

Date: 14/03/2018

FREEDOM OF INFORMATION REQUEST FOI/013954 – Maternity unit, exposure to nitrous oxide

Staff working in maternity are at principal risk of exposure to Nitrous Oxide (Entonox). Potential health effects from prolonged exposure to Nitrous Oxide are:

- > Can affect a woman's fertility.
- > Bodin et al (1999) found an association between exposure and reduced birthweight and an increase in SFGA babies Developmental toxicity on the developing foetus and an increase in miscarriage.
- > Permanent inactivation of the body's stores of vital Vitamin B12. Prolonged exposure can result in chronic illness from a multitude of debilitating symptoms and includes myeloneuropathy and sub acute degeneration.
- > Megablasic bone marrow changes
- > Folate metabolism and DNA synthesis is impaired (RCM Entonox Guideline >2018)

Under The Control of Substances Hazardous to Health (COSHH) Regulations , employers have a legal duty to monitor staff exposure to nitrous oxide and to ensure that their exposure to these substances are kept to a minimum. To do so, the following should be carried out:

- > Assessment of the risk (Nitrous oxide is a substance with a WEL as listed in the HSE publication EH40/2005 Workplace Exposure Limits)
- > Methods of achieving control of the risk (this substance presents a high risk to people's health and measures should be put in place to minimise, control and regularly monitor exposure to this substance).
- > Personal monitoring for exposure to substances hazardous to health (The Trust should be aware that midwives work for long hours in unventilated rooms).

Currently, the Trust do not provide gas scavenging units to birth rooms where exposure is high but which are provided in Obstetric theatre, where staff exposure is relatively low.

The Trust also does not provide personal monitoring badges to maternity staff that are exposed to Nitrous Oxide. It is recommended that exposure does not exceed 100ppm over 8 hours in any 24 hour period (COSHH)

I am writing to you to request Health and Safety evidence/guidance/policy documentation which supports why the Trust does NOT provide gas scavenging units to each birth room on your maternity unit and evidence as to why it is deemed acceptable to ONLY measure ambient air levels (which is inappropriate due to the ways in which midwives work, in comparison to other clinicians) ?

I would also like to request any evidence which supports why maternity staff are NOT provided with personal monitoring badges by the Trust. The provision of these badges would ensure their exposure is not greater than 100ppm. (Without them, this level CANNOT be monitored and presents a serious risk).

Information re COSHH obtained from www.hse.gov.uk/pubns/indg136.pdf

Why does the Trust not provide gas scavenging units to each birth room? -
This is not a requirement within the HBN (Health Building Note)

Why is it deemed acceptable to only measure ambient air levels? -
The Trust has undertaken both static and personal dosimetry levels have been measured in December 2017 and January 2018.

Why maternity staff are not provided with personal monitoring badges by the Trust?
Personal Dosimetry was undertaken in January 2018