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## A Review on Fog and Smog: Impact, Mode of Action and Remedial Measures under COVID-19 Pandemics

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### ABSTRACT

On 11 March 2020, the World Health Organization (WHO) declared the coronavirus pandemic: the Sars-Cov-2 virus (COVID-19) is a threat to the population's health. A positive correlation has been observed between the spread of the virus and air pollution, which is one of the greatest challenges of our millennium. COVID-19 could have an air transmission and atmospheric particulate matter could create a suitable environment for transporting the virus at greater distances than those considered for close contact. Smog is formed when pollutants like nitrogen oxide, carbon monoxide and volatile

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organic compounds that are released from automobiles, industries and burning of rice crop residues (parali) and fossil fuels interact with sunlight (WHO, 2016). In this context, COVID-19 could also have an airborne transmission and particulate matter (PM 10 and PM 2.5 which is Fine particulates of 2.5 micrometer or 10 micrometer less are also among the pollutants found in smog and haze) could act as a carrier through the aerosol, conveying the virus and increasing its spread. It prove a direct correlation between current high air pollution levels and incidence of COVID-19, high pollution levels might also increase the risk of contracting COVID-19. One of the most pressing and urgent problems is that polluted air can severely endanger human health and life. Individual residents who are affected by smog pollution can often do very little to prevent it, but they can apply adaptive and protective measures to reduce their risk. Elderly and people experiencing any cardiac or respiratory illness are more prone to harmful effects of smog (Sierra Vargas *et al.*, 2012). These measures are minimal exposure to outdoor air but if exposure is inescapable than a facemask should be worn. Those people who are affected with cardio-vascular disease and its allied patients should increase the dosage of medication on their physician's advice to prevent worsening of disease. Supplements and food containing antioxidants like omega 3 fatty acids when added to diet may help against oxidative stress caused by pollutants (Xing *et al.*, 2016). Therefore, it is crucial to minimize the negative effects of smog by wearing mask and reduced the environmental pollution by adopting eco-friendly products.

**Key words:** Fog, Negative impacts, Pollution, Smog, Weather.

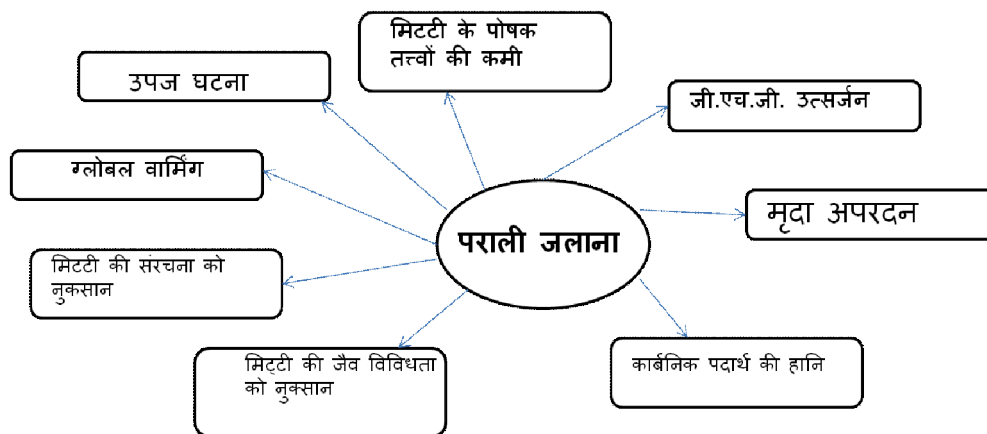
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vLoLFk 0; fä	151 I s200	I Hkh 0; fä; ka dks LokLF; I Ecā/kr I eL; kʻA [kkl dj T; knk mudks tks dh ʻcnik.k ds fy, T; knk I onu"lhy gʻA
cgrr T; knk vLoLFk 0; fä [krjukd	201 I s300 301 I s500	vki krdkyhu fLFkrh ds fy, LokLF; prkoulh yxHkx I Hkh ds fy, [krjkA LokLF; prkoulh I Hkh ds fy, xHkhj [krjk egl ʻ gʻksyxskA

• Lekx dk ʻHkko I cl sT; knk ofj'B ukxfjdka dks cPpki  
, ythZl sʻHkfor ykx] xHkzrh efgykvkavkʻ /kæi ku djus  
okysykska dks ʻHkfor djskA

• Nkrh ea tyu] [kkl h] dʻ j ; k I Øe.k] xysdk dʻ j  
vkʻ fuekfu; k dk gʻskA

• "okl dh I eL; k] "okl yuseafnDdr] vkʻkA

### Lekx I dsʻ scpa

❖ ; g t: jh gʻs fd ifjokj vkʻ vU; ykxka dks ok; q  
xqkoʻlkk I pdkad ʻAQI% dsckjseal fpr fd; k tk,] ftl I s  
vkerkʻ ij ʻcnikd ekud I pdkad ; kfu vius {ks= ea  
ʻcnik.k ds Lrj ds ckjs ea tkudkjh jgʻA ok; q xqkoʻlkk  
I pdkad ; k , D; wkbz ʻAQI% ; s crkrk gʻs dh gok fdruh  
LoPN gʻs bl dh jʻVx nrk gʻA ; g i; kbz.k ea=ky; }kj  
tkjh dh tkusokyh fjikʻZ gʻs tskgok dh xqkoʻlkk dks jst  
e,fuVj djrk gʻA , D; wkbz gok eaekstn ʻcnik.k tʻs sfd  
PM 2.5 vkʻ PM 10 dkcʻu ekuksvkdI kbM] ukbVktu  
Mkbv,DI kbM] vktku vkʻ I YQj Mkbv,DI kbM vkfn ʻedk  
gʻs ʻtkxj.k tksk if=dk yʻk I s xghr fd; k x; k gʻA  
, D; wkbz fjikʻZ ds vuq kj gok ds Lrj dks thjks I s300 ds  
chp j [kk gʻA 150 I s ʻAij Lrj fdl h ds fy, Hkh vLoLFk  
ekuk tkrk gʻs vkʻ 200 I s ʻAij dk Lrj fcydy gh  
vLoLFk dgk tkrk gʻA vkʻ ; s tks[ke ds Lrj ds I pdkad  
dyj vk/krfjr tʻs sdh yky vkʻ cʻkuh jx ds vuq i gʻA  
❖ vius ʻkj dsckgj dh xfrfof/k; ka dks de I s de dja  
; kuh fd cgkj de tk, ʻA

❖ Lekxh fnuka ij viuh xfrfof/k; ka I kekl; j [kʻ ; kfu  
nkʻMuk ; k I kbfdy pykuk] Vgyuk vkfn de djaftl I s  
I ka dh I eL; k; kvka I sjkgr feyxhA

❖ xʻ pkyr batu] dhVuk"kdka vkʻ nʻy vk/krfjr iʻ  
dk mi ; kx djus I scpa

❖ gkbMS/M jgʻA

❖ okrkupfyr okrkoy.k ea ʻkj ds vnj 0; k; ke dja

❖ Mkbfox de dja

; g I ko/krfu; kavki dks dkjʻkuk dky ea vki dks LoLFk  
jgusrFkk fu; fer fnup; kʻcukuseal g; kx dja hA tc Hkh  
ʻkj I sckgj fudysrks ʻcnik.k jfgr ekLd dk ʻ; kx dja

### fu'd'k

dkjʻkuk dky ea Lekx dsudkjkrEd ʻHkko gekjs LokLF; ds  
ʻAij iMuk fuf"pr gʻs bl s gea cpus ds fy, gea dN  
vko"; d dne mBkus gʻksftl esʻedk gʻs tc Hkh ʻkj I s  
ckgj fudysrks pgjs dks ekLd I s < d dj j [kaftruk gʻs  
I ds 0; k; ke dja o LoLFk fnup; kʻz dk vuqkyu dja

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