STATUS REPORT
OF COVID-19 IN HARYANA

(No. 6 / June 07th 2020)

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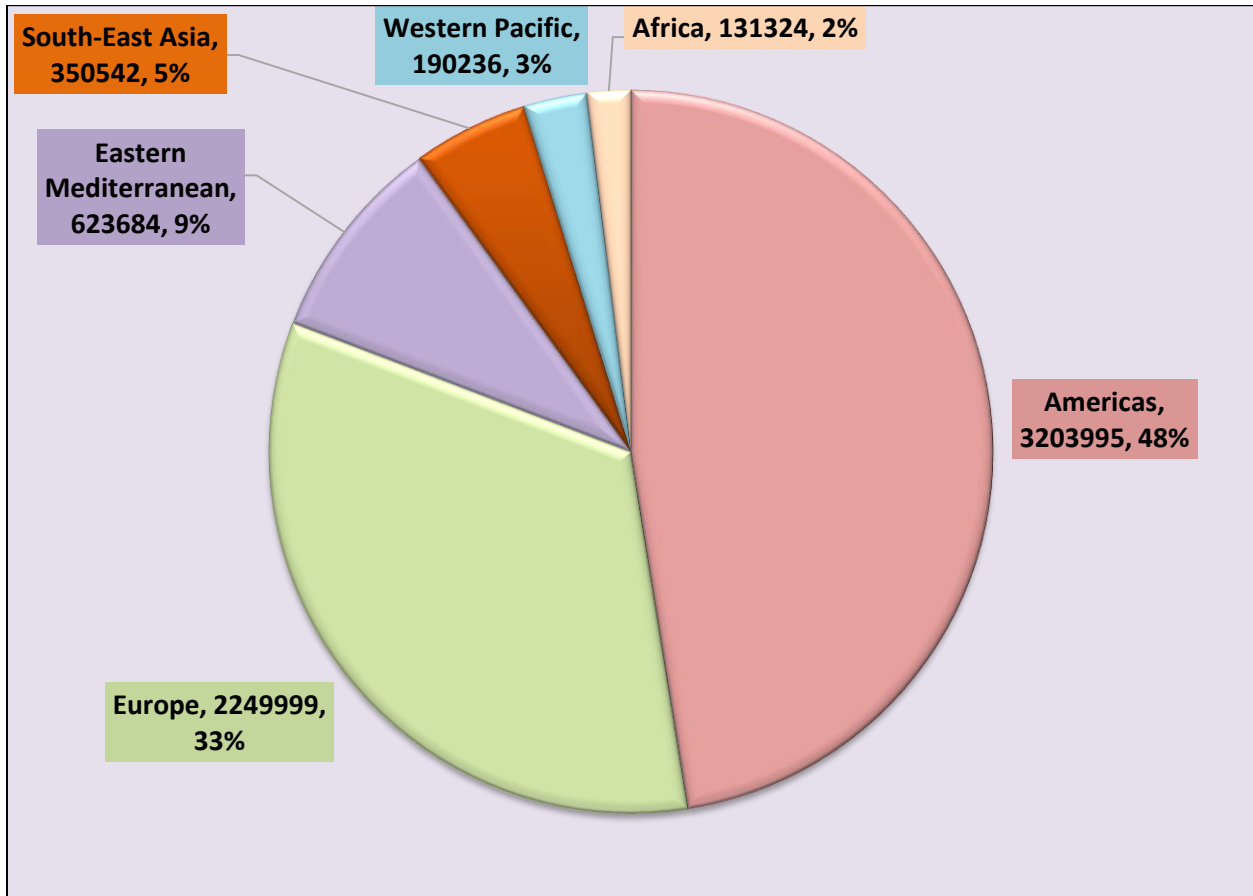
Directorate of Health Services, Haryana

BACKGROUND: - Coronavirus disease (COVID-19) is an infectious disease caused by a newly discovered coronavirus. Its first case was reported in China. On 31st December 2019, the World Health Organization (WHO) China Country Office was informed of cases of pneumonia of unknown etiology (unknown cause) detected in Wuhan City, Hubei Province of China. On 7th January 2020, Chinese authorities identified a new strain of Coronavirus as the causative agent for the disease. The virus has been renamed by WHO as Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2) and the disease caused by it as COVID-19. World Health Organization has assessed the risk for spread of this disease and declared the current novel coronavirus outbreak as a Public Health Emergency of International Concern (PHEIC) on 30th January, 2020. Further, on 11th March, 2020, WHO declared COVID-19 as a pandemic.

EPIDEMIOLOGY: - The etiologic agent responsible for current outbreak of SARSCoV-2 is a novel coronavirus is closely related to SARS-Coronavirus. This disease is an infectious disease, which mainly spreads by the viral load present in the respiratory droplets of infected persons. Current estimates of the incubation period of COVID range from 2-14 days. Most common symptoms include fever, fatigue, dry cough and breathing difficulty. Diagnosis is by demonstration of the virus in respiratory secretions by special molecular tests. The deaths reported are mainly among elderly population particularly those with co-morbidities. The case fatality rate is estimated to range from 2 to 3% (Singhal T.; 2020). The disease is rapidly spreading from its origin in Wuhan City of Hubei Province of China to the rest of the world.

GLOBAL STATUS OF COVID-19 CASES

According to WHO, on 07.06.2020, worldwide, a total 6,750,521 cases of this disease have been reported. The distribution of COVID-19 cases in WHO Regions, represent that Americas Region is having highest share followed by Europe Region, Eastern Mediterranean Region, South-East Asia Region, Western Pacific Region and Africa Region (Figure No.1). On analyzing the Region wise trend of COVID-19 spread, it is estimated that the burden of this disease has been shifted to Americas and Europe Regions from South-East Asia Region. Further, the worldwide cumulative trends show that the number of patients of this disease are increasing day by day.

Figure No. 1: WHO Region Wise distribution of COVID-19 Patients (as on 07.06.2020)

South-East Asia, 350542, 5%

Western Pacific, 190236, 3%

Africa, 131324, 2%

Eastern Mediterranean, 623684, 9%

Americas, 3203995, 48%

Europe, 2249999, 33%

Source – World Health Organisation (WHO)

Out of the 216 affected countries / areas / territories, the mostly affected countries were United States of America, Brazil, Russian Federation, The United Kingdom, **India,** Spain, Italy, Peru, Germany, Iran, Turkey, France, etc.

COVID-19 is also causing deaths worldwide. Since its inception, till 07.06.2020, total 395,779 deaths were reported by WHO. According to WHO, till 07.06.2020, highest deaths of COVID-19 patients occurred in United States of America followed by The United Kingdom, Brazil, Italy, France, Spain, Mexico, Belgium, Germany, Iran, Canada, **India,** etc.

On global scenario, India is having 5th ranking in over all case load of COVID-19. However, on the basis of COVID-19 related mortality indicator, India internationally stands at 12th position.

STATUS OF COVID-19 CASES IN INDIA

India reported the first confirmed case of the coronavirus infection on 30.01.2020 in the state of Kerala. The affected had a travel history from Wuhan, China. No significant rise in cases was seen in the rest of February. On 04.03.2020, 22 new cases came to light, including those of an Italian tourist group with 14 infected members. The transmission escalated during March month, after several cases were reported all over the country, most of which were linked to people with a travel history to affected countries. Further, on 31.03.2020, a Tablighi Jamaat religious congregation event that took place in Delhi in early March month emerged as a new virus hotspot after numerous cases across the country were traced back to the event.

On 07.06.2020, total 246,628 cases were confirmed in India. As a consequence of this disease, deaths have been reported in India. The first death was reported on 12th March, 2020, a 76-year-old man who had returned from Saudi Arabia, became the first victim of the virus in the country. As on 07.06.2020, the death toll crossed to 6,929. However, on comparing the mortality percentage with International statistics, Indian scenario was observed comparatively better as represented in Table No. 1.

Table No. 1: Comparison of COVID-19 Cases and Deaths (as on 07.06.2020)

Variables	World	India
Total Cases	67,50,521	246628
Total Deaths	3,95,779	6929
Mortality (%)	5.86%	2.81%

Source – *World Health Organisation (WHO)&#Ministry of Health and Family Welfare (MOHFW)

The number of COVID-19 cases are increasing continuously since the inception of first case. On dated 07.06.2020, Maharashtra, Tamil Nadu, Delhi, Gujrat, Rajasthan, Uttar Pradesh, Madhya Pradesh, West Bengal, etc. were emerged as most affected states in India according to the MOHFW. COVID-19 cases related mortality pattern of Indian states shows that the states like Maharashtra, Gujrat, Delhi, Madhya Pradesh, West Bengal, Uttar Pradesh, Tamil Nadu, Rajasthan, etc. had a large portion of deaths in India (Table No. 2).

Table No. 2: State Wise Distribution of COVID-19 Cases & Death in India (as on 07.06.2020)

Name of State / UT	Population (As per Census 2011)	Total Confirmed COVID-19 Cases	Cured / Discharged / Migrated	Deaths	Active Cases	Recovery (%)	Mortality (%)	Total Cases Per Million Population	Active Cases Load Per Million Population
Maharashtra	11,23,74,333	82968	37390	2969	42609	45.1%	3.6%	738	379
Tamil Nadu	7,21,47,030	30152	16395	251	13506	54.4%	0.8%	418	187
Delhi	1,67,87,941	27654	10664	761	16229	38.6%	2.8%	1647	967
Gujarat	6,04,39,692	19592	13316	1219	5057	68.0%	6.2%	324	84
Rajasthan	6,85,48,437	10331	7501	231	2599	72.6%	2.2%	151	38
Uttar Pradesh	19,98,12,341	9733	5648	257	3828	58.0%	2.6%	49	19
Madhya Pradesh	7,26,26,809	9228	6108	399	2721	66.2%	4.3%	127	37
West Bengal	9,12,76,115	7738	3119	383	4236	40.3%	4.9%	85	46
Karnataka	6,10,95,297	5213	1968	59	3186	37.8%	1.1%	85	52
Bihar	10,40,99,452	4915	2425	30	2460	49.3%	0.6%	47	24
Andhra Pradesh	4,96,70,000	4510	2620	73	1817	58.1%	1.6%	91	37
Haryana	2,53,51,462	3952	2134	24	1794	54.0%	0.6%	156	71
Telengana	3,50,04,000	3496	1710	123	1663	48.9%	3.5%	100	48
Jammu and Kashmir	1,24,07,815	3467	1126	39	2302	32.5%	1.1%	279	186
Odisha	4,19,74,218	2781	1716	8	1057	61.7%	0.3%	66	25
Punjab	2,77,43,338	2515	2092	50	373	83.2%	2.0%	91	13
Assam	3,12,05,576	2397	547	4	1846	22.8%	0.2%	77	59
Kerala	3,34,06,061	1807	762	15	1030	42.2%	0.8%	54	31
Uttarakhand	1,00,86,292	1303	423	11	869	32.5%	0.8%	129	86
Jharkhand	3,29,88,134	1000	473	7	520	47.3%	0.7%	30	16
Chhattisgarh	2,55,45,198	923	266	4	653	28.8%	0.4%	36	26
Tripura	36,73,917	747	173	0	574	23.2%	0.0%	203	156
Himachal Pradesh	68,64,602	400	194	5	201	48.5%	1.3%	58	29
Chandigarh	10,55,450	309	273	5	31	88.3%	1.6%	293	29
Goa	14,58,545	267	65	0	202	24.3%	0.0%	183	138
Manipur	28,55,794	157	52	0	105	33.1%	0.0%	55	37
Nagaland	19,78,502	107	0	0	107	0.0%	0.0%	54	54
Ladakh	1,33,487	99	48	1	50	48.5%	1.0%	742	375
Puducherry	12,47,953	99	36	0	63	36.4%	0.0%	79	50
Arunachal Pradesh	13,83,727	47	1	0	46	2.1%	0.0%	34	33
Andaman and Nicobar Islands	3,80,581	33	33	0	0	100.0%	0.0%	87	0
Meghalaya	29,66,889	33	13	1	19	39.4%	3.0%	11	6
Mizoram	10,97,206	24	1	0	23	4.2%	0.0%	22	21
Dadar Nagar Haveli	3,43,709	19	1	0	18	5.3%	0.0%	55	52
Sikkim	6,10,577	7	0	0	7	0.0%	0.0%	11	11
Cases Being Reassigned to States	NA	8605	0	0	8605	0.0%	0.0%	NA	NA
India	1,21,06,40,480	246628	119293	6929	120406	48.4%	2.8%	204	99

Source-MOHFW Link - https://www.mohfw.gov.in/ (Retrieved on 07.06.2020 at 3:20 PM)

Figure No. 2: State Wise Trend of Total COVID-19 Cases, Mortality (%) and Recovery (%) in India (as on 07.06.2020)
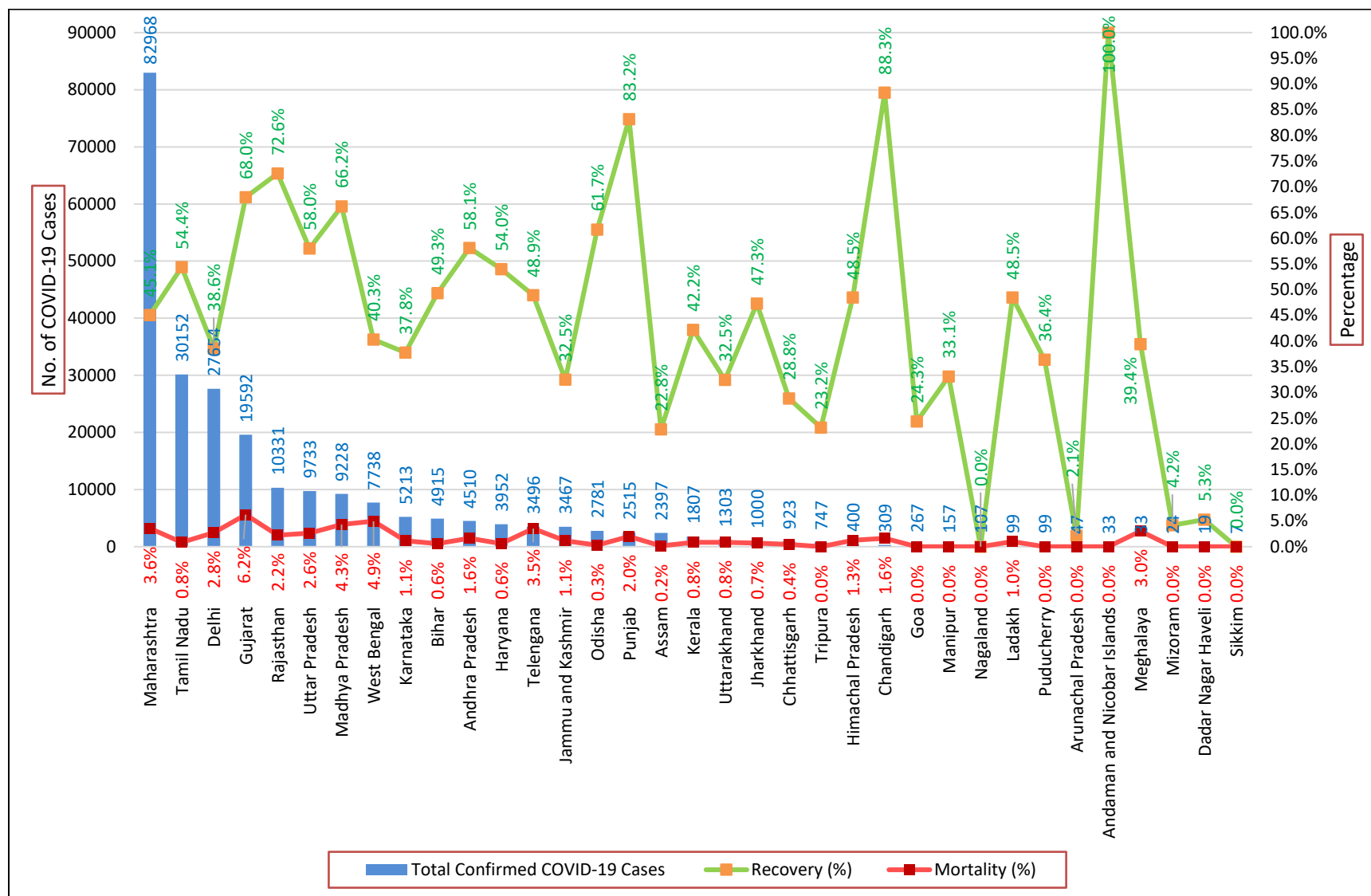
Source – MOHFW Link - https://www.mohfw.gov.in/ (Retrieved on 07.06.2020 at 3:20 PM)

STATUS OF COVID-19 CASES IN HARYANA

First case of COVID-19 was reported in Haryana on 17.03.2020. From the date of inception of COVID-19 case in Haryana, the numbers have been increased to 4448 on 07.06.2020. Out of these cases, 1474 have cured and 28 deaths were reported till 07.06.2020.

On date 07.06.2020, districts Gurugram, Faridabad, Sonepat, Jhajjar, Nuh, Panipat, Palwal and Ambala were sharing the major part of total COVID-19 cases in Haryana. The influence of Jamat related cases was the also contributing as major triggering factor in overall number of COVID-19 patients in some districts.

Table No. 3: District Wise Distribution of COVID-19 Cases in Haryana (N=4448) (as on 07.06.2020)

District	Population (Census 2011 & Website)	Total Positive Cases	Discharged / Cured	Deaths	Total Active Cases	Active Case Per Lakh Population	Mortality (%)	Recovery (%)	Positive Cases Per Lakh Population
Ambala	11,28,350	87	53	2	32	3	2.3%	60.9%	8
Bhiwani	11,98,085	72	11	0	61	5	0.0%	15.3%	6
Ch. Dadri	5,02,276	35	1	0	34	7	0.0%	2.9%	7
Faridabad	18,09,733	676	183	13	480	27	1.9%	27.1%	37
Fatehabad	9,42,011	43	12	0	31	3	0.0%	27.9%	5
Gurugram	15,14,432	1936	465	4	1467	97	0.2%	24.0%	128
Hisar	17,43,931	86	28	0	58	3	0.0%	32.6%	5
Jhajjar	9,58,405	109	96	0	13	1	0.0%	88.1%	11
Jind	13,34,152	39	26	2	11	1	5.1%	66.7%	3
Kaithal	10,74,304	44	11	0	33	3	0.0%	25.0%	4
Karnal	15,05,324	99	41	1	57	4	1.0%	41.4%	7
Kurukshetra	9,64,655	52	30	0	22	2	0.0%	57.7%	5
Mahendergarh	9,22,088	102	37	0	65	7	0.0%	36.3%	11
Nuh	10,89,263	102	71	0	31	3	0.0%	69.6%	9
Palwal	10,42,708	124	54	0	70	7	0.0%	43.5%	12
Panchkula	5,61,293	33	26	0	7	1	0.0%	78.8%	6
Panipat	12,05,437	83	51	4	28	2	4.8%	61.4%	7
Rewari	9,00,332	48	12	0	36	4	0.0%	25.0%	5
Rohtak	10,61,204	162	56	1	105	10	0.6%	34.6%	15
Sirsa	12,95,189	52	35	0	17	1	0.0%	67.3%	4
Sonepat	14,50,001	423	164	1	258	18	0.2%	38.8%	29
Yamunanagar	12,14,205	20	9	0	11	1	0.0%	45.0%	2
Foreign (USA) Returnee Haryana Citizens	NA	21	2	0	19	NA	0.0%	9.5%	NA
Haryana	2,54,17,378	4448	1474	28	2946	12	0.6%	33.1%	17

Figure No. 3: Distribution of Total COVID-19 Cases in the Districts of Haryana (as on 07.06.2020)
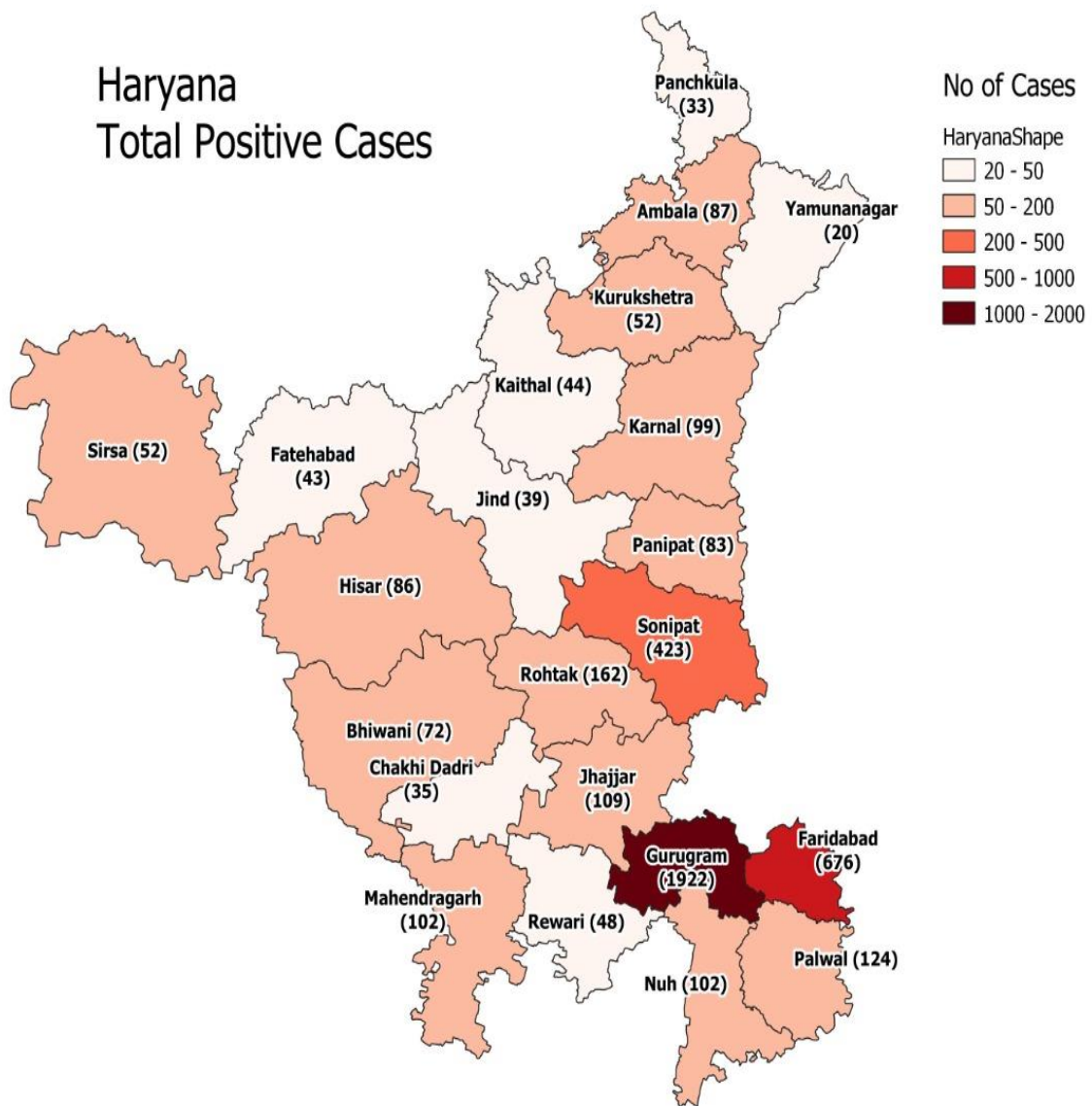

Haryana
Total Positive Cases

No of Cases

HaryanaShape
- 20 - 50
- 50 - 200
- 200 - 500
- 500 - 1000
- 1000 - 2000

Panchkula (33)

Ambala (87)

Yamunanagar (20)

Kurukshetra (52)

Kaithal (44)

Karnal (99)

Sirsa (52)

Fatehabad (43)

Jind (39)

Panipat (83)

Hisar (86)

Sonipat (423)

Rohtak (162)

Bhiwani (72)

Chakhi Dadri (35)

Jhajjar (109)

Gurugram (1922)

Faridabad (676)

Mahendragarh (102)

Rewari (48)

Palwal (124)

Nuh (102)

Figure No. 4: Distribution of Total Active COVID-19 Cases in the Districts of Haryana (as on 07.06.2020)

Haryana
Total Active Cases

No of Cases

HaryanaShape
- 0 - 50
- 50 - 200
- 200 - 500
- 500 - 1000
- 1000 - 2000

Panchkula (7)
Ambala (32)
Yamunanagar (11)
Kurukshetra (22)
Kaithal (33)
Karnal (57)
Sirsa (17)
Fatehabad (31)
Jind (11)
Panipat (28)
Hisar (58)
Sonipat (258)
Rohtak (105)
Bhiwani (61)
Chakhi Dadri (34)
Jhajjar (13)
Faridabad (480)
Gurugram (1467)
Mahendragarh (65)
Rewari (36)
Palwal (70)
Nuh (31)
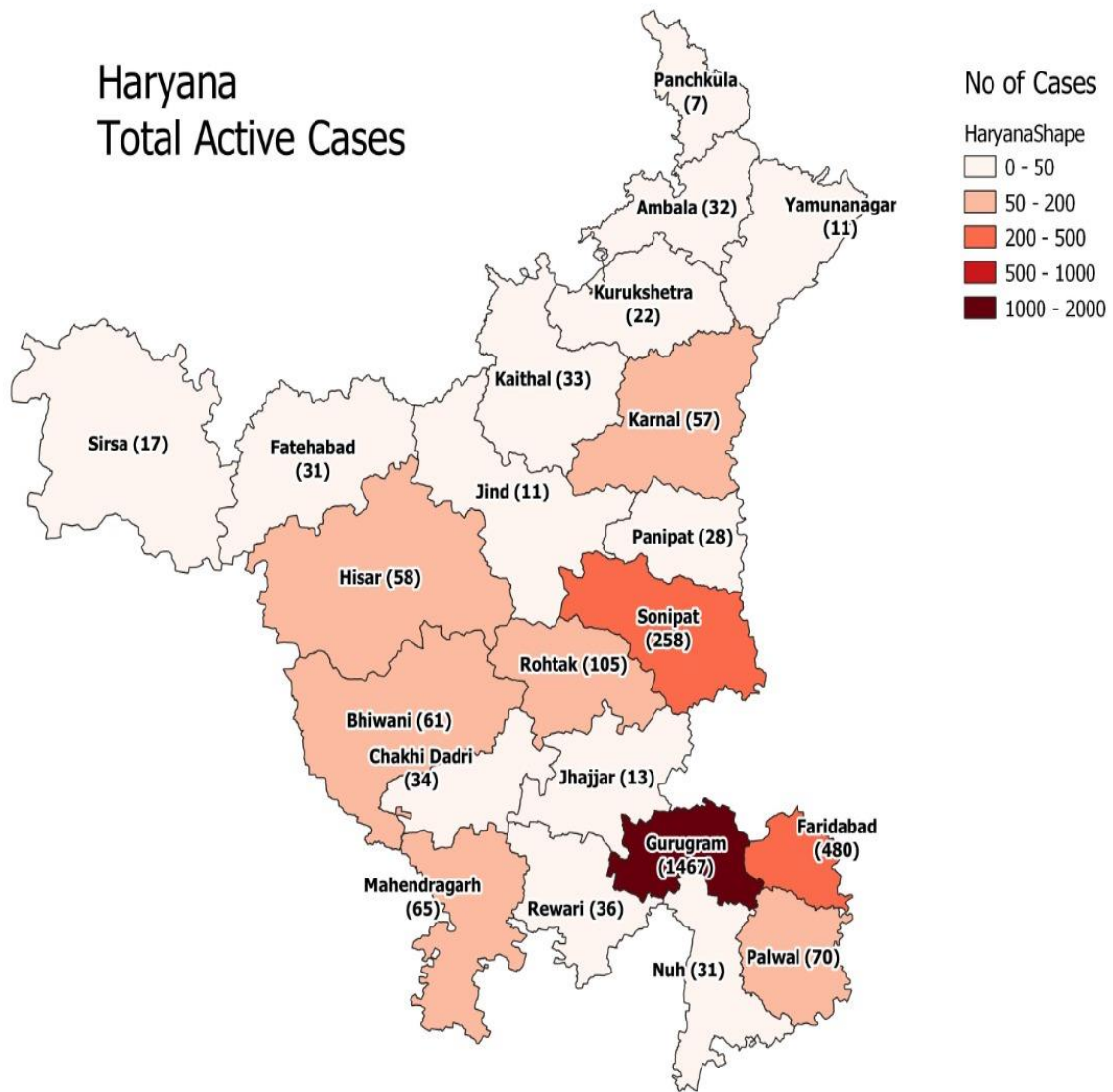
Figure No. 5: District Wise Distribution of COVID-19 Cases in Haryana (as on 07.06.2020)

District	Total Positive Cases	Total Active Cases	Deaths
Ambala	87	32	2
Bhiwani	72	61	0
Ch. Dadri	35	34	0
Faridabad	676	480	13
Fatehabad	43	31	0
Gurugram	1936	1467	4
Hisar	86	58	0
Jhajjar	109	13	0
Jind	39	11	2
Kaithal	44	33	0
Karnal	99	57	1
Kurukshetra	52	22	0
Mahendergarh	102	65	0
Nuh	102	31	0
Palwal	124	70	0
Panchkula	33	7	0
Panipat	83	28	4
Rewari	48	36	0
Rohtak	162	105	1
Sirsa	52	17	0
Sonepat	423	258	1
Yamunanagar	20	11	0

Legend: Total Positive Cases, Total Active Cases, Deaths

Table No. 4: Age Wise Distribution of COVID-19 Cases and Deaths in Haryana (as on 07.06.2020)

Age Group	No. of Cases	No. of Death	Mortality (%)
0-<5 Years	72	0	0.0%
5-14 Years	223	0	0.0%
15-24 Years	702	3	0.4%
25-34 Years	1309	4	0.3%
35-44 Years	918	0	0.0%
45-54 Years	557	5	0.9%
55-64 Years	373	7	1.9%
65-74 Years	216	7	3.2%
75-84 Years	65	2	3.1%
85-94 Years	13	0	0.0%
Total	**4448**	**28**	**0.6%**

Figure No. 6: Age Wise Distribution of COVID-19 Cases in Haryana (N=4448) (as on 07.06.2020)
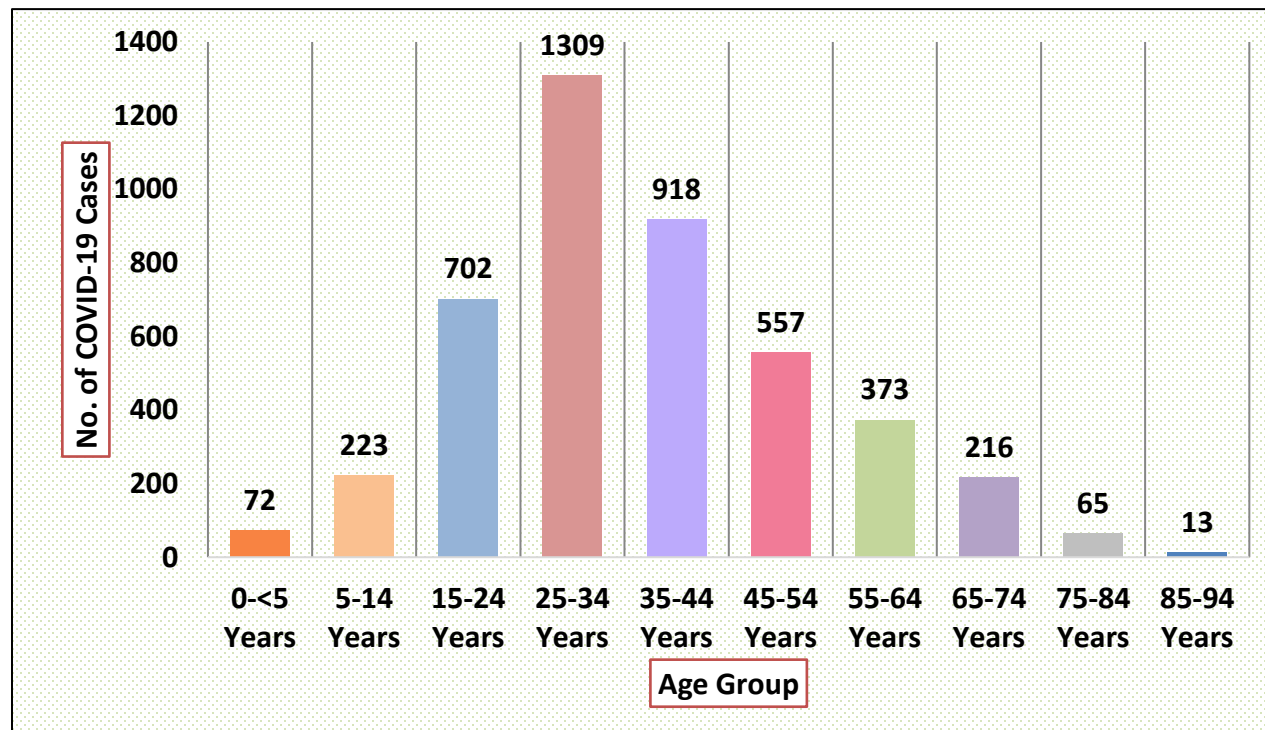
The age wise distribution of COVID-19 Cases in Haryana is given in the Figure No. 7. Highest number of the cases present in Haryana belongs to age group 25-34 years followed by age groups 35-44 years, 15-24 years, 45-54 years, 55-64 years, 5-14 years, 65-74 years, 0-<5 years, 75-84 years, and 85-94 years.

Figure No. 7: Age Wise Distribution of COVID-19 Deaths in Haryana (N=28) (as on 07.06.2020)
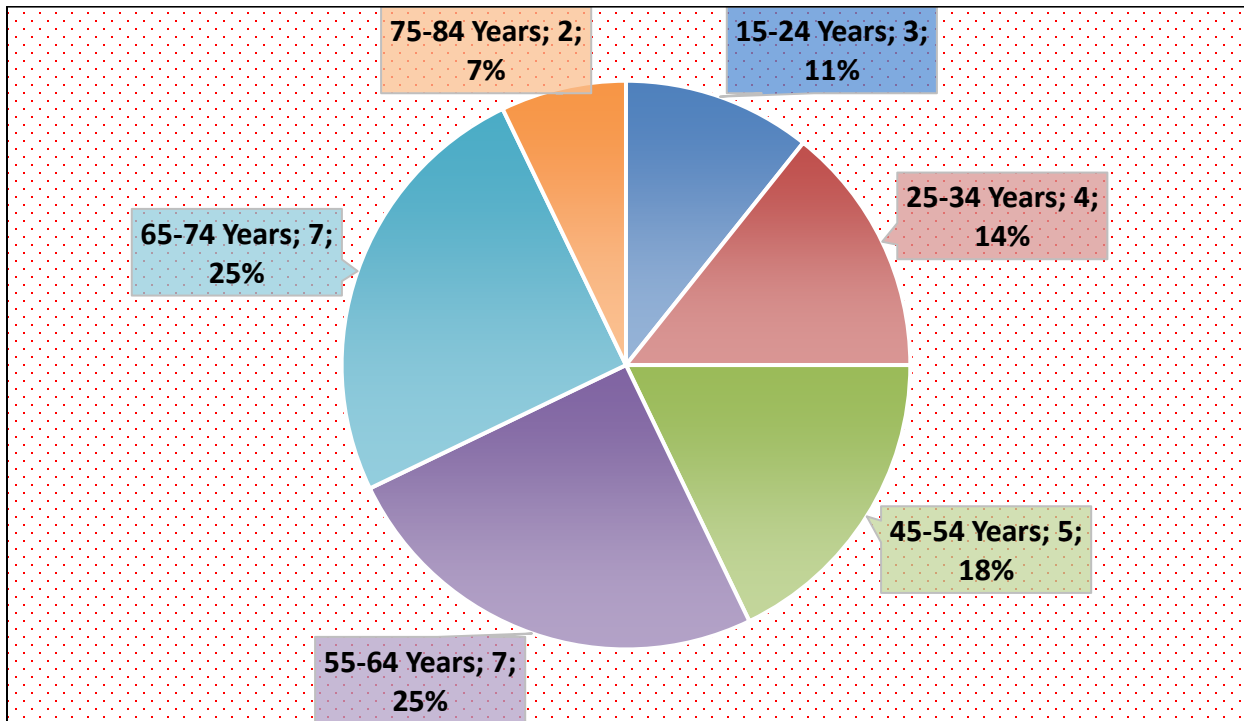

Figure No. 8: Gender Wise Distribution of COVID-19 Cumulative Cases in Haryana (N=4448)
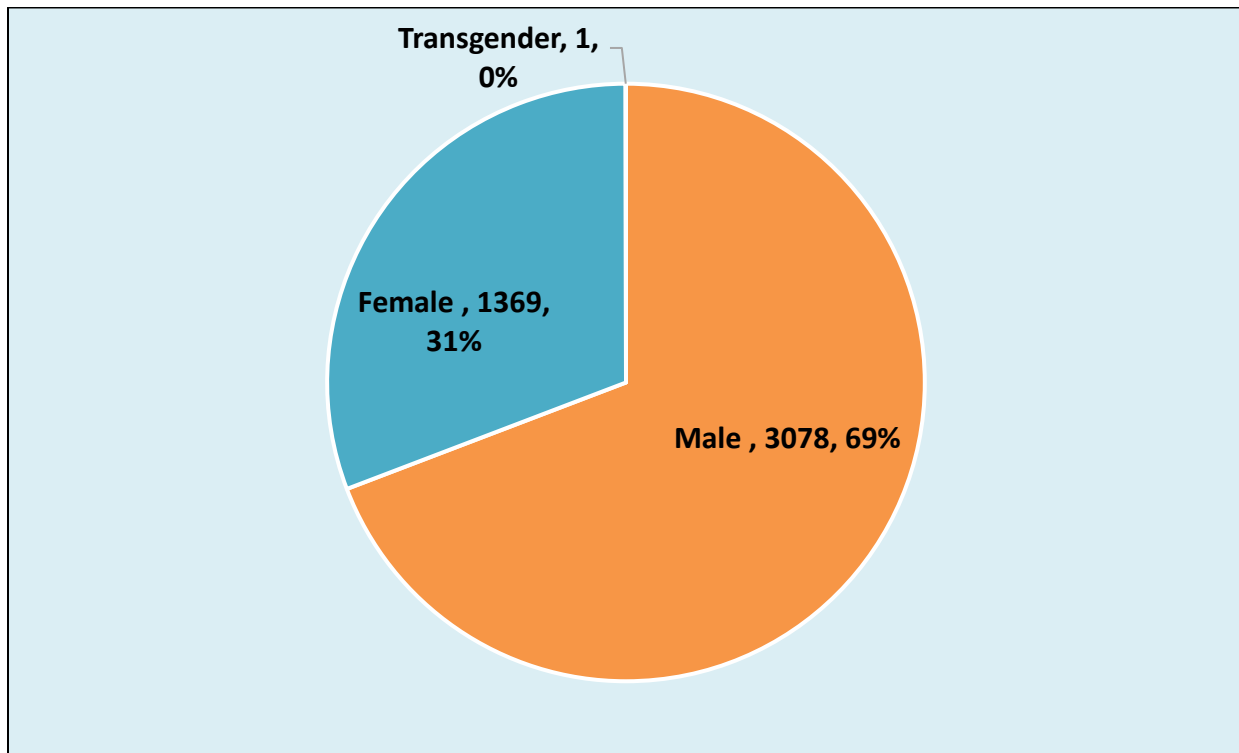
(as on 07.06.2020)

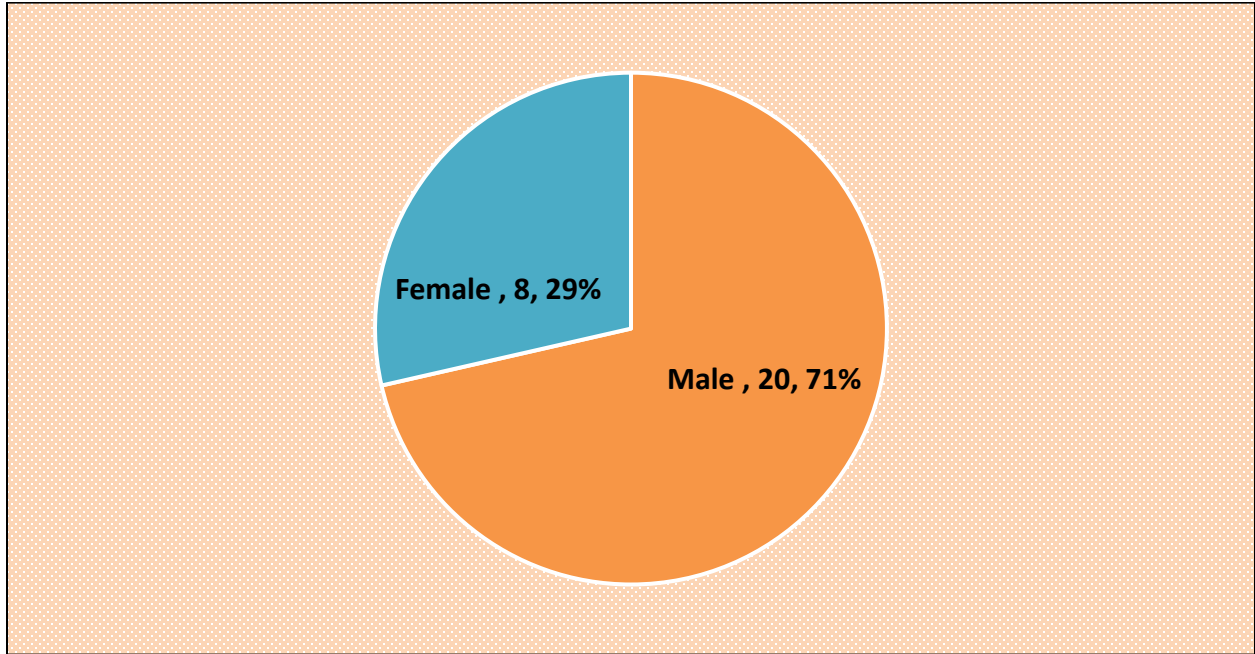**Figure No. 9: Gender Wise Distribution of COVID-19 Deaths in Haryana (N=28)** (as on 07.06.2020)

Figure No. 10: Occupation Wise Distribution of COVID-19 Cases in Haryana (N=4448) (as on 07.06.2020)
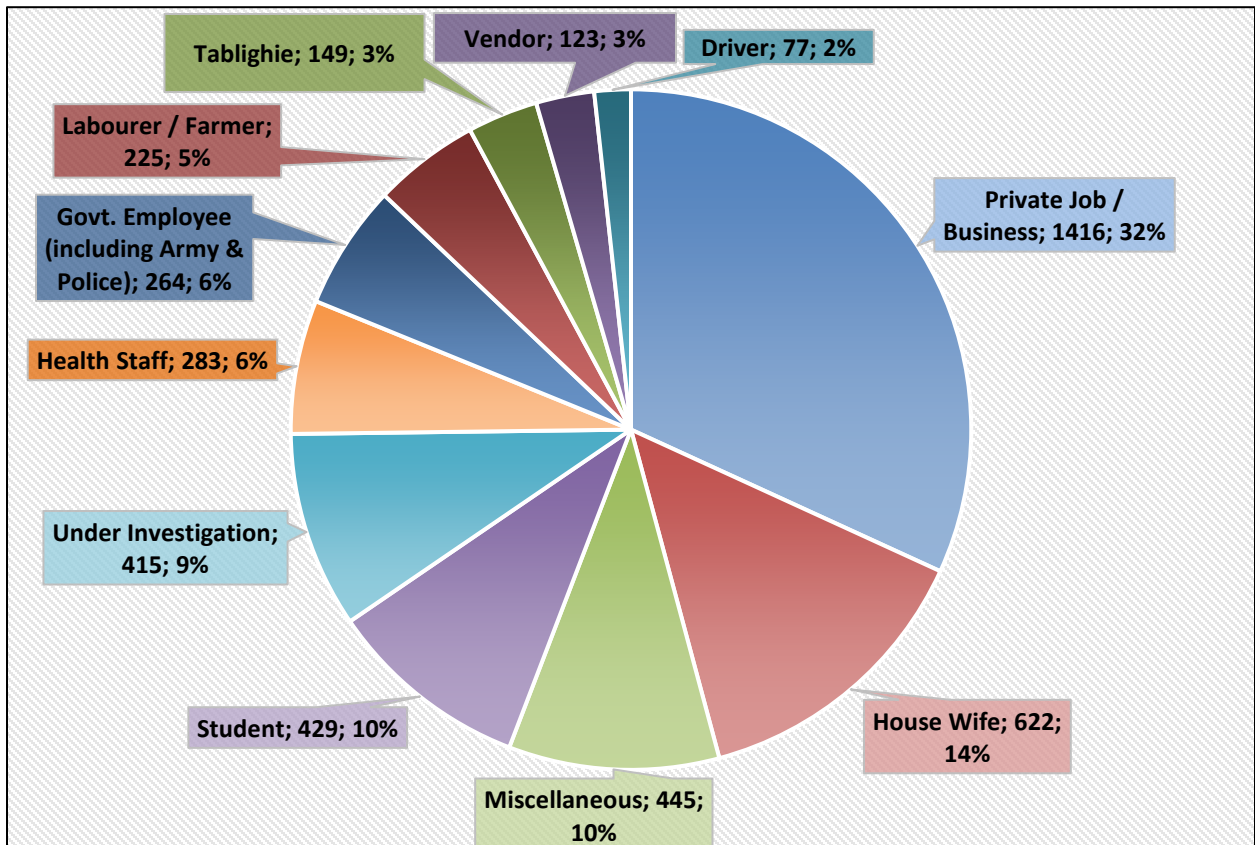
Figure No. 11: Date and Day Wise Trend of Cumulative Cases of COVID-19 and Moving Average (7 Days) in Haryana since the Inception of First Case on 17.03.2020 (as on 07.06.2020)
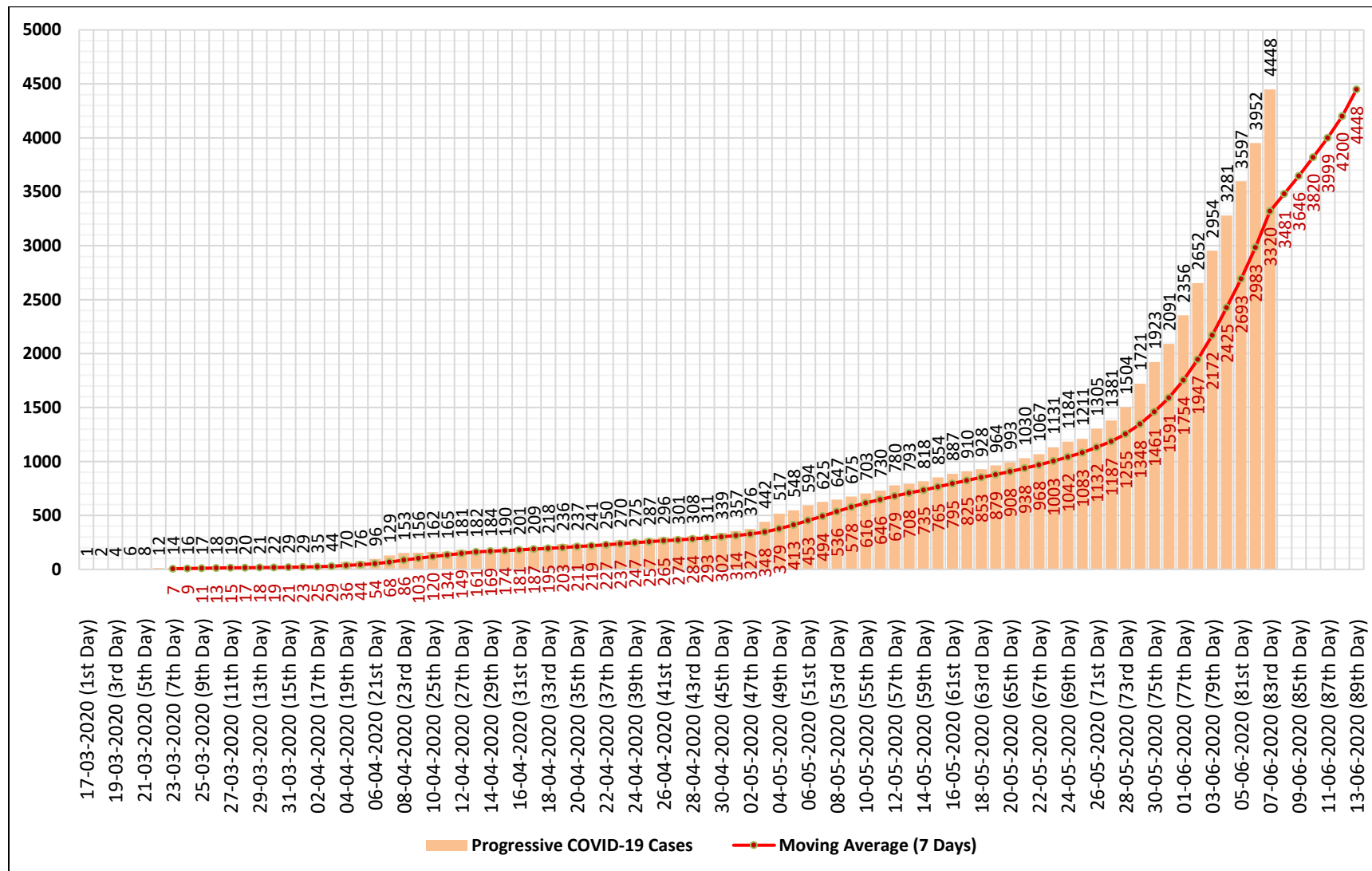
Figure No. 12: Weekly Trend of COVID-19 Cumulative and New Cases in Haryana (as on 07.06.2020)

Weekly Cumulative Cases values (red bars / octagon labels): 12, 21, 76, 181, 236, 296, 442, 703, 910, 1184, 2091, 4448

Weekly New Cases values (blue line labels): 12, 9, 55, 105, 55, 60, 146, 261, 207, 274, 907, 2357

Categories: 16-22 Mar, 23-29 Mar, 30 Mar-5 Apr, 6-12 Apr, 13-19 Apr, 20-26 Apr, 27 Apr-3 May, 4-10 May, 11-17 May, 18-24 May, 25-31 May, 1-7 June

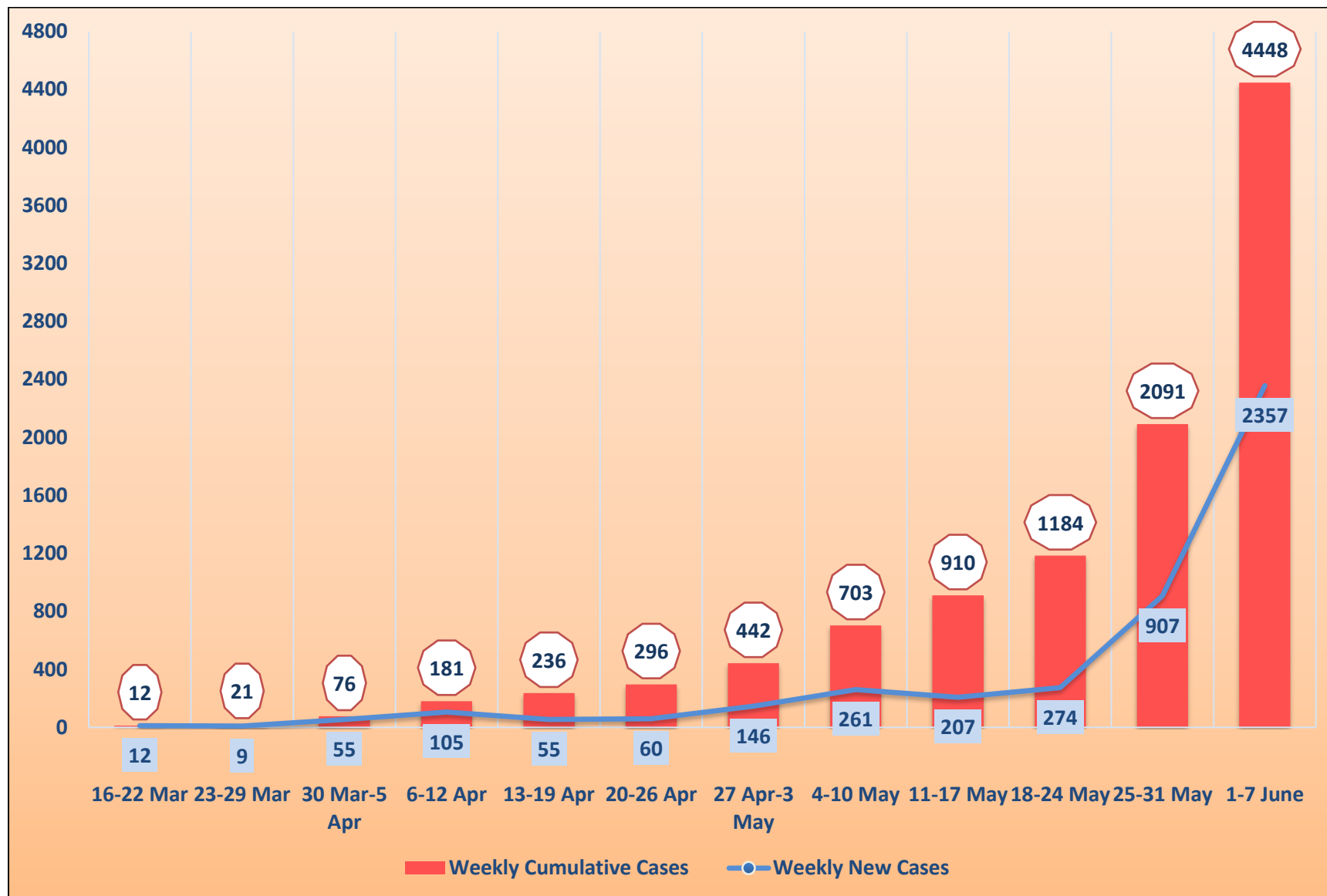Legend: ■ Weekly Cumulative Cases —●— Weekly New Cases

Figure No. 13: Date and Day Wise Distribution of COVID-19 New Cases and Moving Average (7 Days) in Haryana (as on 07.06.2020)
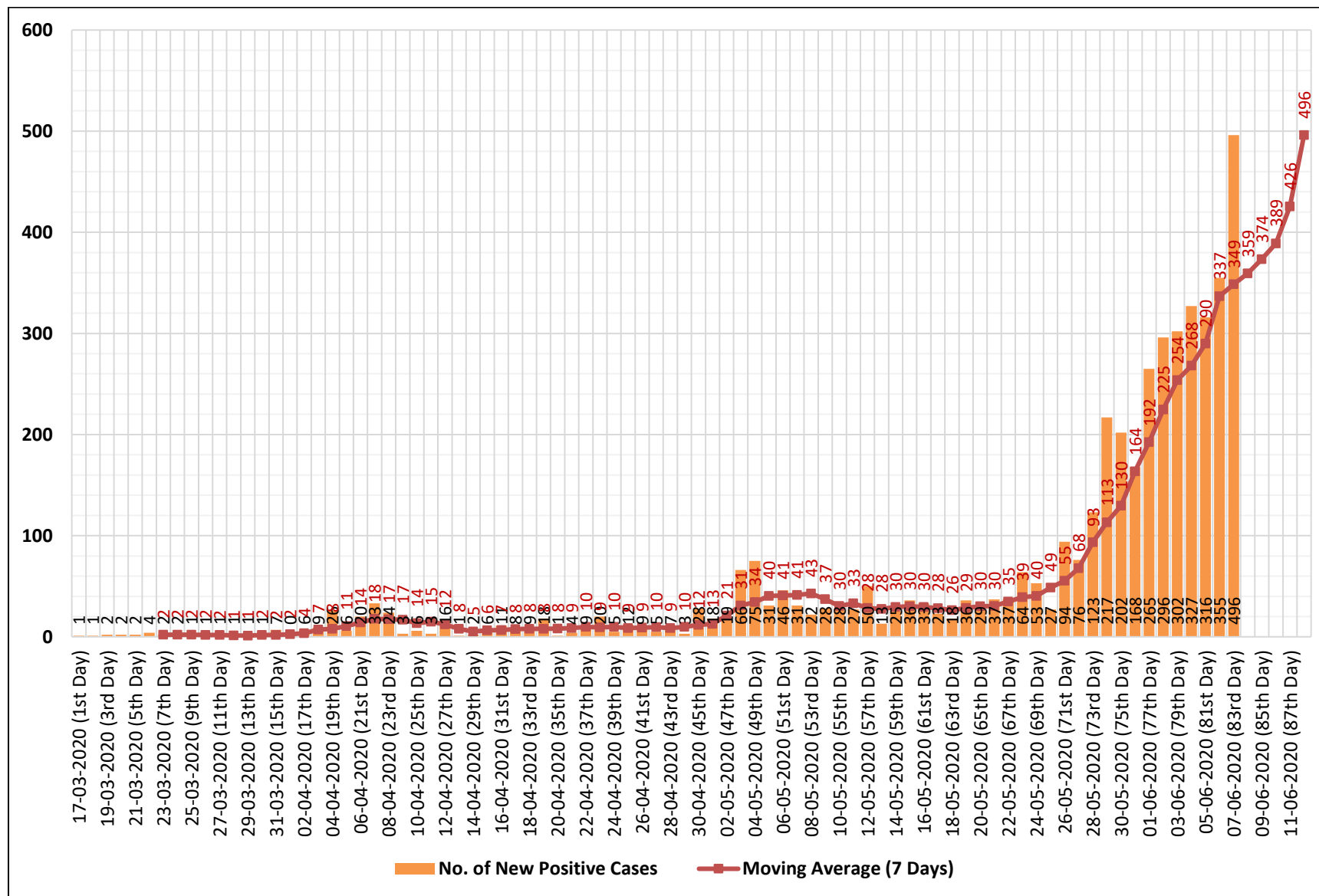
Table No. 5: COVID-19 Testing Status in Haryana (as on 07.06.2020)

District	Total Samples Collected	Positive Samples	Negative Samples	Awaited Samples	Total Samples Tested	Positivity Rate (%)	Samples Collected Per Lakh Population	Samples Tested Per Lakh Population
Ambala	6836	87	6446	303	6533	1.3	606	579
Bhiwani	3624	72	3265	287	3337	2.2	302	279
Charkhi Dadri	3374	35	3123	216	3158	1.1	672	629
Faridabad	14599	676	13600	323	14276	4.7	807	789
Fatehabad	4438	43	4161	234	4204	1.0	471	446
Gurugram	15669	1936	13544	189	15480	12.5	1035	1022
Hisar	9055	86	8696	273	8782	1.0	519	504
Jhajjar	4361	109	4169	83	4278	2.5	455	446
Jind	6486	39	6281	166	6320	0.6	486	474
Kaithal	4241	44	4005	192	4049	1.1	395	377
Karnal	8944	99	8517	328	8616	1.1	594	572
Kurukshetra	6682	52	6350	280	6402	0.8	693	664
Mahendergarh	3961	102	3655	204	3757	2.7	430	407
Nuh	5800	102	5524	174	5626	1.8	532	516
Palwal	6536	124	6197	215	6321	2.0	627	606
Panchkula	5241	54	5040	147	5094	1.1	934	908
Panipat	5070	83	4774	213	4857	1.7	421	403
Rewari	2934	48	2848	38	2896	1.7	326	322
Rohtak	10293	162	9831	300	9993	1.6	970	942
Sirsa	3687	52	3428	207	3480	1.5	285	269
Sonepat	10009	423	9392	194	9815	4.3	690	677
Yamunanagar	3882	20	3709	153	3729	0.5	320	307
Haryana	**145722**	**4448**	**136555**	**4719**	**141003**	**3.2**	**573**	**555**

Figure No. 14: Date Wise Trend of Positivity Rate and Sample Tested in Haryana (as on 07.06.2020)
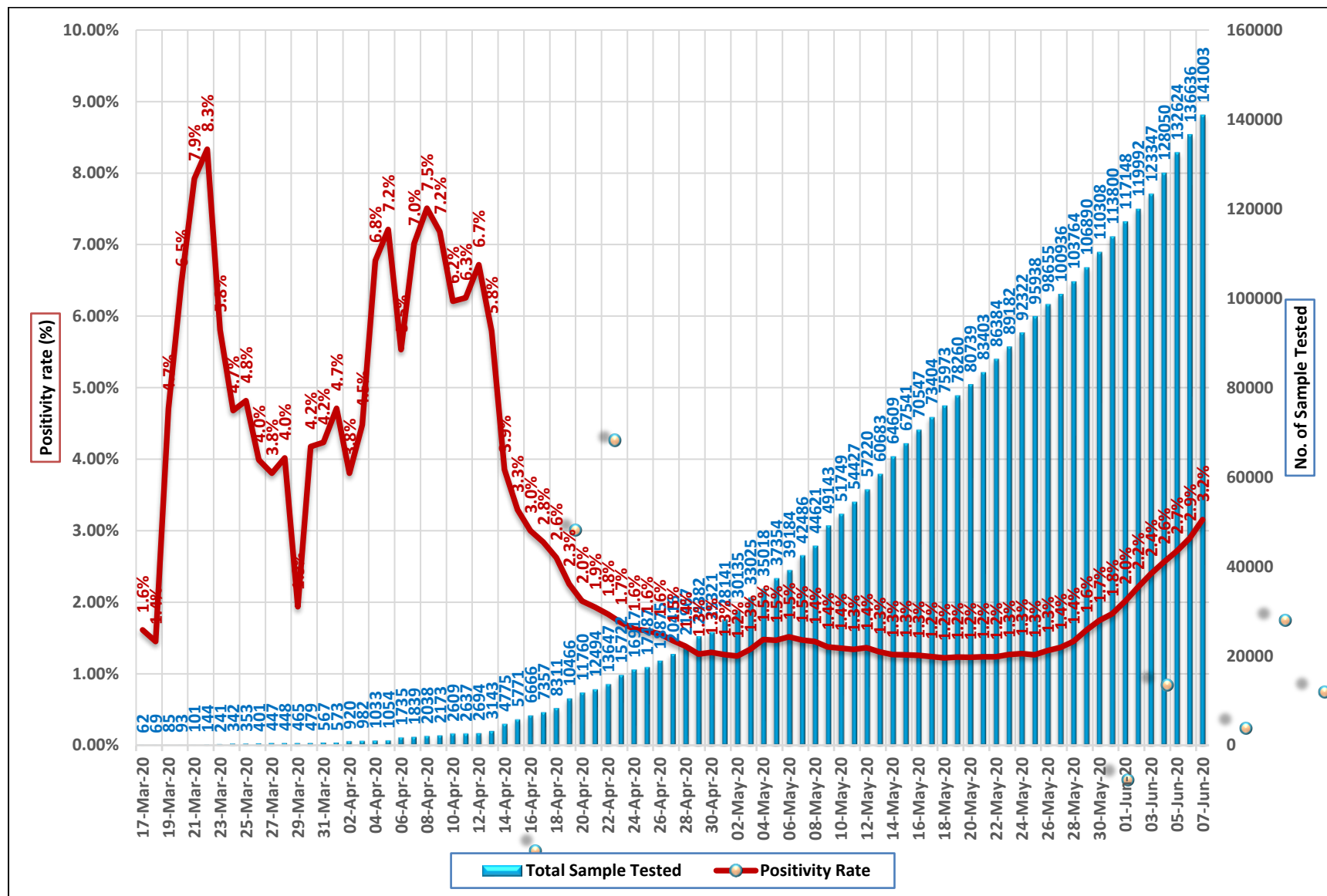
Figure No. 15: District Wise Comparison of Positivity Rate (%) and Samples Tested Per Lakh Population as per the Census 2011 & Official Website of New Districts (as on 07.06.2020)
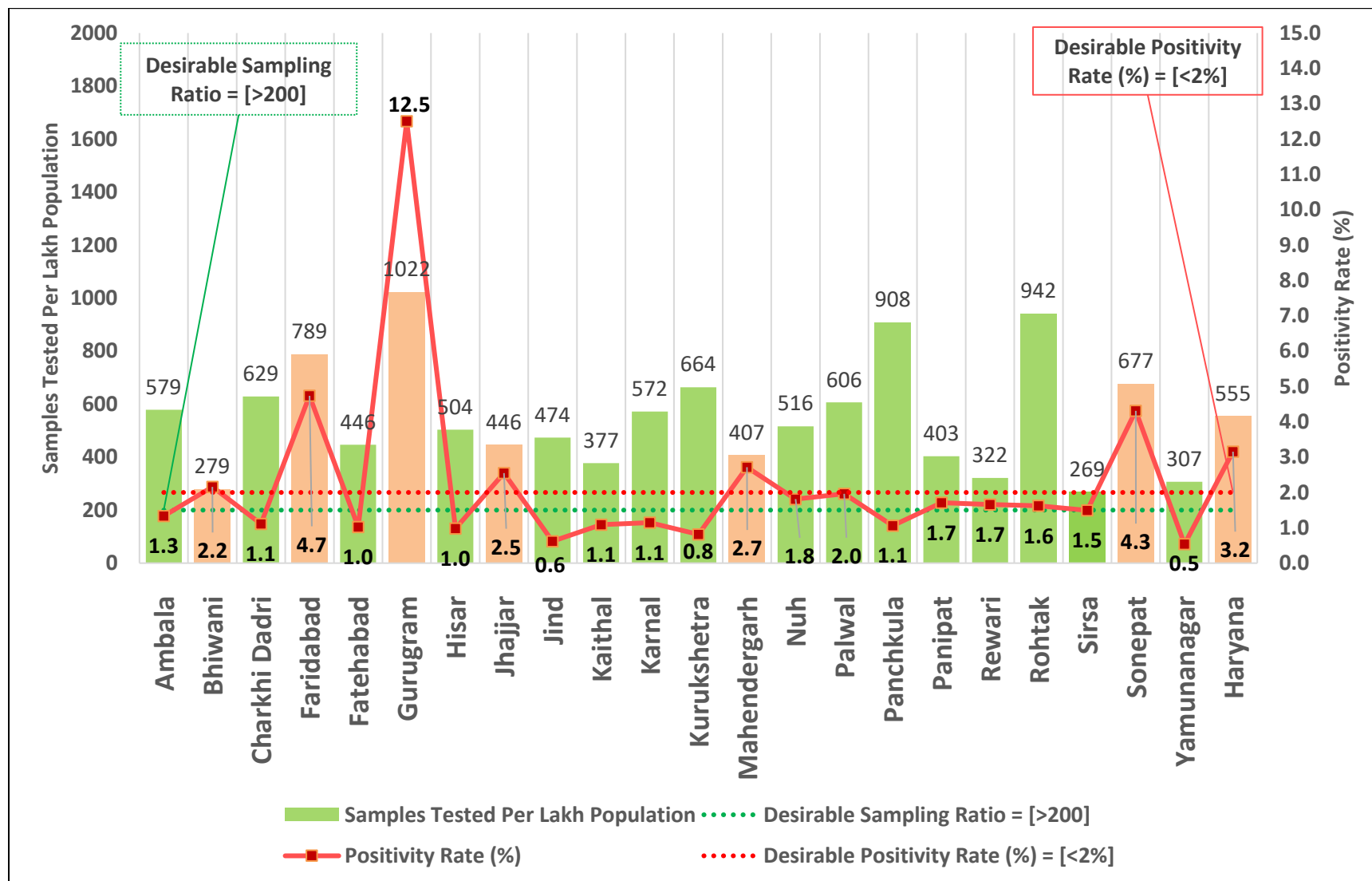
Figure No. 16: District Wise Distribution of Containment Zones and Person Found Symptomatic ILI / SARI in Haryana (as on 07.06.2020)
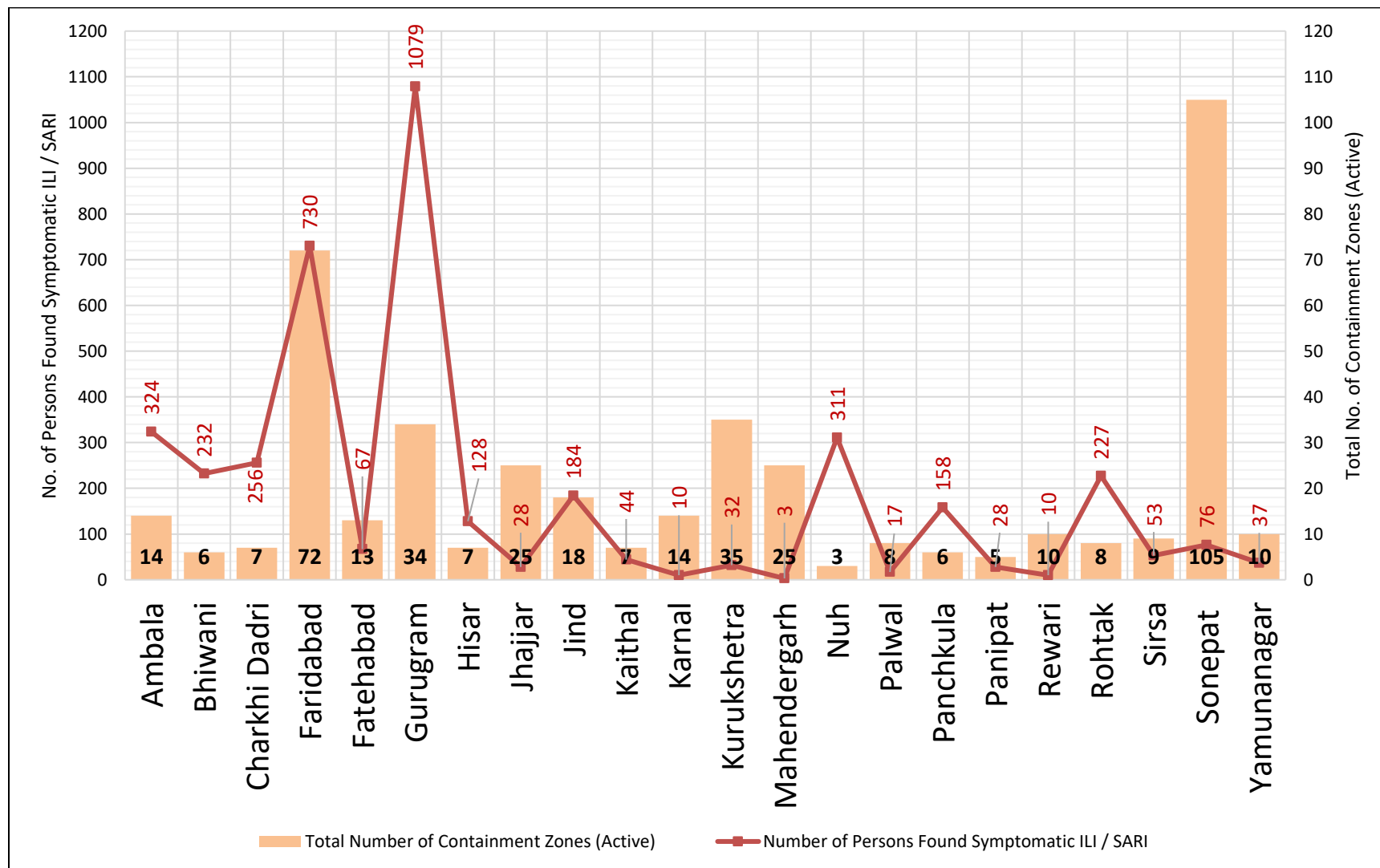
Table No. 6: District Wise Distribution of Containment Zones in Haryana (as on 07.06.2020)

Districts	Total Number of Containment Zones (Active)	Total Households in Containment Zone	Total Population in Containment Zone	Number of Persons Found Symptomatic ILI / SARI
Ambala	14	4342	22756	324
Bhiwani	6	10417	54746	232
Charkhi Dadri	7	6913	39941	256
Faridabad	72	84025	374216	730
Fatehabad	13	1091	5666	67
Gurugram	34	46141	207603	1079
Hisar	7	4833	24339	128
Jhajjar	25	10465	48042	28
Jind	18	13726	73848	184
Kaithal	7	489	2540	44
Karnal	14	4997	23222	10
Kurukshetra	35	2108	11059	32
Mahendergarh	25	2532	12870	3
Nuh	3	1723	10638	311
Palwal	8	12089	95766	17
Panchkula	6	4064	19608	158
Panipat	5	7406	34760	28
Rewari	10	15783	75791	10
Rohtak	8	6435	39370	227
Sirsa	9	934	4560	53
Sonepat	105	104036	497088	76
Yamunanagar	10	2989	15713	37
Haryana	441	347538	1694142	4034

Table No. 7: Health Facility Wise Distribution of Critical COVID-19 Patients in Haryana (as on 07.06.2020)

Sr. No.	Health Facility / Medical College	Patient on Oxygen Support	Patient on Ventilator	Total
1.	**Pt. BD Sharma PGIMS, Rohtak**	4	0	**4**
2.	**SHKMGMC, Nalhar, Nuh**	1	0	**1**
3.	**ESIC Medical College and Hospital, Faridabad**	13	5	**18**
4.	**MAMC Agroha, Hisar**	1	0	**1**
5.	**Mederor Hospital, Manesar, Gurugram**	0	3	**3**
6.	**Fortis Hospital, Gurugram**	0	3	**3**
7.	**Medanta Hospital, Gurugram**	0	4	**4**
	Total	**19**	**15**	**34**

Table No. 8: Category Wise Distribution of COVID-19 Facilities in Haryana (as on 07.06.2020)

Category	Facilities	Total Isolation Beds (excluding ICU Beds)	Isolation Beds of Confirmed Cases	Isolation Beds for Suspected Cases	O2 Supported Beds	ICU Beds	Ventilators	O2 Manifold	PPE Kits	N95 Masks	Compatible to B.W.M. System
Cat. I - Dedicated COVID Hospitals / DCH	42	3654	2040	1614	2344	568	261	40	18773	61912	42
Cat. II - Dedicated COVID Health Center / DCHC	181	5275	2157	3118	2690	1518	764	109	31522	68797	181
Cat. III - Dedicated COVID Center / DCCC	369	32365	7555	24810	0	0	0	0	4242	6086	351
Grand Total	**592**	**41294**	**11752**	**29542**	**5034**	**2086**	**1025**	**149**	**54537**	**136795**	**574**

Table No. 9: Status of Districts of Haryana According to Zoning Parameters Recommended by MOHFW (as on 07.06.2020)

District	Population (Census 2011 & Website)	Total Cases	Total Active Cases	Active Cases Per Lakh Population	Case Fatality Rate (%)	Testing Ratio (No. of Sample Tested Per Lakh Population)	Confirmation (%) / Positivity Rate (%)	Doubling Rate (7 days) = 7/Log 2 (N7/N1)
Ambala	1128350	87	32	3	2.3%	579	1.3	10
Bhiwani	1198085	72	61	5	0.0%	279	2.2	8
Ch. Dadri	502276	35	34	7	0.0%	629	1.1	5
Faridabad	1809733	676	480	27	1.9%	789	4.7	9
Fatehabad	942011	43	31	3	0.0%	446	1.0	6
Gurugram	1514432	1936	1467	97	0.2%	1022	12.5	6
Hisar	1743931	86	58	3	0.0%	504	1.0	10
Jhajjar	958405	109	13	1	0.0%	446	2.5	63
Jind	1334152	39	11	1	5.1%	474	0.6	17
Kaithal	1074304	44	33	3	0.0%	377	1.1	12
Karnal	1505324	99	57	4	1.0%	572	1.1	8
Kurukshetra	964655	52	22	2	0.0%	664	0.8	12
Mahendergarh	922088	102	65	7	0.0%	407	2.7	5
Nuh	1089263	102	31	3	0.0%	516	1.8	14
Palwal	1042708	124	70	7	0.0%	606	2.0	8
Panchkula	561293	33	7	1	0.0%	908	1.1	20
Panipat	1205437	83	28	2	4.8%	403	1.7	17
Rewari	900332	48	36	4	0.0%	322	1.7	7
Rohtak	1061204	162	105	10	0.6%	942	1.6	4
Sirsa	1295189	52	17	1	0.0%	269	1.5	25
Sonepat	1450001	423	258	18	0.2%	677	4.3	7
Yamunanagar	1214205	20	11	1	0.0%	307	0.5	6
USA Returnee Haryana Citizens	NA	21	19	NA	NA	NA	NA	NA
Haryana	25417378	4448	2946	210	0.6%	555	3.2	8

Glossary of Formula Used: -

- ❖ **Active Case Load Per Million Population** = (No. of Active Cases / Total Population) *1000000

- ❖ **Growth Rate** = {(Current Value – Previous Value) /Current Value} *100

- ❖ **Mortality (%)** = (No. of Deaths/Total Confirmed Cases) *100

- ❖ **Moving Average** = Average (No. of Cumulative Cases on N1: No. of Cumulative Cases on N7)

- ❖ **Positivity Rate (%)** = No. of Positive Cases/ (Total Sample Tested) *100

- ❖ **Positive Cases Per Million Population** = (No. of Positive Cases / Total Population) *1000000

- ❖ **Recovery (%)** = (No. of Cured Cases/Total Confirmed Cases) *100

- ❖ **Sample Collected Per Million Population** = (Total Sample Collected/Total Population) *1000000

- ❖ **Total Sample Tested** = Sum (No. of Positive Cases + No. of Negative Cases)

- ❖ **Sample Tested Per Lakh Population** = (Total Sample Collected/Total Population) *100000

- ❖ **Sample Tested Per Million Population** = (Total Sample Collected/Total Population) *1000000

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