

Armadillo Merino® Next-to-skin clothing – the forgotten layer?

How can you provide your officers with an effective PPE layering system without considering the next-to-skin layer? An effective next-to-skin layer is vital.

Your skin covers about 2m² and is your body's most sensory organ detecting pressure, pain, heat and cold, all discomfort factors that greatly influence your cognitive functioning and sense of wellbeing. So we need to buffer the skin.

All PPE layers are designed to protect your body but your choice of next-to-skin clothing has the biggest impact on wearer safety, performance and comfort. The first layer isn't a stand-alone garment but should be an integral component when considering a layered clothing system. Careful consideration must also be made of the material chosen for the next-to-skin layer for your last line of defence.

▼ Drinking water and wearing a soft, natural and safe next-to-skin garment will help in protecting your skin.



Cotton and synthetic yarns are widely used for next-to-skin clothing but recently wool has been reintroduced. Cotton is soft against the skin but is very moisture retentive and contributes to the cotton chills when going from a sweat to stand. Wicking synthetic garments have been proven to be ineffective in managing sweat under a layered system and instead contribute to greater moisture accumulation against the skin increasing the risk of steam burns during a flash over. Nylon and polyester garments will also melt and drip at very low temperatures inflicting painful and potentially life changing injuries.

Wool was an effective FR barrier for hundreds of years but was unpopular as the fabrics were itchy and heavy to wear. Merino wool fabrics are very different. Merino is a breed of sheep with a superfine wool fibre prized for softness and remarkable multi-attribute properties. Over the last forty years merino farmers have been selectively breeding sheep for finer wool fibres. These flocks are now producing superfine 18,5micron wool, which is as fine as cashmere, and when combined with the latest spinning and knitting technology makes the most advanced next-to-skin garments. So why wear merino?

Merino is nature's performance fibre. Consider these ten attributes –

- No melt, no drip
- Flame resistant without chemicals to more than 570°C (1000°F)
- An effective thermal barrier that reduces heat transfer
- Thermo-regulating - reducing your thermal load (hot and cold) to help protect the body
- Moisture control - by actively managing vapour and liquid sweat
- Performance optimisation – Improved stamina by delaying the onset of sweat and reducing your moisture loss and calorie burn



Images courtesy of Armadillo Merino®

▲ The Armadillo Merino® logo gives you reassurance of greater next-to-skin protection, performance and comfort.

- Fast drying – allows quick venting out between jobs without chilling
- Odour. No body odour after multi-day use. No smoke or fume retention
- So comfortable – soft and stretchy fabrics that retain their shape
- Sustainable – no microplastics here. Armadillo garments are recyclable and will biodegrade within a year at their end of life.

Health and wellbeing is topical. By wearing Armadillo Merino® garments, healthy fireman can avoid the nasty clothing toxins released from synthetic fabrics when exposed to heat. Natural fibres worn next-to-skin help to optimise the skin health and well-being of your officers.

Armadillo Merino® designs and manufactures next-to-skin protective clothing for professional operators using a range of technical merino fabrics that deliver superior protection, performance and comfort. Armadillo Merino® protects professionals operating in high risk environments around the world including astronauts, special forces, fire, police, ambulance, search & rescue.

Your best investment yet - The most valuable asset you protect are your people. They live dangerous lives and operate in extremes of heat and cold so for less than the price of training shoes you can outfit your officers in Armadillo Merino® with the confidence that they are wearing the most effective next-to-skin layer available. They will love you for it.

➡ For more information, go to www.armadillomerino.com