

## New Study Finds Time Spent Driving An Automobile May Increase Skin Cancer Risk

**WASHINGTON (Feb. 2, 2007)** – Drivers who spend a significant amount of time in their cars might find themselves in the fast lane for developing future skin cancers, according to new research examining the incidence of left-sided skin cancers in patients and driving trends of adults seen at a Midwestern university dermatology clinic.

Speaking today at the 65th Annual Meeting of the American Academy of Dermatology, dermatologist Scott Fosko, MD, FAAD, professor and chairman of dermatology at Saint Louis University School of Medicine in St. Louis, Mo., discussed the possible relationships between left-sided skin cancers and driving.

“Since previous scientific findings have shown an association between one-sided exposure to ultraviolet light (UV) and an asymmetric facial distribution of sun damage, we would expect that skin cancers also would be more prevalent on the left side of the body in drivers who spend a significant amount of time in their cars,” said Dr. Fosko. “Our initial findings confirm that there is a correlation between more time spent driving and a higher incidence of left-sided skin cancers, especially on sun-exposed areas in men.”

A total of 898 patients (559 men and 339 women) with skin cancers occurring on either side of the body were included in a retrospective chart review conducted by Dr. Fosko and his team of researchers. Of the 53 percent of left-sided skin cancers that occurred in this group of patients, nearly two-thirds (64 percent) of left-sided skin cancers were found in men compared to approximately one-third (36 percent) in women. Dr. Fosko noted that his team also found a statistically significant number of left-sided skin cancers on sun-exposed areas (head, neck, arms and hands) in men, but not in women. This incidence directly correlates to the areas of the body most often exposed to UV radiation while driving.

Of the skin cancers that were reviewed, 608 were basal cell carcinomas, 178 were squamous cell carcinomas, 23 were invasive melanomas, 42 were in situ, or non-invasive, melanomas (25 malignant melanoma in situ and 17 lentigo maligna type malignant melanoma in situ), and 64 were miscellaneous cancers. While Dr. Fosko expected the number of basal cell carcinomas to be the highest type of skin cancers reported since they are the most common form and are associated with cumulative sun exposure, he was surprised by the number of non-invasive melanomas that occurred on the left side of the patients studied – 31 of the 42 non-invasive melanomas reported, which accounted for 74 percent.

“A subset of skin cancers found in the patients with in situ melanomas was lentigo maligna, which is a form of melanoma caused by cumulative sun exposure rather than the more common form of melanoma that occurs from intense, intermittent sun exposure,” noted Dr. Fosko. He observed that 70 percent of lentigo malignas occurred on the left side. “This finding supports our theory that drivers who regularly spend more time in the car over the course of several years are more likely to develop skin cancers on the left side of the body, particularly skin cancers like basal cell carcinoma and lentigo maligna that develop gradually over time.”

As of January 2007, Dr. Fosko and his team collected 70 completed questionnaires evaluating driving habits of the dermatology patients seen at the university-based clinic. Initial tabulations show a direct link between more time spent driving an automobile and a higher incidence of left-sided skin cancers.

“Our initial data shows that those individuals under age 70 who consistently spent the most time per week driving a car were more likely to develop left-sided skin cancers,” added Dr. Fosko. “We’re also finding that all drivers who occasionally drive with the windows open had a higher incidence of left-sided skin cancers. Light skin complexion and more driving time also increased the risk for forming skin cancers on the left side. Since there are more cars on the road than ever before, it is likely that this trend will continue. And with more women than ever driving for work and family activities, I wouldn’t be surprised if we see higher reports of left-sided skin cancers in women in the future – gradually closing the gender gap that now exists.”

Typically, an automobile’s side and rear windows are made from non-laminated glass that is designed to block UVB rays (the sun’s burning rays), but not the deeper penetrating UVA rays. However, most windshields are made of laminated glass that can filter UVB and most UVA rays. Dr. Fosko noted that studies have shown tinting automobile glass or using UV filters on windows helps reduce the amount of UVA that penetrates the glass. To further minimize the risk of UV exposure while driving, Dr. Fosko advises drivers to apply a broad-spectrum sunscreen with an SPF of 15 or higher on sun-exposed areas and to wear protective clothing whenever possible.

Skin cancer is the most prevalent of all types of cancers with more than 1 million new cases diagnosed each year. An estimated 10,850 people will die of skin cancer in 2007. More than 8,000 of those deaths are estimated to be from melanoma, the most deadly of all skin cancers. Most types of skin cancer have a better than 95 percent five-year cure rate if detected and treated early. To learn more, visit [www.skincarephysicians.com](http://www.skincarephysicians.com) and click on “SkinCancerNet.”

Headquartered in Schaumburg, Ill., the American Academy of Dermatology (Academy), founded in 1938, is the largest, most influential, and most representative of all dermatologic associations. With a membership of more than 15,000 physicians worldwide, the Academy is committed to: advancing the diagnosis and medical, surgical and cosmetic treatment of the skin, hair and nails; advocating high standards in clinical practice, education, and research in dermatology; and supporting and enhancing patient care for a lifetime of healthier skin, hair and nails. For more information, contact the Academy at 1-888-462-DERM (3376) or [www.aad.org](http://www.aad.org).