

28. A hospital receives $\frac{1}{5}$ of its flu vaccine shipments from Company X and the remainder of its shipments from other companies. Each shipment contains a very large number of vaccine vials.

For Company X's shipments, 10% of the vials are ineffective. For every other company, 2% of the vials are ineffective. The hospital tests 30 randomly selected vials from a shipment and finds that one vial is ineffective.

What is the probability that this shipment came from Company X?

- (A) 0.10
- (B) 0.14
- (C) 0.37
- (D) 0.63
- (E) 0.86