

# HOT TOPICS

## Long-awaited mortality study released at golf show

**GCSAA-commissioned research says incidences of death to superintendents by cancer are unusually high.**

**IOWA CITY, Ia.**—A new study by the University of Iowa College of Medicine has found abnormally high deaths from cancer—particularly lung cancer—in golf course superintendents who died between 1970 and 1992.

However, Dr. Burton Kross, the study's chief investigator, tells superintendents that "the results of this study cannot and should not be used to draw any cause-and-effect relationships between your profession and cancer."

The study, yet to be submitted for peer review, was commissioned by the Golf Course Superintendents Association of America (GCSAA) to examine and correlate the death certificates of GCSAA members filed between 1970 and 1992. Preliminary results were obtained from 618 death certificates; when the study is completed, up to 750 former GCSAA members may be included.

"The relationships between pesticide exposures and human cancers are uncertain," Kross told an audience at the

GCSAA's annual convention last month in Dallas. "However, evidence is building between specific pesticides and specific human cancers."

Kross said that the results were adjust-

ed to reflect age at death compared to the total population. However, he also said that other factors such as lifestyle and family history—neither of which were studied—could "certainly" be contributing

### GCSAA/Iowa State Epidemiology Study

**Criteria:** white males, former members of the GCSAA whose death certificates were filed between 1970 and 1992.

CAUSE OF DEATH	NO. IN STUDY	P.M.R. <sup>1</sup>	CONFIDENCE <sup>2</sup>
<b>All cancers</b>	<b>179</b>	<b>136</b>	<b>120-153</b>
Byccal	3	90	29-275
Esophagus	5	163	69-388
Stomach	4	78	30-206
<b>Large intestine</b>	<b>29</b>	<b>178</b>	<b>125-253</b>
Liver	1	62	9-437
Pancreas	9	130	68-248
Other digestive	3	161	52-494
<b>Lung</b>	<b>59</b>	<b>127</b>	<b>100-162</b>
Respiratory, non-lung	2	91	23-362
Bone and connecting tissue	3	297	97-909
Skin	2	78	20-307
<b>Prostate</b>	<b>15</b>	<b>229</b>	<b>140-375</b>
Bladder	3	70	23-217
Kidney	3	93	31-282
<b>Brain</b>	<b>7</b>	<b>242</b>	<b>120-488</b>
<b>Non-Hodgkin's lymphoma</b>	<b>9</b>	<b>211</b>	<b>113-395</b>
Leukemia	7	157	78-317

<sup>1</sup>**P.M.R.** = Proportionate Mortality Ratio, the number of observed deaths among superintendents divided by expected deaths from the general population multiplied by 100. (100 equals index for general population. More than 100 equals a more frequent incidence of the specific cause of death among superintendents; less than 100 equals a less frequent incidence.)

<sup>2</sup>**CONFIDENCE** level is 95% that actual P.M.R. is in this range.

Source: GCSAA, Iowa State University College of Medicine

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factors to the high cancer rates.

The study found a higher-than-usual number of deaths from lung cancer. Two other types of cancer, brain and non-Hodgkin's lymphoma, occurred more often in the group. Researchers also found that cancer of the large intestine and the prostate were more common in this group (see chart).



**Kross: no 'cause-and-effect'**

"We can now identify what merits further investigation," said GCSAA president Randy Nichols. "This was the first phase toward looking at the occupational hazards that affect our membership."

New GCSAA executive director Steve Mona says the study is "a baseline for future research."

"We also think this gives us an opportunity to forge new partnerships with groups that can help us," Mona adds. "For example, this is one more reason to work closely with chemical manufacturers in their efforts to develop new technology in products and packaging. Another example could be working with an organization like

the American Cancer Society on the smoking issue."

Allen James, executive director of Responsible Industry for a Sound Environment (RISE), issued a statement in response to the study (see sidebar).

Kross, during his Dallas presentation, made three recommendations to the GCSAA:

- 1) Support programs to help employees stop smoking, and control exposure to secondary smoke by designating non-smoking areas for employees and patrons.
- 2) Minimize exposure to pesticides by carefully following pesticide application label directions and using protective clothing and equipment as much as possible.
- 3) Expand on the GCSAA's programs in pesticide application and training.

Nichols added another point:

- 4) "We need to work closely with chemical manufacturers in their efforts to develop new technology and new packaging."

Though the study was only 80 percent complete, Kross noted that he doesn't expect the final numbers to change drastically, and that releasing such preliminary results was not uncommon in the scientific community.

—Jerry Roche

## RISE's response:

■ "We must caution everyone on the very preliminary nature of the study, and the fact that the researchers have not determined a cause-and-effect relationship for these results.

"While there is no proven link between health issues and practices used to control pests on our nation's golf courses, RISE members endorse research aimed at solutions for health concerns.

"We agree with the need for research. However, as Dr. Kross said, 'one cannot establish cause-and-effect relationship from this data.'

"RISE members believe it is important to note that today's products used for control of pests have undergone an average of 8 to 10 years of stringent health and safety tests before being considered for registration by the EPA. Such products are used safely when applied according to the labeled directions."



—Allen James

## This LM reader sees a federal government that's out of control

■ To the editor:

My wife and I just returned from a week in Washington. We were there to do everything possible to help reduce the Federal Behemoth (aka federal "budget").

Our federal government is out of touch and out of control. It is unresponsive to reason, and its arrogant, regulatory overlords are contemptuous of those who would question their wisdom or motives.

The most recent manifestation of federal omniscience is the Clinton health care disaster. What Ira Magaziner and his minions have dreamed up is the antithesis of the American spirit.

The 100 businessmen in our group received a briefing from one of Ira's "health hacks." Any doubt I ever had about the intentions of the present administration were removed after this briefing. They intend to remove every vestige of entrepreneurial capitalism in this country, and they don't apologize for it.

There were three questions from the

audience. The answers were scary.

- 1) "My mom just had a quadruple bypass operation. What would happen to her?"

The reply was: "This administration intends to eliminate the financial incentives for the surgeon to perform the work."

- "Well, then how would my mom get the needed operation?"

"We believe the doctor would still want to perform the surgery because it would be professionally rewarding and intrinsically valuable for him to do that type of work."

At this, another man told his concerned friend, "Phil, he just said your mom's gonna die!"

- 2) "What happens to the part-time worker who moves from job to job?"

"You will pay for the time he works for you. While he is between jobs, the federal government will pay for him."

- 3) "Considering the Hubble telescope and other federal fiascos, why should we trust you with health care?"

"That's a good question," said the administration hack. "However, our plan...blah, blah, blah, blah..."

Thank goodness our forefathers under-

stood that the best federal government is limited federal government.

Excessive regulation is choking business at all levels. Excessive taxes are choking the middle class. Excessive welfare is destroying generations of kids. Yet our pompous elected leaders continue to ignore their constituents.

What is the answer? I'm reminded of the words of the great American Socialist Patrick Henry, "Give me security, or give me death!" (Well, something like that.)

Wake up, people, and take responsibility for your personal lives. Get involved in your government. Your first instinct might be to say that it won't do any good because they won't listen. Well, they definitely won't listen if you don't call or write, that's for sure.

Write letters. Make visits. Invest your time, effort and money in changing your government.

**Andie Hines**  
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(ED. NOTE: Letters to the editor are welcomed. Mail your comments to: Editor, Landscape Management, 7500 Old Oak Blvd., Cleveland, OH 44130; or fax them to 216-891-2675.)