

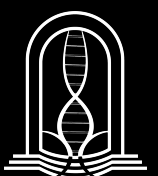
ARTIFICIAL PANDEMIC

CATEGORY GUIDELINE



What do we expect?

In response to the growing concerns surrounding the potential risks of outbreaks, this category aims to inspire creative solutions and advancements in the fields of diagnosis, treatment, and prevention of a simulated artificial pandemic. Participants are invited to tackle this hypothetical scenario with innovative ideas that can contribute to safeguarding global health. Raising awareness and preparedness for the destructiveness of possible outbreak disasters provides a platform for them to collaborate to overcome the challenges posed by outbreaks. By promoting innovation in diagnosis, treatment and prevention, we aim to contribute to the development of strong global health systems that are resilient to unpredictable threats. We invite participants to join us on this journey to envision a healthier, safer future for everyone.



IS A NEW DISEASE STARTING?

CASES SHOWING COLD-LIKE SYMPTOMS AND UNKNOWN CAUSE APPEARED IN GALEN!

Initiation

Thousands of people began to flock to hospitals due to many complaints such as headache, fever, weakness, muscle and joint pain. Doctors in the Country of Galen said that for the first time, hospitals were so crowded and they could not reach the patients.



It was stated that retroorbital pain, vomiting and diarrhea were also observed in some adult patients, and rashes were also observed in pediatric patients. The increase in the number of patients day by day and the temperature being above seasonal values made the work of doctors difficult.





THE NEW PANDEMIC

**THE NUMBER OF CASES IN AFRICA REACHED 2
MILLION 238 THOUSAND!**

1st Month



It was found that the situation was similar in many countries on the same continent. As a result of the research, scientists announced that this disease is thought to be caused by a virus specific to the environment. Due to the lack of health, cleaning and other basic services in the countries where the epidemic started, patients could not receive the necessary treatments and the rate of infection increased. Scientists stated that people should remember Covid-19, the most recent epidemic in history, and increase their individual precautions, and that they are in communication with institutions and organizations for other measures. They explained that they are investigating whether they are faced with a new virus due to the nature crises, climate change, increase in temperatures, and melting of glaciers in recent years, or a virus that has existed since the past and has re-emerged as a result of the mutations it has undergone.

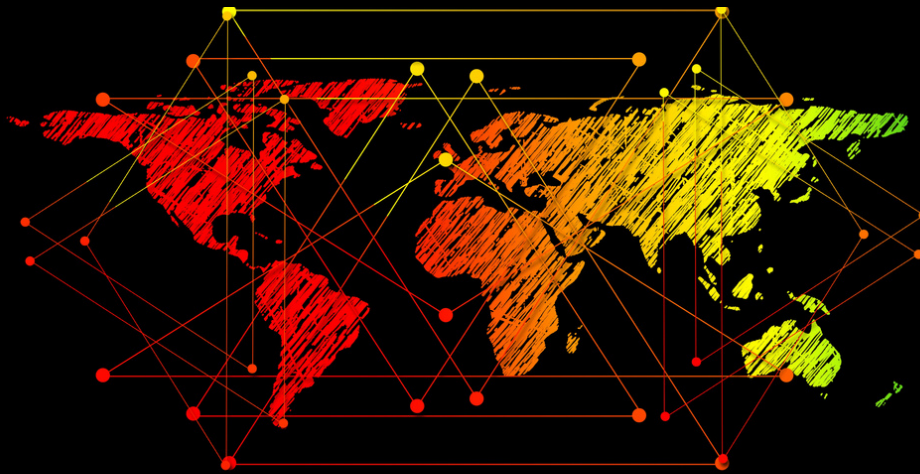




THE DEATHS HAVE STARTED

THE VIRUS SPREAD TO NEIGHBORING CONTINENTS!

3rd Month



In the latest announcement by the World Health Organization, it was reported that the number of patients presenting with similar complaints has surpassed 5 million, with deaths nearing 1 million. Demises did not exhibit discernible discrepancies concerning age, health status, or gender. Upon arriving in the Galen country for disease investigation, Turkish researchers were incredulous at the conditions. The ambient temperature was nearly stifling. The profusion of flies around riverbanks and within animal breeding grounds, coupled with an indeterminate number of bird carcasses in the vicinity, drew their attention. It was revealed that the disease had been observed in neighboring continents until research efforts yielded results. Distribution patterns of the disease and its point of origin became focal points for scientific inquiry.

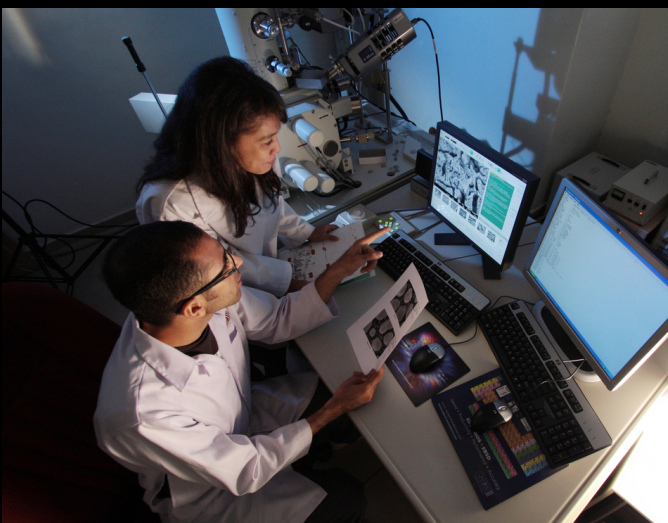


RESEARCH CONTINUES

BREAKING NEWS : THE NUMBER OF FLIES REACHED 10 MILLION! THE VIRUS WAS OBSERVED IN DIVERSE HOST ENVIRONMENTS!

6th Month

Many scientists, predominantly virologists and microbiologists, from various regions of the world are actively continuing their research efforts to trace the origin of the disease, which first exhibited its initial symptoms with the virus in the Galen Country. The escalation in avian mortalities in the vicinity prompted scientists to commence investigations on other organisms as well. Building upon their prior studies, researchers sought signs of the outbreak in equines and avifauna. In the latest research endeavors undertaken by scientists, it was observed that the population of mosquitoes in Galen surged tenfold compared to the preceding year, reaching an approximate figure of 10 million.



Scientists shared their findings, indicating that the isolated virus pertains to the Flaviviridae family and is transmitted to humans through *Culex* mosquitoes. Consequently, preparations for the requisite treatment materials have commenced in accordance with this information.





THE TREATMENT IS READY

HOPEFUL DEVELOPMENTS IN TREATMENT STUDIES!

10th Month

A biotechnology firm based in Germany began to receive positive responses from experiments conducted to neutralize the virus caused by the disease they developed. It was decided to first test the treatment on animals. The treatment prepared for horses was completed based on known treatments and applied.



Trials began on consenting patients in the human trial phase and on severely ill adult patients. Records of improvement in patients were documented in examinations conducted by doctors regularly every week for a month. Whether the treatment has a preventive effect on the disease at its onset is still unknown, but the success rate after contact with the disease was announced to be 80%.





SURPRISING PICTURE IN HOSPITALS

WHILE TREATMENTS CONTINUE, THE INCREASE OF PATIENTS WITH UNKNOWN REASON HAS CREATED A QUESTION MARK IN MIND.

15th Month

It was indicated that all stages for the implementation of the treatment had been completed, and it was now asserted that individuals could commence treatment without having experienced the disease, with protective effects. Concurrently with the treatment, a reduction in hospital congestion began to be observed. It was reported that there was also a decrease in the incidence of the virus and mortality rates among animals.



Despite certain propaganda by opponents of the treatment, governments elucidated the treatment to the public in the most straightforward terms and endeavored to ensure its accessibility to all segments of society. While the treatment process persisted, hospitals unexpectedly became inundated with adult patients, particularly those afflicted with neurological, diabetic, and cardiovascular disorders. Initially, inquiries were launched to investigate whether these conditions were linked to the outbreak or the treatment.



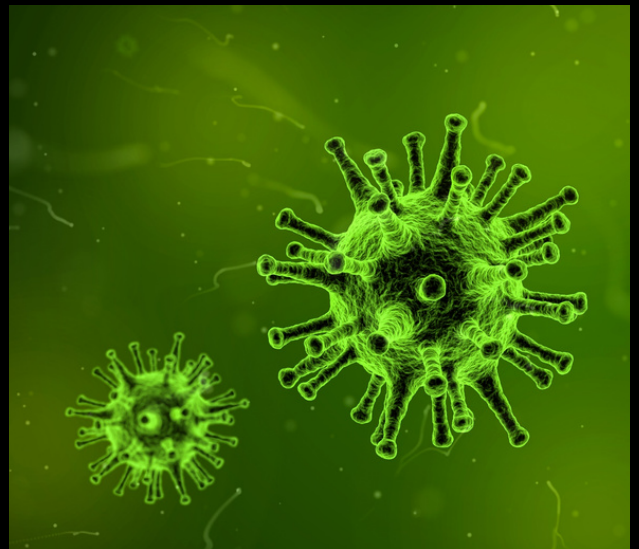


RESEARCH HAS BEEN CONCLUDED

THE BEST WAY TO PREVENT THE VIRUS: TRUSTING SCIENTISTS

18th Month

The research on the diseases that filled hospitals 3 months ago has been concluded. It has been observed that in patients who did not receive the appropriate treatment for this disease, who were exposed to the virus but did not show any symptoms for a long time, the symptoms later became stronger.



It was deemed appropriate to apply a stronger treatment to these patients, and innovative approaches were also applied to patients whose treatment had already started.



1. Cope with Climate Change

- The connection between insects acting as carriers for the virus and climate change should be established. It should be explained how to minimize the part of climate change that affects the outbreak.

2. Identifying the Pathogen and Taxonomic Classification

Describing:

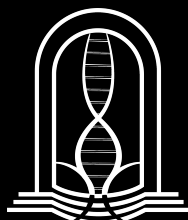
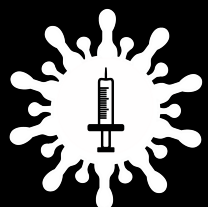
- The pathogen for their chosen scenario must be identified by the teams based on the information provided to them.
- It should be stated in the scenario which pathogen is referred to.

Taxonomic Classification Strategies:

- Taxonomic databases and tools should be explored by teams for accurate classification. The consequences of taxonomic choices and their impact on public understanding should be discussed.
- A taxonomic name should be given to the pathogen; this name must comply with binomial nomenclature rules.

Innovative Approaches:

- The integration of artificial intelligence or machine learning should be considered for achieving more efficient taxonomic classification.



3. Isolation and Characterization

Selection of Isolation Methods:

- Options to isolate the pathogen, such as differential centrifugation, chromatography, or immunoprecipitation, must be chosen by teams. The chosen method should be justified based on efficiency and purity.
- All laboratory protocols of the method should be stated.

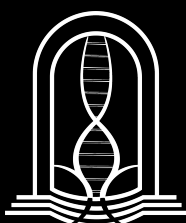
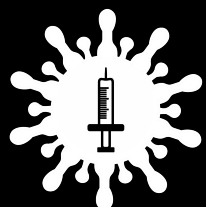
4. Development of Diagnostic Essays

Diagnostic Test Options:

- A variety of diagnostic assays must be developed by teams, such as ELISA, lateral flow assays, or nucleic acid-based assays, or an original novel detection method that has not been studied before. Its choice should be justified based on sensitivity, specificity and practical application.

Rapid Test or Comprehensive Diagnostics:

- Whether to focus on developing rapid on-site tests or more comprehensive diagnostic methods is decided by teams. The advantages and limitations of the chosen approach must be discussed.



Integration of Technologies:

- The integration of multiple technologies for advanced diagnostics is explored by teams. How the method minimizes false positives and negatives must be explained.

5. Therapeutic Approach

Drug Development or Vaccine Research:

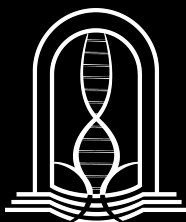
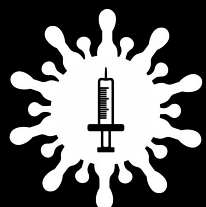
- Between developing an antiviral drug or working on a vaccine must be chosen by teams. The feasibility and potential impact of each approach must be evaluated.

Treatment Protocols:

- Drugs outline treatment protocols are chosen to develop by teams. The factors such as dosage, routes of administration and potential side effects must be considered.
- The drug's developing methods and inhibition mechanisms should be explained in detail. Also, an explanation of how they will develop a strategy in case of a possible mutation is expected.

Clinical trials:

- The importance of planning and conducting rigorous clinical trials should be exemplified by teams. Strategies to expedite the testing process without compromising security should be suggested.



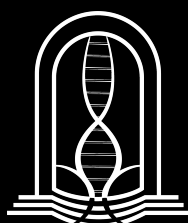
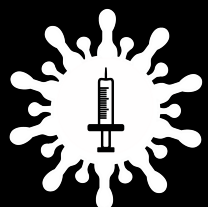
6. Prevention and Mitigation

- **Vaccination Strategies:** Traditional vaccination campaigns or new approaches are being chosen by teams. The advantages and challenges of the chosen vaccination strategy should be discussed.
- **Public Awareness Programs:** Public awareness campaigns are designed by teams. Cultural sensitivities are addressed, and campaigns are tailored to different populations.

Precautionary practices that states will take for their countries:

Precautionary practices for their countries are considered by states.

- **International Cooperation or Community Participation:** The decision to focus on global collaboration or community-level participation is made by teams. The potential impact and challenges of the chosen approach are considered.
- **Ethical Considerations:** Ethical implications in prevention strategies are considered by teams. Issues related to vaccine distribution, access, and informed consent are addressed.



7. Scoring

