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**Rules to be applied for the organisation of road cycling competitions
in the context of the COVID-19 pandemic**

**UCI WorldTour – UCI Women’s WorldTour – UCI ProSeries
Continental Road Championships
UCI Road World Championships**

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The stakeholders of cycling and the UCI acknowledge the extraordinary nature of the COVID-19 prevailing since 2020 and the ensuing difficulties for the organisation of safe sporting events. These are all the more acute in the context of cycling events due to the regular international travel, the use of free-access venues and facilities and the different team and staff compositions.

From the beginning of the pandemic, the UCI and stakeholders of cycling agreed to constitute the UCI Steering Group to present to the UCI Management Committee a set of emergency rules (hereinafter: the Rules) with the objective of reducing the risk of transmission of the coronavirus during events of the UCI International Calendar. Since the end of the 2020 road cycling season new events have occurred that must be taken into consideration for the organisation of road events on the UCI international calendar. Indeed,

- the development, validation by many health authorities, and dissemination of several vaccines against COVID-19,
- the new advances in the design of antigenic tests,
- the appearance of mutations in the viral genome, causing changes in the host-pathogen interactions.

impose to update the Rules for the organization of road races that had been applied for the 2020 season. As for the 2020 season, the present document should not be a “consensus statement” per se.

Upon agreement within the UCI Steering Group, these Rules were presented to and approved by the UCI Management Committee in accordance with article 47.1 lit. k) of the UCI Constitution. The Rules include requirements, instructions (mandatory measures) and present recommendations for good practice (recommended and desired measures) for organising cycling events during the COVID-19 pandemic.

The Rules apply to all UCI road races of the UCI WorldTour, UCI Women’s WorldTour and UCI ProSeries, as well as Continental Road Championships and UCI Road World Championships (hereinafter: the “Events”). They concern the Elite, U23 and Junior, Female and Male categories.

The Rules apply to all Events taking place as of approval by the UCI Management Committee until they are repealed by the UCI Management Committee and no earlier than 31 December 2021. The Management Committee has instructed the UCI Steering Group to update the present Rules on a regular basis in consideration of new knowledge on the SARS-CoV-2 pathogenic power, progress in the field of biotechnology, especially for COVID-19 testing, and methods of prevention and control of the spread of the virus. This provision is all the more important as the conditions of the pandemic and knowledge about the SARS-CoV-2 characteristics are rapidly evolving. Any amendments of the present protocol shall be published without delay and shall be immediately applicable, unless indicated otherwise. A consolidated version containing the latest amendments in force will be published on the dedicated webpage of the UCI website as soon as practicable (<https://www.uci.org/road/news/2020/covid-19-pandemic-how-to-return-to-cycling-events>).

The document is divided into two main sections, a section concerning assessment of the pandemic severity as the Events approach, and a section setting out the requirements and practical recommendations to be implemented by organisers and teams in relation to the Events.

As a preamble, it is recalled that:

- local, regional and national rules and laws prevail over the requirements and recommendations set out in the present document;
- the process of adapting the conditions for organising sporting events is part of a general risk-reduction strategy, acknowledging however that the risks of infection may not be entirely excluded.

I. Pandemic severity assessment

The first step with a view to organizing an Event (which is likely to bring together a considerable number of people) is for the Event organiser to carry out and share an analysis of the pandemic situation. The aim of this pandemic severity assessment is to determine the overall risk of spreading the disease during the Event and the appropriate means to mitigate such a risk.

The pandemic severity assessment should be carried out with the involvement of local public health authorities and staff with expertise in mass gatherings

A- Assessment criteria

Several criteria are applied to characterise the pandemic severity, based on qualitative and quantitative factors. The difficulty is to propose criteria that are easily accessible in all countries of the world. The Council of Europe, on the advice of the European Centre for Disease Prevention and Control (ECDC), has recently published a method for assessing the severity of the pandemic.

The Event organisers should contact local or national health authorities in order to characterise the state of the pandemic. The selected criteria are:

- the total number of newly confirmed cases of COVID-19 per 100,000 population in the last 14 days at regional level;
- the 'test positivity rate', that is, the percentage of positive tests among all tests for COVID-19 infection carried out during the last week;
- the 'testing rate', that is, the number of tests for COVID-19 infection per 100 000 population carried out during the last week.
- the basic reproductive number (R) is an excellent parameter for characterising human-to-human transmission. R represents the number of people on average that a single infected individual may contaminate around him or her; it is a determining factor in epidemic risk assessment. A difficulty is obtaining this information for all countries. This information is not centralised by WHO and its estimation remains subject to the initiative of the national authorities; the organisers should contact the national health authorities to obtain this information.

B- Characterisation of the different phases of the pandemic.

The decisions of authorising a sporting event remain under the authority of the competent local or national authorities. However, organisers must inform teams and the UCI of local and regional conditions of the pandemic. To do so, they will use the color code proposed by the ECDC, characterising the severity of the pandemic; for European countries, this information is available in free access¹.

The assessment of the pandemic severity is the responsibility of the COVID-19 coordinator designated by the event organizer (see below). The pandemic severity is represented by a color code,

1. **green area**, if the 14-day cumulative COVID-19 case notification rate is less than 25 per 100,000 population and the test positivity rate of tests for COVID-19 infection is less than 4%;
2. **orange area**, if the 14-day cumulative COVID-19 case notification rate is less than 50 per 100,000 population, but the test positivity rate of tests for COVID-19 infection is 4% or more. Or, if the 14-day cumulative COVID-19 case notification rate ranges from 25 to 150 per 100,000 population but the test positivity rate of tests for COVID-19 infection is less than 4%;
3. **red area**, if the 14-day cumulative COVID-19 case notification rate ranges from 50 to 150 per 100,000 population, and the test positivity rate of tests for COVID-19 infection is 4% or more. Or if the 14-day cumulative COVID-19 case notification rate ranges from 150 to 500 per 100,000 population;
4. **dark-red area**, if the 14-day cumulative COVID-19 case notification rate is more than 500 per 100,000 population.

II. Optimal conditions for organising competitions.

The concrete actions to be implemented for an optimal organisation of cycling competitions should be considered according to the national health regulations in force in the country (or administrative regions) of the Event, and according to the evaluation of the phase of the pandemic which will be made closer to the competition according to the criteria set out above (see paragraph I-B).

One of the globally acknowledged principles for organising competitions is the creation and maintenance of protective "bubbles" around the teams which, in the context of road races, will link to form a "peloton bubble". The measures implemented should be based on the general objective of controlling entry into the "team bubble", and restricting direct and unprotected contact between the "team bubbles" and "peloton bubble" and people whose health status has not been checked.

The mitigation measures are grouped into three categories: "mandatory, MAN", "recommended, REC", and "desired, DES". The MAN measures will be for the organisers (MAN-org), the teams (MAN-team) or the UCI (MAN-uci). A general diagram of the measures is

¹ Map of pandemic severity levels in different European countries
<https://www.ecdc.europa.eu/en/covid-19/situation-updates/weekly-maps-coordinated-restriction-free-movement>

presented below, and their level of requirement will be presented in the form of a table according to the "severity" of the pandemic (see paragraph III).

A- Pre-event measures²

1. Appointment of a COVID-19 Coordinator for the Event

An expert in infectious diseases must be appointed by the Event organiser; this COVID-19 Coordinator must have an up-to-date knowledge of the requirements and recommendations put in place by the national (or regional) health authorities to ensure the security of sporting events. He/she should get in touch with these authorities as soon as possible in order to best coordinate the actions to be implemented by the Event organiser with the rules in force. He/she regularly consults the WHO website (<https://covid19.who.int>) or on a dedicated national website, to assess the pandemic status in the host country. This person is responsible for:

- assessing the pandemic severity in the region, ahead of the competition. He/she is the advisor for the implementation of preventive measures. The COVID-19 Coordinator is the link between the Event organiser and the local or regional health authorities;
- assisting the Event organiser with the protocol for the management of suspected COVID-19 cases, including all stages of patient management until the diagnosis
- providing the Event organiser the criteria for the identification of contact cases with a confirmed COVID-19 case (with either high-risk exposure, i.e. close contact, or low-risk exposure)³ and coordinating the relevant actions with the local or regional health authorities.

2. Ensure that the accommodation where teams are staying is adequate to maintain a "life bubble" around each team

The accommodation arrangements shall enable distancing between teams with measures such as grouping each team on a single floor (or a wing of the hotel) and a reserved and independent dining room, whenever possible. The Event organiser must inform the each hotel of the required preventive measures (room cleaning, physical distancing, hand washing, wearing a mask during service, etc.).

The Event organiser will request that hotel staff abide by the rules in force for cleaning and disinfecting furniture and objects.

3. Ensure the prior management of suspected COVID-19 cases

For multi-day events (UCI World Championships, stage races), the Event organiser shall consider arranging rooms (if possible a single room per team) known as "isolation" to be used by anyone presenting symptoms suggestive of COVID-19, before referral to the COVID Doctor (see point II-D-3).

² Relevant information shall be provided by the Event organiser to teams in accordance with section V. of this document at least 14 days prior to the Event.

³ Contact Tracing by European Center for Disease Prevention and Control

4. Inform the teams of the requirements and/or recommendations in terms of prevention procedures within their group (staff and riders)

These measures may include personal protection, cleaning of technical equipment, cleaning and disinfection of commonly touched surfaces in the vehicle buses, etc. **These measures shall be appropriate to protect the integrity of the team bubbles.** In this respect, the role of team doctors is essential.

5. Offer biology laboratory resources to the teams.

The fight against the spread of the latest SARS-CoV-2 variants has led most European countries to strengthen health controls on entry into their territory. A negative PCR test of less than 72 h (sometimes less than 48 h) is now required to be authorised for entry into most countries. In order to enable the teams to reach their home countries, the organisers will assist the teams in the following ways,

- 1) the teams make a request to the organisers, specifying the day of departure and the number of people involved,
- 2) this request should be sent to the organiser 14 days before the race
- 3) the organiser will send the following information to the team 4-5 days before the race,
 - Laboratory(s) close to the team's hotel with PCR testing capability,
 - Ability to test riders and staff members 48 hours before the race start, with results provided within 24 hours, in regulatory form (result certificate in PDF form),
 - Possibility of taking samples in the teams' hotels,
 - Cost of tests (which will remain to the teams),
 - Direct point of contact with a manager in the laboratory.

B- Procedures for entering team bubbles

1. Global context

a. new SARS-CoV-2 variants.

One of the major events of the last few months has been the appearance of new variants of SARS-CoV-2. Although coronaviruses make fewer mutations than most RNA viruses, mutations are common, and related to errors in the genetic code occurring during replication. The first SARS-CoV-2 mutation of concern was detected in March 2020, and resulted in the replacement of one amino acid of the virus's Spike protein located at position 614. Mutations affecting the Spike protein are of great interest due to their potential to impact transmissibility (Lauring and Hodcroft, 2021). Viruses with the D614G mutation quickly became the globally dominant form by June 2020, and many subsequent studies confirmed that they are more infectious than initial lineages (Korber et al., 2020).

In late 2020, a new SARSCoV-2 variant designated as B.1.351 emerged in Eastern South Africa (Tegally et al., 2020). One of the mutations in this variant, N501Y, is located in the important receptor-binding domain (RBD) of the Spike protein and is predicted to increase binding to human cells (Greaney et al., 2021). Preliminary studies suggest this new variant is associated with a higher viral load, which may suggest increased transmissibility. Moreover, at this stage of our knowledge, there is no clear evidence of the new variant being associated with more severe disease. But further research is needed to understand the impact of this N501Y mutation on viral transmission, the clinical severity of the

infection and specific preventive measures. Similarly, it is important to verify the performance of laboratory tests on this B.1.351 variant.

This N501Y mutation is also shared with other variants first identified in the UK (B.1.1.7) (Tegally et al., 2020) and Brazil (P.1) (Faria et al., 2021). The B.1.1.7 variant lineage that spreads rapidly across the European countries is more transmissible, with a growth rate that has been estimated to be 40-70% higher than other SARS-CoV-2 lineages. This is mainly due to the N501Y mutation in the RBD increasing the SARS-CoV-2 binding to human cells (Volz et al., 2021). However, preliminary clinical studies indicate that there is no change in disease severity or occurrence of reinfection by this B.1.1.7 variant. Moreover, the mutations reported in this variant of concern do not appear to affect the performance of PCR and antigen COVID tests. But the questions raised by the performances of the laboratory tests on the P.1 variant remain unanswered.

Consistent evidence of increased transmission of the new variants should make us more attentive to the early case-finding of asymptomatic carriers through systematic COVID testing. Measures to control the spread of these variants must focus on reducing transmission, reinforcing all mitigation measures. Pending further results on the susceptibility of these variants to currently available vaccines, **the only effective way to control the spread of all SARS-CoV-2 variants of concern in the cycling world is to strictly apply all the measures detailed in the present protocol.**

- b. vaccination and Covid controls on entry into the team bubbles.

At the time of writing the current protocol, there have been efficacy reports from phase 3 trials of five vaccines and the scientific data have been published in peer-reviewed journals for BNT162b2 (Moderna), ChAdOx1 (University of Oxford and AstraZeneca), BNT162b2 (Pfizer and BioNTech) and Gam-COVID-Vac (Sputnik V). Three have been evaluated by drug regulatory authorities and approved for use in many countries.

However, a detailed understanding of their efficacy, the duration of the immunity and their effect on viral transmission are currently lacking. Do any of the vaccines prevent viral transmission is a major issue for the preventive measures during the sport events (The Lancet Editorial, 2021). Whether Covid-19 vaccines can prevent viral transmission and therefore combined with physical distancing measures contribute to reductions in human-to-human transmission of the virus is a major issue for the preventive measures during the sport events. In parallel of the phase III efficacy trials of the ChAdOx1 nCoV-19 vaccine, naso-pharyngeal swabs were obtained from volunteers and analyzed to allow assessment of the overall impact of the vaccine on risk of infection (Voysey et al., 2021). It was shown that a single standard dose of the vaccine reduced PCR positivity by 67%, and that, after the second dose reduced PCR positivity by 49.5% overall. These preliminary data clearly suggest that ChAdOx1 nCoV-19 vaccine may have a substantial impact on the viral transmission by reducing the number of infected individuals in the population.

However, apart from these preliminary data on one of the vaccines approved by drug regulatory authorities, we have no data on the impact of vaccines on viral transmission.

For this reason, vaccinated personnel remain subject to PCR controls for entry into the team bubble. This measure will be revised as soon as convincing results are published confirming the effects of vaccines on the prevention of viral transmission.

2. Pre-Event health checks

Health checks shall be undertaken for all members of the team (staff and riders) and should be completed prior to travelling to the Event. These health checks shall include both a clinical and a biological component (both are mandatory, except in very low risk period);

- a. the clinical aspect of detecting carriers of the virus is based on examining clinical signs suggestive of the disease. The methods of clinical examination are left to the discretion of the team doctors. They are free to use the clinical tool of their choice based on their personal experience. But the UCI proposes a simple questionnaire that can be used remotely (Figure 1).

Covid-19 Questionnaire	
Fever $\geq 38^{\circ}\text{C}$	4 pts
Cough and/or dyspnea	4 pts
Abnormal fatigue	4 pts
Anosmia and/or ageusia	3 pts
Stuffy nose or sore throat	2 pts
Nausea, vomiting, diarrhea	2 pts
Unusual myalgia	2 pts
Unusual headache	1 pt
<p>< 3 a little suspicious</p> <p>$4-6$ moderately suspicious \rightarrow PCR test according to the context</p> <p>> 6 highly suspicious \rightarrow PCR test</p>	

Figure 1. Suggested screening questionnaire

- b. the diagnosis of COVID-19 (biological component) is usually made using clinical, laboratory and radiological features. In asymptomatic patients, clinical and radiological signs of COVID-19 are non-specific, the COVID-19 diagnosis has to be confirmed by a molecular biology technique to identify the SARS-CoV-2.
- c. what type of test when entering the team bubbles? Infection with SARS-CoV-2 does not lead to symptoms in ~30 to 45% of cases (He et al., 2020). Screening testing of asymptomatic individuals is one of the most promising tools to combat the COVID-19 pandemic (Mina et al., 2020), since asymptomatic cases are key contributors to virus spread. Entry-screening tests into team bubbles must be highly sensitive because the consequences of bringing SARS-CoV-2 into the peloton bubble can be devastating. However, a negative test alone should not be considered sufficient to enter in team bubbles. Other requirements, including masks and physical distancing are required.

COVID-19 tests can be grouped into 3 main categories,

- nucleic acid tests which target specific sequences of the viral genome. These tests comprise RT-PCR (quantitative PCR, qPCR, droplet digital PCR, ddPCR), isothermal

amplification (loop mediated isothermal amplification, RT-LAMP, regular LAMP, nicking endonuclease amplification reaction, NEAR).

- serological tests (serological rapid diagnostic tests, serological ELISA) detect specific SARS-CoV-2 IgG/IgM in blood.
- antigenic tests detect viral N (nucleocapsid protein) or S (spike protein) proteins using capture antibodies via LFA (lateral flow assay) or ELISA.

All these tests play distinct roles in hospital, point-of-care, or large-scale population testing. Existing and emerging tests are available on the following website, which is continuously updated,

<https://csb.mgh.harvard.edu/covid>

To date, the gold standard tests for the viral diagnosis of SARS-CoV-2 infection are nucleic acid tests, based on the detection of viral nucleic acids in nasopharyngeal secretions (Candel et al., 2020). The most widely used technique is PCR. The RT-PCR methods, i.e. both qPCR and ddPCR, are highly sensitive and these techniques amplify a nucleotide sequence of a target gene present in a sample, which helps in detecting a specific pathogen and discriminating it from other related pathogens.

It can be said that PCR techniques are “excessively sensitive” to establish infectivity, since they are capable of detecting very low viral loads (Vogels et al., 2020). The sample infectivity is commonly found for RNA concentrations greater than 100 RNA copies/mL, corresponding to Ct values higher than 32 (La Scola et al., 2020).

That is why to be most effective, PCR results should include the cycle threshold values (Ct), which are an estimate of viral load (Kahn et al., 2021).

However, the massive use of these techniques has generated some problems related to the availability of laboratories, the delay in the notification of results and cost of analyses.

Antigen detection tests are also direct diagnostic methods, with the advantage of obtaining the result in a few minutes. The simplicity and low cost of these tests allow them to be repeated on successive days in certain clinical settings. The sensitivity of antigen tests is generally lower than that of nucleic acid tests, although their specificity is comparable⁴. The sensitivity of antigenic detection tests (ADT) is 98% for Ct ≤25, and 57% for Ct ≥30. According to these data, ADT can detect SARS-CoV-2 infected individuals with high viral loads, have potential in determining contagious individuals, and would not be suitable in the study of contacts or asymptomatic cases, since in general the levels of viral load are low (Toptan et al., 2021).

However, the simplicity and low cost of this test allow them to be repeated frequently, even daily. Having a viral detection analysis in real time has proven more useful to control the spread of infection in closed populations than to perform a more sensitive test (nucleic acid tests which target acid nucleic sequences specific to the viral genome), but with longer delay time and cost.

As other viruses the SARS-CoV-2 constantly change through mutations and new variants emerge that cause Covid-19. Several new variants emerged in the fall of 2020

⁴ Public Health England. SARS-CoV-2 lateral flow antigen tests: evaluation of VUI-202012/01. <https://www.gov.uk/government/publications/sars-cov-2-lateral-flow-antigen-tests-evaluation-of-vui-20201201/sars-cov-2-lateral-flow-antigen-tests-evaluation-of-vui-20201201>. Accessed 15 February 2021

which seem to spread more easily and quickly than previous lines of the SARS-CoV-2, leading to more hospitalizations, and potentially more deaths. These mutations in the viral genetic sequences have the potential to alter the performance of diagnostic tests. Nucleic acid assays (i.e. PCR) mostly target multiple sequences in the most conserved areas of the SARS-CoV-2 genome, and not the gene encoding the Spike protein which exhibits the main mutations reported across these three variants. Therefore, no major performance deficits in PCR testing are expected. This contributes to explain why, to fight against the spread of variants in Europe, the vast majority of countries require a negative PCR test on entry into their territory.

Concerning the antigen-based tests, a recent study concluded that five SARS-CoV-2 rapid antigen tests were able to detect the B.1.1.7 variant which emerged in UK (N501Y mutation). However, to date no evaluations have been performed to examine the performances of antigenic tests for detecting the other variants (i.e. B.1.351 variant emerged in South Africa, with E484K and N501Y mutations, and B.1.1.248 variant emerged in Brazil, with 12 mutations including K417T, E484K, and N501Y).

This is why, in the absence of conclusive data on the performance of antigenic tests on the variants currently circulating in Europe, PCR tests, looking of specific nucleic acid sequences, remain essential and indispensable for the detection of asymptomatic carriers of the SARS-CoV-2 for entry into team bubbles.

d. the general objective of the biological controls necessary to enter into the team bubbles is the screening of healthy carriers (asymptomatic cases) or pre-symptomatic SARS-CoV-2 cases. Specific procedures and tests need to be adapted to mass screening. Such screening tests intended for the qualitative detection of SARS-CoV-2 nucleic acid (i.e. viral tests) may be conducted as follows:

- the use of saliva as an organic fluid for the detection of SARS-CoV-2). Saliva has been shown to be a viable alternative to nasopharyngeal swabs that cause discomfort due to procedure's invasiveness (Wyllie et al. 2020; Azzi et al. 2020). Saliva specimens obtained under supervision perform comparably to naso-pharyngeal swabs (Fernandez-Gonzalez et al., 2021). The sensitivities of supervised salivary collection, and saliva self-collection specimens reached 97% and 91% in patients with Ct values \leq 30 (Fernandez-Gonzalez et al., 2021). This body fluid should be considered as a reliable sample for the diagnosis in both symptomatic and asymptomatic individuals, particularly to detect individuals with Ct < 30, with a significant risk of transmission.
- as mentioned above, a highly specific and sensitive method to identify specific SARS-CoV-2 nucleic acid sequences is needed on this type of biological matrix (Ji et al. 2020).

3. Practical arrangements

3.A. One-day races.

* COVID clinical suspicion questionnaire to be completed daily on the 5 days preceding the race. A questionnaire is **proposed below as a suggestion** (Figure 1); if it is used, adequate measures shall be taken in case the risk score is "strongly suspect" or "moderately suspect" on 2 days out of 5. Teams are free to use another clinical tool providing clinical guidance;

* tests for the qualitative detection of the SARS-CoV-2 RNA (nucleic acid test, PCR type) must be carried out 6 days⁵ before the Event; if this test is negative, a second test will be carried no more than 72 hours⁶ before the Event (Figure 2-A below). A team member's participation in the Event shall only be authorised if the results for these 2 tests have been received and are confirmed as negative prior to the Event. Teams shall be entirely responsible for compliance with this rule regarding staff members, whereas riders may be forbidden from taking part in the Event in accordance with section V.

* a further viral test shall be required if the previous test was undertaken more than 10 days prior to the subsequent Event (Figure 2-B). This test shall be carried out no more than 72 hours before the subsequent Event. A team member's participation in this Event shall only be authorized if the result for this subsequent viral test has been received and confirmed as negative prior to the Event. Teams shall be entirely responsible for compliance with this rule regarding staff members, whereas riders may be forbidden from taking part in the Event in accordance with section V.

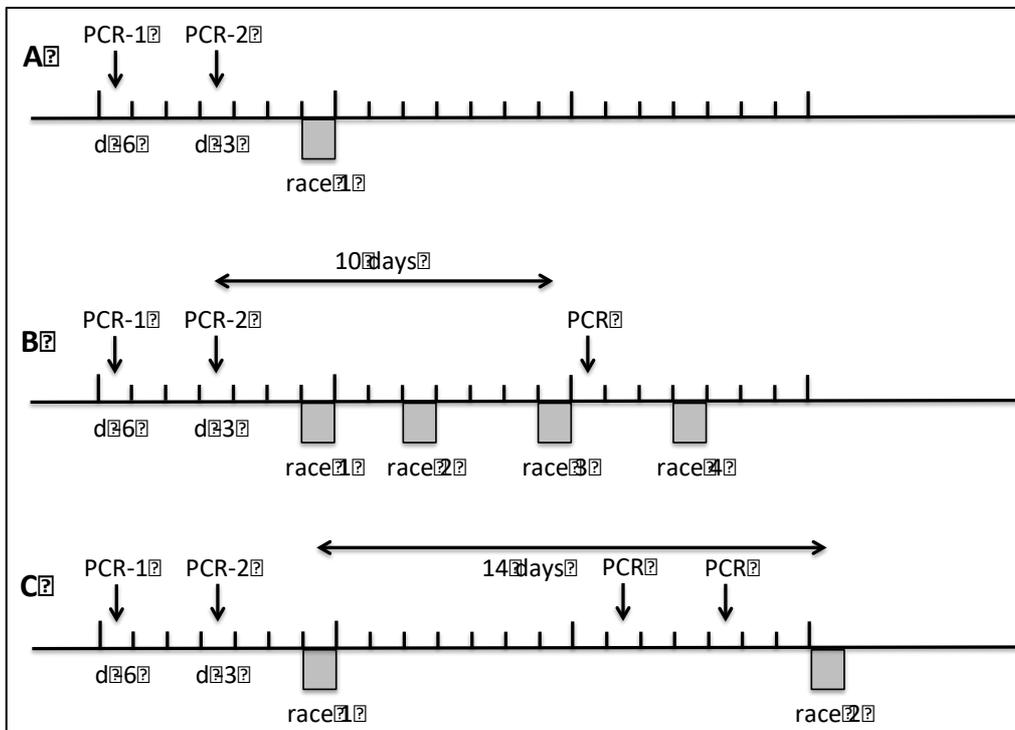


Figure 2. Schedule of PCR tests for entry into team bubbles

* if 14 or more days separate 2 one-day races, a new viral test is necessary 6 days before the second race as well as a further viral test no more than 72 hours before the Event (Figure 2-C). A team member's participation in the Event shall only be authorized if the results of these 2 viral tests have been received and are confirmed as negative prior to

⁵ The deadlines for the first diagnostic test shall be monitored with a tolerance of 24 hours before the 6-day deadline. This applies to all diagnostic tests referred to in this document with a deadline of 6 days prior to the Event.

⁶ The deadline for the second diagnostic test shall be monitored with a tolerance of approximately 24 hours before the 72-hour deadline and up until the day of the Event. This applies to all diagnostic tests referred to in this document with a deadline of 72 hours prior to the Event.

the Event. Teams shall be entirely responsible for compliance with this rule regarding staff members, whereas riders may be forbidden from taking part in the Event in accordance with section V.

PCR tests performed as part of mandatory entry procedures in countries (which have adopted this measure) can be used as pre-event tests. The objective is to optimize the testing program by avoiding unnecessary repetition.

These tests are the responsibility of the teams, both in terms of logistics and costs.

3.B. Stage races.

The requirements below apply to any team member whether present from the beginning of the Event or joining during the course of the Event.

* complete health checks (COVID clinical suspicion questionnaire or other) daily during the 5 days before the Event (see above). Teams (most often their doctors) will have the option of using the model proposed above or their own tool.

* have a first viral test for SARS-CoV-2 (PCR type) 6 days before the Event (Figure 3-A below). If this diagnostic test is negative, a second viral test will be carried out no more than 72 hours before the Event.

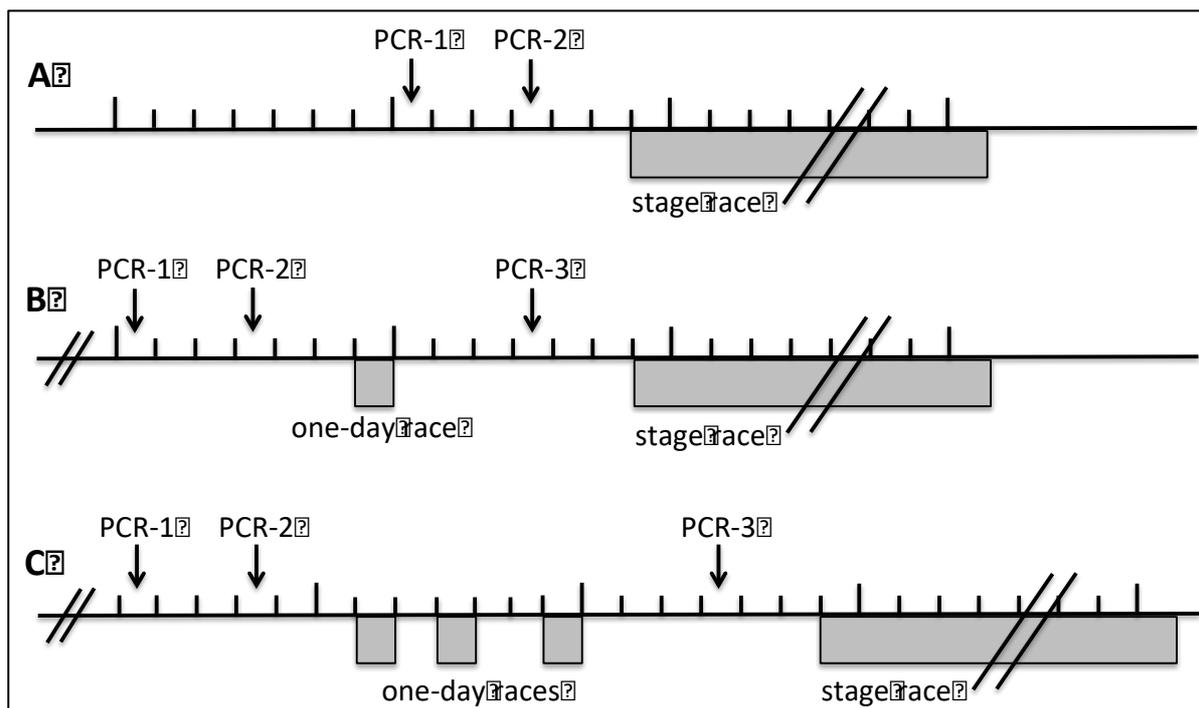


Figure 3. Schedule of PCR tests with one-day and stage races

A team member's participation in the Event shall only be authorized if the results of these 2 viral tests have been received and are confirmed as negative prior to the Event. Teams shall be entirely responsible for compliance with this rule regarding staff members, whereas riders may be forbidden from taking part in the Event in accordance with section V. In addition, teams shall be responsible for determining and implementing measures and/or conditions for the access of team members into the "team bubble".

When a stage race follows a one-day race, the diagnostic tests must be carried out in accordance with Figures 3-B and 3-C. A team member's participation in the Event shall only be authorized if the results of these 2 viral diagnostic tests have been received and are confirmed as negative prior to the Event. Teams shall be entirely responsible for compliance with this rule regarding staff members, whereas riders may be forbidden from taking part in the Event in accordance with section V.

PCR tests performed as part of mandatory entry procedures in countries (which have adopted this measure) can be used as pre-event tests. The objective is to optimize the testing program by avoiding unnecessary repetition.

These tests are the responsibility of the teams, both in terms of logistics and costs.

C- Ensure the protection of the team bubbles and the peloton bubble

When used in conjunction with widespread testing, quarantining of anyone that may be infected, hand washing, room ventilation and physical distancing, facemasks are a valuable tool to reduce community transmission. Models suggest that public mask wearing is most effective at reducing spread of the virus when both compliance and mask performances are high (Figure 4) (Howard et al., 2021).

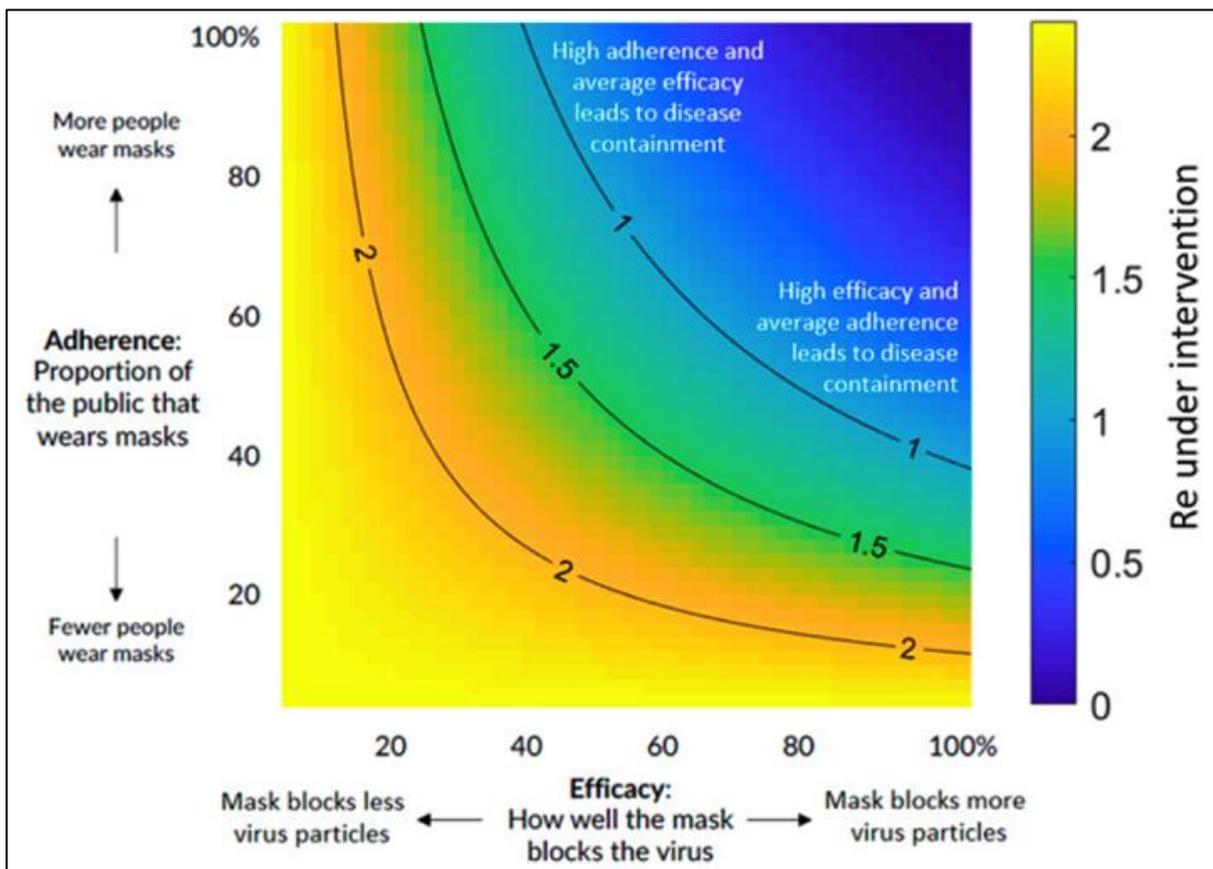


Figure 4. Impact of mask wearing under the full range of mask adherence and efficacy. The color indicates the resulting reproduction number R from an initial R0 of 2.4. Blue area is what is needed to slow the spread of COVID-19. Each black line represents a specific disease transmission level with the effective reproduction number R indicated (Howard et al., 2021).

The airborne transmission route of SARS-CoV-2 is highly virulent and dominant for the spread of COVID-19. In-depth investigations of the COVID-19 epidemic clearly show that asymptomatic people with SARS-Cov-2 are a major cause of virus transmission, particularly as the viral loads in nasopharynx and oropharynx samples in asymptomatic and pre-symptomatic individuals are similar to those of symptomatic patients.

The protective efficacy of masks can be explained scientifically, so that everyone can clearly understand the role of masks in the prevention of Covid-19. A sufficiently high adherence rate to public mask wearing at ~80% of the population results in the outbreak containment with most respiratory protective devices (Figure 4) (Howard et al., 2021). But in parallel with adherence, the protective performances of masks play an effective role in the prevention of the spread of Covid-19. The protective performance of mask is affected by many factors, such as material properties, wearing method, facial fitting etc.

The filtration efficiency of masks depends, at least partly, of the particle-size of droplets coughed or exhaled. When the particle size of droplets exceeds 1 μm , the mask filtration efficiency is more than 80% and reaches 90% for droplets higher than 4 μm . The larger droplets of infected people contain a larger number of viruses, which will be more dangerous and have a greater risk of transmission. That is why wearing masks (whether N95, surgical masks or ordinary cotton masks), when they are worn correctly, is one of the most effective protection measures for the peloton.

But when the particle size is less than 1 μm , the filtration efficiency decreases and for most types of masks is only 60%–70%, except for the N95 mask (Wei et al., 2021). In this period of emergence of highly contagious SARS-CoV-2 variants, it is important to take into consideration the filtration performance of droplets less than 1 μm . Therefore attention is drawn to the filtration performance of masks that are used in teams and by organization members. Results showed that the filtration efficiency varied considerably from 5–50% among fabrics materials due to the material properties, such as density and microscopic structure of the materials (Hao et al., 2021).

This is why attention is drawn to the filtration performance of the masks that are used by the teams, accredited persons and members of the organization. The performance of non-medical masks should always be carefully checked before being adopted and worn regularly. It is equally important that everyone should pay attention to wearing the facemask correctly, covering mouth and nose.

1. **Provide information** about the importance of individual protective measures (maintaining safety distances, wearing a face mask, frequent hand washing, ventilation of rooms)

All personnel are concerned, team staff, officials, all accredited persons (journalists, medical staff, guests, etc.), as well as all personnel involved in the organization of the event.

The Event organiser will pay particular attention to the strict application by the staff involved in the Event of individual measures to protect and prevent the spread of the virus. Wearing the facemask will be permanent for the entire duration of the event, including outdoors. For the riders, wearing the facemask will be mandatory, except during the warm-up, training, and during the race.

2. **Arrange separate pathways for different categories of personnel;**

- within the media zone,
- within official zones,

- within the VIP area.

3. Arrange the communal areas accessible with accreditation to allow for physical distancing (min 1.5 m between people), especially;

- in the media zone, arrangement of workspaces,
- in official areas,
- in VIP areas, impose the wearing of individual masks.

4. Forbid use of changing rooms and other communal areas.

5. Manage the presence of spectators;

- limit spectators in the start and finish areas according to the rules published by the national authorities in charge of public health;
- maintain a safe distance between spectators and riders;
- encourage spectators to wear a face mask at all times.

6. Ensure cleaning and disinfection of common areas and equipment, and limit sharing of materials;

- restrooms (in sufficiency, cleaning procedures, 1.5 m physical distancing, including for queues (marks on the ground));
- regular cleaning of all commonly touched points;
- availability of hand sanitisers at strategic points.

7. Provide waste bins for contaminated items to allow for the safe disposal or storing of all hygienic materials.

8. Ensure the protection of the peloton bubble during the Events

a. In the morning of the Events (one-day races or every stage during stage-races), the COVID-19 clinical suspicion questionnaire must be completed by all team members, or any other clinical tool chosen by the team physician, administered (riders and staff members) (see B.1.). This measure is under the responsibility of the team who may rely on the team doctor on site or a physician remotely.

b. Adapt the registration procedures so as to ensure physical distancing.

c. Limit access to the start area as much as possible. Only allow access to essential people, with compulsory facemasks. Riders must wear the facemask until a few minutes before the start.

d. Adapt the feed zones;

Ensure safety of the area(s) and compliance with the “Special provisions for 2020 end of season (<https://www.uci.org/docs/default-source/rules-and-regulations/part-ii-road/regulations-and-flexibility-for-2020-end-of-season-eng---updated-16.07.2020.pdf>) as well as all national guidelines on social distancing, and prohibit access by the public.

- e. Regulate the use of organisation and team vehicles. In order to reduce the risk of contamination in the confined spaces of vehicle interiors, it is advisable to,
 - limit the number of people in team vehicles to 3,
 - wearing the facemask is mandatory in the vehicles,
 - ventilate the cabin by keeping the windows half-open (depending on weather conditions).

- f. **Limit access to the finish area** as much as possible. Only allow access to the "end of finish line" area for essential people (1 to 2 people per team, a few photographers), and everyone with a compulsory facemask.

Specific provisions during stage races.

Organise COVID-19 diagnostic tests;

For Events of more than 10 days (i.e. Grands Tours), the Event organiser shall be responsible for providing the infrastructure and/or logistical support for COVID-19 tests to be carried out for all team members at least every 10 days (with a recommendation for tests to be carried out on rest days, if any);

The imposed Covid tests must be based on the detection of nucleic acid sequences of the viral RNA, possibly on salivary support.

These tests are the responsibility of the Event organiser, both in terms of logistics and costs.

9. Ensure the protection of the team bubbles after the Events

a. Adjustment of the awards ceremony;

- restrict the number of athletes to receive prizes at one time;
- require riders, and any other person involved, to wear a mask during the ceremony;
- place the podium blocks 1.5 m apart;
- create 1.5 m pre-podium boxes in which riders can wait their turn to stand on the podium;
- create a self-serve option where riders can collect their medals after hand sanitising;
- request riders not to touch each other during the podium ceremony;
- limit the number of photographers according to national health regulations. Also ensure that accredited persons wear their protective masks correctly;
- limit the size of the crowd, respecting social distancing (as per national health regulations);
- create a one-way traffic plan for pedestrian traffic around the podium and the awards area.

b. Adapt the anti-doping station and procedures;

- ensure that doping control protocols are consistent with measures to prevent viral contamination (detection of asymptomatic carriers using viral tests (DCO, BCO) and chaperons, physical distancing outside and inside the station, procedures for checking and signing documents, etc.)
- a specific document is reported in Annex.

D- Management of suspected COVID-19 cases

1. Coordination with the local health authorities (hospitals, emergency services)

The Event medical service must contact the local hospital and/or emergency medical services to inform them of the Event, and ensure they have the capacity to handle trauma patients during the pandemic.

2. Identifying a physician in charge of COVID-19 suspected cases (COVID doctor)

In coordination with local health services and/or in accordance with applicable rules, this doctor shall be responsible for managing any clinical suspicion of COVID-19. The COVID doctor must:

- provide a face mask to anyone who is sick or has suspicious symptoms;
- comply with applicable rules regarding mandatory protective equipment for medical personnel when dealing with COVID-19 suspected patients (FFP2 mask, gloves, visor or protective glasses, coveralls).

3. Management of a suspected COVID-19 case;

- All persons involved in the Event (including Event staff and team members) are requested to signal any suspicion of COVID-19 immediately to the Event medical services;
- the Event medical services will contact the COVID doctor to manage the follow-up with the suspect patient;
- the management of clinical cases will be carried out in agreement with the local or regional health services, and in accordance with WHO guidelines (see reference at the end of this document)
- the identification of contact cases with a confirmed COVID-19 case (close contacts and low-risk exposure contacts) will be the responsibility of the COVID doctor, in coordination with the team doctor and the competent health authorities;
- the implementation of the initial clinical examination protocol, and referral of the patient to the nearest COVID centre is the responsibility of the COVID doctor;
- the determination of the persons who shall be quarantined shall be the competence of the COVID doctor or the health authorities, as the case may be according to national guidelines.⁷

The definition of contact cases depends on the observance of physical distancing and mask wearing rules. Reducing the number of contact cases that will be isolated depends on the application of physical distancing, mask wearing and regular hand washing in all circumstances.

4. Decision-making after confirmation of a COVID-19 case.

In the event of a confirmed case of COVID-19, the COVID doctor shall report all relevant information to the Event organiser which shall be responsible for taking the appropriate measures

⁷ The relevant information regarding the procedures and the criteria for identifying risky contact cases, will be part of the information to be provided to teams as per section V. of this document.

for the Event upon due consultation of national health authorities. The Event organiser shall consult the UCI and representatives of riders and teams and present them with the health authorities' considerations prior to confirming the decisions regarding the Event. Such decision shall not concern which persons shall be quarantined, which remains under the sole competence of the COVID doctor and/or national health authorities.

III. Enforcement of the various measures depending on the state of the pandemic.

Actions to be implemented according to the pandemic severity, i.e. **green area (low risk)**, **orange area (moderate risk)** and **red, dark-red areas (at risk)** are shown in the following table.

	Moderate risk	Low risk	Very low risk
A) Preparation before the Event			
1. Appointment of a COVID-19 Coordinator			
- send the management plan for COVID+ subjects	MAN-org	MAN-org	MAN-org
2. Accommodation of teams in hotels			
- maintain a life bubble	MAN-org	MAN-org	REC
3. "Isolation" rooms in the hotels	MAN-org	MAN-org	REC
4. Prevention procedures within teams	MAN-team	MAN-team	REC
5. Offer biology laboratory resources to the teams	MAN-team	REC	REC
B) Procedures for entering team bubbles			
Pre-Event health checks;			
- clinical detection carriers of the virus	MAN-team	MAN-team	REC
- implementation of the COVID testing programme	MAN-team	MAN-team	REC
C) Ensure the protection of the team bubbles			
1. Information on individual hygienic procedures	MAN-org	MAN-org	REC
2. Provision of separate pathways	MAN-org	MAN-org	REC
3. Ensure physical distancing in communal spaces (media center, VIP areas, etc.)	MAN-org	MAN-org	REC
4. Forbid use of changing rooms.	REC	REC	REC
5. Presence of spectators;			
- limit spectators (start and finish areas)			
according to national rules	MAN-org	MAN-org	REC
- maintain a safe distance between spectators and riders	MAN-org	MAN-org	MAN-org
- encourage spectators to wear a mask	MAN-org	REC	REC
6. Ensure cleaning and disinfection of communal areas	MAN-org	MAN-org	MAN-org
7. Provide waste bins	MAN-org	MAN-org	MAN-org
8. Health check on race morning (COVID questionnaire or other)	MAN-team	MAN-team	REC
9. Adapt the registration procedures	MAN-org	MAN-org	REC
10. Limit access to the start area	MAN-org	MAN-org	REC
11. Adapt the feed zones	MAN-org	MAN-org	REC
12. Regulate the use of organisation and team vehicles	MAN-org	MAN-org	REC
13. Limit access to the finish area	MAN-org	MAN-org	REC
Special case of stage races			
COVID-19 testing during the event	MAN-org	MAN-org	REC
14. Adjustment of the awards ceremony.			

- restrict the number of riders to receive prizes	MAN-org	REC	REC
- require athletes to wear face masks.	REC	DES	DES
- place the podium blocks 1.5m apart	MAN-org	MAN-org	REC
- create 1.5 m pre-podium boxes	MAN-org	REC	DES
- create an individual award recovery system	MAN-org	REC	DES
- riders should be prevented from touching each other	MAN-org	REC	REC
- limit the number of photographers around the podium.	MAN-org	MAN-org	REC
- one-way traffic plan for pedestrians around the podium	MAN-org	REC	REC
15. Adapt the anti-doping station and procedures in accordance with the document in the Annex	MAN-org	MAN-org	MAN-org
5. PPE for everyone if physical distancing impossible.	MAN-org	MAN-org	MAN-org

D) Management of suspected COVID-19 cases

- appointment of a COVID doctor for the race	MAN-org	MAN-org	REC
- coordination with local health authorities	MAN-org	MAN-org	REC
- provide a clean mask to all sick people	MAN-org	MAN-org	MAN-org
- provide PPE for medical professionals	MAN-org	MAN-org	MAN-org
- send management procedures of COVID+ cases	MAN-org	MAN-org	MAN-org

IV. Exchange of information.

In order to promote the exchange of information necessary for the organisation of competitions, two secure data storage spaces will be opened by the UCI,

A – the first is intended for organisers to provide information to teams regarding the implementation of specific health-related measures. The organisers will deposit at the latest 14 days prior to the Event at the following link:

<https://box.uci.ch/index.php/s/s2yFWfyXINmJ43l>

1. information concerning the phase of the pandemic as the competition approaches, including the criteria reported in paragraph I.A. The following criteria are required,

- the total number of new confirmed cases of COVID-19 cases per 100,000 population, and per week during the last 14 days;
- the percentage of positive tests among all tests for COVID-19 infection carried out during the last week;
- the number of tests for COVID-19 infection per 100,000 population carried out during the last week.

2- the COVID-19 suspect case management protocol, including;

- the availability of Covid laboratories recognized by the health authorities
 - # distance of these laboratories from the race start and arrival sites?
 - # what operating availability (hours of availability for performing PCR tests)?
- the conditions of isolation of suspect subjects before biological confirmation.
- the criteria for defining contact cases, and their management.

3. a summary of the risk mitigation measures put in place.

4. the list of registered teams, including the identity of the registered riders, and an email contact point for each of them.

B - the other is intended for teams to inform the UCI about the implementation of viral tests. This space will be open to teams (preferably team doctors or any other person designated by the team and under their responsibility) and will only be available for consultation by the UCI Medical Director. Team doctors will use this storage space to drop: the state of the PCR tests carried out before the Event.

In order to facilitate the collection of information, adapted forms are available on the UCI website:

<https://www.uci.org/road/news/2020/covid-19-pandemic-how-to-return-to-cycling-events>

V. Regulatory provisions.

Any subject or entity failing to implement the MAN (mandatory) measures may be fined by the Disciplinary Commission between CHF 1,000 and CHF 10,000. The Disciplinary Commission shall determine the amount of the fine taking into account all the circumstances and in particular any aggravating or mitigating circumstances. Art. 12.2.005 of the UCI Regulations shall apply in case of a repeated offence.

Any subject or entity which defrauds, cheats or acts in an unfair manner when submitting the information required under this protocol to the UCI shall be sanctioned in accordance with article 12.4.008 of the UCI Regulations.

In case of failure by teams to provide evidence of a viral diagnostic test required under this protocol, at the latest at the time of rider confirmation, the rider concerned may not take part in the relevant Event*. Notification shall be made to the rider or his/her team either by the UCI Medical Director (or on his behalf) or with the intermediary of the Commissaires' Panel.⁸

In case of failure by an Event organiser to implement the required measures under this protocol, the UCI may request specific measures to be taken within a set deadline (if the defaults are remediable). If the defaults are either not remedied within the set deadline or not remediable prior to the Event, the UCI may:

- determine that the Event shall be withdrawn from the UCI International Calendar if the Event manifestly fails to implement adequate preventive measures*;
- Determine that any other events organized by the Event organiser under the period of application of this protocol be withdrawn from the UCI International Calendar if the Event organiser fails to prove its capacity and willingness to implement adequate preventive measures at such other events*;
- Refer the matter to the UCI Disciplinary Commission to consider the imposition of a fine;
- Refer the matter to the UCI Management Committee or Professional Cycling Council to consider appropriate measures that may be taken with regard to future registration of the Event on the UCI International Calendar.

*These measures may be decided by the UCI Medical Director (or on his behalf) in consideration of the objectives of this protocol. These powers have been delegated by the UCI Management

⁸ This measure shall be applicable starting with events taking place on 1 August and after.

Committee in accordance with article 47 par. 2 and 4 of the UCI Constitution.

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