ilation increased to 17 changes per hour the 
N\textsubscript{2}O level increased to approximately 10 ppm after one hour and 
exceeded that level only six times during the day rising above 25 ppm only once for a brief period.

The NIOSH recommendations regarding room venti-
lation are not as specific as those regarding individual 
gas levels and simply state that "engineering controls shall 
be implemented so that occupational exposure to waste 
anesthetic gases are controlled in accordance with the 
following sections ... that no worker is exposed at TWA 
concentrations greater than 25 ppm."\textsuperscript{2} However, the Brit-
ish Columbia government committee on surgical suite 
ventilation, recommended in 1975 that 20 air changes 
be provided per hour, of which 15 would be exhausted.\textsuperscript{3} 
Our department has always considered these ventilation 
rates to be the desirable standard. We therefore feel that 
Wood \textit{et al.} are incorrect when they claim NIOSH rec-
ommendations are unattainable and if this is accepted 
staff may be exposed to greater atmospheric levels of 
N\textsubscript{2}O than necessary. Finally we feel every anaesthetic de-
partment should include regular atmospheric sampling 
of N\textsubscript{2}O levels as part of a regular equipment maintenance 
programme.

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REFERENCES
1 Wood C, Ewen A, Goresky G, Sheppard S. Exposure of 
operating room personnel to nitrous oxide during paediatric 
2 Recommendations for an occupational exposure standard 
for waste anesthetic gases and vapors. National Institute for 
Occupational Safety and Health 1977; 77–140.
3 Oulton JL. Operating room venting of trace concentra-
tions of inhalation anaesthetic agents. Can Med Assoc J 

REPLY
Thank you for the opportunity to reply to the letter from Dr. 
Fancourt-Smith \textit{et al.} Unfortunately their letter does not iden-
tify the population that they studied, or the type of anaesthetics 
administered. Nor is it clear at what location they measured 
ambient levels of N\textsubscript{2}O. It is, therefore, difficult to draw 
comparisons between the levels of N\textsubscript{2}O that they quote and 
the N\textsubscript{2}O exposures of operating room personnel that we mea-
sured.

In our study the N\textsubscript{2}O exposures of individual staff members 
consistently exceeded the background room level as measured 
at the room exhaust outlet. This probably reflected the prox-
imity of personnel to the main sources of waste N\textsubscript{2}O: the pa-
tient's exhaled gases and the breathing circuit. We agreed that 
increased air exchanges in the operating room would decrease 
overall concentrations of N\textsubscript{2}O. However, any reduction in back-
ground levels of N\textsubscript{2}O does not necessarily imply an equal 
reduction in the individual exposures of operating room per-
sonnel.

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REFERENCES
1 Wood C, Ewen A, Goresky G, Sheppard S. Exposure of 
operating room personnel to nitrous oxide during paediatric 

Portex epidural catheters

To the Editor:
It has recently come to our attention that some epidural 
catheters have been produced without any holes in the 
distal part of the catheter. If passed into the epidural 
space (without prior close inspection), it is impossible to 
aspirate or to inject into them. Defective catheters may 
be found in the epidural kits supplied by Concord/Portex 
(Keene, New Hampshire) of Lot #204685 with expiry date 
4/97. These kits contain the 16-gauge Tuohy needle and 
the 17-gauge nylon closed-end catheter.

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REPLY
We at Sims are proud of our service commitment to our cus-
tomers. Part of that commitment is reflected in our defective 
goods policy. We have a clear understanding with both the 
doctor and/or the anaesthesia technician that any defective tray 
be reported to us as soon as possible. We ask that the doctor 
tear off the tray lid and enclose a written message, or in the 
case of defective catheters return them to us for an immediate 
no charge replacement. This information is forwarded to the 
main plant on a product complaint form, along with the de-
fective product in question. The plant tests the product and 
reviews the complaint and a written explanation is sent back 
to the Initiator.

It is the responsibility of Concord/Portex to provide the high-
est quality products to our customers and their patients. We 
are distressed that the epidural catheter with defect reached the