CoWEDA
Cold Weather Ensemble Decision Aid

The Need

Cold stress degrades performance, potentially resulting in injuries and casualties. Proper selection of cold weather ensembles is the primary prevention strategy. At present, the evaluation and selection of cold weather ensembles are often based on anecdotal experiences, or simple charts and tables which do not fully address the need for cold protection.

The Technology

CoWEDA is a software tool designed to assist in the selection of clothing ensembles for different levels of cold exposure using menus of clothing items. By integrating a thermoregulatory model, physiological criteria, and clothing algorithms into a user-friendly application, it relates the clothing items to the physiology consequences at anticipated activity and environmental conditions.

Benefits

COWEDA allows users to build their own ensembles from their clothing inventory (e.g., jacket, gloves and boots), and then interprets their selection in the context of cold exposure risks. It guides users to select the most appropriate clothing items to optimize human performance and mitigate risks of frostbite and hypothermia.

Contact

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