

# Why people are dying of Coronavirus:

## Pre-existing acute kidney impairment

A proposed theory based on past and present science

**“The mortality rate was significantly higher among patients with SARS and acute renal impairment compared with those with SARS and no renal impairment (91.7% vs. 8.8%) ( $P < 0.0001$ ). Renal tissues revealed predominantly acute tubular necrosis with no evidence of glomerular pathology.”**

**Published: Acute renal impairment in coronavirus-associated severe acute respiratory syndrome, *Kidney International*, the Official Journal of the International Society of Nephrology, 2005.**

This document in no way underestimates the seriousness of the current COVID-19 situation; nor the efforts currently being made. Quite the contrary.

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An official Italian document reporting the statistics of the Italian people who have died from Covid-19 was released 17/3/2020, by the Italian Superior Health Institute (ISS).<sup>(1)</sup>

**The 17/03/2020 ISS report states:**

The average age of people dying in Italy that tested positive with COVID-19 is 79,5 years old. The average age of infection is 63 years old. According to the Chinese CDC (Centers for Disease Control), children are not at all affected by Covid-19. Children less than 10 yrs of age represent less than 1% of the people contaminated.

**Official ISS statistics - Death occurrence over different age groups<sup>(1)</sup>:**

- 707 deaths between 70-79 years of age
- 852 deaths between 80-89 years of age
- 198 deaths over 90 years of age
- 17 deaths under 50 years of age "5 of these people were under 40 yrs old, all men, aged between 31 and 39 yrs, with past serious pathologies".

**Aside from specific age "99% of people who have died of COVID19 deaths in Italy had one or more PRE-EXISTING pathologies<sup>(1)</sup>:**

- 48,5% had 3 or more of these pathologies
- 25,6% had 2
- 25,1% had 1
- **0,8% (3 cases in total) had no pre-existing pathology."**

The report listed 10 reoccurring pre-existing pathologies in 99% of all deaths. These 10 pathologies have ALL been scientifically documented by science to be directly linked to acute renal impairment.

**OFFICIALLY 99% OF ALL COVID19 DEATHS OCCUR IN PEOPLE OF "AVERAGE AGE OF 79.5 YEARS OLD" WITH ACUTE RENAL IMPAIRMENT (This is why the young are not affected).**

The 10 PRE-EXISTING pathologies listed by ISS 17/03/2020 and their occurrence rate in COVID-19 deaths<sup>(1)</sup>:

**Most common diseases observed in patients with COVID-2019**

<b>Pathologies</b>	<b>N. of cases</b>	<b>%</b>
Ischemic Heart Disease (Coronary Heart Disease)	117	33
Atrial Fibrillation (irregular heart beat)	87	24,5
Stroke	34	9,6
Hypertension	270	76,1
Diabetes Mellitus	126	35,5
Dementia	24	6,8
COPD (Chronic obstructive pulmonary disease)	47	13,2
Active cancer in the past 5 years	72	20,3
Chronic liver disease	11	3,1
Chronic renal failure	64	18
<b>Number of pathologies</b>		
0 pathology	3	0,8
1 pathology	89	25,1
2 pathologies	91	25,6
3 or more pathologies	172	48,5

**The 10 PRE-EXISTING pathologies listed by ISS 17/03/2020 directly linked to chronic kidney disease**

- Ischemic Heart Disease <sup>(2), (3), (4)</sup>
- Atrial Fibrillation <sup>(5), (6), (7)</sup>
- Stroke <sup>(8), (9), (10)</sup>
- Hypertension <sup>(11), (12), (13)</sup>
- Diabetes Mellitus <sup>(14), (15), (16)</sup>
- Dementia <sup>(17), (18), (19)</sup>
- COPD (Chronic obstructive pulmonary disease) <sup>(20), (21), (22)</sup>
- Cancer <sup>(23), (24), (25)</sup>
- Chronic liver disease <sup>(26) (27) (28)</sup>
- Chronic renal failure (Self-explanatory)

A scientific paper published in 2005 in *Kidney International*, the Official Journal of the International Society of Nephrology titled: “Acute renal impairment in coronavirus-associated severe acute respiratory syndrome” stated:

**“The mortality rate was significantly higher among patients with SARS and acute renal impairment compared with those with SARS and no renal impairment (91.7% vs. 8.8%) (P < 0.0001). Renal tissues revealed predominantly acute tubular necrosis with no evidence of glomerular pathology.”** <sup>(29)</sup>

**World statistics (22/03/2020)** <sup>(30)</sup>: Large variations of positive cases and deaths per counties is witnessed.

Country	N. Infections	N. Deaths	Official death rate %
China	81,054	3,261	
Italy	53,578	4,825	
USA	26,892	348	
Spain	25,496	1,381	
Germany	22,364	84	
France	14,459	562	
S. Korea	8,897	104	
Switzerland	6,863	80	
UK	5,018	233	
Australia	1,286	7	
Japan	1,054	36	
Qatar	481	0	

Public testing has been very slow to start and is available mostly to seriously affected people in most countries. People who contract the virus and experience no or mild symptoms are very often not being tested. «If we observed the only population diagnosed, we wouldn't find a death rate of 0,2% but probably much higher.” Dr Bruno Lina, virologist, *The International Center for Research in Infectiology (CIRI)*, Lyon, France. Germany has been performing mass testing of the German public, as a result their infection rate is higher, but the death rate is lower.

## **The activation, transcription and reproduction of viruses.**

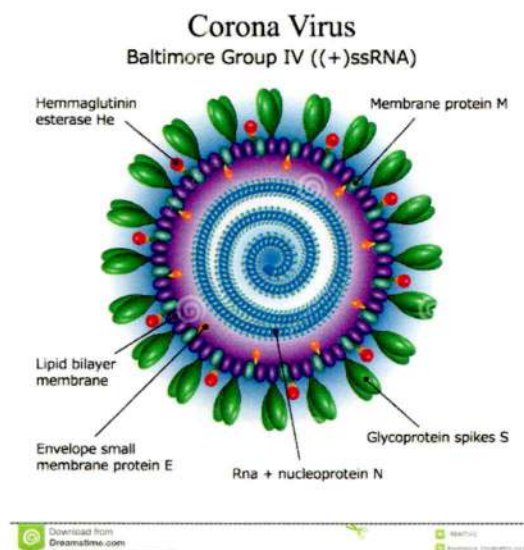
Why some people have no or mild symptoms whilst others may die

- **What is a virus ?**
- **Why do some people have no or mild symptoms whilst others may die?**
- **What is the connection between viruses like Covid-19, the lymphatic system and the kidneys?**
- **Explaining the Covid-19 symptoms**

**What is a virus ?** Viruses are genetic material (DNA or RNA) enveloped in a protein coat. They are classified as « non-living ». They can only be activated once they are delivered into a living host (human, animal or plant cell).

**Why do some people experience no or mild symptoms whilst others die?** We are told this is due to our immune system. But what is our immune system? Our immune system is predominantly our lymphatic system. To what degree we are affected by bacterial or viral infections (including coronavirus COVID-19) is due to how well our lymphatic system and kidneys function.

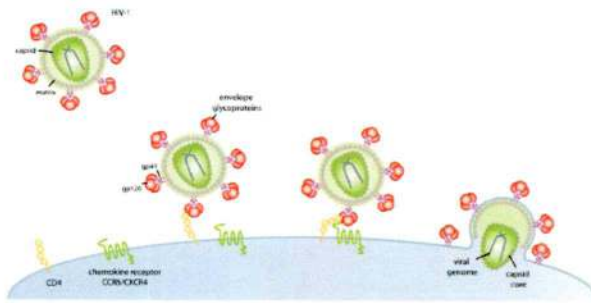
## The viral activation process – 3 ESSENTIAL steps for serious infection to occur



Viruses, including SARS and the current COVID-19 (Coronavirus), once inside our body, first bind to spikes protruding from our cell membranes called *glycoprotein spikes*. The virus is then engulfed by the cell membrane during a process called *clathrin-mediated endocytosis* whereby the virus is locked into a protective pocket called a *vacuole or endosome* (a large pocket found in almost all cells used to stock waste or toxic matter and reserves needed for the cell to maintain the composition of the internal cell).

Viruses require 3 distinct processes to occur in order for the virus to become active, multiply and create a serious infection. **If any one of these processes do not occur within the body the virus remains dormant (asleep), producing no effect/symptoms.**

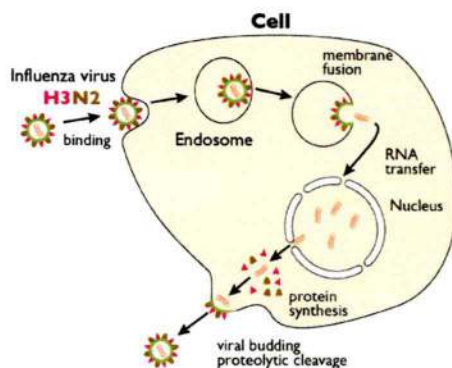
### Step 1:<sup>(31)</sup>



Viruses enter our cells by binding onto antennae-like receptors that protrude out from the cell membrane. This bonding process results in the fusion of the viral and cell membranes, which allows the virus to pass into the cell. The viral material is instantly and effectively encapsulated/quarantined into an endosome as a protective measure by the cell.

French Professor of microbiology and world-renowned expert of infectious diseases Dr Didier Raoult has been treating coronavirus patients successfully with chloroquine, which is well documented to inhibit virus entry <sup>(32)</sup> **We can not control this step.**

### Step 2:<sup>(33)</sup>



(Ref : <https://www.mdpi.com/1999-4915/4/7/1144/xml>)

The second step of virus activation is triggered by the influx of potassium ions passing through the M2 ion-channels along the cell membrane. The change from a sodium to a potassium-rich environment in maturing endosomes, decreases the pH of the environment within the endosomes which triggers the uncoating and of the viral core inside the cell and the importation of the viral RNA into cell's nucleus, where replication and transcription take place, leading to infection.

A change in the pH within the endosome releases viral RNA, which enters our cell's nuclei where it becomes activated, replicating to create infection. **We can not control this step.**

**Step 3: This step depends on YOU.**

**Once viral matter is dispatched throughout the body, it is up to the immune system and specifically the lymphatic system to combat the infection.**

Our lymphatic system consists of a vascular system, glands and organs. It extends all throughout the body, it is connected to every cell via lymphatic vessels and the interstitial fluid (the liquid that surrounds each cell). Unlike the circulatory system the lymphatic system does not transport blood and plasma, it transports lymph, a white fluid that carries our white blood cells throughout the body and to areas of infection.

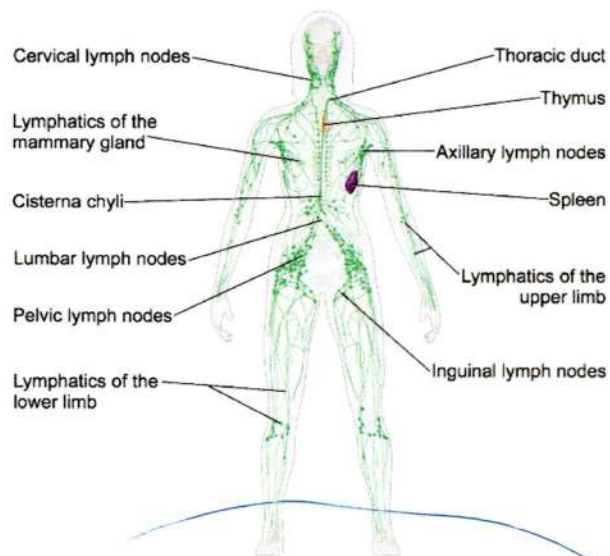


Image of the lymphatic system <sup>(34)</sup>

The role of the lymphatic system is to transport hormones, to absorb and transport fatty acids and fats from the digestive system essential for our cells, remove waste/unwanted proteins/toxins and combat infectious matter. Our white blood cells are an essential part of our lymphatic system, they include: Lymphocytes, Neutrophils, Monocytes and Macrophages, Natural Killer T-Cells, Dendritic Cells, Platelets and Endothelial Cells, etc.

White blood cells are found in the lymph, lymphatic tissue and blood, they are produced in the bone marrow, lymph node and the thymus gland, they are an essential part of the immune response should a virus get passed stage 1 and 2 mentioned above.

## What is the connection between viruses like Covid-19, the lymphatic system and the kidneys?

In the article published in *Kidney International*, the Official Journal of the International Society of Nephrology, we learned that not only that “The mortality rate was significantly higher among patients with SARS and acute renal impairment compared with those with SARS and no renal impairment (91.7% vs. 8.8%) (P < 0.0001).” but that **“Renal tissues revealed predominantly acute tubular necrosis with no evidence of glomerular pathology.” This is vital, as it is the kidney tubules that regulate our body’s balance of water and electrolytes throughout the body in a process called osmoregulation.** “Kidney tubules selectively reabsorb filtered water and electrolytes to regulate body water and electrolyte balance. The tubules can reabsorb most of the filtrated water by 99% via urinary concentration mechanisms. The tubules also reabsorb sodium, potassium, chloride, calcium, magnesium, and phosphate.”<sup>(35)</sup>

### What happens when water reabsorption is compromised?

When the fluid surrounding the cells (*the interstitial fluid*) loses water due to kidney impairment, and a water-solute imbalance occurs, meaning there is a higher concentration of solutes outside of the cell. To balance this situation water fuses out of the cell. This dehydration of cells leaves the cell membrane thin and the cell deformed or shriveled. This reduces the capacity of the cell to make and stock energy, eliminate wastes and can result in cell and gene dysfunction.<sup>(36)</sup>

This cellular dehydration also causes congestion and stagnation of the lymph. When patients with acute kidney impairment become infected with Covid-19 they already have a chronically dehydrated and congested lymphatic system, due to chronic kidney dysfunction. When this occurs the immune/lymphatic system is no longer able to transport the essential immune fighting white blood cells to infected areas, which allows the virus to propagate further.

All cells produce acidic cellular waste which is deposited into the interstitial fluid surrounding the cells. When these acids can not be drained away from the cells, due to interstitial congestion, the acids accumulate and irritate the outer-skin of the organs. This acid accumulation lowers the fluid pH and causes an inflammatory response. As a protective response the body increases the production of mucous to protect tissue damage by the acids. This interstitial acidosis greatly suppresses T cell-mediated immunity, required to fight the infection, greatly reducing the body’s ability to defend itself.<sup>(37)</sup>



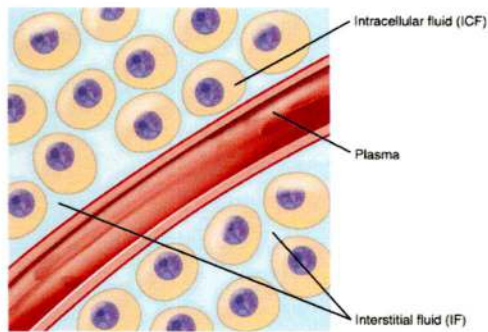


Image of interstitial fluid (blue) surrounding cells, alongside a blood vessel. <sup>(38)</sup>

### Explaining the Covid-19 symptoms

The Official ISS report <sup>(39)</sup> published 17/03/20 stated that the most frequent symptoms experienced by the Italians that have died from Covid-19 are:

- **Fever** (77% of the cases)
- **Difficulty breathing** (74% of the cases)
- **Cough** (42% of the cases).

**Fever** - The skin is the biggest elimination organ in the human body. It is also often considered to be the body's third kidney as the skin plays an important, often vital role, in the elimination of wastes IF kidney function is impaired. A fever is a natural self-preserving elimination function of the body brought about to eliminate waste fast. The body temperature will rise, causing the pores in the skin to dilate as the body pushes waste, toxins and infectious matter out of the body by perspiration and evaporation. A fever should be accompanied, not stopped. By taking medication to stop the fever the elimination process is halted and the wastes accumulate further within the body.

**Difficulty breathing** – As the lymphatic system is congested, acids and mucous accumulate in the interstitial fluid around the cells. This reduces optimal lung capacity which leads to impaired breathing.

**A cough** - is a self-preserving natural mechanism of the body to clear out accumulating mucous from the congested lungs. Taking medication to stop the coughing process is not helpful for the elimination process. Coughing should be accompanied not stopped.

**A confirmed official 99% of all deaths due to Covid-19 in Italy all had pre-existing pathologies which are all caused by kidney insufficiency. This is why children, young and older people with good kidney function are not affected by Covid-19.**

**Treatment should involve kidney and lymphatic support. Sadly these people are dying because of a pre-existing kidney impairment which is worsened by the Covid-19.**

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*Influenza Virus-Mediated Membrane Fusion: Determinants of Hemagglutinin Fusogenic Activity and Experimental Approaches for Assessing Virus Fusion.*

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