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*In reply:*—The opportunity to respond to the point raised by Freund and Ward<sup>1</sup> and by Ikada and Schweiss in this issue of ANESTHESIOLOGY regarding similarities in drug packaging is greatly appreciated.

The problem in both cases centers around removal of the syringes from the sealed carton before they are ready to be used. The handling of syringes in such a manner is not in accord with either the written instructions on the carton or with the intended use of the syringes in emergency situations. The printed instructions on the carton clearly state, "Do not assemble until ready to use," and "Medication and fluid path and needle are sterile and nonpyrogenic if caps and needle cover are in place and package is intact." It is essential that these instructions be followed. Additionally, the intact carton acts as a tamper-proof system to assure that the protective vial and syringe caps have not been removed and replaced.

The cartons as well as the syringes are designed to be functionally efficient for emergency use. The label on the carton is easy to read and contains the name of the medication, strength, and expiration data. The carton is easy to open; just rip off the tab, tip the carton forward and the vial and injector slide right into your hands. The vials are identical in shape but not in size and are quite prominently labeled with the name of the medication they contain. The opening of the carton, the removal of the componentry, the simultaneous removal of the protective caps, and the assembly of the vial and injector can be performed within a very few seconds.

In summary, the design of the syringes and the packaging represents the current state of the art and provides equipment that not only is convenient and efficient to use in emergency circumstances, but also assures a high degree of safety if used according to instructions.

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Drs. Ikada and Schweiss have made recommendations in regard to label color coding of emergency drugs. Color coding of medical products is an area of continuing controversy. Reports in the published literature indicate that color coding contributes to increasing medication errors even though it is perceived by many to have potential benefits.<sup>2</sup> Color coding encourages reliance on drug identification by methods which detract from the only method that should be used when dispensing or administering medications; that is, reading the container label thoroughly and repeatedly. The use of color on packages and containers should serve only as a means of drawing the attention of the user to the label in order to read it before the drug or medication is administered. The label color should not be used as a basis for selecting a medication or an intravenous solution.

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#### REFERENCES

1. Freund RR, Ward RJ: Drug packaging invites confusion. ANESTHESIOLOGY 55:87-88, 1981.
2. Derewicz HS: Color-coded packaging and medication error. Am J Hosp Pharm 35:1344, 1978

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## Oxygenation during Mechanical Ventilation in Goats

*To the Editor:*—In a recent paper on the effect of mechanical ventilation with varying levels of PEEP on cerebral blood flow and cerebrospinal fluid pressure in goats, Doblar *et al.* reported arterial blood  $P_{O_2}$  values of 65-68 mmHg when the animals were ventilated with air at a tidal volume of 15 ml/kg, and a  $P_{aCO_2}$  of 30 mmHg with zero end-expiratory pressure. These values

are lower than the  $P_{aO_2}$  values of 94.5 mmHg reported in spontaneously breathing goats.<sup>2</sup> Furthermore, animals with a  $P_{aO_2}$  of less than 60 mmHg had already been excluded from the study. The authors state that the animals were paralyzed but give no details of the anesthesia or body position.

It is, however, well-known that most of the lung tissue