
2.4

-1

-2

-3

-4

-

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-5

-6

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-

-7

-8

-9

-10

-11

-12

-13

-14

:

Troposphere -1

80 20

Stratosphere -2

360 80

Ionosphere -3

: ()

% 78 -1

% 21 -2

% 0.9 -3

-4

:

:

:

-1

-2

-3

-4

-5

-6

-7

-8

-9

:

-1

-2

-3

()

2.4

1.5

(1)

: % 0.01

. -1
. -2
. -3

: % 0.1

, -1
. -2
. -3
. -4
. -5
. -6
. -7
. -8

(2)

(3)

-1

-2

-3

-4

(4)

-1

-2

-3

-4

-5

-6

(5)

()

-1

-2

-3

-4

(6)

tetra-ethyl lead

-1

-2

-3

-4

-5

-6

-7

(7)

aerosol

stratosphere

(8)

(9)

Yersinia , Streptococcus , Mycobacterium ,

Pentium , Candida , Aspergillus

Cornyebactrium ,

Bacillus

Pasture plague Upsets

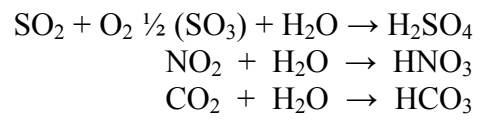
anthrax

. Small pox

(Indoor Air Pollution)

% 90 – 80

Acid Rain



-1

-2

-3

-4

Ozone

-)

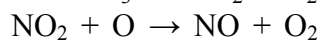
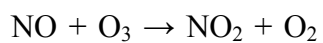
.(

:



Stratosphere

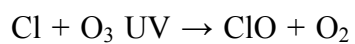
:



()

+

+



()

: -1

(D.N.A) -2

Epidermal

D.N.A

() -3

: -4

: -5

: -6

: -7

: -8

Troposphere

2050

5 - 3

Environment

%90-80

carcinogens

Mutagens

Acute exposure

chronic exposure

sub- acute exposure

Ionizing Radiation

Aflatoxin
Metabolites

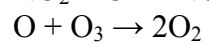
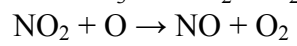
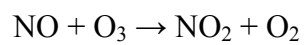
Neoplasia

. DNA

Environmental Pollution

NO₂ NO

(O₃)



(UV)

:

:

-1

-2

()

()

-3

-4

()

-5

(

)

-6

-7

(flares)

-8

-1

-2

-3

-4

-5

-6

-7

-8

) -9

()

() (

-10

.3 : 1

-11

-12

-13



:

() 1930 .1

60

(Smog) (-) 1948 .2

6000 22 ()

:() 1952 .3

(4000)

:() 1966 .4

84

17

					:()1966	.5
					:(-)1970	.6
		8000				
					:(-)1974	.7
				50		
			50			
89	28				T.N.T	20
					:(-)1979	.8
		()			:(-)1984	.9
	40					
				800		
					:()1984	.10
500						
				80	:()1984	.11
				4248	452	
				(-))1986	.12