBose

Editor’s note: Managing editor Ramona DuBose leaves UNC as this issue goes to press. We are grateful for her leadership and guidance and wish her well.

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—ELIZABETH MAYER-DAVIS, PHD, PROFESSOR OF NUTRITION