

# The Negative Ion Generator (for medical purpose)

**The Negative Ion Generator** is world's best negative ion generator that can discharge negative ions at the amount of 24 million ions/cc.

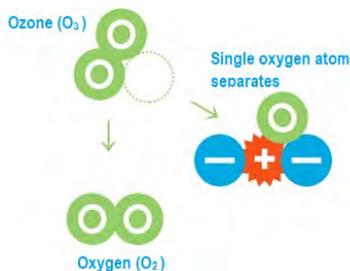
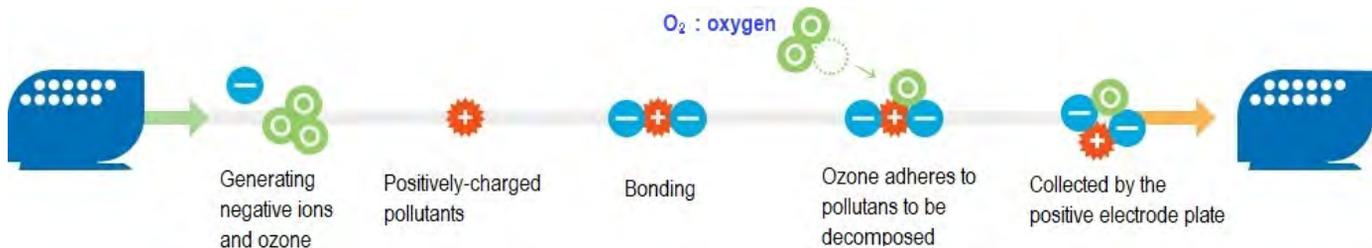
【Comparison】	(unit: ions/cc)
In a mountain	: 700 or more
Beside a fountain	: 780
Between windy office buildings	: 380
Under a waterfall (30" distance)	: 4730
In a forest	: 1800

Negative ions are so called "the vitamins of the air" that cleanse the air to eliminate dusts, bacteria, viruses, molds and fungi, and bring oxygen to boost your immune system.

## Mechanism of antibacterial, antivirus, and odor killing performance

**The Negative Ion Generator** produces vibration in the air while discharging a great number of negative ions. The vibration helps negative ions bonding with positively-charged pollutants. Repeating bonding, particles of pollutants are gravitationally dropped.

**The Negative Ion Generator** also generates a little amount of ozone ( $O_3$ )--as little as the amount existing in nature. Adhering to dropping pollutants, they are oxidized and decomposed. Thus, the air can be purified by synergistic effect of negative ions and ozone.



## Realization of purification process in nature

Ozone is generated in nature by solar radiation. The ozone concentration in normal air is approximately 0.025 ppm. It works on air purification and provides us comfortable living environment.

Ozone is unstable, consisting of 3 atoms of oxygen. Once ozone hits a particle of pollutant, its single oxygen atom (O) adsorbs it and oxidizes it. Then diatomic oxygen molecule ( $O_2$ ) turns into fresh air.

## 1 Antibacterial & antivirus efficacy

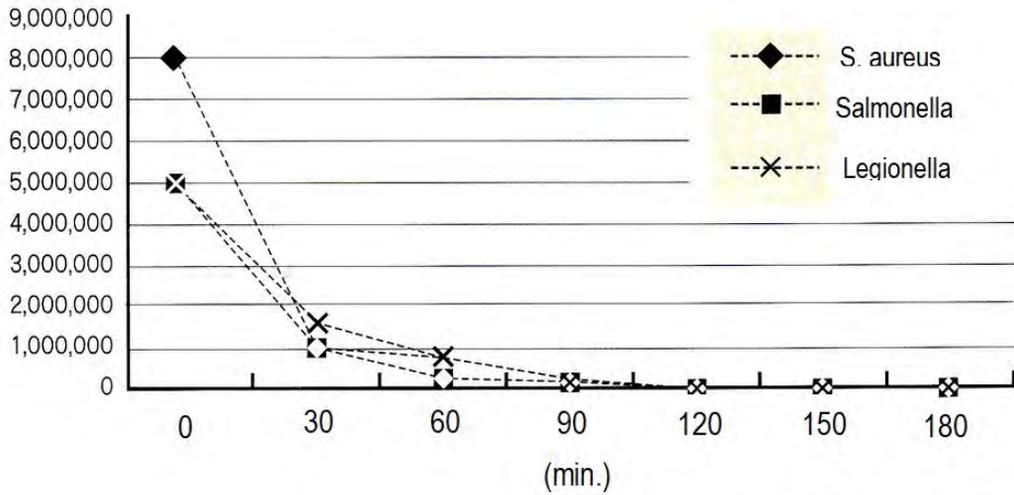
Commercial ozone generators have been widely used for water treatment system because of ozone's strong oxidation activity against contaminants. When it comes to the same for air purification, however, a careful choice must be needed because the ozone amount in the air exceeding 0.1 ppm might be harmful, according to working environment standard in Japan.

To generate a great number of negative ions while minimizing ozone generation is one of the superior technologies of **The Negative Ion Generator**

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## ◆ Sterilization completed in 2 hours

The following graph shows specified bacteria completely inhibited in 2 hours after placed with *The Negative Ion Generator*.

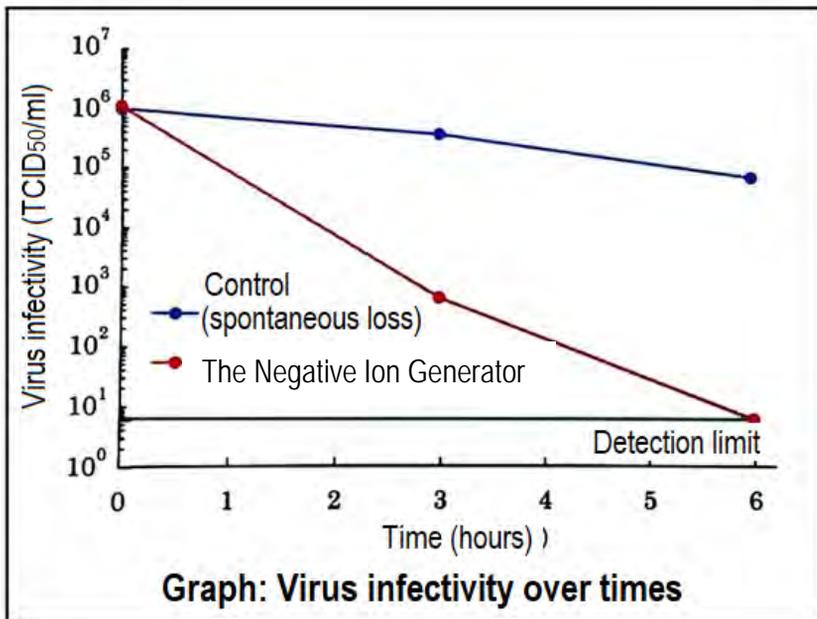


(Tested by JML--Japan Microbes Laboratory in 2010)

## ◆ Demonstration of efficacy against influenza virus

Sterilization activity of *The Negative Ion Generator* has been approved by KRCES (Kitasato Research Center for Environmental Science).

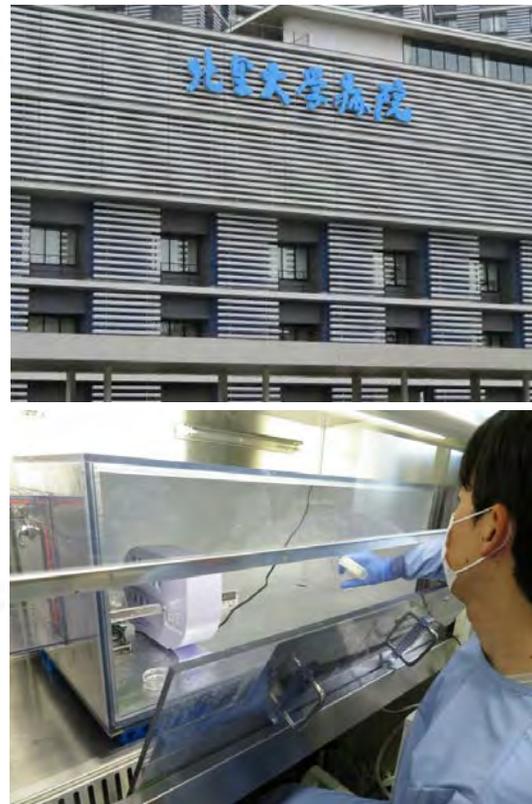
In April 9, 2018, KRCES carried out sterilization test focused on influenza virus. The sterilization efficacy was confirmed under the conditions of air-suspended and surface deposited influenza virus.



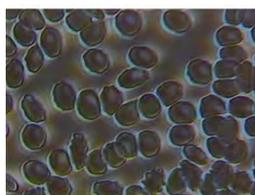
Graph: Virus infectivity over times

It is true that various ion generators are commercially available, but some of them generates the both negative and positive ions with which a satisfactory effect cannot be expected.

Accordingly, it is also true that some local hospitals nursing homes have replaced their conventional air purifiers to and *The Negative Ion Generator*.



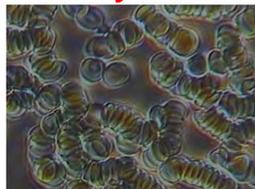
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Healthy blood



Muddy blood



Sticky blood



## Blood normalization

Some researches said that any disease may be caused by body acidification where only 1% of the oxygen taken by breath becomes active oxygen.

Cancer is a typical disease of those whose body is acidified. A carcinogen occurs when gene DNA is cut by active oxygen. A cancer cell is likely to occur in a body part being lack of oxygen due to poor blood circulation. Additionally, the cancer cell produces lactic acid that acidifies blood including immune cells—leukocytes. Lactic acidosis occurs when lactic acid accumulates in the bloodstream. Disruption of biological or cell membrane by active oxygen is also one of cause of other lifestyle diseases such as diabetes, hypertonia and so on.

Normal Immune function can be maintained with weak alkaline blood as well as immune cells in a reduced state. Negative ions help you maintaining your healthy body system including normalizing immune function in an alkaline state.



## Allergy inhibition

There are various causes of allergy suffering people of today.

Mites are one of causes of asthma and atopic dermatitis. It seems that they easily grow in Japan with a climate of high temperature and high humidity. However, the result of some experiments shows that negative ions diffused in the air dramatically inhibit the growth of mites. In other words, negative ions may be panacea for allergic disorders.

Practically, itching by atopic dermatitis can be eased by applying the air of negative ions to the part for 15 to 20 minutes. The easing is due to removal of active oxygen and ion neutralization.



## Prevention from electromagnetic waves

Melatonin is a natural hormone that is made in the pituitary gland of your brain. The exposure of humans or animals to electromagnetic radiation depresses pineal melatonin production and blood melatonin levels. By excessively using a mobile phone, for example, you might have the symptom as if cerebrospinal fluid in your brain is heat up with a microwave. Electromagnetic wave from mobile phone would induce reactive oxygen species to modify the proteins, oxidize the lipid of your brain.

It is important to minimize the effect of electromagnetic wave or to restore your body affected by the exposure to it. Placing yourself in the air filled with negative ions is the best thing to do.

Commercial electric appliances	Leakage magnetic field strength (mG)	Safe distance (inches)
Hair dryer	50 - 700	12
Microwave cooker	200 - 500	80
Electric shaver	100 - 500	4
Air conditioner	50 - 200	50
Mobile phone	15- 200	4
Personal Computer	30 - 100	30
Copy machine	90	15
Refrigerator	2 - 20	20
Television	20	60

# The Negative Ion Generator (for medical purpose)

## ◆ Specifications

Name	The Negative Ion Generator (for medical purpose)
Model	UPD201105
Origin	Made in Japan
Dimension	300 mm L × 79.5 mm W × 220 mm H
Material	ABS (UL94V-O)
Weight	1,700 g
Power source	AC100V (50/60Hz)
Power dissipation	10W
Electrical discharge method	Corona unvoiced discharge (Ion turbo charger system)
Negative ion concentration	2,000,000 ions/cc/outlet (x 12 outlets)
Ozone concentration	0.020 ppm or less (may vary depending on indoor condition)



Official approval by JAPAN ASSOCIATION OF ION RESERCH AND APPLICATION  
SOCIETY OF PREVENTIVE & ALTERNATIVE MEDICINE  
LIVING USAGE DISEASE PREVENTION ACADEMIC COMMITTEE (LUDPAC)

