

**FAQs – RENTING AND COVID-19**

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**Q- Will the apartment be clean when I enter ?**

*A - Yes, we will organize and make sure the apartment is thoroughly cleaned including all linens, kitchenware and appliances*

**Q- What products do you use to achieve a high degree and standard of cleanliness ?**

*A - We use the usual cleaning products with a high degree of detergent or alcohol or bleach that are required by and listed in the ISS (Istituto Superiore di Sanità - High Institute of Health)*

**Q- Can you achieve an even higher degree of cleanliness or even "sanitization" of the apartment ?**

*A - Yes, even if not strictly required we can provide this additional service*

**Q- How would you achieve this result ?**

*A - We would use a machine that produces OZONE molecules and we would saturate the air in the apartment with Ozone for a period of time.*

**Q- What is Ozone and how does it work ?**

*A - Ozone (O<sub>3</sub>) is a highly reactive gas composed of three oxygen atoms. It is both a natural and a man-made product that occurs in the Earth's upper atmosphere. (the stratosphere) and lower atmosphere (the troposphere). It is a powerful oxidant (far more so than dioxygen). Advantages of ozone include high thermodynamic oxidation potential, less sensitivity to organic material and better tolerance for pH variations while retaining the ability to kill bacteria, fungi, viruses, as well as spores and cysts.*

**Q- What concentrations you will need to use to achieve a reasonable level of sanitization of the property ?**

*A - The recommended concentration of OZONE for our purposes is approx. 2 ppm (part per million, or 4 mg per cubic meter).*

**Q- What is the concentration of Ozone present in a space that would be safe for people, animals and plants ?**

*A - The safety range which is 0.02 ppm for ozone levels.*

**Q- So how would this sanitization work ?**

*A - Before your arrival we would go to the apartment with the Ozone generator and put it in operation until there is a saturation in the air of approx. 2 ppm (part per million, or 4 mg per cubic meter). After the procedure, we will wait approx. 30 minutes before opening all the windows to aerate the apartment. We can also opt for waiting until the OZONE decomposes back to oxygen, but this takes a few days. Once this procedure is completed, the apartment must be tested with an ozone meter to guarantee that the air is again within the safety range which is 0.02 ppm for ozone levels.*

**Q - If you do this procedure in advance of my arrival how would it work ?**

*A - Once the apartment has been cleaned and ready as last step we will proceed with the treatment and depending on how far in advance we will let it decay naturally or open the windows and aerate it. We will then close the apartment and "seal" it to make sure no one goes inside before your arrival.*

**Q - Could I have this procedure done while I am already occupying the apartment ?**

*A - Sure we can do it as many times as you wish, but you cannot stay in the apartment while the procedure is ongoing and until the Ozone levels are below the 0.02 ppm threshold*

**Q- How long this would take ?**

*A - Depending on the size of the apartment and how it is distributed it will take approx 2 hours - 0.45 minutes to achieve the saturation, 30 min to leave it work and 45 min of open windows.*

**Q - How would you enter the apartment to open the windows if the level of ozone is still harmful ?**

*A - In the first 30 minutes of letting the ozone do its job, the level will be already lower and our staff will have particular protective masks.*

**Q- Can this be done also for a single room or a section of the apartment ?**

*A - Sure as long as the area can be closed from the rest of the house..*

**Q - Can we have this treatment for our luggage/clothes too?**

*A - Yes of course, you have just to leave them inside the apartment with the suitcases or wardrobes open.*

**Q- How can you be sure that, after aerating the apartment, it is safe to use it?**

*A - After it has been aerated for a reasonable length of time, we will use an Ozone test meter.*

**Q - Why Ozone is a better option to sanitize an apartment rather than the usually detergent or products ?**

*A - Because OZONE has special properties for sanitization, and also because it is a gas, it naturally permeates all the spaces and surfaces including beds, mattress, divans, curtains etc. without leaving a trace.*

**Q - Do you have some references about the use of Ozone and it's properties against viruses and Covid ?**

*A - Yes at the end of this FAQ section there are all the links and references*

**Q - So in your opinion Ozone is safe ?**

*A - Yes, within the acceptable range of 0.02 ppm. Please keep in mind that during the process no one, nor pets, should be in the house and that a prolonged use could create some damages to electronic equipment and plants.*

**Q - Has Ozone been used before for this purpose ?**

*A - Not specifically for the purpose of fighting the Covid.19 virus, but in Europe and Italy Ozone has been used since the 1960 as a way to disinfect, for example, meat (slaughter and meat processing), or cheese production facilities and water treatments.*

**Q - And in the United States ?**

*A - According to the U.S. Food and Drug Administration (FDA), it is "amending the food additive regulations to provide for the safe use of ozone in gaseous and aqueous phases as an antimicrobial agent on food, including meat and poultry." Studies at California Polytechnic University demonstrated that 0.3 µmol/mol levels of ozone dissolved in filtered tapwater can produce a reduction of more than 99.99% of such food-borne microorganisms as salmonella, E. coli and Campylobacter*

**Q - Are there any studies that provide more detail on the use of Ozone in fighting virus and Covid-19 ?**

*A - Yes below in the reference you will find the links to those studies*

**Q - Should I want you to sanitize the apartment I am going to rent through the use of Ozone, how would this work?**

*A - Once you have booked an apartment you would let us know of your request and depending on your arrival dates and if the apartment was occupied before you we would organize to do the procedure*

**Q - Would it have a cost ?**

*A - Yes, this would be an extra expense because it will involve special equipment, personnel and some time (for the procedure to take effect and get to the saturation level required) and also depending on where and how big the house is, it may require closing some internal doors and doing the procedure in sections.*

**Q - Could you quantify the cost ?**

*A - It is a bit difficult to give an exact price but, to give you a general idea for a normal 2 bedroom size apartment (approx 80 sq. mt. or 800 sq. ft.) and a normal layout we would be in the 50 euro (plus VAT) range.*

**Q - If the property is a big farm house or villa would it still be possible to have it sanitized ?**

*A - Sure we will probably need to get a professional company to do this and maybe use a different and quicker method like hydrogen peroxide.*

**Q - Could you provide some extra masks and hand sanitizer before our arrival or during our stay ?**

*A - Most probably yes.*

**Q - Are there any rules for wearing masks, gloves or other personal protective equipment ?**

*A - Generally yes, but these rules change quite often so better check also in the future if things have changed. Currently in Italy (Nov. 2020) we have to wear a face mask inside and also outside - no particular rules on gloves or other equipment.*

**Q - Are there any rules for going out and will museums or restaurants be open ?**

*A - Again these rules change very often so better check constantly - the last regulation established that each region in Italy (in our case Tuscany) would be reviewed once a week to determine the level of danger and consequentially the level of closures. Here the last decree of the 24 October in english*

*<http://www.salute.gov.it/portale/nuovocoronavirus/dettaglioNotizieNuovoCoronavirus.jsp?lingua=italiano&menu=notizie&p=dalministero&id=5144>*

**Q - What are the general rules if i feel sick at home ?**

*A - Depending on how sick you feel, if it is an emergency you will call the national emergency number **112** or **118** active 24h. In other cases in Tuscany you can get in contact with the health authorities by calling the 24/7 public freephone number set up by the Ministry of Health: **1500** or the Tuscany region has also set up a free number to answer questions regarding local cases but it isn't run all day and night: **800.55 6060**, punch option 1. Available Monday through Friday, 9am-6pm. You can also call a local number **055 4385850** active from 9am to 1pm for informations or the local health agencies:*

*ASL central Tuscany (Florence, Prato, Pistoia, Empoli): 055.5454777 [rientrocina@uslcentro.toscana.it](mailto:rientrocina@uslcentro.toscana.it)*

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National Library of Medicine - Inactivation of Surface Viruses by Gaseous Ozone

[https://pubmed.ncbi.nlm.nih.gov/18561570/?from\\_term=ozone+sterilization&from\\_pos=3](https://pubmed.ncbi.nlm.nih.gov/18561570/?from_term=ozone+sterilization&from_pos=3)

Journal of Preventive Medicine and Hygiene - Water and Air Ozone treatment as alternative sanitizing technology

<https://www.jpmmh.org/index.php/jpmmh/article/view/757>

EPA, United States Environmental Protection Agency - Ozone for industrial water and wastewater treatment.

<https://www3.epa.gov/npdes/pubs/ozon.pdf>

Ozone Efficacy for the Control of Airborne Viruses: Bacteriophage and Norovirus Models

<https://pubmed.ncbi.nlm.nih.gov/32275685/>

European Center for Disease Prevention and Control - Sterilization options

<https://www.ecdc.europa.eu/sites/default/files/documents/Cloth-face-masks-in-case-shortage-surgical-masks-respirators2020-03-26.pdf>

European Center for Disease Prevention and Control - Decontamination and Reuse of Respirators

<https://www.ecdc.europa.eu/en/publications-data/options-decontamination-and-reuse-respirators-covid-19-pandemic>

The Journal of the International Ozone Association - Development of a Practical Method for Using Ozone Gas as a Virus Decontaminating Agent

<https://www.tandfonline.com/doi/full/10.1080/01919510902747969>

Ozone: Science & Engineering - Effectiveness of Ozone Gas on Airborne Virus Inactivation in Enclosed Spaces:

<https://www.tandfonline.com/doi/full/10.1080/01919512.2020.1822149>

Science and Research Database Publications - General Ozone search

<https://www.tandfonline.com/action/doSearch?AllField=virus&SeriesKey=bose20> &

European Molecular Biology Laboratory-European Bioinformatics Institute - Application of ozone for enhancing the microbiological safety and quality of foods

<https://europepmc.org/article/med/10492485>

Research Gate - Inactivation of Norovirus by ozone gas in conditions relevant to health care

[https://www.researchgate.net/](https://www.researchgate.net/publication/6455782_Inactivation_of_Norovirus_by_ozone_gas_in_conditions_relevant_to_healthcare)

[publication/6455782\\_Inactivation\\_of\\_Norovirus\\_by\\_ozone\\_gas\\_in\\_conditions\\_relevant\\_to\\_healthcare](https://www.researchgate.net/publication/6455782_Inactivation_of_Norovirus_by_ozone_gas_in_conditions_relevant_to_healthcare)

Research Gate - Half-life time of ozone as a function of air movement and conditions in a sealed container

[https://www.researchgate.net/](https://www.researchgate.net/publication/259092141_Half-life_time_of_ozone_as_a_function_of_air_movement_and_conditions_in_a_sealed_container)

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Istituto Superiore Sanità - Italian Institute Health Care - Use of sanification options

[https://www.iss.it/documents/20126/0/Rappporto+ISS+COVID-19+n.+25\\_2020.pdf/90decdd1-7c29-29e4-6663-b992e1773c98?t=1589836083759](https://www.iss.it/documents/20126/0/Rappporto+ISS+COVID-19+n.+25_2020.pdf/90decdd1-7c29-29e4-6663-b992e1773c98?t=1589836083759)

Istituto Superiore Sanità - Italian Institute Health Care - Use of ozone anche in reference to COVID-19

[https://www.iss.it/documents/20126/0/Rappporto+ISS+COVID-19+56\\_2020.pdf/6be24ac7-d084-2f51-feb0-7ea0957e5781?t=1595858146906](https://www.iss.it/documents/20126/0/Rappporto+ISS+COVID-19+56_2020.pdf/6be24ac7-d084-2f51-feb0-7ea0957e5781?t=1595858146906)

Ministero della Salute - Health Ministry - Study on use of Ozone with Food

[http://www.salute.gov.it/imgs/C\\_17\\_pubblicazioni\\_1514\\_allegato.pdf](http://www.salute.gov.it/imgs/C_17_pubblicazioni_1514_allegato.pdf)

INAIL - National Institute Work Safety - Use of Ozone during Covid-19 pandemic

<https://www.inail.it/cs/internet/comunicazione/news-ed-eventi/news/news-documento-iss-inail-ozono-pandemia-2020.html>