

Safety of the Closed System

To the Editor:—In October 1974 ANESTHESIOLOGY, there are two articles and an editorial concerned with the possible effects of vented gases on operating room personnel. It was suggested that this potential hazard be reduced and/or eliminated by exhausting the vented gases through suction apparatus or by various ventilating systems.

I submit that the closed system is another effective, safe, and economical way in which to reduce or eliminate this hazard. The

closed system has many other advantages, which I detailed in an earlier Letter to the Editor (September 1972).

Because the closed system is a safe and effective solution to the problem, I object to the statement in the final sentence of the editorial that only exhaust systems satisfy the potential legal problem of vented agents.

STUART C. CULLEN, M.D.
Professor Emeritus, Anesthesia
73 West Shore Road
Belvedere, California 94920

Obstetrics

PERINATAL DEATHS All perinatal deaths occurring at Emanuel Hospital are reviewed by a Fetal and Neonatal Death Committee. This presentation deals with some of the findings of this body from 1958 through 1971. This study was divided into two seven-year periods for the purpose of comparison and because the second seven years included the consequences of an added high-risk obstetrical population. Though there was an increase in the fetal death rate, when comparing the first seven years with the second, there was a decline in the neonatal death rate. The major portion of the perinatal wastage in each series was made up of fetuses and infants with birth weights of less than 5½ pounds. Obstetricians were the professional birth attendants with decreasing frequency when comparing the second with the initial study group. Pediatricians tended to show an increasing concern for the distressed fetus and neonate by more frequently attending the delivery and/or seeing the infant soon after the onset of illness. Determining causes of death among the study population showed that prematurity and related factors were responsible for at least 40 per cent. There appears to be a very slight decrease in the preventable deaths, but a definite increase in the possibly preventable deaths when

comparing the two study periods. It is apparent that the committee finds itself increasingly hard pressed to find fetal and neonatal deaths requiring criticism. (Franklin, R. W.: *Perinatal Mortality Rates: A Fourteen-year Survey in a Metropolitan Community Hospital*. *Am J Obstet Gynecol* 119:297-305, 1974.)

FLUOROMETABOLITES Fluorometabolites associated with the use of methoxyflurane were measured in maternal and cord blood. Maternal serum inorganic fluoride rose five- to tenfold in the 10 to 15 minutes before delivery, but the cord blood showed less than 25 per cent of that increase. By the day after delivery, organic acid-labile fluoride had risen to about 450 μM in the mother; the maximum concentration in an infant was about 100 μM . These concentrations do not appear hazardous when the extensive use and higher concentrations of methoxyflurane metabolites in surgical patients are considered. It was concluded that exposure of obstetric patients to methoxyflurane as analgesia or anesthesia for as much as 30 minutes is probably safe. (Fry, B. W., and Taves, D. R.: *Maternal and Fetal Fluorometabolite Concentrations after Exposure to Methoxyflurane*. *Am J Obstet Gynecol* 119:199-204, 1974.)