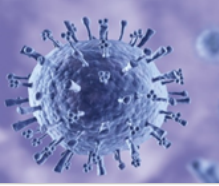


# Influenza H1N1 control in air



## Applications

Environmental Biosecurity in Indoor Public areas, Health Facilities, Work/Production Areas, etc.

## Objective

Determine efficiency of Oxyion Technology® to inactivate H1N1 in air.

## Materials And Methods



1. Orthomyxoviridae, Influenza A virus (H1N1), ATCC # VR-897 embryo inoculation (105 TCID50)



2. Medium harvesting



3. H1N1 micropulverization in the air



4. Oxyion treatment exposure: 0,5- 1- 1,5- 2- 2,5 and 3 minutes.

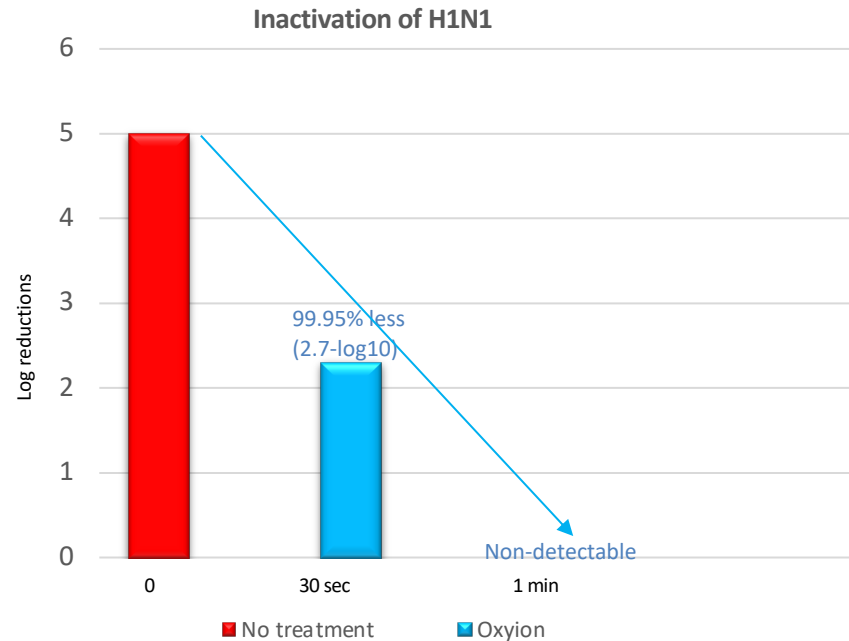


5. H1N1 plate recovery misted in the air



6. H1N1 recovery by PCR. Cylindrical effect.

## Results



30 sec



60 sec

► Influenza H1N1  
99.9% reduction in  
30 seconds.  
Non-detectable in  
1 minute

1 Log reduction = Number of germs is 10 times smaller  
2 Log reduction = Number of germs is 100 times smaller  
3 Log reduction = Number of germs is 1000 times smaller  
4 Log reduction = Number of germs is 10000 times smaller

## Conclusions

Oxyion technology was effective in controlling a misted high viral load in the air with a treatment time of 1 minute. With an initial load of more than 4.0 log<sub>10</sub> Oxyion® demonstrates its effectiveness in controlling this virus according to scientific parameters of the ICTV (International Committee on Taxonomy of Viruses).

It was concluded that the viral elimination mechanism would be related to the rupture of the virus's lipids or structural proteins

