



香港兒科護理學院
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CHILDSim

香港兒童醫院模擬培訓中心
ChildSim



香港兒科醫學會
The Hong Kong Paediatric
Society



香港兒童免疫過敏及
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The Hong Kong Society
for Paediatric
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香港兒科護士學會
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Joint recommendations for parents when performing a rapid antigen test (RAT) to children at home by The Hong Kong Paediatric Society, The Hong Kong Society for Paediatric Immunology Allergy and Infectious Diseases, ChildSim, Hong Kong College of Paediatric Nursing and Hong Kong Paediatric Nurses Association

1. How to choose RAT kits?

To choose RAT kits, you may refer to the following lists provided by the Government of the Hong Kong Special Administrative Region:

<https://www.coronavirus.gov.hk/rat/eng/rat.html>



2. What preparatory work should parents and caregivers need to do before performing the RAT procedure judging the young age of the children?

Children may not fully accept the RAT procedures without preparation. Before sampling, parents and caregivers need to prepare kids in a way that they can understand, e.g. demonstrate the sampling procedure on a toy doll, let them know how deep the swab stick would get into the nose and reassure that they would feel a bit itchy but no pain. During the procedure, the child can have his/her favorite toy to hold on, so as to feel safe and be cooperative. Praise your child immediately for being able to cope with the steps of the RAT.

3. How deep should the nasal swab stick reach the nasal cavity while performing the nasal swab rapid antigen test (RAT) on children?

Parents and caregivers should refer to the instruction manual of the individual brand when using the COVID-19 RAT kits. Please refer to the following table for the recommended length of insertion for children of different ages, which should not be too deep.

Age of the child	Length of insertion into the nostril
2-6 years old	1.5 to 2 centimetres
6-12 years old	2 centimetres
Over 12 years old	2 to 3 centimetres

Parents and caregivers are advised to hold the nasal swab in a "pencil grip" manner whilst inserting the swab into the child's nostrils. Put the swab into each nostril sequentially. Gently rotate the swab for the required number of turns (see the instruction of RAT test) and keep rotating the swab stick when it is withdrawn, and repeat the procedure in the other nostril with the same swab stick. Properly dip the nasal swab stick into the testing solution and mix it well. Place the testing kit on a flat surface, drip the required number of drops of the mixed solution into the well of the kit, and read the result within the specified time.

4. Will it cause nosebleeds while doing the RAT test on children, if so, will it affect their health?

There are only a few capillaries in the area touched by the nasal swab stick, so the chance of nosebleeds is very low. Minor nosebleeds will not affect the child's health.

If nosebleeds do occur during the sampling procedure, parents and caregivers should help the child to press on the alar of the nose (not the nasal bridge) to stop the bleeding and the child should lean slightly forward and temporarily breathe through the mouth. The bleeding will stop in 5 to 10 minutes in majority of the cases.

5. What are the myths about stopping nosebleeds?

Plugging the nostrils with tissue paper while uptilting the child's head and putting ice packs on the child's forehead are common myths of stopping nosebleeds. Plugging the nostrils with tissue paper will further damage the mucous membrane of the nasal wall and cause bleeding again. Uptilting the head will not stop the nose bleeding, but will lead the backflow of blood from the nasal cavity to the airway and possibly cause choking. Putting ice packs on the child's forehead will not stop the bleeding.

6. Can RAT be done again after a nosebleed occurs?

If the nosebleed is not serious, a nasal swab can be performed again after a short period of resting. In that case, parents and caregivers are advised to do the procedure in a gentle manner and avoid applying excessive pressure on the healed nasal mucosa.

7. When is the appropriate time to take a RAT for children?

Parents and caregivers should take a nasal swab after the child wakes up in the morning. Avoid brushing teeth, rinsing mouth, cleaning nose, drinking water and eating before the sampling procedures, as these acts will reduce the viral

load on the mucous membranes of the nasal walls, thereby reduce the sensitivity of the test.

8. Regarding testing for COVID-19 status in children, nasal swab or deep throat saliva is more accurate?

Each testing method has its own degrees of sensitivity and specificity. The accuracy of the test depends on the sampling method and whether the instructions as shown in the test kit are followed properly. Different testing methods take different time to get a result. A test, which can be performed repeatedly at home, acceptable and tolerated by kids, providing result immediately, should be a preferred choice for children's daily use before going to school.

Most children are unable to perform the "Ka-Too" action to collect deep throat saliva of standard quality. Furthermore, it may take one to two days to get a result of deep throat saliva test. Rapid Antigen Test (RAT) using throat swab is a useful tool if performed properly. It does not only can identify children infected with the SARS-CoV2 in a timely manner for monitoring and treatment but also help to prevent the virus from spreading in the school campus.

9. Can parents or caregivers use the oral type of SARS-CoV2 antigen saliva rapid test kits on children?

The oral type of RAT has not been approved by the Centre for Health Protection of the Department of Health, Hong Kong SAR yet. Tongue and oral trauma may occur when the children struggle or play around with the stick in their mouth. Therefore, it is not recommended to use this method to perform RAT for children for the time being.

10. Can the RAT kit be used by the children / adolescents alone?

The RAT kit should not be handled by the children / adolescents alone. As part of the home safety measures, parents and caregivers should properly store and dispose of the test kits that are ready for use and used.

11. What should parents and carers do if the RAT is positive?

Parents and carers should read the test result according to the brand's instruction as stated in its manual. Once the child is tested positive, it is necessary to report the positive result to the "2019 Coronavirus Rapid Antigen Test Positive Person Reporting System" within 24 hours (<https://www.chp.gov.hk/ratp/>).



Moreover, the child should stay at home. Parents can refer to the “Back to School Health Tips” prepared by Centre for Health Protection, Department of Health for subsequent management (https://www.coronavirus.gov.hk/pdf/backtoschool_ENG.pdf).



Parents and carers should monitor the infected children with respect to the guidelines (<https://bit.ly/36kQ6Vu>) as suggested jointly by The Hong Kong Paediatric Society, The Hong Kong Society for Paediatric Immunology Allergy and Infectious Diseases, Hong Kong College of Paediatric Nursing and Hong Kong Paediatric Nurses Association.



As children's immune systems are immature, they may get serious complications once infected with COVID-19. Therefore, The Hong Kong Paediatric Society, The Hong Kong Society for Paediatric Immunology Allergy and Infectious Diseases, ChildSim, Hong Kong College of Paediatric Nursing and Hong Kong Paediatric Nurses Association sincerely appeal to parents to have their children vaccinated against COVID-19 as recommended by the Scientific Committee on Vaccine Preventable Diseases, Centre for Health Protection.



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