blockage or irritation of the bronchial tree by aspirated material and retention of mucus. Support of respiration should begin at the time of the accident. By such emergency therapy, mortality can be significantly reduced. (*Macicar, I. N., Frew, I. J. C., and Matheson, J. G.: Role of Respiratory Insufficiency in Mortality of Severe Head Injuries, Lancet 1: 390 (Feb.) 1958.*

PNEUMOTHORAX The circulatory effects of producing pneumothorax equal in volume to the functional residual capacity of 7 dogs under pentobarbital anesthesia were compared with the cardiac output of 6 dogs followed over a similar period of time without induction of pneumothorax. Cardiac output dropped 20 per cent immediately and 20 per cent more during the next 5 hours. The authors believe the fall in cardiac output was due to the partial collapse of the large systemic veins which in turn increased the resistance to blood flow in these veins and decreased the filling pressure of the heart. (*Simmons, D. H., and others: Acute Circulatory Effects of Pneumothorax in Dogs, J. Appl. Physiol. 12: 255 (March) 1958.*)

HUMIDITY Intrabronchial crusts are a frequent complication of tracheostomy and are common in those patients with poliomyelitis, head injuries and crush injuries of the chest. The authors use a slow drip of normal saline at 4 drops per minute into the oxygen tubing which is attached to the tracheotomy tube. The normal saline runs through a 25 gauge needle and the saline is kept near the level of the patient's head to avoid accidental drowning. (*Lueders, H. W., and others: Simplified Method for Achieving Intrarespiratory Humidification in the Tracheotomized Patient, J. Thoracic Surg. 35: 461 (April) 1958.*)

INFANT'S FIRST BREATH Studies show that the infant's first respiratory effort produces thoracic pressure falls of −60 to −80 cm. of water. These observations appear to justify a new approach to resuscitation of the apneic infant, in which intratracheal air or oxygen is initially introduced in short (0.1 second) blasts reaching pressure peaks of 40 to 60 cm. of water (*Swyer, P.: First Breath: Natural and Induced, Canad. M. A. J. 78: 128 (March 15) 1958.*)

OXYGEN FOR THE NEWBORN The aim of supplemental oxygen therapy for neonatal respiratory distress should be the restoration of arterial oxygen levels to a partial pressure of 95 mm. of mercury. If oxygen is given in concentrations just sufficient to achieve this, the dangers of both hypoxia and hyperoxia will be avoided no matter what the percentage of inspired oxygen may be. It is suggested that oximetry be used to provide objective measurement of arterial oxygenation in premature infants. (*Swyer, P.: Physiological Basis for Supplemental Oxygen in Newborn, Canad. M. A. J. 78: 236 (Feb. 15) 1958.*)

OXYGEN FOR PREMATURES Oximetry was used to control supplemental oxygen administration at the minimum level necessary to secure adequate blood oxygenation in premature infants. Studies showed that the routine administration of 35 per cent oxygen to premature infants with respiratory difficulty resulted in inadequate blood saturation initially in 1/3 of cases. On the other hand, half of the infants receiving oxygen on clinical grounds did not in fact require it. (*Swyer, P. R., and Wright, J.: Control of Supplemental Oxygen by Oximetry, Canad. M. A. J. 78: 231 (Feb. 15) 1958.*)

VENTILATORY RESUSCITATION A symposium on mouth-to-mouth resuscitation (expired air inflation) stresses several principles evolved from the extensive researches of its participants: (1) Mouth-to-mouth resuscitation is unequivocally superior to all methods of manual artificial respiration in all age groups. It is the only technique which assures adequate ventilation in all cases. (2) Expired air breathing should be performed with two to three times the resting tidal volume of the victim at a rate of twelve to twenty per minute. With this mild hyperventilation, the rescuer readily converts his exhaled air to a suitable resuscitating gas (18 per cent oxygen, 2 per cent carbon dioxide). (*Symposium on Mouth-to-Mouth Resuscitation (Expired Air Inflation), J. A. M. A. 167: 317 (May 17) 1958.*)