



America's Coming of Age

By Darrell Smith

As the average American gets older, EPA decides to examine the environmental factors affecting the elderly.

The aging American is the center of many public policy discussions, ranging from health care access and costs, to affordable housing and now, with EPA's Aging Initiative, environmental health. This March, EPA announced its plans to develop a *National Agenda for the Environment and the Aging: Setting Priorities for Research and Education to Address Environmental Hazards That Threaten the Health of Older Persons*, conceived by former EPA Administrator Christine Todd Whitman.

With increases in longevity and the graying of America, concern for the elderly is an emerging public health issue.

Why is EPA focusing on the elderly? First, it's common for environmental health research to center on sub-populations, to better understand and control disproportionate exposures and risks. Second, the older American population is rapidly growing in number and is – without question – one of the most powerful groups in the nation.



three examples demonstrate that there are very real environmental factors that can disproportionately affect the elderly.

So why now is EPA directing efforts toward aging Americans? To begin with, the number of elderly persons in the population is increasing. The large group known as “baby boomers” will begin to turn 65 in the year 2011. According to EPA, in the year 2025, California and Florida will continue to have the greatest number of residents 65 and older, and globally, the proportion of persons aged 60 and older is expected to double by 2050, from 10 to 21 percent.⁴ A group that will comprise such a significant portion of the population will undoubtedly continue to receive attention from a number of policy makers.

Who makes up the aging population? That depends on whom you ask. EPA does not provide a definitive age. Kathy Sykes, senior advisor with the EPA Aging Initiative, states, “people age at different rates.” In research performed by The National Council of the Aging, survey participants were asked to “identify the chronological age at which ‘the average man’ and ‘the average women’ become middle-aged, old, and very old.” Respondents aged 65 and older said middle age started at age 50 to 53, old age at 70 to 75, and very old age at 80 to 85.⁵

Third, there are clear instances where stressors – such as heat, microbial contaminants and certain environmental pollutants – more markedly affect the elderly.

Data from France show that the elderly bore the brunt of the oppressive heat wave that stifled much of Europe this summer. At press time, estimates suggested that 10,000 people died as the result of the heat wave, the majority of whom are older than 75.¹ West Nile virus provides another instance of increased sensitivity or susceptibility of the elderly. In Colorado, the state hardest hit in this year’s disease spread, of the seven deaths to date, the youngest person was 68.² Recent studies have also linked PM10 exposure to the premature death of people who already have heart and lung disease, especially the elderly.³ These

EPA found a suitable home for the Aging Initiative in its Office of Children’s Health Protection, which is already equipped to focus on sensitive sub-populations, and to examine issues across all media (air, water, etc.). To help guide program development, EPA has held six listening sessions around the country this spring. Comments were sought under three broad categories: 1) research gaps in environmental health; 2) preparation for an aging society; and 3) encouraging older adults to volunteer for environmental work. The public was invited to give brief statements aimed at helping the EPA devise a national agenda for the elderly, and former EPA Administrator Whitman participated in some of the sessions. Across the country, a few common themes emerged from the public participants: protesting the senior “death discount” (a controversial cost benefit method recently reported on by the media), and objecting to the EPA’s Clear Skies initiative. ACC was one of the few industry groups that participated.

So, what will be the focus of the Aging Initiative? It is difficult to say at this time. EPA does not expect the draft of the national agenda to be released until early 2004. However, we have learned that EPA’s Aging Office’s efforts appear to be centered on outreach, education and research.

At the listening sessions and in dialogue with EPA, ACC has urged that EPA should keep the following points in mind when developing the national agenda:

- People are living longer and healthier lives, due at least in part to the advancements provided by the business of chemistry. During the early portions of the past century, life expectancy increased dramatically as a result of reductions in infant mortality. Great reductions in mortality from infectious diseases through chlorination of drinking water was one of the most remarkable public health achievements during that time period. However, in more recent decades technological advances facilitated by the science of chemistry have increased life expectancy primarily through improved longevity of older Americans.
- Since the creation of the EPA in 1970 and associated efforts of the chemical industry, the concentrations of many chemicals such as lead, mercury, PCBs and pesticides have markedly declined in the environment. Moreover, the continued oversight of federal legislation and regulations and the commitment of the chemical industry to Responsible Care provide confidence that these improvements will continue.
- Finally, the long-standing systems of toxicity testing and risk assessment in the United States are designed to provide information for health-protective decisions to cover both the average population and sensitive subpopulations, including aging individuals. In order for EPA to set priorities that will ensure continued advances in length and quality of life for everyone, it will be necessary to focus resources on areas that address the real needs of the elderly and the true environmental hazards that may have an impact on them. According to the Merck Institute of Aging & Health and The Gerontological Society of America, "... seventy percent of the physical decline that occurs with aging is related to modifiable factors including smoking, poor nutrition, lack of physical activity and injuries from falls." Older Americans are not meeting six of the 10 targets established by Healthy People 2000 (physical exercise, nutrition, weight, pneumonia vaccinations, and injuries and deaths due to falls). Emphasis should therefore be given to the environmental issues related to these factors, rather than on hypothetical concerns of low-level environmental exposures to chemicals, which often lack scientific substantiation.



One thing is clear: The aging community and the chemical industry have a lot to offer one another. The aging population has benefited greatly from a myriad of diverse products created by the business of chemistry, such as clean water for drinking and brushing teeth, products for staying cool, athletic gear for senior athletes (from golf balls to swimsuits), prosthetics, disinfectants and bleach for healthy living, fiber optics for communicating with distant family, photographic film, building materials for retirement dream homes, miracle medicines, and abundant nutrition to enhance the quality of our longer, healthier lives. Further, the chemical industry has benefited from the buying power and influence of the aging population.

As long as EPA continues with this effort, ACC is intent on remaining engaged. We have already reached out to the American Association of Retired Persons, a nonprofit membership organization dedicated to addressing the needs and interests of persons 50 and older, and the Leadership Council on Aging Organizations, a coalition of 50 national nonprofit organizations concerned with the well-being of America's older population. In both cases, our points were well received, and our interest in the issue was appreciated. Neither organization has yet to develop a position on EPA's work, but both have agreed to engage with ACC if they decide to become involved in the Aging Initiative. **C B**

Darrell Smith is a director with ACC's Public Health Team. Contact him at darrell_smith@americanchemistry.com.

¹Litchfield, John. 22 Aug 2003. Holocaust of the elderly: death toll in French heat wave rises to 10,000. Independent.co.uk found at: <http://news.independent.co.uk/europe/story.jsp?story=436017>.

²Washington Post Express. 8 Aug 2003. West Nile Cases Triple in Week.

³Samet, Jonathan M. (2000) National Morbidity, Mortality, and Air Pollution Study.

⁴Environmental Protection Agency. Aging Initiative. 2003.

⁵American Perceptions of Aging in the 21st Century. 2002. The National Council of the Aging.

⁶Cole P. and Rodu B. (1996) Declining cancer mortality in the United States. *Cancer*, 78:2045-48.

⁷Rodu B. and Cole P. (2001). The fifty-year decline of cancer in America. *J Clin Oncol*, 19:239-41.

⁸Arias, E. (2002) United States Life Tables, 2000. National Vital Statistics Reports, Centers for Disease Control. 51, 3.