

The challenge of keeping drugs cool during shipping



By Leslie Morgan

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There's no denying that it's always been a challenge to transport medicines and medical equipment from one corner of the world to the other -- they're sometimes heavy, often fragile and in most cases, time is of the essence. The challenge becomes even greater when the product happens to be a fridge line -- usually a medicine that needs to be stored at a temperature of between 2 and 8°C. It's not unusual for Durbin to source a product in England (where temperatures are variable, depending on the season) and transport it to the Middle East (where temperatures regularly soar above 40°C).

The responsibility is huge -- inadequate temperature control during storage and transportation of a fridge line pharmaceutical can reduce the efficacy of the product in very short time. That's why Durbin has Standard Operating Procedures (SOP) to ensure optimum storage and temperature control, if indicated, starting with the pick-up from the manufacturer right to the point of delivery to the customer.

So, if you're ordering fridge line products, how can you tell whether or not they have been kept in controlled temperatures? The simplest way is to use a thermometer probe on delivery.

If the temperature in the box is outside the recommended parameters, make a note of the temperature and inform your supplier immediately. They can contact the

licence holder and/or manufacturer to find out whether or not the product is safe to use.

If the box is too cold, it may have been that the ice packs weren't 'normalised' -- a process where they are taken out of the freezer and kept at room temperature for 20 to 30 minutes before the boxes are packed. This will ensure the temperature doesn't dip too low and to reduce the risk of condensation inside the box. If the box is too warm, it may be that not enough ice packs were used or that the journey has taken longer than expected, due to flight delays for example.

If the monitor shows that the temperature of the box on arrival is correct, it's also worth checking that there hasn't been any direct contact between the product and ice packs -- usually they are kept apart with air bubble wrap, polystyrene spacers or chips. This is important because if a product does come into contact with an ice pack, it can get too cold (below 2°C or freeze). Again, if this happens, contact your supplier to confirm that the product is still safe to use. Products and ice packs should

also have been packed into polythene bags inside the box as this reduces damage to the packaging from condensation.

If the delivery time is long, the destination temperature high or the product sensitivity high, Durbin can place a temperature monitor -- an electronic device that can be set to take readings at intervals, every 10 minutes, for example, in each box of fridge line pharmaceuticals. The customer simply needs to return the temperature monitor and the supplier can produce a temperature graph for the journey. There could, though, be a cost involved in supplying the monitor. Another option for extra sensitive items, such as vaccines and blood products, is to use specialist refrigerated couriers, although the cost can be very high.

Finally, it goes without saying, of course, that fridge line products should be unpacked and placed in the fridge as soon as possible after delivery. This means that it's better to place your order at the beginning of the working week to avoid delivery at the weekend. ■

Durbin PLC is a British company based in South Harrow, London. Established in 1963, the company specialises in supplying quality assured pharmaceuticals, medical equipment and consumable supplies to healthcare professionals and aid agencies in over 140 countries. As well as reacting rapidly to emergency situations, Durbin PLC responds to healthcare supply needs from local project level to national scale programmes. Web address: www.durbin.co.uk Email: L.morgan@durbin.co.uk