



# Trust in the cold chain begins with shared temperatures

The Australian Food Cold Chain Council chair, Mark Mitchell, gives a current example of why the food cold chain is an integral part of Australia's food landscape.

The globe's cold chain has been put under the microscope as a result of the demands being placed on it by the rollout of COVID-19 vaccines. The logistics of moving millions of doses of vaccine under strict temperature control have highlighted the traditional challenges faced by the food cold chain every day.

It's the same old story – the technology is available, the means and the knowledge are there – all of which have succumbed to other commercial considerations that have taken priority over quality and compliance.

The worst of these is the transparent and practical exchange of temperatures between stakeholders at critical control points (CCPs), which occurs when food changes custody or is cross-docked. All too often this temperature exchange doesn't happen.

Even more problematic is that there are too many operators relying on inaccurate air temperatures, or fancy telematics that are never looked at unless there is a load rejection at some random point in the cold chain – usually not at the CCP where the issue occurs in the first place. The result of these serious

oversights is that temperature-abused food passes through CCPs without anyone ever knowing.

This is the elephant in the room for the COVID-19 cold chain. Research at AFCCC tells us that proper temperature exchange for conventional vaccines delivered to pharmacies in Australia does not always occur either. On a global scale, the World Health Organisation (WHO) calculates that more than half of all vaccines are wasted because of temperature-control logistics and other shipment-related issues.

If the intention is to do things by the book for the COVID-19 vaccine rollout, there is some work to do.

The COVID-19 cold chain should take note that Australia wouldn't have +30 per cent food loss and wastage, or 25 per cent current vaccine loss rates from temperature abuse, if total compliance to proper cold chain practices occurred at all CCPs in the existing chains.

Then there is the question of scale. Once again, in food supply, there is not enough compliant cold chain globally, especially in developing nations.

This situation will be acutely

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highlighted in the COVID 19 cold chain as the world scrambles to find the means to distribute vaccine, some of which needs to be kept at up to  $-70^{\circ}\text{C}$ . The vaccines have to be able to reach far-flung and isolated communities in a variety of climates, not just capital city hospitals and vaccine units.

But those acting responsibly in refrigeration, and in food and pharmaceutical shipments, understand the important role of the cold chain, and the specialised people who run it. There's hardly a fresh food item or pharmaceutical product that does not depend on a refrigerated transport and cold room storage on a daily basis.

Our international associates at the Global Food Cold Chain Council (GFCCC) have launched a global vaccine distribution initiative, having acknowledged that insufficient attention has been paid to refrigeration logistics, scale and speed of vaccine deployment.

The GFCCC and the AFCCC believe that the world focus on the vaccine distribution mission could jump start cold chain improvement and expansion for longer-term food loss and waste reduction.

It is fortuitous that COVID-19 has exposed these important points that have to be applied to the entire cold chain and global food system.

It is no longer good enough for cold chain temperature data to be treated as commercial-in-confidence at control points or during journeys. Stakeholders must come to grips with the fundamental principles of quality control, and realise that data disclosure leads to compliance. Any industry that hides its data, hides its quality.

The AFCCC has offered its support and expertise to the pharmaceutical industry and the Federal Government during the critical rollout of vaccines, at whatever temperature stipulated by the vaccine manufacturers. **F**