



**PREVENTION OF INFECTION
with Coronavirus
A practical guide for DENTAL HYGIENISTS**

APRIL 2020



**WHAT WE HAVE TO KNOW AND KNOW HOW TO DO
IN THE RECOVERY PHASE OF PROFESSIONAL ACTIVITY
AND DURING THE EMERGENCY PERIOD
Currently declared until the 31st of July, 2020**

**THE INDICATIONS ARE NOT DEFINITIVE
AND WILL BE UPDATED ACCORDINGLY WITH
THE EVOLUTION OF THE COVID-19 DISEASE**

THE MEASURES PROVIDED HERE ARE BASED ON SCIENTIFIC EVIDENCE CURRENTLY AVAILABLE AND ON THE INDICATIONS OF THE COMPETENT HEALTH AUTHORITIES

In Italy, the Ministry of Health has adopted specific measures to limit the spread of the SARS-CoV-2 infection. With the Federal Decree issued on the 22nd of February 2020, attention was drawn to the importance of correct prophylactic measures by the general population, underlining the need to ensure the strict application of infection prevention and control measures (standard precautions, by air, from droplets and from close contact) in all healthcare facilities. The general measures were accompanied by specific measures for healthcare professionals, also defined in relation to the type and level of exposure risk. In fact, the adequate application of these measures can limit the transmission and circulation of SARS-CoV-2 and therefore keep the health services efficient even in emergencies.

UNIVERSAL PRECAUTIONS

The management of prevention in the workplace involves the implementation of general measures to protect the health and safety of workers (art. 15 of Legislative Decree 81/08) including "the elimination of risks and, where this is not possible, their reduction to a minimum in relation to the knowledge acquired on the basis of technical progress; the substitution of what is dangerous with what is not, or is less dangerous; the limitation to a minimum of the number of workers who are, or who may be exposed to risk; limited use of chemical, physical and biological agents in the workplace; the priority of collective protection measures over individual protection measures. "The already foreseen protection measures for the risk from biological agents must be integrated by the indications identified ad hoc by the reference organisms at national and international levels, as in the case of the epidemic emergency situation from SARS-CoV-2. Workers are required to comply with all the prevention measures identified, in compliance with the obligations set out in the Legislative Decree 81/2008 according to which each worker must take care of his own health and safety and that of other people present at the workplace, on which the effects of his actions or omissions fall ..."

The Ministerial Decree of Health from 09.28.1990 and the Legislative Decree 81/2008 impose to consider also in the dental field, every patient as potentially infected and a carrier of communicable diseases and thus, to apply to all patients without distinction the same prophylactic measures.

The risk of infection for healthcare professionals involved in procedures that generate aerosols without adequate personal protective equipment (PPE) is considered high, as demonstrated by the cases ascertained by healthcare professionals in Italy. The profession of dental hygiene is at the top among those at risk of contracting infectious diseases of which also the Covid-19 (NYTimes.com - The workers who face the greatest Coronavirus risk).

All operators of the dental team must be informed and updated on the methods and risks of occupational exposure, the prevention and protection measures available, as well as the characteristics of the clinical picture of COVID-19. These precautions include the correct use of PPE, awareness and training on how to use them: dressing, undressing and elimination.

Definitions and characteristics of the pathogen:

The World Health Organization (WHO) has called the COVID-19 (Corona Virus Disease - 2019) the respiratory disease caused by the new coronavirus that appeared in the first half of February 2020.

Coronaviruses (CoV) are a genus of RNA viruses (subfamily Orthoronavirinae, family Coronaviridae, suborder Cornidovirineae, order Nidovirales) identified in the mid-1960s. They owe their name to the appearance of virions under an electron microscope, due to the S proteins of the viral peplomer that create an image that resembles a royal crown or the solar crown. They have an envelope and a diameter of 60-140nm. They can infect both humans and animals, including birds and mammals. In humans, they can mainly cause infections of the upper respiratory tract with fever, dry cough, fatigue and, infections of the gastrointestinal tract.

The severity of these conditions is very variable, since coronaviruses are responsible for both a large part of the common cooling syndromes (especially in children and young adults, with a slow start), and serious respiratory syndromes such as SARS (Severe Acute Respiratory Syndrome) and MERS (Middle East Respiratory Syndrome) as well as kidney failure and even death.

The elderly and those with pre-existing diseases such as diabetes and heart disease, are more susceptible to severe forms. Some people become infected but do not develop any symptoms and can become a source of infection.

How it is transmitted:

Sources of infection:

The main sources are infected people who can transmit it after close contact, for example between family members or in a healthcare environment.

The transmission pathways are mainly represented by the droplets of the breath of infected people projected into the conjunctivae or mucous membranes of the eyes, nose and mouth through:

- air or through saliva, coughing and / or sneezing, blowing your nose, speaking at close distances
- direct contact with a handshake and then touching the mucous membranes of the mouth, nose and eyes with contaminated hands;
- indirect contact or touching contaminated surfaces (the virus lives for a long time even without a host);
- airborne or prolonged exposure in a closed environment with the presence of the virus in the air.

It is important that sick people apply hygiene measures such as:

- sneeze or cough in a tissue or with the elbow flexed (no evidence) and throw the used tissues in a closed disposal immediately after use
- Wash hands frequently with soap and water for at least 20 seconds, follow with the use of gels or alcoholic solutions.

Susceptible population: Entire Global Population

The incubation period (i.e: the period of time between contagion and the development of clinical symptoms) is estimated between 2 and 14 days, with an average of 5 days, according to current estimates. It is not clear when transmissibility begins.

PREVENTION MEASURES ARE ALWAYS ADOPTED IN THE DENTAL PRACTICE TO AVOID CONTACT OF EVEN OTHER SEVERE DISEASES SUCH AS HCV, HBV, HIV, TB.

Prevention measures allow you to reduce the risk of getting infected in the presence of an infected person. All staff involved in the dental practice, including the administrative staff in contact with the patient, must be aware of: the epidemiological situation of SARS-CoV-2 in their country and globally, the known risk factors for infections, signs and symptoms case reports with SARS-CoV-2, recommended measures for infection prevention and control.

In this emergency phase it is important to proceed with triage before the patient enters the dental office. The aim is to carry out a first risk assessment, including a summary of the patient's travel, epidemiological and clinical history to assess the probability of a SARS-CoV-2 infection.

MANDATORY TELEPHONE TRIAGE

During the confirmation call, the day before the appointment, investigate the patient's health through an anamnestic collection of any symptoms in order to treat only apparently healthy patients who have not come into contact with the sick or potentially such, asking to measure body temperature (not higher than 37 °) before leaving their home to go to the clinic on the day of the appointment.

The following steps are recommended:

Questions to ask patients:

1. Do you currently have symptoms such as cough, sore throat, fever, conjunctivitis, breathing difficulties, diarrhea, vomiting, loss of smell and taste, epidermal manifestations (reported in some cases)?
2. Have you been in contact with people in quarantine?
3. Did you come into contact with positive COVID-19 people?
4. Have you come into contact with or live with healthcare workers?
5. Have you attended a healthcare facility where patients with SARS-CoV-2 infection have been hospitalized?
6. Did you contract COVID-19?
7. Have you been in solitary confinement? How long?
8. Have you been subjected to a rhino-pharyngeal swab?
9. If you have gone through the COVID-19 disease, how long has it been since the last negative swab?

PS: Bibliographical sources indicate that the diagnosis and treatments in the oral cavity of patients healed after SARS-CoV-2 infection, should be performed at least 1 month after discharge.

Avoid treatments on frail patients, pregnant women, immunocompromised patients, the elderly and / or with a history of respiratory diseases, as they are more at risk of complications in the event of a COVID-19 infection.

IF A TREATMENT CAN NOT BE POSTPONED BECAUSE OF IT'S URGENCY, LISTED BELOW THE OPERATIONAL INDICATIONS FOR THE PREVENTION OF DISSEMINATION AND CONTAINMENT OF COVID-19, FOR DENTAL HYGIENISTS

Waiting room

After passing the "mandatory telephone triage" try to schedule appointments in order to avoid overlaps.

Avoid waiting rooms with many people (max 2 at a safe distance), make sure that there is more than 1 meter distance between one person and the other.

Organize the agenda by inserting 30-minute breaks between one patient and another, to allow the correct sanitation of the environments. It is advisable to advise accompanying persons to temporarily leave the practice and return after the scheduled time. WHO defines hand hygiene as the simplest and cheapest procedure to fight infections, including SARS-CoV-2, therefore:

Forcing all inbound and outbound patients to wash their hands. To be effective, hand washing should be carried out for 60 seconds, taking care to lather and rub the palm, back and space between the fingers. The hands are then rinsed with cold or lukewarm running water. In the absence of water, it is recommended to rub the hands with alcohol for 20-40 seconds.

Provide patients with masks.

Detect:

- Body temperature with contactless thermometer (send the patient back if he has 37° or higher)
- oxygen saturation with oximeter (values between 96 and 99% are considered normal).

Place in the reception and waiting room, dispensers with tissues available to patients and companions. Have the used paper tissues disposed of in a waterproof bag directly by the patient. The bag will be disposed of with infected materials produced by the practices healthcare protocols.

Remove objects from the waiting room that could be contamination vehicles (magazines, brochures, toys, children's drawing materials, etc.).

Disinfect switches, handles, and surfaces of all rooms with 0.1% sodium hypochlorite or 70% ethyl alcohol. Clean and sanitize air conditioning system outlets, split filters or machines where possible.

Ventilate the waiting room frequently.

Invite patients to leave jackets, backpacks and other personal wear in the waiting room before entering the operating room. Potentially contaminated or valuable objects (bags or cell phones), should be placed in a special disposable bag and store in a dedicated area of the operational area.

If the patient is suspected of being positive, call the regional telephone number dedicated to intervention calls only and follow the instructions of the competent bodies.

PATIENT PROTECTION

Before entering the operating unit, allow the patient to wear:

- Overshoes, disposable shirts for the protection of clothes, caps that also cover the ears, protective glasses (mandatory).

At the end of the session:

- Have the disposable gown removed (possibly in a dedicated room), to be removed without ever touching the outside, spilling it from the sleeves, rolling it upside down and disposing of it in a special container for infected waste that must always be closed
- Have the patient wash their hands, disinfect them and wear the mask before access to the reception

Before the operational session

- Prepare the disposable material necessary for the performance to be carried out in order to reduce movement and limit contamination.
- Prepare antiseptics for rinsing to be performed not only in the preliminary phase, but to be repeated throughout the operative session, as the virus is present in the patient's saliva. The aerosol or droplet nuclei can be present in the air of the surgery for a maximum of 30 minutes after a procedure. After treatment, the operator must not remove the protective barriers, such as the face mask to talk to the patient, as the potential risk of contagion due to contact with contaminated material in the air may remain. Furthermore, there is the possibility that an airborne contaminant penetrates the ventilation system and spreads in the areas of the structure in the absence of a protective barrier. A method of reducing the count of overall bacteria produced during dental procedures is the use of a pre-rinse-treatment that significantly reduces the number of microorganisms in dental aerosol. There is no scientific evidence that demonstrates the total elimination of COVID-19, the use of mouthwashes is recommended, for the purpose of temporarily reducing the microbial load and for managing the oropharyngeal hygiene.

For this purpose it is recommended to rinse and gargle with antiseptic mouthwashes based on:

- Iodopovidone 0.2-1% for 15 seconds to be repeated every 30 minutes.
- Cetylpyridinium chloride 0.05-0.1%, gargle for 15 seconds followed by a 30 seconds rinse
- Hydrogen peroxide 1%, gargle for 15 seconds followed by a 30 seconds rinse
- Chlorhexidine 0.2%, gargle for 15 seconds followed by a 30 seconds rinse

NB. Povidone iodine should not be associated with other products! It is possible to follow the use of hydrogen peroxide, rinses with chlorhexidine.

It is preferable not to spit, but to aspirate the mouthwash

PROTECTION OF OPERATORS AND THE ENVIRONMENT

PPE (Personal Protective Equipment)

Operator

The transmission of SARS-CoV2 occurs mainly via direct and indirect respiratory tract. The operating position of dental hygienists, generally located 30/40 cm away from the patient and the production of aerosols during the procedures, place the operator in a condition of high risk of contagion.

The ISS, in fact, says that the risk increases when:

- contact is close (<1 meter) and prolonged (> 15 minutes)
- contact is of a repeated or continuous type, such as to increase the overall time of exposure to cases
- Maneuvers and procedures at risk of producing aerosols from the patient's secretions are performed.

The rules of conduct of dental hygienists who must perform indifferent professional services, must comply with the following recommendations:

- measure body temperature every morning, before going to the workplace, refraining from leaving your home in case of fever;
- avoid touching the eyes, nose and mouth with unwashed hands or contaminated gloves;
- do not touch with contaminated gloves handles, drawers, dental units, servo-furniture, trolleys, stools, telephone, computer keyboards, mouse and other technological supports that must be protected with disposable films and in any case properly disinfected before and after use;
- wash your hands adequately with hot water and suitable detergents or with hydroalcoholic solutions (60%) before and after each session, for at least 20 seconds
- always use personal protective equipment (PPE): remove jewelry and wear uniform, disposable gown, cap, mask, goggles / protective visor and gloves.

FACE MASKS

The Ministry of Health issued in 2009 and updated in 2012 a document entitled "Guide for the correct use of surgical and respiratory masks to reduce the transmission of the new influenza virus AH1N1V, 4 also applicable to other respiratory viruses, including SARS-CoV-2".

Types of masks

There are simple hygiene masks, which do not bear the CE mark and do not protect the respiratory tract, but only serve to protect (e.g. food in canteens etc.).

Surgical masks, on the other hand, are real personal protective equipment and are available in 4 types:

- I, IR, II and IIR, with increasing protection depending on the filtering layers. They differ for bacterial filtration efficiency (BFE) from 95% to 98% and microorganisms that measure from 3 to 1 μ . They protect against splashes and visible particles of respiratory and nasal secretions, but not from the actual viral aerosol and should in any case be replaced every 2-3 hours because by moistening they lose efficacy.

The mask / respirator with facial filter is the only PPE that can give some protection even from viruses, but it is uncomfortable and requires experience and attention in adapting it to the face. The filtering effectiveness is indicated with abbreviations FF from P1 to P3 (Filtering Face Piece):

- FFP1 indicates a minimum filtering effectiveness against solid particles of 78%,
- FFP2 a minimum effectiveness of 92% against solid and liquid particles,
- FFP3 an effectiveness that reaches 98%.

For virus protection, only types FFP2 (N95) and FFP3 (filters N99 and N100) are indicated (Standard EN 149: 2001 + A1: 2009).

FFP2 and FFP3 masks can be equipped with or without expiration valve.

Those without a valve are the most recommended, but exhaled internal air accumulates which, by moistening, makes breathing more tiring.

The presence of the valve has no effect on the filtering capacity of the device but ensures greater comfort when the mask is worn for a long time and allows hot air to escape from the device, reducing the humidity that forms internally, avoiding the formation of condensation. These protect the wearer but not vice versa, because the exhalation is not filtered during exit, but only during entry. If worn by an infected person during exhalation, infected air may escape from the valve. It is therefore advisable to overlap these with a disposable surgical mask for patient protection and a rigid visor. They must be replaced after 4-6 hours, never reused and disposed of properly after use. When they become wet, they must be replaced and not reused. For good adherence to the face there must be no facial hair, they also offer limited comfort and can also cause breathing difficulties and limit working efficiency in those who are predisposed, or not accustomed and trained.

For dental hygienists it is essential to wear FFP2 / FFP3 masks to protect themselves from the aerosol caused by piezoelectric and /or magnetostrictive ultrasound instruments.

The modality of manipulation of the masks both in the positioning and in the removal phase is of great importance!

How to wear masks:

- wash and disinfect your hands before putting on masks
- hold the mask by the elastic, avoid touching it, checking that it carefully covers the nose, mouth and chin.

Once worn, the operator must perform a tightness test, before entering the work area, which is divided into two phases:

- after having cupped his hands on the filter, he must carry out a deep and rapid inhalation. If the filter is hermetically sealed, inspiration should quickly lower the pressure inside the device by making it adhere to the face. Air should only enter through the filter and not from the edges.
- Always keeping your hands cupped on the filter, you must breathe out quickly, if the pressure inside increases and there are no air leaks from the edges, the filter will be positioned correctly.

How to remove masks:

- hold the mask by the elastic, avoiding touching the front with your hand
- dispose of the mask in a special container for infected waste which must always be closed
- wash and disinfect your hands or gloves (if you are wearing two pairs) after removing it.

Important: defer hygiene performance if the filter masks are missing (perform other services that are the responsibility of the dental hygienist that do not involve the production of aerosols).

FACIAL SHIELDS

Facial shields are indispensable especially during procedures that produce nebulization and aerosols and must cover lateral areas. Most face shields allow the use of protective glasses to be placed on the mask, but they do not always allow the use of magnifiers on lenses or on helmets.

Disinfect screens / visors / glasses at the end of the session with 70° alcohol or immerse them in 500 ~ 1,000 mg / L of chlorine-containing disinfectant for 30 minutes, then rinse them with running water and dry them.

HEADGEAR

Use headgear or long hats that wrap hair, ears and also cover the neck, "balaclava" type. Disposable PPE are to be considered, therefore the method of handling is essential both by wearing and removing the device.

The PPE is not reusable after use and must be worn and removed following the appropriate handling methods and disposed of in an infected waste container.

GLOVES

Wear the first pair of gloves, in nitrile or latex (with AQL at least 1-1.5) already during the dressing procedures, on properly washed and dry hands. Put on a second pair of gloves after putting on the disposable lab coat or coverall in TNT, making sure that they overlap the cuffs. At the end of the operating procedure, the gloves must be removed being careful not to touch the skin or the sleeve of the disposable lab coat. If you have double gloves, try not to touch the inner glove. If contaminated, torn, cut, punctured or when deemed appropriate, before removing them, disinfect the outside of the gloved hands with the assistance of another operator, both for the first and the second pair of gloves. The first pair of gloves, if not contaminated and intact, can be used to continue the undressing. At the end, remove the first pair of gloves taking care not to contaminate the skin and dispose of them in the container of special infectious risk waste.

FOOTWEAR COVERS

During the emergency phase they must be worn by all dental health professionals. They must be removed with clean gloves without touching the part facing outwards, rolling them up on themselves. The part facing the toe must go outwards. They must be disposed of in the container of special infectious risk waste.

LAB COATS

Wear disposable water repellent gowns over the traditional uniform.

In this emergency phase disposable water repellent coveralls with built-in hood are very useful, to guarantee total protection. The aerosol settles on the lab coat which must be changed after each patient. The undressing process must take place in a dedicated room. The lab coat comes off with clean gloves, starting from the shoulders and arms, rolling it up

on itself and down without ever touching the underlying clothing. They must be immediately disposed of in the container of special infectious risk waste. Plan session times that include dressing and undressing of the operator and patient.

DRESSING AND UNDESSING PROCEDURES

The following dressing / undressing procedures are recommended, respecting the following sequences.

Dressing in the anti-room / filter area

Respect the indicated sequence:

1. remove jewelry and personal items
2. cleanse your hands with soap and water or alcoholic solution;
3. check the integrity of the devices (do not use non-intact devices);
4. wear a first pair of gloves;
5. wear the disposable gown / coverall / cap over the uniform;
6. wear suitable facial filter;
7. wear protective glasses;
8. Wear second pair of gloves.

Undressing in the anti-room / filter area

Behavior rules:

- avoid any contact between potentially contaminated PPE and the face, mucous membranes or skin
- disposable PPE must be disposed of in the appropriate container in the undressing area;
- decontaminate reusable PPE.

Respect the indicated sequence:

1. remove the first pair of gloves and dispose of them in the container
2. remove the disposable lab coat and dispose of it in the container;
3. remove the glasses and sanitize them;
4. remove the facial filter by handling it from the rear and dispose of it in the container;
5. remove the second pair of gloves;
6. cleanse your hands with soap and water or alcoholic solution.

NB. Practice the hygiene of the gloves with alcoholic solutions after each removal sequence.

PREPARATION OF OPERATING UNITS

1. Remove from the surfaces of the servos surrounding the dental chair all that is not essential to the treatment, to avoid contamination. The free surfaces are easy to clean and disinfect.
2. Apply, where possible, protective barriers on the fixed surfaces around the operating field (lamp, quiver, armchair control tablets, push-button panels, handles), to protect them from splashes and the fall of the aerosol.
3. Cover the headrest of the chair with disposable protection.

4. Remove the bib fasteners and replace them with adhesives or with knotting bibs.

OPERATIONAL STEPS FOR THE DENTAL HYGIENIST

Given that no cases of transmission of COVID-19 in the dental field have been reported, the oral cavity is a potential transmitter with a high risk of infection, as widely demonstrated by a group of Chinese researchers. Angiotensin converting enzyme II (ACE2) seems to be highly expressed on the mucous membrane of the oral cavity, in particular, in the epithelial cells of the tongue. This result, besides being important in future prevention strategies, highlights the need to follow in addition to universal precautionary measures, the implementation of special measures aimed at controlling the transmission of aerosols in order to prevent and control the spread of this highly contagious disease .

Therefore the dental hygienist must carry out a series of actions such as:

- reduce the extra-oral nebulization;
- lengthen the time between one session and another;
- prefer manual instruments over mechanical ones and / or minimize nebulization with dispersion of aerosols in the environment, lowering the power and quantity of irrigation of the ultrasonic devices;
- avoid air-polishing procedures;
- always use high speed double suction or recently introduced suction devices (to be tested).

Important

The clinical diary must be completed only after removing the gloves and washing and disinfecting the hands in order to use the mouse, keyboard or ballpoint pen, which must in any case be covered with protective films, after disinfection.

In summary:

Available methods for reducing aerosol and splash contamination:

1. personal protection barriers such as water repellent disposable overalls / caps / overalls, filter masks, gloves, safety glasses and face shields;
2. pre-treatment rinse with antiseptic mouthwashes;
3. high speed double suction (HVE).

Among the devices available for the reduction of aerosol contamination produced during operating procedures, there are filters for high efficiency particulate environments (HEPA) or ultraviolet ray chambers in the ventilation system. Both systems are effective but expensive and may require engineering changes to the ventilation system.

RE-ORDERING PATIENT CHANGE

Recommendation for Dental Assistants (DA)

- Always wear PPE: clean gloves, masks, glasses or screens, caps.
- Always ventilate the room
- Collect the contaminated instruments in rigid or possibly closed containers, transfer to the sterilization room in a decontamination tank.
- Remove the ultrasonic insert and the relative handpiece, the contra-angle handpiece after flushing.

SURFACE DISINFECTION AND DECONTAMINATION

Studies of other coronaviruses, such as SARS and MERS virus, suggest that the survival time on surfaces, in experimental conditions, varies from 48 hours up to a few days (9 days) depending on the matrix / material , concentration, temperature and humidity, even if this data refers to the possibility of detection of RNA of the virus and not to its isolation in an infectious form. More recent experimental data relating to the persistence of the SARS-CoV-2 virus, confirm its persistence capacity on plastic and stainless steel for up to 72 hours, on copper for 4 to 9 hours, on cardboard for up to 24 hours showing an exponential decay of the viral title over time.

As per protocols already regularly in use, the surfaces exposed to contact by aerosol fallout and splashes, must be decontaminated and disinfected with specific chemical agents in the following ways:

- remove the protective barriers.
- Disinfect surfaces with products possibly based on:
 - 65/70% ethyl alcohol paying attention to the contact times so that the rapid evaporation of the product does not affect the result and does not alter the leather surfaces;
 - 0.1% hypochlorite used with caution to avoid stains, corrosion and bad odor;
 - ready-to-use products active on capsulated viruses and possibly specifically, even than on Coronaviruses.
- Disinfect the armchair with particular attention to the headrest and surrounding areas more exposed to splashes or aerosols, proceeding from the outermost parts of the armchair and terminating with the cuspidor.
- Disinfect the seat and in particular the handle of the sliding rail:
 - do not spray the product directly on the surfaces, but on a disposable paper cloth to avoid inhalation during use. Prefer disinfectant wipes ready to use available both alcohol-free for sensitive surfaces and / or with alcohol.
 - Respect the contact times necessary for the degradation of microorganisms.
 - Carry out a first step to remove, cleanse and decontaminate the surface and a second to disinfect them.
- At the end of each operating procedure, the aspirators must be flushed for a period of time with appropriate decontaminants / disinfectants.

P.S. Check the safety data sheet of the chemical agents paying attention to the active principle, the spectrum of action, the damage / benefit ratio of the product, toxicity for the operator, emergency measures in the event of an accident and compliance with recent European regulations.

COMPLIANCE WITH PRIVACY IN THE TIME OF COVID

The COVID-19 emergency and public health protections must also be linked to those of the protection of privacy, at least as indicated by the Privacy Guarantor. The Authority stresses that “employers must refrain from collecting information on the presence of any flu symptoms of the employee and his/her closest contacts or in any case falling within the non-

working sphere, also through specific requests to the individual worker or unauthorized investigations". The purpose of preventing the spread of the Corona-virus must in fact be carried out by subjects that institutionally exercise these functions in a qualified way.

The assessment and collection of information relating to the typical symptoms of Corona-virus and for information on the recent movements of each individual belongs to the health professionals and to the system activated by the civil protection, which are the bodies responsible for ensuring compliance of the public health rules recently adopted.

The obligation of the healthcare provider remains valid to report any situation of danger to health and safety to the employer on work premises. The Guarantor invites all holders of the processing of personal data "to scrupulously comply with the indications provided by the Ministry of Health and by the competent institutions for the prevention of the spread of Corona-virus, without carrying out autonomous initiatives that provide for the collection of data also on the health of users and workers who are not legally required or prepared by the competent bodies".

The patient's right to privacy, if ordinarily it is of equal dignity to his right to health, both constitutionally guaranteed, in the current emergency situation the safeguard of the protection of third parties and the obligations of the 2087 cc, justify data processing methods different from the ordinary.

The health of the community is inseparably dependent on health of individual citizens. In any case, dental practices always implement all procedures for any patient to avoid the spread of infections of any kind.

Reference Bibliography

1. Basso M, Bordini G, Bianchi F, Prosper L, Testori T, Del Fabbro M. Use of preoperative mouthwashes against SARS-CoV-2 virus (COVID-19): literature review and clinical recommendations, *Quintessenza Internazionale*, 1/20 Marzo 2020 Volume 34. *Clinical Oral Investigations* (2020)
2. Li Zhiyong, Meng Liuya. Prevention and control of novel coronavirus infection in oral diagnosis and treatment, *Chinese Journal of Stomatology*, 2020
3. Chinese Guidelines on the Management of COVID-19 Version 7 ° Published on 3/3/2020 by the National Health Commission of the R.P.C. and by the National Administration of Traditional Medicine of the R.P.C.
4. Marui the VC, Souto M, Rovai ES, et Al. Efficacy of preprocedural in mouthrinses Reduction of Microorganisms in The Aerosol: A Systematic Review[J]. *J Am Dent Assoc*, 2019, 150(12 is):1015-1026.e1.
5. Ministry of Health: Circular 22 February 2020, n. 0005443 "COVID-2019. New indications and clarifications" Zou L., Ruan F., Huang M. et al.: SARS-CoV-2 Viral Load in Upper Respiratory Specimens of Infected Patients. *N Engl J Med* (2020)
6. Ong SWX, Tan YK, Chia PY, et al. - Air, Surface Environmental, and Personal Protective Equipment Contamination by Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2) From a Symptomatic Patient. - *JAMA*. Published online March 04, 2020. doi:10.1001/jama.2020.3227
7. Peng X¹, Xu X¹, Li Y¹, Cheng L¹, Zhou X², Ren B³. Transmission routes of 2019-nCoV and controls in dental practice. *Int J Oral Sci*. 2020 Mar 3;12(1):9.
8. Pfänder, Steinmann - Persistence of coronaviruses on inanimate surfaces and their inactivation with biocidal agents - *Journal of Hospital Infection* 104 (2020) 246e251
9. Qiu H., Wu J., Hong L. et Al. 2020. Clinical and epidemiological features of 36 children with coronavirus disease 2019 (COVID-19) in Zhejiang, China: An observational cohort study. *Lancet Infect. Dis*. 2020

10. ISS Working Group Report COVID-19 · n. 2/2020 Rev. Infection Prevention and Control updated March 28, 2020.
11. Recalcati S. 2020. Cutaneous Manifestations in COVID-19: A First Perspective. J. Eur. Acad. Dermatol. Venereol. 2020
12. Robinson Sabino-Silva & Ana Carolina Gomes Jardim & Walter L. Siqueira - Coronavirus COVID-19 impacts to dentistry and potential salivary diagnosis –
13. Scott Froum, Michelle Strange. COVID-19 and the problem with dental aerosols. Oral Medicine, Anesthetics, and Oral-Systemic Connection. Apr 7th, 2020
14. Telephone triage FROMCeO Lombardia component Dentistry
15. Wang C., Horby P.W., Hayden F.G., Gao G.F.: A novel coronavirus outbreak of global concern. The Lancet (2020).
16. www.fnomceo.it. Regional Federation of Lombardy Medical Doctors and Dentists Orders. Coronavirus: indications for Lombard dentists. Consulted March 2020.
17. Xian Peng, Xin Xu, Yuqing Li, Lei Cheng, Xuedong Zhou and Biao Ren - Transmission routes of 2019-nCoV and controls in dental practice - International Journal of Oral Science (2020)12:9
18. Zi-yu GE, Lu-ming YANG, Jia-jia XIA, Xiao-hui FU, Yan-zhen ZHANG Possible aerosol transmission of COVID-19 and special precautions in dentistry* Journal of Zhejiang University-SCIENCE B Feb. 26, 2020

Sitography and educational videos

- www.sidp.it. Italian Society of Periodontology and Implantology & Various authors. COVID-2019: Standards for dentistry [Consulted March 2020].
- www.nytimes.com/interactive/2020/03/15/business/economy/coronavirus-work-risk.html. Bureau of Labour Statistics, O*Net. [Consultato marzo 2020].
- Online courses or teaching aids - WHO IPC course in Italian: <https://openwho.org/courses/COVID-19>
- PCI-E; FAD COVID-19 ISS course <https://www.eduiss.it/course/index.php?categoryid=51> Video
- <https://www.epicentro.iss.it/coronavirus/sars-cov-2-ipc-video-vestizione-svestizione> Dressing / undressing PPE
- Kazuhiro Tateda , president The Japanese Association for infectious Disease e Masashi Yamakawa, Associated Professor, Kioto Institute of Technology. Video