

UV nail lamps do not significantly up skin cancer risk

December 16 2012



Ultraviolet nail lamps, used for professional and personal nail techniques, do not pose a clinically significant skin cancer risk, according to a letter to the editor published online Dec. 6 in the *Journal of Investigative Dermatology*.

(HealthDay)—Ultraviolet (UV) nail lamps, used for professional and personal nail techniques, do not pose a clinically significant skin cancer risk, according to a letter to the editor published online Dec. 6 in the *Journal of Investigative Dermatology*.

Alina Markova, M.D., from Massachusetts General Hospital in Boston, and Martin A. Weinstock, M.D., Ph.D., from Brown University in Providence, R.I., compared irradiance from three common UV nail lamps with exposure of narrowband [UVB](#) (NBUVB) used for phototherapy. The action spectrum for photocarcinogenesis ([Skin Cancer](#) Utrecht-Philadelphia human [SCUP-h]) was used to determine each device's carcinogenic effective irradiance. The nail lamp's UV dose per session was calculated, assuming 10 minutes per UV nail lamp

session for each device's carcinogenic-effective irradiance. SCUP-h was used to determine the ratio between the carcinogenic potential of the UV nail lamp and the single NBUVB phototherapy course.

The researchers found that UV nail lamps primarily emitted [UVA](#) with no detectable UVB or UVC. The highest spectral irradiances produced by devices A, B (containing fluorescent lamps), and C (light-emitting diode) were 15,253, 15,202, and 2,845 mWm^{-2} , respectively. To equal the dose received during one NBUVB course, over 13,000 sessions with device A or B and more than 40,000 sessions with device C sessions would be required.

"Our study of three UV nail lamps reveals that such exposure is a tiny fraction of a single NBUVB course, and hence does not produce a clinically significant increased risk of developing skin cancer," Markova and Weinstock conclude.

More information: [Full Text](#)

Copyright © 2012 [HealthDay](#). All rights reserved.

Citation: UV nail lamps do not significantly up skin cancer risk (2012, December 16) retrieved 25 April 2024 from

<https://medicalxpress.com/news/2012-12-uv-lamps-significantly-skin-cancer.html>

<p>This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.</p>
--