

## Tanning Beds Cause Cancer

### Indoor Tanning Causes Melanoma, Report Shows

By [Salynn Boyles](#)

WebMD Health News

Reviewed by [Brunilda Nazario, MD](#)

July 28, 2009 - A leading global [cancer](#) research group is declaring tanning bed use a significant cancer hazard.

The World Health Organization's International Agency for Research on Cancer (IARC) announced today that it has moved UV tanning beds to its highest cancer risk category -- "carcinogenic to humans." Prior to the move, the group had classified sun lamp and tanning bed use as "probably carcinogenic to humans." In an interview with WebMD, the IARC's Vincent Cogliano, PhD, called the scientific evidence linking indoor tanning to the deadly [skin cancer](#) melanoma "sufficient and compelling."

A dramatic rise in melanoma, especially among young women, has been seen in recent years. Cogliano said studies conducted over the past decade provide an "an abundance of evidence" that tanning bed use has played a role in this rise, along with direct sun exposure. "People mistakenly see a tan as a sign of health when it is actually a sign of damage to the [skin](#)," he says.

#### UVA and UVB Cause Cancer

Cogliano says the IARC group met last month to review the research on tanning beds and the role ultraviolet light exposure plays in skin cancer.

The studies found that ultraviolet A (UVA), ultraviolet B (UVB) and ultraviolet C (UVC) radiation all cause cancer in animal models, he says. This is significant because the indoor tanning industry has often claimed that tanning beds are safe because the bulbs have more UVA radiation than UVB, says American Cancer Society Deputy Chief Medical Officer Len Lichtenfeld, MD.

"This report puts to rest the argument that tanning with UVA light is safe," Lichtenfeld said in a statement. "As noted by the IARC report, UVA light is also a class I carcinogen and should be avoided." The report cited the group's own research analysis published in 2006, finding the use of tanning beds before age 30 to be associated with a 75% increase in melanoma risk. A separate study reported last July by researchers from the National Institutes of Health found that melanoma rates among young women in the United States almost tripled between 1973 and 2004.

Beginning in the early 1990s, a particularly dramatic increase was seen in thicker and more lethal melanoma lesions, leading the researchers to conclude that tanning has probably played a significant role in this increase.

Early this year, researchers from the Northern California Cancer Center reported that melanoma cases doubled in the U.S. between the mid 1990s and 2004. The researchers concluded that the increase could not be explained by better screening and earlier detection of the cancer. About 62,000 new cases of melanoma were diagnosed in the U.S. and about 8,000 people died of the disease in 2008, according to the ACS. "We were not able to examine possible causes for this increase, but there is a lot of evidence that it is related to tanning," Clarke tells WebMD.

Study co-author Eleni Linos, MD, DrPh, of Stanford University, points to studies showing increases in outdoor and indoor tanning in recent years, especially among young women. "One of the established risk factors for melanoma is UV light, so both exposure to sun and exposure to tanning beds are probably risk factors."

#### SOURCES:

International Agency for Research on Cancer, special report on radiation, *Lancet*, August 2009, online edition.

Vincent Cogliano, PhD, head of IARC Monographs program, Lyon, France.

Len Lichtenfeld, MD, deputy chief medical officer, American Cancer Society, Atlanta.

*Journal of Investigative Dermatology*, July 2008.

Christina Clarke, PhD, research scientist, Northern California Cancer Center.

WebMD Health News: "[Melanoma Increase Is Real.](#)"

Dan Humiston, president, Indoor Tanning Association.

WebMD Health News: "[Healthy Tanning Beds? Experts Say No.](#)"

© 2009 WebMD, LLC.