

Swissnoso position: COVID-19 screening in asymptomatic patients

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Prevention in COVID-19 hospital transmission is a high priority issue for health systems. The proportion of asymptomatic individuals among those tested positive for SARS-CoV-2 is high, albeit varying greatly (from 20 to 40%). In certain situations, hospitals may opt to screen asymptomatic patients such as hospital admissions (in general wards, and/or high-risk wards such as the ICU and transplant unit), before surgery or aerosol-generating procedures (AGP), after having travelled abroad, or following transfer from endemic areas or high-risk settings (long-term care facilities). Individuals in quarantine, or contacts of index hospitalized patients may also be screened in the hospital setting.

In Switzerland, the strategies taken by the individual hospitals regarding testing of asymptomatic persons are variable, with overall low yields (0-5%). Lack of scientific evidence in this regard as well as epidemiological differences in geographical areas explain to some extent the differences and need to be considered when making decisions about admission screening modalities.

Swissnoso considers the evidence base for recommending the testing of asymptomatic individuals at hospital admission as low. Moreover, a negative test result in an asymptomatic person reflects that precise moment in time; however, the person could be in the incubation period and become symptomatic within very little time. In this regard, the following document aims to primarily address transmission risk level and, consequently, offer some guidance by summarizing certain criteria for asymptomatic patient SARS-CoV-2 testing at the beginning or during hospital admission. If a hospital opts to screen asymptomatic individuals for SARS-CoV-2, Swissnoso recommends evaluating the cost-benefit of this strategy on a regular basis as well as taking laboratory testing capacities into account, so that there are sufficient tests available for those with symptoms suggestive of COVID-19. Still, hospitals should continue to commit all efforts, first and foremost, to promote and enable standard infection prevention precautions.

Targeted COVID-19 laboratory screening criteria¹ for asymptomatic patients in acute-care hospital settings

Risk	Population	Consideration regarding isolation precautions	Comment
<p>Low</p>	<p>Specific populations to consider: (assuming patients are not contacts and are hospitalized for reasons other than confirmed or suspected COVID-19)</p> <ul style="list-style-type: none"> • all admissions • ICU patients • patients admitted for elective major surgery² • patients admitted for aerosol-generating procedures (AGP) • severely immunocompromised patients³ 	<p>Swissnoso does not recommend pre-emptive isolation of asymptomatic individuals so as to preserve isolation rooms for those with symptoms suggestive of COVID-19. This statement is based on the assumption that a general masking strategy with surgical masks for HCW has been installed.</p>	<p>Consider targeted screening depending on the local epidemiology, using canton-specific incidence data⁴.</p> <p>Choosing one or more appropriate subpopulations to be tested depends on the hospital case-mix and remains at the discretion of the hospital's leadership.</p>
<p>Medium</p>	<p>Individuals in quarantine due to returning from an endemic country/area who are hospitalized</p>	<p>For these patients, primarily ensure that they are identifiable by their medical record and placed on pre-emptive isolation precautions.</p>	<p>Swissnoso recommends testing patients in quarantine when returning from an endemic country/area only if testing capacities allow for it. Persons not able to communicate their symptoms should be tested preferentially.</p> <p><u>Note:</u> In terms of timing of administering the test after exposure, Swissnoso recommends testing on day 5-7 after exposure.</p>
<p>High</p>	<p>Contact persons (in quarantine, following exposure to an index case)</p> <p>Contact patients exposed in hospital clusters</p>	<p>For these patients, primarily ensure that they are identifiable by their medical record and placed on pre-emptive isolation precautions.</p>	<p>Swissnoso recommends screening all asymptomatic contact persons in quarantine, following exposure to an index case, either before or upon their hospitalization or when identified during hospital cluster analysis.</p> <p><u>Note:</u> In terms of timing of administering the test after exposure, Swissnoso recommends testing on day 5-7 after exposure.</p>

Footnotes:

¹Ensure sufficient testing capacities for persons matching the FOPH test criteria before starting systemic testing of asymptomatic patients. Consider molecular testing as preferable modality. Facilitated molecular tests such as saliva tests are not widely available yet and thus currently not recommended.

²Major surgery inventory includes cardiac surgery, lung surgery, neurosurgery, and abdominal cavity surgery. This inventory is not exhaustive; any organ/space surgical procedure can be considered as major surgery

³Patients a. receiving chemotherapy for active haemato-oncological diseases, b. receiving immunosuppressive or immunomodulatory treatment (including prednisone > 0.3-0.4mg/kg/day for more than 14 days) for other conditions, e.g. for multiple sclerosis, rheumatic arthritis, etc., c. solid-organ transplant (SOT) and hematopoietic stem cell transplant (HSCT) recipients, d. with severe acquired or congenital immunodeficiencies

⁴BAG COVID-19 weekly report: <https://www.bag.admin.ch/bag/en/home/krankheiten/ausbrueche-epidemien-pandemien/aktuelle-ausbrueche-epidemien/novel-cov/situation-schweiz-und-international.html#1354652653>