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CAMPUS NEWS

100 Years and counting for Epidemiology and Environmental Health

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Faculty and staff from the Department of Social and Preventive Medicine, then part of the UB medical school, gather outside their offices at 2211 Main St. near Sisters Hospital, in approximately 1989.

By GRACE LAZZARA

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"This 100th anniversary celebration is an opportunity to understand and commemorate our history, and to look to the future in a time of rapidly changing public health challenges."

Jo Freudenheim, UB Distinguished Professor and chair
Department of Epidemiology and Environmental Health

› Epidemiology and Environmental Health's noteworthy names

Even as the then-University of Buffalo's Medical School battled its city's calamitous outbreak of the deadly influenza pandemic of 1918 and 1919, its board recognized the growing need for knowledge and practitioners to address ever-present epidemic diseases that threatened public health worldwide. Taking action, UB founded the Department of Hygiene and Public Health in 1919, becoming one of the country's first universities to devote an academic department to training public health officers and studying epidemic diseases.

Today, the department goes by the name Epidemiology and Environmental Health and is part of UB's School of Public Health and Health Professions. It is celebrating 100 years of evidence-informed education, groundbreaking research, notable researchers and community engagement. The need for education and practitioners in public health is no less urgent today than 100 years ago, according to Jo Freudenheim, UB Distinguished Professor and department chair.

"This 100th anniversary celebration is an opportunity to understand and commemorate our history, and to look to the future in a time of rapidly changing public health challenges," Freudenheim says. "For a relatively small department, a notably large number of the leaders in the field of epidemiology and in public health more generally have conducted research and studied in our program. We also want to honor their contributions."

To mark the occasion, the department is holding a weekend of special events May 30 through June 1, including a symposium, the Saxon Graham Lecture and a 100th anniversary dinner. More details and registration information are available online.

Temporary Contagious Disease Unit, Ernest Wende Hospital, 456 Broadway at Spring St., ca. 1910.

Evolving commitment

The creation of the Department of Hygiene and Public Health in 1919 was, in fact, a natural evolution of activity already underway for some years at UB:

- 1845: Austin Flint, a founding faculty member of UB's medical school, publishes an examination of a local outbreak of fever. Several years later, this work is referred to by John Snow, the "father of field epidemiology."
- 1891: Public health and hygiene courses appear in the UB medical school catalog.
- 1912: A course in hygiene is required for the medical school's third-year students.
- 1913: Hygiene and Sanitation becomes a formal division in the medical school.
- 1918-19: During the flu epidemic, medical students serve as aides in Buffalo hospitals and a temporary medical center set up in a high school.

But by creating Department of Hygiene and Public Health, UB put a clear stake in the ground, dedicating real resources to the promotion of public health.

Starting out with three instructors, including department co-founder and socially conscious physician Walter Goodale, Hygiene and Public Health evolved in myriad ways. The range of topics it offered widened. The research that faculty conducted grew in complexity. The number of students grew. Over time, as the focus of the department changed, so did its name — from Hygiene and Public Health to Preventive Medicine and Public Health in 1946, Social and Preventive Medicine in 1967, and to Epidemiology and Environmental Health in 2014.

Over the past 100 years, department investigators have been involved in cutting-edge research on such topics as typhoid, the measles and polio vaccines, and hypertension, cancer and other chronic diseases. During the 1950s, department researchers, working with collaborators at Roswell Park, conducted work on diet and other factors related to ethnicity in relation to cancer. A 1950s study examined the link between respiratory diseases and air pollution, the results of which helped federal regulators develop the standards for 1970's Clean Air Act. One of the field's first community-based studies of a random population sample—the Buffalo Health Study—was completed in the 1960s.

The 1980s saw growth that included new faculty who focused on what were then up-and-coming fields like cancer and cardiovascular and reproductive epidemiology, examining exposures such as alcohol consumption, hormone use, diet and environmental toxins. The 1990s brought more diversity in fields of study, including work on genetic variation, and the contribution of department faculty in the design and implementation of the Women's Health Initiative, a large clinical trial and observational study examining the major causes of illness and death in postmenopausal women.

Continuing the fight

Today, the Department of Epidemiology and Environmental Health offers even greater resources in the effort to improve the health of communities. In addition to its focus on epidemiology, it now includes the divisions of Environmental Health Sciences and Health Services Policy and Practice. Research on topics such as the effects of the microbiome on chronic disease, air pollution and reproduction, transgenerational effects of arsenic exposure and the effects of nutrition on growth in low- and middle-income countries continue the department's record of producing relevant research with an impact on public health both locally and globally.

Even with the vast changes in health and health care during the past century, the department's focus "has always been on understanding how best to prevent disease, deliver care and teach researchers and practitioners about public health," Freudenheim says. "We have concerns with both infectious and non-infectious diseases. Flu remains an important health issue. We are very proud of the students who have come through our programs and gone on to practice, teach and do research in public health. We are continuing to develop the leaders who will help us meet current challenges and the ones yet to come."