

## MRC Harwell

## Shipping Frozen Material on Dry-Ice

## Shipment of Cryopreserved Sperm on Dry-Ice Doesn't Reduce Viability

The Figure below shows that shipping cryopreserved sperm on dry-ice does not affect its viability compared to samples held in Liquid Nitrogen ( $LN_2$ ) storage. The sperm can be returned to Liquid Nitrogen storage on arrival.

Care must be taken during the handling of the material to ensure that during the unpacking, or transfer, that the samples do not warm up. Incorrect handling will reduce the viability of the samples and subsequent fertilisation rates.

80

70

60

**Tertilisation Rates %)** 00

## Prolonged Storage of Frozen Sperm on Dry-ice has Negligible Effects on the IVF Fertilisation Rates

When handled correctly cryopreserved sperm, held in dry-ice, has similar IVF fertilisation rates to samples that are stored in Liquid Nitrogen ( $LN_2$ ).

The figure below shows that storage on dryice for up to 2 years has only a small effect on fertilisation rates, with levels consistently being high. The sperm should not be allowed to warm up during storage as this will be detrimental to its viability.



