Although home-based RDTs broaden the use of testing, they have been shown to be more accurate when performed by trained health care providers than by untrained persons. Persons who perform tests at home should carefully follow test kit instructions.

The appropriate interpretation of RDTs for SARS-CoV-2 testing and screening depends on the clinical indication and the pretest probability of infection. Among persons with a moderate-to-high pretest probability, which includes symptomatic persons and asymptomatic persons who have had close contact with a person with Covid-19, a positive RDT indicates a confirmed SARS-CoV-2 infection. However, RDTs may have false negative results, and repeat testing should be considered in cases of high clinical suspicion or worsening symptoms and in the serial screening or asymptomatic persons. A second negative RDT 2 days after the initial test or a negative laboratory-based NAAT would help to rule out SARS-CoV-2 infection.

In persons with exposure to SARS-CoV-2, testing is generally not useful in the first 48 hours after exposure since the virus will not have achieved a sufficient viral load. The most appropriate window for testing is generally considered to be 5 to 7 days after exposure, which is the average peak of symptoms and viral load. Therefore, for a single-test strategy, asymptomatic, exposed persons could use an RDT 5 to 7 days after exposure. For a two-test strategy, which is the FDA-approved indication for most RDTs for asymptomatic screening, a second RDT should be performed 2 days after a negative test. All symptomatic persons should be tested at the onset of symptoms and, if test results are negative, repeat testing should be considered if clinical suspicion remains high or symptoms worsen. In persons with low pretest probability of infection who have a positive RDT, a confirmatory test should be performed promptly.

The correct answer is 3.

Reference: Drain PK. Rapid Diagnostic Testing for SARS-CoV-2. *N Engl J Med*. 2022 Jan 20;386(3):264-272.

Available from: https://www.nejm.org/doi/10.1056/NEJMcp2117115?url_ver=Z39.88-2003&rfr_id=ori:rid:crossref.org&rfr_dat=cr_pub%20%200pubmed

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Q2 Empagliflozin in Heart Failure

Which *one* of the following statements about the use of empagliflozin in patients with heart failure and preserved ejection fraction is *false*?

- ❍ 1. It reduces the combined risk of cardiovascular death or hospitalization in patients with diabetes.
- ❍ 2. It does not reduce the combined risk of cardiovascular death or hospitalization in patients without diabetes.
- ❍ 3. It increases the risk of uncomplicated urinary tract infections.
- ❍ 4. It increases the risk of hypotension.

Educational Point: Patients with heart failure present with either a reduced or a preserved ejection fraction. Whereas heart failure with a reduced ejection fraction can be treated with drugs that act to attenuate the over-activation of endogenous neurohormonal systems, therapeutic options for patients with heart failure and a preserved ejection fraction are limited. Although some benefits have been reported with mineralocorticoid-receptor antagonists and neprilysin inhibitors, the magnitude of the effects has been modest and the benefits have been apparent only in subgroups of patients.

Sodium–glucose cotransporter 2 (SGLT2) inhibitors have been shown to reduce the development and progression of heart failure in patients with type 2 diabetes and in those with heart failure and a reduced ejection fraction. However, the effect of these drugs in patients with heart failure and a preserved ejection fraction has not been well studied. Post hoc analyses of a large-scale trial of dapagliflozin in type 2 diabetes indicated that SGLT2 inhibition might not reduce