

**Testimony of
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before the
House Aging and Older Adult Services Committee
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Good Morning, Chairman Mundy, and members of the House Aging and Older Adult Services Committee.

My name is Dr. Stuart Shapiro, and I am President and CEO of the Pennsylvania Health Care Association (PHCA), a statewide advocacy organization for the commonwealth's elderly and disabled residents and their providers of care. Our mission is to ensure that those who need long-term care receive quality services in the most appropriate setting as they age.

Our membership --- comprising for-profit and nonprofit providers --- offers services that range from integrated retirement communities and multi-level care campuses to freestanding nursing homes, assisted living/personal care homes, and ancillary care/home-care enterprises. Overall, PHCA represents more than 300 long-term care and senior service providers that serve over 31,000 elderly and disabled individuals across the state.

I am here, as you know, to testify on the matter of HB 1952 which if passed would require carbon monoxide detectors in residential facilities with care-dependent individuals.

Clearly as an advocate for the commonwealth's elderly and disabled, I am genuinely concerned about any issue which impacts upon their health and safety.

In order to present you with thoughtful testimony we gathered data and did research on this subject and have been able to review documents from the Centers for Disease Control (CDC), the U.S. Consumer Product Safety Association, and various state agencies. This subject has also been written about in several publications including the Journal of the American Medical Association and other medical and forensic journals.

As you all know, carbon monoxide is a colorless, odorless, and poisonous gas that results from the incomplete combustion of fuels such as natural or liquefied petroleum (LP) gas, kerosene, gasoline, oil, wood, coal and other fuels. The health effects related to CO depend upon its concentration in air, the duration of exposure, and its concentration in blood. Carbon monoxide combines with hemoglobin (Hb) and thus interferes with normal oxygenation of blood.

Data on carbon monoxide poisonings in the United States is not very complete because it is not reportable in 37 of 50 states; nonetheless, there are some interesting statistics. According to data reported by the CDC, it appears that between 1999 and 2004, about 75% of deaths occurred in men. From Missouri, where it is reportable, it appears that between 2001 and 2007 slightly over half the carbon monoxide deaths were due to suicide.

Based on older data from the U.S. Consumer Products Safety Association (US CPSA), it appears that of the 75% non automobile CO related deaths, the vast majority were caused by defective heating systems, older systems and the poor maintenance of heating systems. This same study reported that 10% of the CO deaths were related to charcoal grills.

This study also shows, deaths from CO in the US fell almost 50% between 1982 and 1997. Given that heating systems have been improving, I would presume that the number of deaths has dropped further. Again, however, I want to caution that CO related deaths are not reportable in 75% of states so finding and tracking comparable data is very difficult.

To me, the most important data available is that regarding the location of carbon monoxide deaths. The most recent data is from the US CPSC which reported for the period 1993-1997 as follows:

Estimated Non-Fire Carbon Monoxide Poisoning Deaths by Location of Death, 1993-1997

Location of Death	Average Percentage
TOTAL	100%
Home	68%
Temporary Shelter*	14%
Auto	6%
Other**	6%
Unknown	6%

*Temporary Shelter is defined as cabins, recreational vehicles or campers, tents or trailers

**Other includes a restaurant, a motel, and an office building

Clearly, the predominant problem (82%) is with heaters at home and in temporary shelters such as cabins, RV’s, campers, tents or trailers.

The report did not list nursing homes or personal care homes in their data.

We were unable to find any reliable data on carbon monoxide poisoning in Pennsylvania.

With this background, let’s turn to the current status of regulation of CO in Pennsylvania and elsewhere.

Presently, all nursing home facilities in Pennsylvania must adhere to the National Fire Protection Association 101 *Life Safety Code* promulgated by the federal government and already adopted by the Pennsylvania Department of Health. The Life Safety Code has strict airflow and ventilation requirements applicable to nursing homes ensuring that resident air quality is safe.

These requirements are specified for virtually all useable spaces in a nursing facility. Compliance with the air change requirement, per the *Life Safety Code*, prevents the lethal circumstance of carbon monoxide poisoning. In addition, the infrequency with which resident rooms are closed also prevents the buildup of carbon monoxide gas inside a room.

Carbon monoxide, as we discussed earlier, is a chemical produced from the incomplete burning of natural gas such as a unit burning coal, gasoline, kerosene, oil propane or wood. Electric powered heating appliances do not produce carbon monoxide.

Most nursing homes utilize electricity, central hot water systems or packaged heating and cooling units to provide heat to their facilities. Electric powered heating systems pose no threat of carbon monoxide poisoning and packaged heating and cooling units direct gas fumes outside without access to room areas. Additionally nursing homes do not rely on fireplaces with chimneys to heat the facility nor do they operate underground garages. These are potentially other sources of carbon monoxide.

We are in the process of gathering additional data regarding what action, if any, other states have taken on the topic of carbon monoxide. There appear to be a few states which have already legislated the installation of carbon monoxide detectors.

For example, Minnesota requires the installation of carbon monoxide detectors for **all** single family and multifamily dwellings unless the unit is a state-operated unit or is a multifamily dwelling that contains minimal or no source of carbon monoxide. Nursing homes are not treated differently from any other dwelling.

Illinois requires the installation of carbon monoxide alarms in single or multifamily dwellings relying on the combustion of fossil fuel for heat, ventilation or hot water. Again, **this law does not just apply to nursing homes but to every dwelling.**

Massachusetts has a law that requires carbon monoxide detectors for **all** dwellings that use fossil fuel burning equipment.

The Ohio General Assembly has proposed legislation which would require the installation of carbon monoxide alarms in single or multifamily dwellings which have a fossil-fuel burning heater or appliance, fireplace or attached garage. This legislation has merely been introduced in the House and has not passed the General Assembly. We will continue to gather data from other states and pass it to the Committee, if you so desire.

It appears, however, that whenever a state has determined that the threat of carbon monoxide is sufficient to mandate carbon monoxide detectors, the legislative body has determined it is a threat for everyone who occupies a dwelling in the state that burns fossil fuel--not merely nursing home or personal care facilities.

As you all know, I have been an advocate for the elderly and disabled most of my life. If there was a demonstrated problem with carbon monoxide in nursing homes or personal care homes, I would be the first to suggest that an effort be made to expand regulatory authority.

As an advocate for the elderly and disabled of Pennsylvania, we believe that the Commonwealth and the Departments of Health and Welfare have sufficient authority, regulations and laws in

place which ensure proper air quality for and protect the overall elderly and disabled population from the potential threat of carbon monoxide poisoning as well as other potential hazards.

We all agree life safety is a critical issue for nursing homes and personal care facilities within the Commonwealth. To this end, the Department of Health and the Department of Public Welfare regularly inspect nursing homes for any and all threats to a resident's quality of life. As I have already stated the Department of Health has adopted the *Life Safety Code*, a federal standard systematically updated to ensure that facilities do not pose undue risk of harm to its residents. If there is a real or potential problem with carbon monoxide on an individual facility basis, they have the authority to mandate fixing the problem. If they see a systemic problem, they have the current authority to propose regulations dealing with this problem.

Nursing homes, based on publically available data, are already not fully reimbursed for the care they provide to Medicaid residents based on the approved costs by DPW. In fact, they lose about \$12 per day caring for each Medicaid resident. This legislation will simply add new costs without a proven need or benefit and could divert limited resources away from patient care. Thus, if the legislature were to enact this legislation, it is important to not make this another unfunded mandate that takes dollars away from on-going patient care.

If after studying the currently available data on where carbon monoxide poisonings most often occur, and the legislature then deems carbon monoxide poisoning a real problem that should be regulated in Pennsylvania, then we believe that the legislature should require that CO monitors also be installed in homes, RV's, etc along with the facilities listed in the bill, as it is those locations where the largest number of affected individuals appear to reside. That is the approach has been taken by several other states. As an absolute minimum, we recommend that the requirement for a CO detector be extended to the home of any individual who is receiving any health or human service paid for with Commonwealth dollars.

Please allow me to shift briefly to a related subject. We all know the proven benefit of smoke detectors. They are required in nursing homes and personal care homes, and I expect will be rightly required in assisted living facilities when they are licensed. The Philadelphia Fire Department has reported that there have been virtually no fire deaths in homes over the last many years with working smoke detectors. While not the subject of this hearing, I would suggest that rather than mandate carbon monoxide monitors for nursing homes, assisted living facilities, and personal care homes, a greater public good would be to require smoke detectors in the home of everyone receiving any health or human services paid for with Commonwealth dollars.

In conclusion, given this background of unproven need or benefit of carbon monoxide monitors in nursing homes, personal care homes, or assisted living facilities, we cannot support this particular piece of legislation. We do, however, support making acute carbon monoxide poisoning, no matter where it occurs, a reportable disease in the Commonwealth so that data can be gathered to help understand the epidemiology (the who, where, how, etc) of this hazard in Pennsylvania. Once data is gathered and analyzed, decisions about the need for additional regulations can then be made.

Thank you for inviting me to testify.