

Development and field validation of a wet-work exposure sampler

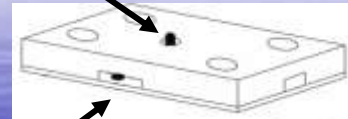
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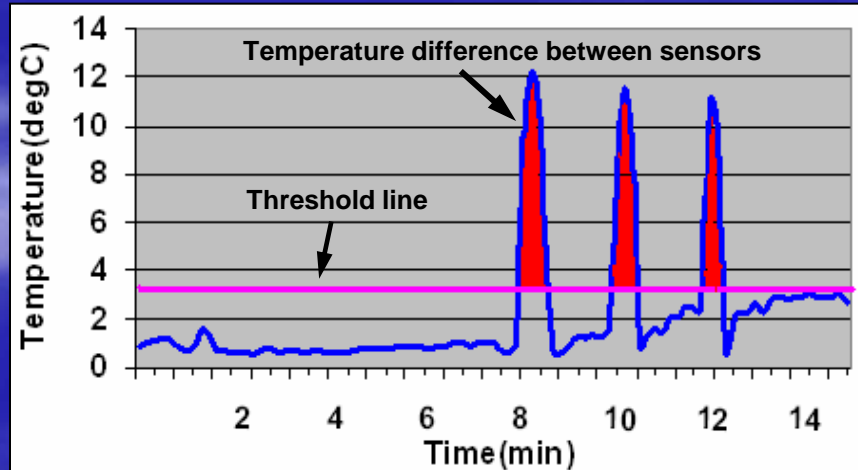




On-finger sensor



Above-finger sensor



Results

- ❑ Development of a comfortable holder and a suitable data analysis routine.
- ❑ For hairdressers, the most suitable threshold value in analysing exposure data is Mean + 4SD with the sensitivity of 62% (95% CI: 50, 74) and specificity of 62% (95% CI: 44, 80).
- ❑ For florists, the most suitable threshold value is Mean + 3SD with a sensitivity of 69% (95% CI: 59 – 77) and specificity of 69% (95% CI: 56 – 82).



Conclusions

- ❑ This is the first measurement system to assess exposure to wet-work .
- ❑ Good sensitivity and high specificity in detecting exposure to wet-work under real conditions.
- ❑ The relative low cost of the device, noise-free operation and long battery-life.
- ❑ It appears that direct observation is less accurate to detect the real duration of wet-working.
- ❑ This device does not require special training or skills like time study techniques used in direct observation.

