

COVID- 1,000,000 DEATHS GERALD ENTE.MD JUNE 1,2022

One million deaths from Covid-19 in the USA and at least 15 million deaths globally are the reported numbers we have reached by the end of the May 2022 after 30 months of this virus. Unexpectedly, the US has a much higher death rate than most other wealthy countries because our country has failed to vaccinate enough people, especially old people. Also, we became complacent and generally slackened our masking, distancing as well as hand washing. The million deaths number is based on death certificates reported and therefore is likely significantly higher. This number is almost as high as the death toll of our soldiers in all of our major past wars combined. It includes deaths from the disease as well as from our pandemic impacted overworked health systems. 75% of these deaths are people who were 65 or older and represents 3% of our population over 85 years of age. Many of these deaths would have been preventable with vaccination. Chronic kidney disease patients on dialysis were the perfect victims of this pandemic. A large number of them died (20% more than expected). A disproportionate number of them were old, poor and black. Dialysis centers prove to be an added problem which might be resolved by home dialysis. However this is difficult because of logistics and costs.

The **15 million global death** estimate shows that middle income countries account for 81%, high income countries 15% and low income countries 4%. Men accounted for 57% of the deaths and the rate was higher for the oldest. These figures are based on country-reported data, but many lots of countries do not report so that modeling is necessary. Also in poor countries when a massive outbreak occurs people die in the streets, bodies are abandoned or cremated, causing the data to be an underestimation.

We have spoken about the role that George Washington and Ben Franklin had played **historically** with **Smallpox** vaccination. Today we shall go further into that. Back in the 1700s, Cotton Mather, a signer of the Declaration of Independence, owned a slave named Onesimus, who came from West Africa where Smallpox vaccination was common practice. When Smallpox was rampant in Boston in 1720, Onesimus convinced Mather that vaccination would help. Mather became a fervent campaigner for this inoculation. The skepticism was so great that Mather's home was bombed by protestors.

Over half of Americans have been **infected with the virus at least once**. Experts differ in stating that for every 1 case reported there are 4 to 9 undiagnosed; but they all agree that our data is under-stated. Also while some viral diseases like Measles afford lifelong immunity, these Covid viruses do not. The immunity from the disease or the vaccines protects against severe disease and death but re-infections are common. As the new variants evolve, they become more transmissible and are causing and will keep causing re-infections.

As a virus spreads, it mutates. Omicron follows this rule. Omicron has new variants known as BA.1, BA.2 and BA.2.12, now present in 22 countries. The US is in the midst of a **new wave** (the 5th, by my count) related to Omicron **variants, BA.2 and BA.2.12.1** with about 100,000 new cases daily. These new variants are better at evading prior immunity and replicating faster than the lesser known and predecessor mutations, making them hyper-transmissible. They have changed their anatomy through multiple mutations and modifications allowing them to enter our cells differently and more efficiently. They double every week. They are dominant in the USA. They are considered among the most contagious diseases in the world. They now account for over 90% of the cases in NY and NJ. Good news is that in general they produce milder disease in most people BUT they spread more rapidly, they cause more long covid, they put more stress into our health systems (including hospitals), and they produce more variants. (We are already up to BA.4 and BA.5.) Although our vaccines are protective people have slowed down on getting vaccinated. Harvard researchers stated that BA.2 and BA.2.12.1 are just as deadly as predecessors. The reason that death rate remains high is that even though the disease is less severe, the numbers of cases are higher making the math show a higher number. New nasal vaccines, which are aimed at new variants, are in advanced experimental trials.

BA.4 and BA.5 are already thriving in Europe and Africa, in 13 countries and reported to be 10% more contagious than BA.2. BA.2 and BA2.12.1 are 25% more contagious than BA.2. These viruses are mutating against global immunity. Immune pressure will increase the rate of selection of the fittest mutations that are already out there. In South Africa where these variants begin about 90% of the people have some immunity mainly from previous infection but only about 30% of population has been vaccinated. But these same people are susceptible to BA.4 and BA.5. Even people who have recovered from infection in December or January may become re-infected. **Natural immunity does not work here.** We are about 4-6 weeks behind South Africa. BA.4 and BA.5 may cause a new wave of infection but researchers say that it is too early to know whether these 2 will take off in the US.

Mayor Eric Adams upgraded the **Covid alert status to high** recently in NYC. (In South Florida the alert level has been raised to medium). One in three New Yorkers has had this disease and at least 1 in 207 people have died. The number of new cases is increasing daily and the hospital admissions have increased steadily in recent months in 46 states. Mayor Adams is SUGGESTING that New Yorkers wear masks at crowded indoor events. The White House has just warned that one third of all Americans live in areas where Covid cases are so high and increasing so steadily that our leaders are also SUGGESTING that in those areas people who are attending indoor events wear masks.

Although in the New York City area 1 person in 3 (in the USA it is 1 in 4) has evidence of having had Covid-19 disease, there are a lucky group of people who have not yet been infected. We have seen families where 3 out of 4 members get the virus and one member stays clear. We know that one bed partner can get sick (with

symptoms or without) and the other may remain clear. How does this happen? Getting vaccinated and boosted (**vaccines still are our best tool** for controlling Covid and helping to shift the pandemic to the next phase), keeping precautions, having less nasal receptors for the virus, having a better immune system or just being lucky are some possible reasons.

Much new information about **Long Covid** has recently become available. A two year long study from China has reported that about half of hospital survivors (serious disease) had long covid. A US study from the database of private insurance claims agreed that hospitalized patients were at greater risk of developing long covid, but 75% of long Covid patients had only minor or moderate disease. Another study found that while two thirds of the patients had pre-existing health conditions nearly a third did not. This is a huge number (millilions) of previously totally healthy individuals. Vaccinated people are less likely to develop long covid. Also, CDC says that 1 in 5 adult Covid US survivors may develop long Covid. Our Government is planning a major drive aimed at Long Covid. As many as 23 million Americans may have this. The Government has issued a plan for the first ever federal inter-agency action plan. The NIH has 1.1 Billion dollars to study this problem. CDC, NIH, VA and other agencies will set up and strengthen special clinics to treat and follow these patients; will study the cause and course of this special disease; bolster health insurance for these patients; raise awareness about this chronic condition; connect patients with resources; identify workplace interventions and keep federal surveillance on this problem.

We know that **women** experience more symptoms of long Covid than men and the symptoms persist longer. We know that it can take a year for the sense of smell to return. We know that the global incidence of long covid is substantial (estimated globally at 200 million people), varying in geographic areas with prevalence in Asia at 51% of people with Covid, in Europe at 44% and in North America 31%. We know that vaccination lessens, but does not eliminate, the risk of long covid. We know that people with long covid are at greater risk of abnormal blood clotting. We do not know if that is a cause or a result.

Booster shots in the US have given excellent protection against severe disease from Omicron. Omicron infection without vaccinations provide little immunity. I believe that we all know the value, the safety and the efficacy of the 3rd shot (the 1st booster) so let's talk about **the 4th shot**. However because of misinformation or disinformation many Americans have not yet taken this 3rd shot. The 2nd booster (4th shot) protects against Omicron causing less severe disease (hospitalization, ICU and death) and lasts for several months, giving protection for about 4 to 5 months. Even Cancer patients are recommended to receive the 2nd shot 4 months after the first booster. Protection against the virus from this shot begins at 10 to 14 days after receiving it. The same people who were advised to get the 3rd shot are advised to get the 4th shot. There are some experts who do not believe boosters are necessary, but they are in the minority.

- **Quick Facts**
- **Covid disease does not cause impotence** although in Rhesus monkeys PET scans show changes in the male genital tract.
- **Latest study shows that Ivermectin is as effective as placebo; does not work.**
- 1 in 3 **Medical Clinicians** plan to leave the field by 2024.
- Some hospitals are **relaxing mask rules**, others **distribute their own mandatory masks. (This shows total confusion.)**
- Vaccination during **pregnancy does not cause fetal abnormalities** but disease causes severe complications in the unvaccinated.. Vaccination also extends protection to the newborn. (NYU Langone).
- A German took **90 Covid vaccine shots so that he could sell vaccine cards .**
- A German study from 1200 medical practices discovered a newly diagnosed kind of **Diabetes** type 2 probably caused by mild cases of covid disease. Data from USA and UK concurs. More study is needed here.
- Delta variant has been **transmitted from pet** hamsters to humans and human to human. (This is breakthrough information.)
- **Conjunctivitis during Covid disease is a marker** for serious disease including ICU care and death
- **Brain scans** reveal specific abnormalities in the brain after even mild disease. The brain shrunk in size and lost grey matter,
- **US will share** its 11 new Covid technologies developed by the NIH with other countries.
- **Routine childhood vaccinations** in the US as well as most other countries have slipped and fallen behind historic levels.
- **Eye glass wearers** appear to have a lower risk of catching Covid (not contacts).
- Covid disease frequently **damages the cornea and the lens** of the eye.
- FDA and CDC agreed to allowing children 5 to 11 to be boosted with Pfizer vaccine. The Moderna vaccine is also safe and effective for this age group.
- FDA has authorized first **breath test** that detects Covid with high accuracy. This breathalyzer test tests for 5 chemical compounds found in the virus by gas chromatography. Test is produced by InspectIR.
- **Risk of death** is 3-4 times greater from Covid than Flu in patients requiring oxygen (reported in a study from Portugal).
- **Airlines** that dropped mask requirements are now suffering staff shortag
- New Generation of **cancer preventing vaccines** may wipe out tumors before they form and are based on RNA technology.
- **Dogs** are being trained to detect Covid by sniff with 92% accurate.
- 10.4 million children have **lost at least 1 parent or caregiver to Covid.**
- A new Covid **spit PCR test** is probably more accurate and certainly easier to administer than nasal swab tests.
- **Vitamin D** supplements do not work for Covid prevention; nor do lotteries.
- Covid-19 **mandates are not effective.**

- AstraZeneca vaccine use has been limited in USA because of blood clot problem. CHECK STATUS NOW
- If you **lose your vaccination card**, you may contact your local health department by email...The records are not lost.
- Two **new side effects for the Pfizer vaccine** are: transient eye-lid swelling and possible sudden hearing loss. (Study in progress.) **These vaccines are safe for people with a previous history of myocarditis.**
- McMaster University in Canada and Yale researchers are developing a **nasal RNA Covid vaccine.**
- Vaccination causes a **lower viral load which** means **less transmissible.**
- Survivors of serious Covid disease have greater **than 3 times the risk of dying** from all causes during the following year.
- The '21-'22 **twindemic (flu + Covid)** did not happen for 2 reasons: people took care to avoid Covid and **viral interference** which is a phenomenon where the presence of 1 virus fights off another virus in a body or in a geographic area.

Many new studies keep showing that our present vaccines are effective in preventing serious disease and death for a significant amount of time. We now know that fully vaccinated people have a high level of neutralizing antibodies which keep them safe from new disease. When this level of neutralizing antibodies falls the individual is susceptible to breakthrough infection.

We are smart enough after 30 months with Covid-19 to know what to do... vaccinations, boosters, masks, social distancing, hand washing and using our brains... home testing, planning for what to do if positive, ;planning for alternatives for events and travel. As Covid funds diminish there is a possibility that free supplies for vaccination, testing, treatments and protective equipment may be rationed or even unbelievably run out or people may be required to pay "out of pocket". A new wave is coming. BA.2 has surged in Europe. Our waste water testing indicates that another surge is coming here. This pandemic is not over. I hope we won't have more lockdowns and mandates. In the near future **there will always be a new variant.** Entirely eliminating these infections is an unrealistic goal. Virus mutations are not slowing down. We know what we need to do. We must do it.

A parting thought: So...you have been eating hot dogs, salamis and McChickens all your life, but you don't want to take the Covid vaccine, because "you don't know what's in it"?