

Infectious rate: each infected person can spread the virus to about (1 to 2 others) on average									
Disease PK								Virus/Bact	
IDisease	NameDisease	Infectious Rate	% Mortality Rate	Incubation Period (days)	Development Period (days)	Convalescence Period (days)		Cause	Comment Section
1	Flu	1.3	0.15%	2	8.5	10		Virus (1)	Influenza
2	Strep Throat	2.5	0.05%	3.5	3	14		Bacteria(2)	Streptococcus
3	AIDS	0.00005	50%	14	61	4380		Virus (1)	HIV
4	COVID-19	2.5	1.50%	5	10	14		Virus (1)	SARS-CoV-2 virus
5	Salmonella	4	0.05%	3	5	12		Bacteria(2)	Salmonella. Food poisoning
6	Plague	2	50%	4	4	14		Bacteria(2)	Yersinia pestis
7	Rabies	1	99.50%	61	1	2		Virus (1)	Lyssavirus
8	Tetanus	NULL	15%	10	5	18		Bacteria(2)	Clostridium tetani
9	Chickenpox	9	0.70%	15	1.5	13		Virus (1)	Zoster Virus
10	Tuberculosis	5	10%	28	62	210		Bacteria(2)	TB
11	Gastroenteritis	2.5	0.00%	3	5	7		Virus (1)	Norovirus
12	Ebola	2	75%	10	1.5	21		Virus (1)	Ebolavirus
13	Mononucleosis	3.5	8%	35	12	21		Virus(1)	Epstein-Barr

Symptom PK			Mild/ Severe
IDSymptom	NameSymptom		Pain Management
1	Sore Throat	Mild (1)	
2	Inflammation	Mild (1)	
3	Diarrhea	Mild (1)	
4	Fever	Mild (1)	
5	Stomach ache	Mild (1)	
6	Nausea	Mild (1)	
7	Vomiting	Mild (1)	
8	Skin Rashes/ Other cutain reactions	Mild (1)	
9	Jaundice	Mild (1)	
10	Chills	Mild (1)	
11	Headache	Mild (1)	
12	Stuffy nose	Mild (1)	
13	Oxygen	Mild (1)	
14	Seizures	Mild (1)	
15	Cough	Mild (1)	
16	Sore Throat	Severe (2)	
17	Inflammation	Severe (2)	
18	Diarrhea	Severe (2)	
19	Fever	Severe (2)	
20	Stomach ache	Severe (2)	
21	Nausea	Severe (2)	
22	Vomiting	Severe (2)	
23	Skin Rashes/ Other cutain reactions	Severe (2)	
24	Jaundice	Severe (2)	
25	Chills	Severe (2)	
26	Headache	Severe (2)	
27	Stuffy nose	Severe (2)	
28	Oxygen	Severe (2)	
29	Seizures	Severe (2)	
30	Cough	Severe (2)	

Treatment		
IDTreatment	NameTreatment	Diagnosis_ID
1	Cefuroxima	3
2	Peniciline	3
3	Isoniazid	1
4	Entecavir	7
5	Amoxicilin	3
6	Metronidazole	4
7	Ritapentine	1
8	Azithromycin	10
9	Acyclovir	8
10	Ibuprofen	6
11	Acetaminophen	2

Diagnosis				
IDDiagnosis	NameDiagnosis	Date	Disease_ID	MedicalRecord_ID
1	Tuberculosis	22/06/2000	10	4
2	Myopericarditis	08/09/2023	13	7
3	Strep Throat	23/03/2024	2	3
4	Tetanus	09/08/2012	8	3
5	Flu	01/02/2024	1	1
6	COVID-19	06/05/2020	4	2
7	Rabies	19/10/2021	7	8
8	Chickenpox	17/05/2007	9	3
9	Gastroenteritis	13/03/2024	11	6
10	Salmonella	26/11/2013	5	5

Medical Record	
IDmedical_record	Patient_ID
1	2
2	3
3	1
4	5
5	4
6	6
7	7
8	8

Patient		
IDpatient	NamePatient	DoB
1	Amalia Rial Plaza	03/07/2004
2	Paula Rial Plaza	25/07/2001
3	Victoria Rial Plaza	22/12/1999
4	Sara Rial Villanueva	06/06/1991
5	Rodrigo Rial Horcajo	24/08/1962
6	Arianasu Plaza Diaz	17/03/1972
7	Rodrigo Fernández Sanchez	14/05/2004
8	Rubén García Pardo	19/10/2003

Virtual Population					
Initial Population	% Infected	% Healthy	% Immune	Immunity Period	Disease_ID
9	44.44%	33.34%	22.22%	176	1
7	42.86%	28.57%	28.57%	93	4
6	50%	33.33%	16.67%	98	6
6	16.67%	50%	33.33%	130	13

Virtual Person				
IDvirtual_person	Ill/ healthy/ immune/ deceased	Disease Period Countdown		
	State	Disease Countdown	Immunity Countdown	Disease_ID
1	Ill	20.5	0	1
2	healthy	0	0	1
3	immune	0	176	1
4	healthy	0	0	1
5	immune	0	176	1
6	Ill	20.5	0	1
7	Ill	20.5	0	1
8	Ill	20.5	0	1
9	healthy	0	0	1
10	Ill	29	0	4
11	healthy	0	0	4
12	immune	0	93	4
13	healthy	0	0	4
14	immune	0	93	4
15	Ill	29	0	4
16	Ill	29	0	4
17	Ill	22	0	6
18	Ill	22	0	6
19	healthy	0	0	6
20	Ill	22	0	6
21	healthy	0	0	6
22	immune	0	98	6
23	healthy	0	0	13
24	Ill	98	0	13
25	healthy	0	0	13
26	immune	0	130	13
27	healthy	0	0	13
28	immune	0	0	13

Disease has Treatment	
Disease_ID	Treatment_ID
2	1
2	2
10	3
7	4
2	5
8	6
10	7
5	8
9	9
4	10
13	11

Disease has Symptoms PK		
Disease_ID	Symptom_ID	
1	4	
1	19	
1	10	
1	25	
1	15	
1	30	
1	1	
1	16	
1	27	
1	12	
1	11	
1	26	
1	3	
1	18	
1	7	
1	22	
2	1	
2	16	
2	4	
2	19	
2	10	
2	25	
2	5	
2	20	
2	11	
2	26	
2	6	
2	7	
2	21	
2	22	
3	4	
3	19	
3	10	
3	25	
3	8	
3	23	
3	1	
3	16	
4	1	
4	19	
4	10	
4	25	
4	11	
4	26	
4	1	
4	16	
4	12	
4	27	
4	6	
4	7	
4	21	
4	22	
4	3	
4	18	
5	2	
5	18	
5	4	
5	19	
5	5	
5	20	
5	6	
5	7	
5	21	
5	22	
5	11	
5	26	
6	4	
6	19	
6	11	
6	26	
6	10	
6	25	
6	8	
6	23	
6	15	
6	30	
7	11	
7	26	
7	14	
7	29	
7	6	
7	7	
7	21	
7	22	
7	4	
7	19	
8	4	
8	19	
8	10	
8	25	
8	11	
8	26	
8	14	
8	29	
9	4	
9	19	
9	11	
9	26	
9	8	
9	23	
10	15	
10	30	
10	10	
10	25	
10	4	
10	19	
11	3	
11	18	
11	6	
11	7	
11	21	
11	22	
11	5	
11	20	
11	4	
11	19	
11	10	
11	25	
11	11	
11	28	
12	1	
12	16	
12	4	
12	19	
12	5	
12	20	
12	3	
12	18	
12	7	
12	22	
13	1	
13	18	
13	4	
13	19	
13	11	
13	26	
13	8	
13	23	

Primary KEY
Foreign KEY
Enum