RESUSCITATION Twenty-two anesthetized and paralyzed patients undergoing elective surgery were studied while their respirations were maintained by the mouth-to-airway method. Respiratory tidal volume, minute volume and end-tidal CO_2 tension of the patients were measured as was the donors' end-tidal CO_2 tension. The patients' end-tidal CO_2 concentration could be maintained below 5.6 per cent with ease. The critical level of respiratory minute volume required to keep the carbon dioxide concentration below this level was 10 liters per minute. The commonest symptom of the donor (resucitator) was tired hands from maintaining the airway and the mouth-seal. Other symptoms included dizziness, but this could not be correlated with levels of end-tidal CO_2 concentration. (*Cox, J., Woolmer, R., and Thomas, V.: Expired-Air Resuscitation, Lancet 1: 727 (April 2) 1960.*)

RESPIRATORY OBSTRUCTION Twenty-one patients, all under general anesthesia before operation, curarized, and deeply relaxed and apneic, were examined radiographically in the supine position to establish the influence of the head and jaw on the patency of the air passage at the level of the tongue. Twelve of the 21 were similarly examined when awake. Extension of the head with closure of the mouth was found to give practically the same opening of the air passage as pulling or pushing the mandible forward with the head kept in the normal position. Even when the head was tilted maximally back, the clearances found were only some 25 per cent greater with forward displacement of the jaw. Laymen can more easily learn the technique of extending the head and closing the mouth to maintain the airway than by the usual forward displacement of the jaw. (*Ruben, H., Bentzen, N., and Saev, S. K.: X-Ray Study of Passage of Air Through the Pharynx in Anaesthetised Patients, Lancet 1: 849 (April 16) 1960.*)

VENTILATORY MECHANICS The tidal volume of the lung is altered by change from the standing to either the seated or supine position, but not by change from the lying (supine) to the seated position. The expiratory reserve volume is progressively decreased on going from the standing to the seated to the supine position. The inspiratory capacity is increased in the supine position as compared to the sitting or standing position. Other functions tested (minute volumes, vital capacity, maximal pressures, elastance and resistance) did not change significantly with changes in position from standing to sitting to supine. (*Brady, A. W., and others: Ventilatory Mechanics and Strength: Long Term Reexaminations and Position Change, J. Appl. Physiol. 15: 561 (July) 1960.*)

VENTILATORY AIR PRESSURES The effects of various inspiratory air pressures on the pulmonary vascular resistance of 15 dogs were examined in 116 experiments. As inspiratory air pressure was raised, the pulmonary blood flow decreased and the pulmonary arterial pressure increased—an indication of increased pulmonary vascular resistance. The site of this increase is considered to be at the pulmonary capillary. (*Harasawa, M., and Rodbard, S.: Ventilatory Air Pressure and Pulmonary Vascular Resistance, Am. Heart J. 60: 73 (July) 1960.*)

LUNG VOLUMES During continuous negative pressure breathing up to thirty centimeters of water the resting lung volume is decreased from a normal of 2,600 to 1,700 ml. Two and one half times as much pressure is required at a given air flow rate to move the air into or out of the lung with the reduced volume. This increased resistance is a result of narrowing of bronchial tubes concurrent with the volume change. The elastic properties of the lung are not apparently affected by these changes. (*Ting, E. Y., Hong, S. K., and Rahn, H.: Lung Volumes, Lung Compliance and Airway Resistance During Negative Pressure Breathing, J. Appl. Physiol. 15: 554 (July) 1960.*)

REGIONAL LUNG FUNCTION Cyclotron-produced radioisotope O^{15} with a half life of two minutes is used to study regional lung function without tracheal or bronchial intubation. Comparative amounts of radiation from two areas of the chest are determined by pairs of scintillation counters recording simultaneously. Count rates during breath holding fol-