Hard Hat Brim Protection

How much more sun protection is provided by a wide-brimmed hard hat vs. a standard brim-in-the-front hard hat? The following summary is based on a review of data from two specific research studies (see references).

Summary

A standard hard hat with 7 cm front brim and 4 cm side and back brim has been estimated to shield the head from UV radiation as follows:

Face (eyes, nose, and cheeks)	49% to 67% reduction in UV
Ears	50% reduction in UV
Neck	14% reduction in UV

Based on two studies, a full brimmed hard hat (medium-width - approx. 6 cm brim all the way around) can shield the head as follows:

	Study 1	**Study 2**
Face (eyes, nose, cheeks)	36% to 62% UV reduction	62% to 93% UV reduction
Ears	59% UV reduction	88% UV reduction
Neck	19% UV reduction	60% UV reduction

Based on one study, a wide-brimmed sun shield (7-7.5 cm all the way around) added to a hard hat will shield the head as follows:

Face (eyes, nose, and cheeks)	62% to 92% UV reduction
Ears	86% UV reduction
Neck	47% UV reduction

Finally, adding a neck flap to the back of a hard hat will shield the neck from 75% of UV radiation.

Bottom-line

Compared to a standard hard hat, a full-brim hard hat or a wide-brim supplement added onto a hard hat can substantially increase the sun protection of the ears and neck of employees who work outdoors. Also, any type of hard hat can be made more sun-protective by adding a neck flap.

Wide-brim Product Links

Amazon - High Visibility Hard Hat Neck Shade: https://amzn.to/2Z68urP

Amazon - Sunbrero Hard Hat: https://amzn.to/2N8VlvS

Brahma Brims: https://brahmabrims.com/

FullSource Sun Shade - Full Brim Hard Hat: https://bit.ly/30aRZw1

Global Industrial: https://bit.ly/2YTkhyL

Open Tip - Full Brim Hard Hat Sun Shade Visor Neck Shield: https://bit.ly/2Z9orBE

References

Gies P, Javorniczky J, Roy C, Henderson S. Measurements of the UVR protection provided by hats used at school. *Photochemisty and Photobiology*. 2006 May;82(3):750-754.

Backes C, Religi A, Moccozet L, Vernez D, Bulliard JL. Facial exposure to ultraviolet radiation: Predicted sun protection effectiveness of various hat styles. *Photodermatology, Photoimmunology & Photomedicine*. 2018 Sept;34(5):330- 337.