facts about: *Skin Cancer*

RHODE ISLAND

References

1. This statement is widely accepted, including by the American Cancer Society (ACS), National Cancer Institute, and the Centers for Disease Control and Prevention (CDC).[2-4] More than 1 million cases of skin cancer were estimated to be diagnosed in 2008. While registry data on non-melanoma skin cancers are not currently systematically tracked by the United States Cancer Statistics registries, registry data collected in the past were used to develop these estimates.
2. American Cancer Society. (2008). Cancer Facts and Figures: 2008. Retrieved March 13, 2009, from http://www.cancer.org/downloads/STT/2008CAFFfinalsecured.pdf
3. National Cancer Institute. (2005). What You Need to Know About Skin Cancer. Retrieved March 13, 2009, from http://www.cancer.gov/cancertopics/wyntk/skin/page1
4. Centers for Disease Control and Prevention. (2008/2009). Skin Cancer Prevention and Education Initiative, from the Division of Cancer Prevention and Control. Retrieved May 6, 2009, from http://www.cdc.gov/cancer/skin/pdf/0809_skin_fs.pdf
5. Saraiya, M., Balluz, L., & Joseph, D.A. (2007). Sunburn Prevalence Among Adults --- United States, 1999, 2003, and 2004. *MMWR Weekly, 56*(21), 524-528. Retrieved March 13, 2009, from http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5621a2.htm
6. Elwood, J.M., & Jopson, J. (1997). Melanoma and sun exposure: an overview of published studies. *International Journal of Cancer, 73,* 198-203.
7. Hill, D., White, V., Marks, R., et al. (1992). Melanoma prevention: Behavioral and nonbehavioral factors in sunburn among an Australian urban population. *Prev. Med, 21,* 654-669.
8. Oliveria, S.A., et al. (2006). Sun Exposure and Risk of Melanoma. *Arch Dis Child, 91,* 131–138.
9. National Cancer Institute and Centers for Disease Control and Prevention. (2009). State Cancer Profiles. U.S. state-level and Rhode Island county-level incidence data query. Incidence data based on data from the State Cancer Registry, the SEER November 2007 submission and the CDC's National Program of Cancer Registries Cancer Surveillance System (NPCR-CSS) January 2008 data submission. Retrieved April 13, 2009, from http://statecancerprofiles.cancer.gov/
10. Melanoma diagnosis rates are the result of a number of different factors, including: race (melanoma affects Caucasians at a much greater rate than other racial groups), type of UV exposure (intermittent versus cumulative exposure), sun protection behaviors in childhood and adulthood, geographic mobility of the population, risk awareness of the population and geography (e.g., latitude and elevation).
11. National Cancer Institute and Centers for Disease Control and Prevention. (2009). State Cancer Profiles. U.S. state-level and Rhode Island county-level mortality data query. Mortality data based on the National Vital Statistics System public use data file. Retrieved October 20, 2009, from http://statecancerprofiles.cancer.gov/
12. Ries, L.A.G., Melbert, D., Krapcho, M., Stinchcomb, D.G., Howlader, N., Horner, M.J., Mariotto, A., Miller, B.A., Feuer, E.J., Altekruse, S.F., Lewis, D.R., Clegg, L., Eisner, M.P., Reichman, M., & Edwards, B.K. (Eds.). (2008). SEER Cancer Statistics Review, 1975-2005, Section 16: Melanoma of the Skin. Based on November 2007 SEER data submission, posted to the SEER web site, 2008. National Cancer Institute. Bethesda, MD. Retrieved March 13, 2009, from http://seer.cancer.gov/csr/1975_2005/
13. Bickers, D.R., Lim, H.W., Margolis, D., et al. (2006). The burden of skin diseases: 2004 a joint project of the American Academy of Dermatology Association and the Society for Investigative Dermatology. *Journal of the American Academy of Dermatology, 55,* 490-500.
14. The Society for Investigative Dermatology and the American Academy of Dermatology Association. (2006). *The Burden of Skin Diseases 2004*.

15. U.S. Cancer Statistics Working Group. (2009). *United States Cancer Statistics: 1999–2005 Incidence and Mortality Web-based Report*. Table 2.16.1.1MF - Melanomas of the Skin. Age-Adjusted Invasive Cancer Incidence Rates and 95% Confidence Intervals by U.S. Census Region and Division, State and Metropolitan Area, and Race and Ethnicity, United States. U.S. Department of Health and Human Services, Centers for Disease Control and Prevention and National Cancer Institute. Atlanta, GA. Retrieved March 23, 2009, from http://www.cdc.gov/uscs
16. Robinson, J.K. (2005). Sun Exposure, Sun Protection, and Vitamin D. *Journal of the American Medical Association, 294,* 1541-1543.
17. Bleyer, A., O'Leary, M., Barr, R., & Ries, L.A.G. (Eds.). (2006). *Cancer Epidemiology in Older Adolescents and Young Adults 15 to 29 Years of Age, Including SEER Incidence and Survival: 1975-2000*. National Cancer Institute, NIH Pub. No. 06-5767. Bethesda, MD. Retrieved March 13, 2009, from http://seer.cancer.gov/publications/aya/
18. Rigel, D.S., Friedman, R.J., & Kopf, A.W. (1996). The Incidence of Malignant Melanoma in the United States: Issues as We Approach the 21st Century. *Journal of the American Academy of Dermatology, 34*(5), 839-847.
19. U.S. Department of Health and Human Services. (2005). Report on Carcinogens, Eleventh Edition. U.S. Department of Health and Human Services, Public Health Service, National Toxicology Program. Retrieved August 28, 2009, from http://ntp.niehs.nih.gov/index.cfm?objectid=32BA9724-F1F6-975E-7FCE50709CB4C932
20. Armstrong, B.K., & Kricker, A. (2001). The epidemiology of UV induced skin cancer. *Journal of Photochemistry and Photobiology B, 63*(1-3), 8-18.
21. Goldstein, A.M., & Tucker, M.A. (1995). Genetic epidemiology of familial melanoma. *Dermatologic Clinics, 13,* 605-612.
22. Scotto, J., Fears, T.R., Kraemer, K.H., et al. (1996). Nonmelanoma skin cancer. In: D. Schottenfeld & J.F. Fraumeni (Eds.), *Cancer epidemiology and prevention* (2 ed., pp. 1313-1330). New York: Oxford University Press.
23. Armstrong, B.K., & English, D.R. (1996). Cutaneous malignant melanoma. In: D. Schottenfeld & J.F. Fraumeni (Eds.), *Cancer epidemiology and prevention* (2 ed., pp. 1282-1312). New York: Oxford University Press.
24. U.S. Environmental Protection Agency. (2008). Sun Safety Action Steps. Retrieved March 13, 2009, from http://www.epa.gov/sunwise/actionsteps.html
25. American Academy of Dermatology. (2008). Be Sun Smart[SM]. Retrieved March 13, 2009, from http://www.aad.org/public/sun/smart.html
26. Randomized trials are required to provide conclusive evidence that melanoma screening saves lives. In the absence of such trials, however, it is well-accepted that finding melanoma early (at less than 1 mm) is associated with five-year survival rates ranging from 95% to 100% and that a combination of education, awareness, skin self-examination, and physician examination have all been instrumental in the shift toward earlier detected lesions.[27-30] Most recently, a large surveillance program was associated with a steady and sustainable reduction in the incidence of thick melanoma resulting in a statistically significant decrease in mortality that persisted for at least three years.[31] Modeling studies have found that one-time melanoma screening of the general population older than 50 years is cost-effective compared with other cancer screening tests.[32]
27. Epstein, D.S., Lange, J.R., Gruber, S.B., et al. (1999). Is physician detection associated with thinner melanomas? *Journal of the American Medical Association, 281,* 640-643.
28. Berwick, M., Begg, C.B., Fine, J.A., Roush, G.C., & Barnhill, R.L. (1996). Screening for cutaneous melanoma by skin self-examination. *Journal of the National Cancer Institute, 88,* 17-23.
29. Geller, A.C., Swetter, S.M., Demierre, M.F., Brooks, K.R., & Yaroch, A. (2007). Trends, Screening and Early Detection for Melanoma. Current Status (2000-2006) and Future Directions (CME article). *Journal of the American Academy of Dermatology, 57,* 555-572.
30. Koh, H.K. (1991). Cutaneous melanoma. *New England Journal of Medicine, 325,* 171-182.

31. Schneider, J.S., Moore, D.H., & Mendelsohn, M.L. (2008). Screening program reduced melanoma mortality at the Lawrence Livermore National Laboratory, 1984 to 1996. *Journal of the American Academy of Dermatology*, *58*, 741-749.
32. Losina, E., Walensky, R.P., Geller, A.C., et al. (2007). Visual screening for malignant melanoma: a cost-effectiveness analysis. *Archives of Dermatology*, *143*, 21-28.
33. As recommended by the American Cancer Society, the American Academy of Dermatology and a National Institutes of Health Consensus Panel.[2, 34-37]
34. American Academy of Dermatology. (2007). Skin Cancer. Retrieved March 13, 2009, from http://www.aad.org/public/publications/pamphlets/sun_skin.html
35. Drake, L.A., Ceilley, R.I., & Cornelison, R.L. (1992). Guidelines of care for nevi I (nevocellular nevi and seborrheic keratoses). Committee on Guidelines of Care. Task Force on Nevocellular Nevi. *Journal of the American Academy of Dermatology*, *26*, 629–631.
36. Drake, L.A., Ceilley, R.I., Cornelison, R.L., et al. (1992). Guidelines of care for basal cell carcinoma. The American Academy of Dermatology Committee on Guidelines of Care. *Journal of the American Academy of Dermatology*, *26*, 117–120.
37. NIH Consensus conference. (1992). Diagnosis and treatment of early melanoma. *Journal of the American Medical Association*, *268*, 1314–1319.
38. These sun safety behaviors include "covering up" or wearing protective clothing.
39. Centers for Disease Control and Prevention. (n.d.) Skin Cancer. Guide to Community Preventive Services Website. Retrieved March 11, 2009, from http://www.thecommunityguide.org/cancer/skin/education-policy/index.html
40. Data collected through student self-reporting forms the basis for this evaluation of the SunWise Program. Verbal reports are used most frequently in sun protection studies; for example, 76 of 81 skin cancer prevention studies cited in the CDC's *Guide to Community Services* evidence review relied on verbal reports.[39]
41. Kyle, J.W., Hammitt, J.K., Lim, H.W., Geller, A.C., Hall-Jordan, L.H., Maibach, E.W., De Fabo, E.C., & Wagner, M.C. (2008). Economic Evaluation of the U.S. Environmental Protection Agency's SunWise Program: Sun Protection Education for Young Children. *Pediatrics*, *121*(5), e1074-e1084.