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First signs of a levelling off in incidence trends in malignant melanoma in younger generations

A paper by scientists of the [International Agency for Research on Cancer](#) (IARC) published on May 21 in the [International Journal of Cancer](#) analysed incidence trends in malignant melanoma worldwide and observed first signs of a levelling off in younger generations.

Burden of malignant melanoma

According to the most recent [estimates \(for 2008\)](#), there were almost 200 000 new cases of invasive cutaneous malignant melanoma globally, and an estimated 46 000 deaths from the disease¹. Worldwide, elevated rates of melanoma incidence are observed in Caucasian populations residing in highly resourced, westernized countries where melanoma ranks as the sixth most frequently diagnosed cancer overall.

The paper by Erdmann et al. analyses time trends in 84 population-based cancer registries in 39 countries² to examine how risk patterns are changing globally over the period 1953-2008.

A contrasted situation

The study revealed contrasting trends across the world, with incidence rates of melanoma in many European populations on the increase across all age groups. There are some exceptions however, with more stable or decreasing trends in Norway and perhaps more recently in Iceland and France.

A similar temporal pattern is seen in a number of high-risk populations outside of Europe, including Australia, Canada, Israel, New Zealand and the U.S. There is an indication in these countries that incidence rates are levelling off or slightly declining, most notably among younger populations. Such trends are also evident among recently-born cohorts in these countries, lending weight to the hypothesis that change in generational UV exposure is a key contributor.

Ethnic disparities

In global terms, the highest melanoma incidence rates are by far those observed in New Zealand, Australia and the U.S. Caucasians. In Europe, rates are elevated in the Nordic populations, Switzerland, the Netherlands and the Czech Republic, while Southern European populations tend to have a lower incidence. The burden of melanoma among African-Americans as well as in Asian and Latin American countries under study is low and rather constant over time. These observations confirm a relationship between the predominant skin type of the inhabitants of a country and the geographic latitude.

A key role for prevention

The reduction in the incidence of melanoma seen in several high-risk countries among recent birth cohorts is encouraging, and highlights the impact and need of awareness campaigns and secondary prevention activities that target populations at high and increasing risk. Says author

Stabilization of incidence trends in malignant melanoma: prevention successful

Friederike Erdmann, *“these findings support the idea that primary and secondary prevention can halt and possibly reverse the observed increasing burden of melanoma.”*

The need for the further development and implementation of such population approaches to primary prevention is perhaps most apparent in Europe where uniformly increasing incidence rates of melanoma still continue unabated.

(1) Ferlay J, Shin H, Bray F, et al. [GLOBOCAN 2008](#) v1.2, cancer incidence and mortality worldwide: IARC cancerbase no. 10. Lyon, France: International Agency for Research on Cancer, 2010; accessed 22 May 2012.

(2) Erdmann F, Lortet-Tieulent J, Schüz J, Zeeb H, Greinert R, Eckhard W, Breitbart E, Bray F (2012).

International trends in the incidence of malignant melanoma 1953–2008—are recent generations at higher or lower risk? Int J Cancer, Published online May 21, 2012, DOI: 10.1002/ijc.27616