almost guaranteed to get NSI.⁵ We can no longer gamble with our careers, our finance or our health by failing to report needle-stick injury.

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AUTHOR'S RESPONSE

doi 10.1308/003588409X432266

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We would like to thank Stephen Kelly for his helpful comments and were particularly pleased to see that our findings from a single, busy district hospital are indeed reflected by his own very similar study across the surgical specialties in three quite diverse centres.¹ This certainly reinforces the message that current practices are leaving surgeons exposed; although transmission rates are currently small, they are generally increasing. We agree that it is the on-the-spot decision making undertaken by the operating surgeon that is the most risk-prone event and are particularly interested in his efforts at reducing this. Management of these incidents by independent occupational health staff should be encouraged but the emphasis of their involvement must be to make the process more straightforward, taking the perceived inconvenience out of the process that deters so many.² I would be interested to see if the structures put in place by the Kelly and McCann group have made a difference in reducing the barriers to reporting in their hospitals.

We acknowledge that the testing of anaesthetised patients for blood-borne viruses is an area of unresolved ethical debate. In principle, we support the idea of patients giving pre-operative consent to a blood test in the event of a needle stick injury.

The 'take-home' message from both of these pieces of work is that needle stick injuries are common in surgeons and are associated with a small, but significant, risk to our career, health, families and not least our patients.

Thankfully, to date, we have not seen a transmission of a blood-borne virus to a surgeon but note that other theatre staff have been inoculated. It is our responsibility as surgeons to protect our working environment by ensuring structures are in place to allow the consistent, safe and responsible management of these incidents.

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LETTER

doi 10.1308/003588409X432275

Transfer of a pre-operative surgical site mark to the opposite side increases the risk of wrong site surgery

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Surgery performed at the incorrect anatomical site can be devastating for both patients and surgeons.¹ We wish to highlight the case of a patient who had been correctly

Figure 1 Left forearm correctly marked with an arrow.

Figure 2 Arrow transferred to right thumb.

marked for surgery on the left hand with an arrow on the left forearm (Fig. 1: taken at the end of the procedure) who was found to also have an erroneous arrow on the right thumb (Fig. 2). On questioning the patient, it became clear

that the arrow had become imprinted on the thumb when the patient had crossed his or her hands. Transfer of the mark not only introduces an erroneous mark, but also fades the correct mark.

The American Academy of Orthopedic Surgeons estimated that an orthopaedic surgeon has a 1 in 4 chance of performing wrong-site surgery during a 35-year career.² Although there are anecdotal stories of transferred site marks we have identified only one previously published instance.⁵ This was in a patient whose mark was transferred from the forehead onto the bar of a slit lamp and then onto the brow of the next patient to use the lamp.

The use of marker pens does present a small risk in these circumstances of which all users should be aware. Guidelines on pre-operative marking have been produced by The Royal College of Surgeons of England in conjunction with the National Patient Safety Agency⁴ and feature in the World Health Organization's *Surgical safety checklist*.⁵

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