

Vital Health Indices and Nutrition

Health Facilities

Health service delivery in Cavite has evolved into dual delivery systems of public and private provision, covering the entire range of health interventions with varying degrees of emphasis at different health care levels. Hospitals are mainly classified as general or as DOH hospitals which provide services for all kinds of illnesses, diseases, injuries or deformities. It has emergency and outpatient services primary care services, family medicine, pediatrics, internal medicine, obstetrics-gynecology, surgery including diagnostic and laboratory services, imaging facility and pharmacy. These hospitals are further classified into the following: Level-1, Level-2, and Level-3 general services.

Table 5AP shows that the province of Cavite has 60 hospitals providing health services. About 78.33% (or 47) are privately owned and the rest 21.67% (or 13 hospitals) are government-owned operated hospitals. These hospitals are also classified as Level 1, Level 2 and Level 3 hospitals. There are 44 Level-1 hospitals operating in the province; (these Level-1 hospitals are those emergency hospitals that provide initial clinical care and management to patients requiring immediate treatment as well as primary care on prevalent diseases in the locality, which includes: isolation facilities, maternity, dental clinics, 1st level x-ray, secondary clinical laboratory with consulting pathologist, blood station, and pharmacy). Fourteen (14) are Level-2 general hospitals (health services in Level 2 category, include Level-1 services and departmentalized clinical services, respiratory units, ICU, NICU and HRP, high risk pregnancy unit, tertiary clinical laboratory,

and 2nd level x-ray). Two (2) are level-3 general hospitals, the De La Salle University Medical Center in the City of Dasmariñas and General Emilio Aguinaldo Memorial Hospital, a provincial-government hospital which is located in Trece Martires City (Level-3 general hospitals include level 2 services and teaching/training, physical medicine and rehabilitation, ambulatory surgery, dialysis, tertiary laboratory, blood bank, and 3rd level x-ray).

The government hospitals are funded out of the provincial government's budget while municipal/city hospitals are financed by the municipal/city budgets. Management and financial parameters are determined primarily by the local chief executive and, in varying level of influence and technical leadership of the respective provincial/city/ municipal health officer or chief of hospital.

Table 5AP List of Licensed Government and Private Hospitals, Province of Cavite: as of December 31, 2015

City/ Municipality	No.	Name of Hospital	Complete Address	Ownership	Authorized Bed Capacity (ABC)	Classification	Service Capability	Medical Director or Contact Person	Contact Number/s
1st District Cavite City	1	A. Dela Cruz Maternity Hospital	910 Crescini St., Caridad, Cavite City	Private	11	General	Level 1	Erwin Jay P. Dela Cruz, M.D. Medical Director	(046)431-3185
	2	Bautista Hospital	375 P.Burgos Ave., Barangay 32, Caridad, Cavite City	Private	60	General	Level 2	Rita B. Poblete, M.D. Medical Director	(046) 431-0330/ 431-0416
	3	Cavite Medical Center	Manila-Cavite Road, Barangay 8, Dalahican, Cavite City	Private	60	General	Level 2	Dr. Efren P. Sayoc Medical Director	(046) 431-5650/ 504-4496
	4	Cavite Naval Hospital	Naval Pascual Ledesma, Fort San Felipe, Barangay 62-A, Cavite City	Government-Military	100	General	Level 1	Col Angelita V. Larin, MC (MNSA)	(046) 431-0469

City/ Municipality	No.	Name of Hospital	Complete Address	Ownership	Authorized Bed Capacity (ABC)	Classification	Service Capability	Medical Director or Contact Person	Contact Number/s
2 nd District	5	Dra. Olivia Salamanca Memorial District Hospital	P. Gomez St, Cavite City	LGU-Provincial Government	50	General	Level 1	Lamberto Caguiging, M.D. Hospital Director	(046) 431-0552
	6	Major Danilo Atienza Air Base Hospital	Sanglely Point, Cavite City	Government-Military	10	General	Infirmary	Joanne B. Turingan	
	7	Kawit Kalayaan Hospital	San Sebastian Kawit Cavite	LGU-Provincial Government	25	General	Level 1	Remigio Camerino, M.D.	(046)686-0124
	8	Kawit Maternity and General Hospital	66 Freedom Park, Kaingen, Kawit, Cavite	Private	20	General	Infirmary	Christine P. Victa Medical Director	
	9	St. Martin Maternity and Pediatric Hospital	Salcedo II, Noveleta Cavite	Private	50	General	Level 1	Oscar D. Tinio, M.D., MOH,FPCOM	(046)438-1112
	10	E. Contreras Medical Clinic	General Trias Drive, Poblacion, Rosario Cavite	Private	24	General		Aileen C. Limjoco, M.D.	(046)438-1958
	11	Our Savior Hospital, Inc.	General Trias Drive, Rosario Cavite	Private	30	General	Level 1	Alfredo L. Trias, M.D. Medical Director	(046)438-3688/438-1802
	12	Bacoor District Hospital	Reyville Subdivision, Brgy. Habay II, City of Bacoor	Government	10	General	Level 1	Jocelyn C. Caballes, M.D. Chief of Hospital	none
	13	Bacoor Doctors Medical Center	Molino Boulevard, Bayanan, City of Bacoor	Private	60	General	Level 1	Isabel Hayag, M.D. Medical Director	(046)416-6275
	14	Crisostomo General Hospital	Tirona Highway, Habay, Dulong Bayan, City of Bacoor	Private	20	General	Level 1	Soliman C. Crisostomo, M.D. Medical Director	(046)434-4805/3195
City of Bacoor	15	Metro South Medical Center	National Road, Molino IV, City of Bacoor	Private	50	General	Level 2	Dr. Ricardo B. De Los Trinos Chief of Hospital	(046)477-1743/477-3087
	16	Molino Doctors Hospital	National Road, Molino II, City of Bacoor	Private	38	General	Level 1	Nellies Orlino, M.D.	(046)477-1653
	17	Prime Global Care Medical Center, Inc.	Blk 3, Lots 6,7,8 Cabezas Corner Avenida Rizal, Molino Road, Molino II, City of Bacoor	Private	33	General	Level 1	Emiliano U. Maluto, Jr., M.D. Medical Director	(046)477-0806/ (02)986-0960
	18	Southeast Asian Medical Center, Inc.	Molino Road, Molino II, City of Bacoor	Private	50	General	Level 2	Dr. Job J. Mingoa Medical Director	(046)431-0000
	19	St. Dominic Medical Center, Inc.	Aguinaldo Highway, Talaba IV, City of Bacoor	Private	100	General	Level 2	Dr. Oscar D. Tinio Medical Director	(046)417-2525/417-2520
	20	YR - St. Michael Medical Hospital, Inc.	220 Molino II, City of Bacoor	Private	48	General	Level 1	Yolanda M. Rodil, M.D.	(046)477-1757

City/ Municipality	No.	Name of Hospital	Complete Address	Ownership	Authorized Bed Capacity (ABC)	Classification	Service Capability	Medical Director or Contact Person	Contact Number/s
3rd District City of Imus	21	Imus Family Hospital, Inc.	Justineville II, Subdivision 2, Palico, City of Imus	Private	15	General	Level 1	Alyer M. Alestante, MD	(046)471-6403
	22	Medical Center Imus	Diversion Road, Palico IV, City of Imus	Private	90	General	Level 2	Dr. Macrina Isabel Hayag	(046)472-3987/472-3982
	23	Our Lady of the Pillar Medical Center	Tamsui Avenue,,Bayan Luma, City of Imus	Private	98	General	Level 2	Dr. Joseph T. Mendoza	(046)472-3773/472-3072
	24	Paredes Primary Care Center	M. Paredes Bldg, Aguinaldo Highway, Bayan Luma IV, City of Imus	Private	17	General	Level 1	Isabella Paredes - Cruz, MD	(046)471-3281
4th District City of Dasmariñas	25	Asia Medic Family Hospital and Medical Center	Old Pala-pala Road,Sampaloc I, City of Dasmariñas	Private	77	General	Level 1	Estephany Guerra, MD	(046)416-1110/416-0720
	26	Dasmarinas City Medical Center Inc.	Salawag Crossing, Salawag, City of Dasmariñas	Private	60	General	Level 2	Edwin M. Jamir, M.D. Medical Director	(046)485-9000
	27	De La Salle University Medical Center	Congressional Avenue, City of Dasmariñas	Private	250	General	Level 3	Sr. Francesca A. San Diego	(046)416-0226
	28	Emilio Aguinaldo College Medical Center	Salitran II, City of Dasmariñas	Private	154	General	Level 2	Dr. Allan P. Chua	(046)850-2037/416-3010
	29	Fabella-Narciso Medical and Maternity Clinic		Private	8	General	Infirmery		
	30	M.V. Santiago Medical Center-FCIE Branch	Langkaan I, City of Dasmariñas, Cavite	Private	4	General	Infirmery	Dr. Manuel V. Santiago	
	31	St. Paul Hospital Cavite, Inc.	Burol II, Bagong Bayan, City of Dasmariñas	Private	100	General	Level 2	Dr. Lamberto J. Caguiging	(046)416-3877
5th District Carmona	32	Catalan Medical Hospital	523 J.M. Loyola St., Carmona, Cavite	Private	8	General	Level 1	Dr. Amelia A. Catalan	(046)430-0717
	33	HCGC Medical Plaza Hospital	260 San Jose St., Carmona, Cavite	Private	10	General	Level 1	Dr. Gloria P. Casal-Cledera	(046) 430 1017
	34	Pagamutang Bayan ng Carmona	252 San Jose St., Carmona, Cavite	Government-LGU	15	General	Infirmery	Imelda Ledesma-Perez	

City/ Municipality	No.	Name of Hospital	Complete Address	Ownership	Authorized Bed Capacity (ABC)	Classification	Service Capability	Medical Director or Contact Person	Contact Number/s
Gen. Mariano Alvarez	35	CARSIGMA District Hospital	Barangay 5, Poblacion, Gen. Mariano Alvarez, Cavite	Government-LGU	19	General	Infirmary		
Silang	36	San Jose Hospital and Medical Center, Inc.	Governor's Drive, Maderan, Gen. Mariano Alvarez, Cavite	Private	25	General	Level 1	Edison Alberto, M.D.	(046)542-0045
	37	Adventist University of the Philippine Health Service	Putting Kahoy, Silang, Cavite	Private-University	10	General	Infirmary	Mercy N. Buhia Chief of Hospital	(049)541-7211
	38	Estrella Hospital	Km 43 General Aguinaldo Highway, San Miguel, Silang Cavite	Private	20	General	Level 1	Angel Antonio Estrella, M.D.	(046)414-0793
	39	Silang Doctors Hospital	Marcelo H. Del Pilar St., Sabutan, Silang, Cavite	Private	10	General	Infirmary	Maribeth Mendoza Chief of Hospital	(046)686-1197
	40	St. Mazenod Hospital Inc.	B113 L7 and 8 AFP Housing Bulihan Silang Cavite	Private	12	General	Level 1	Norma M. Vito	(046)972-0281
6 th District City of Gen. Trias	41	Velazco Hospital	J.P. Rizal St. Sabutan, Silang Cavite	Private	25	General	Level 1	Victor C. Velazco, M.D.	(046)414-0280
	42	General Trias Medicare Hospital	Brgy. Pinagtipunan, City of General Trias	Private	10	General	Level 1	Antero Lavarias Jr., MD	(046)509-0064
	43	Divine Grace Medical Center	Bypass Road, Tejero, City of General Trias	Private	50	General	Level 2	Dr. Luis Ricardo Sahilan	(046)437-1177/887-2499
	44	General Trias Maternity and Pediatric Hospital	Tejero, City of General Trias	Private	73	General	Level 1	Rico E. Torres, M.D.	(046)437-0133
	45	Gentri Doctors Medical Center Inc.	Governor's Drive Metropolis Green, Manggahan, City of General Trias	Private	69	General	Level 2	Ricardo M. Beroncal, M.D. Medical Director	(046)416-2222
Tanza	46	Gentri Medical Center and Hospital, Inc.	Santos St. Brgy. Manggahan, City of General Trias	Private	50	General	Level 2	Jerrimo L. Genuino, M.D. Hospital Director	(046)686-2338/424-0888
	47	SSMC Satellite Hospital	Gateway Business Park, Javalera, City of General Trias	Private	25	General	Level 1	Jose Rabe, M.D. Chief of Hospital	(046)433-0210
	48	ARESCOM Infirmery	Paradahan, Tanza, Cavite	Government-Military	14	General	Infirmery		
	49	JNRL Family Corporation	A. Soriano Highway, Sahud Ulan Tanza Cavite	Private	22	General	Level 1	Raul F. Manas, MD	(046)489-6398

City/ Municipality	No.	Name of Hospital	Complete Address	Ownership	Authorized Bed Capacity (ABC)	Classification	Service Capability	Medical Director or Contact Person	Contact Number/s
Trece Martires City	50	Tanza Family General Hospital	A. Soriano Highway, Daang Amaya 2, Tanza, Cavite	Private	44	General	Level 1	Lucio T. De Mesa, MD	(046)437-7244
	51	General Emilio Aguinaldo Memorial Hospital	Brgy. Luciano, Trece Martires City	Government-Provincial Government of Cavite	284	General	Level 3	Dr. George R. Repique, Jr	(046)419-0123
	52	M.V Santiago Medical Center	Brgy. De Ocampo, Trece Martires City	Private	75	General	Level 1	Manuel V. Santiago, MD	(046)419-3340/419-0174
	53	DLS-Dr. Rodolfo Poblete Memorial Hospital	Burgos St., Barangay 1 (Poblacion), Alfonso, Cavite	Private	20	General	Level 1	Cristina B. Hernandez, M.D., FPPS Chief of Hospital	(046)415-0190
	54	Our Lady of the Way Medical and Pediatric Clinic	Kabulusan, Magallanes, Cavite	Private	5	General	Infirmery	Marianida H. Sisante Chief of Hospital	
	55	Cavite Municipal Hospital	Maragondon Cavite	Government-LGU	10	General	Level 1	Godwyn Bernardo, MD	(046)412-0836
Naic	56	First Filipino Saint Hospital	San Roque, Naic, Cavite	Private	30	General	Level 1	Rafael A. Vasquez, M.D. Chief of Hospital	(046)412-1411
Tagaytay City	57	Naic Doctors Hospital, Inc.	Daang Makina Naic Cavite	Private	30	General	Level 1	Perlita D. Castro, MD	(046)412-1443
	58	Naic Medicare Hospital	A. Soriano Highway, Naic, Cavite	Government-LGU	10	General	Infirmery		
	59	Ospital ng Tagaytay	Kaybagal South (Poblacion), Tagaytay City	Government-LGU	12	General	Infirmery	Alfonso Nuñez III	
	60	Tagaytay Medical Center	E. Aguinaldo Highway Silang Crossing East Rotonda, Tagaytay City	Private	90	General	Level 2	Dr. Caesar D. Tongo	(046)860-2529
Total ABC					2,799				

Source: Provincial Health Office, Trece Martires City

Hospital Bed-Population Ratio

The number of hospital beds is also a good indicator of health service availability. As per Philippine Statistics Authority-National Statistics Coordination Board (PSA-NSCB) recommendation, there should be one (1) hospital bed per 1,000 population. Table 5AQ describes the distribution of private and government hospital beds per city/municipality. In 2015, the province of Cavite listed 60 hospitals of which the 13 government-owned hospitals had a combined bed capacity of 569, while private hospitals (48) had a combined bed capacity of 2,230. Bed population ratio stood at 0.76 hospitals bed per 1,000 population using the 2015 actual population. To meet the standard, the province needs additional 879 beds to address the needed 3,678 beds for the 3,678,301

Caviteños. Cities which exceeded the standard bed-population ratio were Cavite City (2.83 per 1,000 population), Trece Martires City (2.31 per 1,000 population) and Tagaytay City (1.43 per 1,000 population).

The City of Bacoor had the most number of hospitals with nine (9), while the municipalities of Amadeo, Indang, Gen. Emilio Aguinaldo, Mendez and Ternate have no existing hospitals.

Table 5AQ Distribution of Hospital and Bed Population Ratio by City/Municipality, Province of Cavite: 2015

City/Municipality by District	Total		Government Hospital		Private Hospital		Actual Population 2015	Authorized Bed Capacity	Rate per 1000 Population
	Number of Hospital	Bed Capacity	Number of Hospital	Bed Capacity	Number of Hospital	Bed Capacity			
1st District	11	440	4	185	7	255	342,824	440	1.28
Cavite City	6	291	3	160	3	131	102,806	291	2.83
Kawit	2	45	1	25	1	20	83,466	45	0.54
Noveleta	1	50	-	-	1	50	45,846	50	1.09
Rosario	2	54	-	-	2	54	110,706	54	0.49
2nd District	9	409	1	10	8	399	600,609	409	0.68
City of Bacoor	9	409	1	10	8	399	600,609	409	0.68
3rd District	4	220	-	-	4	220	403,785	220	0.54
City of Imus	4	220	-	-	4	220	403,785	220	0.54
4th District	7	653	-	-	7	653	659,019	653	0.99
City of Dasmariñas	7	653	-	-	7	653	659,019	653	0.99
5th District	10	154	2	34	8	120	500,785	154	0.31
Carmona	3	33	1	15	2	18	97,557	33	0.34
Gen. Mariano Alvarez	2	44	1	19	1	25	155,143	44	0.28
Silang	5	77	-	-	5	77	248,085	77	0.31
6th District	12	716	3	308	9	408	733,853	716	0.98
Amadeo	-	-	-	-	-	-	37,649	-	0.00
City of General Trias	6	277	1	10	5	267	314,303	277	0.88
Tanza	3	80	1	14	2	66	226,188	80	0.35
Trece Martires City	2	359	1	284	1	75	155,713	359	2.31
7th District	8	207	3	32	5	175	437,426	207	0.47
Alfonso	1	20	-	-	1	20	51,839	20	0.39
Gen. Emilio Aguinaldo	-	-	-	-	-	-	22,220	-	-
Indang	-	-	-	-	-	-	65,599	-	-
Magallanes	1	5	-	-	1	5	22,727	5	0.22
Maragondon	1	10	1	10	-	-	37,720	10	0.27
Mendez (Mendez-	-	-	-	-	-	-	31,529	-	-
Naic	3	70	1	10	2	60	111,454	70	0.63
Tagaytay City	2	102	1	12	1	90	71,181	102	1.43
Ternate	-	-	-	-	-	-	23,157	-	-
Total	61	2,799	13	569	47	2,230	3,678,301	2,799	0.76

Source: Provincial Health Office, Trece Martires City

Local Health Facilities

Rural Health Unit (RHU) is the primary government health care facility at the city /municipal level wherein health services are delivered. The RHUs are managed thru their city/municipal health officers and being staffed by doctors, nurses, midwives, medical technologists, sanitary inspectors, nutritionists and volunteer health workers. The basic health services being delivered includes

medical consultation services, treatments of minor ailments, maternal and child health care, dental health, nutrition, dispensation of drugs and medicines, on calls and attendance at home, immunization and conduct of health education, family planning, sanitation campaign and other related activities.

Of the 23 cities and municipalities, there are 39 RHUs operating in the province. City of Bacoor has seven (7) RHUs, Cavite City (5), City of Imus, (3), City of Dasmariñas (2), Gen. Mariano Alvarez (2), Silang (2), and the rest has one (1) RHU per city/municipality.

Moreover, the barangay health station (BHS) is the primary health care facility at the barangay level which provides first aid, maternal and child health care, diagnosis of social diseases, and other basic health services to all the members of the community it is serving. It is commonly staffed of rural health midwives, barangay nutrition scholars and barangay health workers, and they follow a schedule of medical services from Monday to Friday. Sometimes health centers schedule special medical projects or missions and conduct health education classes during weekends especially when the DOH issues health warnings and epidemic cases.

For the year 2015, records showed that there were 647 barangay health stations provincewide. Most of them are situated in the City of Dasmariñas (84), City of Imus (82), Silang (66), and City of Bacoor (40) (Table 5AR).

Ideally, there should be one BHS per barangay. However, some far barangays whose residents have difficult access to their Barangay Health Station can obtain services to the health center of their neighboring barangay.

Table 5AR Number of Rural Health Units, Barangay Health Stations and Barangay Health Workers by City/Municipality, Province of Cavite: 2015

City/Municipality	Barangays	Rural Health Units	Barangay Health Stations	Barangay Health Workers
1st District	143	9	54	294
Cavite City	84	5	-	54
Kawit	23	2	22	86
Noveleta	16	1	13	33
Rosario	20	1	19	121
2nd District	73	7	40	110
City of Bacoor	73	7	40	110
3rd District	97	3	82	72
City of Imus	97	3	82	72
4th District	75	2	84	215
City of Dasmariñas	75	2	84	215
5th District	105	5	106	311
Carmona	14	1	12	109
Gen. Mariano Alvarez	27	2	28	86
Silang	64	2	66	116
6th District	113	4	101	364
Amadeo	26	1	14	50
City of General Trias	33	1	35	152
Tanza	41	1	36	97
Trece Martires City	13	1	16	65
7th District	223	9	180	1,013
Alfonso	32	1	27	164
Gen. Emilio Aguinaldo	14	1	10	95
Indang	36	1	32	80
Magallanes	16	1	16	90
Maragondon	27	1	9	266
Mendez	24	1	24	71
Naic	30	1	27	142
Tagaytay City	34	1	34	48
Ternate	10	1	1	57
Total	829	39	647	2,379

Source: Provincial Health Office, Trece Martires City

Table 5AS Number of Birthing Facilities by City/Municipality Province of Cavite: 2015

City/Municipality	Number of Birthing Facilities	Authorized Bed Capacity
1st District	2	6
Cavite City	-	-
Kawit	1	2
Noveleta	1	4
Rosario	-	-
2nd District	7	20
City of Bacoor	7	20
3rd District	5	11
City of Imus	5	11
4th District	8	16
City of Dasmariñas	8	16
5th District	10	31
Carmona	-	-
Gen. Mariano Alvarez	4	8
Silang	6	23
6th District	17	45
Amadeo	-	-
City of General Trias	3	9
Tanza	8	18
Trece Martires City	6	18
7th District	15	43
Alfonso	2	4
Gen. E. Aguinaldo	-	-
Indang	1	2
Magallanes	2	16
Maragondon	1	3
Mendez	2	3
Naic	3	6
Tagaytay City	3	6
Ternate	1	3
Total ABC	64	172

Source: www.doh.gov.ph

A birthing facility is a medical facility that provides birthing service on prenatal and postnatal care, normal spontaneous delivery and care of newborn babies. As per DOH Administrative Order No. 2008-0029, specifically Section 3, requires that "every birth delivery should be done by skilled birth attendants". Thus, it may be manned by a physician – obstetrician – gynecologist, pediatrician, family medicine specialist, general practitioner, midwife and/or a nurse. As per DOH Department Order No. 2012 – 0012 entitled "Rules and Regulations Governing the New Classification of Hospitals and Other Health Facilities in the Philippines, specifically states that infirmaries and birthing homes are now required to be licensed by the DOH through its regional offices. The objective is to strengthen the capability of birthing homes by ensuring that they are well-equipped, well-organized and operated and supervised by a duly licensed and trained staff. Cavite province has a total of 64 accredited birthing facilities with authorized bed capacity of 172 beds. (Table 5AS).

Health Human Resources

The health human resources are the main drivers of the health care system and are essential for the efficient management and operation of the public health system. There are 711 health manpower employed in the city/municipal health offices. Of this total, majority are midwives (356), nurses (223) dentists (74), and doctors (58). This results to a ratio of one (1) doctor for every 63,419 populace. The standard ratio is 1:20,000 or 184 doctors for the 2015 population, thus post a shortage of 126 government doctors.

The total number of dentists is 74 and has resulted to the dentist-population ratio of 1:49,707. As observed, this figure is much lower (backlog of 110 dentists) compared to the standard dentist-population ratio of 1:20,000. It is also noted that nurses comprising 31.36% of the total number of health personnel, has led to nurse-to-population ratio of 1:16,495. The standard ratio is 1:20,000, meaning the province has 39 nurses above the standard requirement. Moreover, midwives has marked the ratio of 1:10,332 against the standard ratio of 1:5,000 resulting to a backlog of 380 to meet the required 736 midwives. Based on estimates, there is a need to hire additional health personnel in RHUs particularly doctors, dentists and midwives (Table 5AT).

Birthing Facilities

Table 5AT Health Manpower to Population Ratio by City/Municipality, Province of Cavite: 2015

City/Municipality by District	Actual Population 2015	Doctors	Doctor-Population Ratio	Dentists	Dentist to Population Ratio	Nurses	Nurse to Population Ratio	Midwives	Midwife to Population Ratio
1st District	342,824	13	1:26,371	6	1:57,137	38	1:9,022	54	1:6,349
Cavite City	102,806	8	1:12,851	1	1:102,806	16	1:6,425	21	1:4,896
Kawit	83,466	2	1:41,733	2	1:41,733	9	1:9,274	11	1:7,588
Noveleta	45,846	1	1:45,846	1	1:45,846	1	1:45,846	4	1:11,462
Rosario	110,706	2	1:55,353	2	1:55,353	12	1:9,226	18	1:6,150
2nd District	600,609	8	1:75,076	6	1:100,102	33	1:100,102	40	1:15,015
City of Bacoor	600,609	8	1:75,076	6	1:100,102	33	1:100,102	40	1:15,015
3rd District	403,785	4	1:100,946	6	1:67,298	21	1:67,298	37	1:10,913
City of Imus	403,785	4	1:100,946	6	1:67,298	21	1:67,298	37	1:10,913
4th District	659,019	7	1:94,146	5	1:131,804	50	1:131,804	63	1:10,461
City of Dasmariñas	659,019	7	1:94,146	5	1:131,804	50	1:131,804	63	1:10,461
5th District	500,785	8	1:62,598	4	1:125,196	19	1:26,357	58	1:8,634
Carmona	97,557	3	1:32,519	2	1:48,779	6	1:16,260	16	1:6,097
Gen. Mariano Alvarez	155,143	1	1:155,143	0	0	6	1:25,857	21	1:7,388
Silang	248,085	4	1:62,021	2	1:124,043	7	1:35,441	21	1:11,184
6th District	733,853	9	1:81,539	6	1:122,309	36	1:20,385	52	1:14,113
Amadeo	37,649	1	1:37,649	0	0	1	1:37,649	4	1:9,412
City of General Trias	314,303	3	1:104,768	3	1:104,768	16	1:19,644	20	1:15,715
Tanza	226,188	4	1:56,547	1	1:226,188	12	1:18,849	13	1:17,399
Trece Martires City	155,713	1	1:155,713	2	1:77,857	7	1:22,245	15	1:10,381
7th District	437,426	9	1:48,603	7	1:62,489	26	1:16,824	52	1:8,412
Alfonso	51,839	1	1:51,839	0	0	1	1:51,839	5	1:10,368
Gen. Emilio Aguinaldo	22,220	1	1:22,220	0	0	1	1:22,220	5	1:4,444
Indang	65,599	1	1:65,599	0	0	2	1:32,800	8	1:8,200
Magallanes	22,727	1	1:22,727	1	1:22,727	2	1:11,364	6	1:3,788
Maragondon	37,720	1	1:37,720	1	1:37,720	1	1:37,720	4	1:9,430
Mendez	31,529	1	1:31,529	1	1:31,529	3	1:10,510	5	1:6,306
Naic	111,454	1	1:111,454	1	1:111,454	11	1:10,132	10	1:11,145
Tagaytay City	71,181	1	1:71,181	2	1:35,591	4	1:17,795	6	1:11,864
Ternate	23,157	1	1:23,157	1	1:23,157	1	1:23,157	3	1:7,719
Total	3,678,301	58	1:63,419	74	1:49,707	223	1:16,495	356	1:10,332

Source: 2015 Census of Population (POPCEN 2015), Philippine Statistics Authority, and Provincial Health Office, Trece Martires City

Vital Health Indices

Vital health indices are the indicators that measure the total health condition in a certain locality or area (Table 5AU).

Crude birth rate is the ratio of live births per 1,000 population during a given period. For the year 2015, the crude birth rate in the province is 12.03 births per 1,000 total populations, compared to 13.43 per 1,000 total populations in 2014, which recorded a decrease of 1.4 live birth rate level.

Crude death rate (CDR) is the number of deaths per 1,000 population during a given period. CDR slightly increased by 0.7% in 2015 (3.41%) from 2.71% in 2014. This is the ratio of the number of deaths occurring within one year to the mid-year population expressed per 1,000 populations. It is "crude" in the sense that all ages are represented in the rate and does not take into account the variations in risks of dying at particular ages.

The province's infant mortality rate for the year 2015 was increased by 3.4 percent from the previous year's rate of 7.54 percent. Infant Mortality Rate refers to the number of deaths among infants (below one-year) per 1,000 live births.

Maternal mortality rate include deaths of women during pregnancy, at childbirth or in the period after childbirth related to pregnancy and giving birth per 1,000 live births. There was an increase in the maternal mortality rate from 51.06 in 2014 to 52.61 in 2015. Having a physician, nurse or midwife who has formal training present during the birth decreases the maternal mortality rate.

Table 5AU Vital Health Indices, Province of Cavite: 2014 & 2015

Health Indices	2014	2015
Crude Birth Rate	13.43	12.03
Crude Death Rate	2.71	3.41
Infant Mortality Rate	7.54	10.94
Maternal Mortality Rate	51.06	52.61

Source: Provincial Health Office, Trece Martires City

Ten Leading Causes of Morbidity

Morbidity and mortality statistics provide basic information for the management of healthcare systems, and for planning and evaluation of health service delivery.

Morbidity refers to any departure, subjective or objective. In 2015, the ten leading causes of morbidity were Acute Upper Respiratory Tract Infection with a rate of 3,154.45 per 100,000 populations, followed by Acute Lower Respiratory Tract Infection (574.44), Hypertension (454.64), Disorder of the Urinary System (430.70), Accident (399.91), Diarrheal Diseases (249.31), Dermatitis (242.19), Asthma (132.25), Conjunctivitis (80.41), and Varicella (Chicken Pox) (48.30). (Table 5AV)

Table 5AV Ten Leading Causes of Morbidity (Rate per 100,000 population), Province of Cavite: 2015

Rank	Cases	Actual No.	Rate/100,000 population
1	Acute Upper Respiratory Tract Infection	119,645	3,154.45
2	Acute Lower Respiratory Tract Infection	21,788	574.44
3	Hypertension	17,244	454.64
4	Disorder of the Urinary System	16,336	430.70
5	Accident	15,168	399.91
6	Diarrheal Diseases	9,456	249.31
7	Dermatitis	9,186	242.19
8	Asthma	5,016	132.25
9	Conjunctivitis	3,050	80.41
10	Varicella (Chicken Pox)	1,832	48.30

Source: Provincial Health Office, Trece Martires City

Ten Leading Causes of Mortality

Mortality is the intensity of death in a population. It is sometimes used to mean the frequency of deaths in a population.

The leading causes of mortality is the total number of deaths for every cause of death in the given year. The Cavite Provincial Health Office has recorded that the top ten causes of mortality in the province were Heart Diseases (103.83 per 100,000 population), Pneumonia (36.86), followed by Malignant Neoplasms (27.76), Accidents (15.77), Hypertension (13.58) Renal Failure (10.86), Tuberculosis (9.86), Cerebrovascular Accident (7.14), Asthma (7.09) and Diabetes Mellitus (6.35). (Table 5AW).

Table 5AW Ten Leading Causes of Mortality (Rate per 100,000 population), Province of Cavite: 2015

Rank	Cases	Actual No.	Rate/100,000 population
1	Heart Diseases	3,938	103.83
2	Pneumonia	1,398	36.86
3	Malignant Neoplasm	1,053	27.76
4	Accidents	598	15.77
5	Hypertension	515	13.58
6	Renal Failure	412	10.86
7	Tuberculosis	374	9.86
8	Cerebrovascular Accident	271	7.14
9	Ashtma	269	7.09
10	Diabetis Mellitus	241	6.35

Source: Provincial Health Office, Trece Martires City

Leading Causes of Maternal Mortality

World Health Organization (WHO) defines maternal mortality as the death of a woman while pregnant or within 42 days of termination of pregnancy, irrespective of the duration and site of the pregnancy, from any cause related to or aggravated by the pregnancy or its management but not accidental or incidental causes. Risks attributable to pregnancy and childbirth as well as from poor quality of health care services make this a strong indicator for health care status. Maternal Mortality Ratio is the ratio between the number of women who died (for reasons of pregnancy, childbirth and puerperium) to the number of reported livebirths in a given year, expressed as the number of maternal deaths per 100,000 live births.

According to the records of Cavite Provincial Health Office, some of the main causes of maternal deaths in the province were eclampsia and bleeding hemorrhage (Table 5AX).

Table 5AX Leading Causes of Maternal Mortality (Rate per 100,000 Livebirth), Province of Cavite: 2015

Rank	Disease	Number	Rate
1	Eclampsia	11	0.22
2	Bleeding Hemorrhage	9	0.18
3	Septic Shock Hospital Acquired Pneumonia	1	0.02
4	Anemia in Pregnancy		
5	Septic Shock, Ubraptio Placenta	1	0.02
	UncalHermatio	1	0.02
	Subachroid Hemorrhage probaleanterodenous malformation		

Source: Provincial Health Office, Trece Martires City

Ten Leading Causes of Infant Mortality

Infant Mortality refers to death of infants under one year of age.

In Cavite, the first ten leading causes of infant deaths for the year 2015 were pneumonia, followed by fetus and newborn affected by complications of placenta, cord and membranes, labor and delivery; septicemia; congenital malformations; acute respiratory distress syndrome; short gestation, low birth weight and malnutrition; neonatal aspiration syndrome; heart diseases; gastroenteritis and colitis; and birth asphyxia. (Table 5AY).

Table 5AY Ten Leading Causes of Infant Mortality (Rate/ 1000 Livebirth), Province of Cavite: 2014

Rank	Cases	Actual Number	Rate/ 1000 Livebirths
1	Pneumonia	114	2.50
2	Fetus and Newborn Affected by Complications of Placenta, Cord Membranes, Labor and Delivery	66	1.45
3	Septicemia	62	1.36
4	Congenital Malformations	54	1.18
5	Acute Respiratory Distress Syndrome	28	0.61
6	Short Gestation, Low Birth Weight and Malnutriron	23	0.50
7	Neonatal Aspiration Syndrome	22	0.48
8	Heart Diseases	19	0.42
9	Gastroenteritis and Colitis	12	0.26
10	Birth Asphyxia	11	0.24

Source: Provincial Health Office, Trece Martires City

Ten Leading Causes of Under Five Mortality

Under Five Mortality Rate (U5MR) the probability of dying between birth and age five, expressed as the number of deaths below age five per 1,000 live births during a given period.

According to the Provincial Health Office's data, pneumonia is the top leading causes of death among children below 5 years of age. Other leading causes were fetus and newborn affected by complications of placenta, cord and membranes, labor and delivery; septicemia; congenital malformation; acute respiratory distress syndrome; acute respiratory tract infection; short gestation, low birth weight and malnutrition; heart diseases; neonatal aspiration; and gastroenteritis and colitis. (Table 5AZ).

Table 5AZ Ten Leading Causes of Under Five Mortality, (Rate/ 1000 Livebirth), Province of Cavite: 2015

Rank	Cases	Actual Number	Rate/ 1000 Livebirths
1	Pneumonia	166	363.88
2	Fetus and Newborn Affected by Complications of Placenta, Cord Membranes, Labor and Delivery	77	168.79
3	Septicemia	72	157.83
4	Congenital Malformation	42	92.06
5	Acute Respiratory Distress Syndrome	28	61.38
6	Acute Respiratory Tract Infection	28	61.38
7	Short Gestation, Low Birth Weight and Malnutrition	27	59.18
8	Heart Diseases	26	56.99
9	Neonatal Aspiration	22	48.22
10	Gastroenteritis and Colitis	25	54.80

Source: Provincial Health Office, Trece Martires City

Operation Timbang Plus

Operation Timbang Plus or OPT Plus is the annual weighing of pre-schoolers below six years old (or 0 to 17 months) in all barangays in the province. The program, spearheaded by the National Nutrition Council (NNC), aims to identify and locate malnourished children for local nutritional planning. It also provides important information on the nutrition situation of the population useful for nutrition program and policy formulation and important nutrition information about a child for prevention or management of nutrition. It is done on every first quarter of the year on the barangay level to identify and to make summary of masterlist of priority beneficiaries for nutrition and nutrition-related services. This allows the barangay to determine the magnitude and prevalence of malnutrition.

Mostly done in the barangay health centers, the weighing of the children is conducted by the Barangay Nutrition Scholars (BNS) assisted by the barangay health workers and barangay officials.

During the first quarter of 2015, about 607,265 children ages 0-71 months old are targeted for OPT Plus, of which 58.20 percent or 353,455 have been subjected to weighing. From the 353,455 children weighed, 317,410 children were categorized normal that results to a normal prevalence rate of 89.80 percent. Of the total 24,231 underweight children, 16,305 were categorized as underweight while 7,926 were severely underweight.

In terms of underweight prevalence rate, the municipality of Amadeo got the highest prevalence of 8.85 percent and the municipality of Tanza has the lowest rate of 1.58 percent which is below the provincial rate of 6.86 percent Table 5BA).

Table 5BA Operation Timbang Results among 0-71 Months Old Preschool Children by City/Municipality, Province of Cavite: 2015

City/Municipality by Legislative District	2015 Population	Estimated Number of Preschoolers (16.2%)	Number of PS Weighed	% Coverage	Number of Overweight	Number of Normal	Number of Underweight	Number of Severely Underweight	TOTAL	Prevalence Rate
1st District	342,824	55,537	31,945	57.52	1,435	28,582	1,445	483	1,928	6.04
Cavite City	102,806	16,655	8,055	48.37	323	7,065	522	145	667	8.28
Kawit	83,466	13,521	8,485	62.75	375	7,597	381	132	513	6.05
Noveleta	45,846	7,427	4,484	60.37	97	4,175	179	33	212	4.73
Rosario	110,706	17,934	10,921	60.89	640	9,745	363	173	536	4.91
2nd District	600,609	108,679	52,909	48.68	2,819	39,887	6,015	4,188	10,203	19.28
City of Bacoor	600,609	108,679	52,909	48.68	2,819	39,887	6,015	4,188	10,203	19.28
3rd District	403,785	65,413	21,674	33.13	1,211	18,818	1,103	542	1,645	7.59
City of Imus	403,785	65,413	21,674	33.13	1,211	18,818	1,103	542	1,645	7.59
4th District	659,019	106,761	70,212	65.77	1,792	65,818	1,840	762	2,602	3.71
City of	659,019	106,761	70,212	65.77	1,792	65,818	1,840	762	2,602	3.71
5th District	500,785	81,127	53,887	66.42	2,262	49,078	1,875	672	2,547	4.73
Carmona	97,557	15,804	10,641	67.33	512	9,793	248	88	336	3.16
Gen. Mariano	155,143	25,133	19,998	79.57	798	18,504	594	102	696	3.48
Silang	248,085	40,190	23,248	57.85	952	20,781	1,033	482	1,515	6.52
6th District	733,853	118,884	76,882	64.67	1,233	72,057	2,610	982	3,592	4.67
Amadeo	37,649	6,099	3,232	52.99	157	2,789	212	74	286	8.85
City of Gen. Trias	314,303	50,917	20,167	39.61	505	18,053	1,095	514	1,609	7.98
Tanza	226,188	36,642	30,366	82.87	230	29,656	344	136	480	1.58
Trece Martires City	155,713	25,226	23,117	91.64	341	21,559	959	258	1,217	5.26
7th District	437,426	70,863	45,946	64.84	1,062	43,170	1,417	297	1,714	3.73
Alfonso	51,839	8,398	5,789	68.93	189	5,382	174	44	218	3.77
Gen. E. Aguinaldo	22,220	3,600	2,151	59.76	53	2,034	56	8	64	2.98
Indang	65,599	10,627	7,015	66.01	304	6,314	329	68	397	5.66
Magallanes	22,727	3,682	2,391	64.94	52	2,279	46	14	60	2.51
Maragondon	37,720	6,111	4,004	65.53	112	3,648	197	47	244	6.09
Mendez	31,529	5,108	3,389	66.35	129	3,112	139	9	148	4.37
Naic	111,454	18,056	11,144	61.72	75	10,733	249	87	336	3.02
Tagaytay City	71,181	11,531	7,422	64.36	76	7,216	127	3	130	1.75
Ternate	23,157	3,751	2,641	70.40	72	2,452	100	17	117	4.43
TOTAL	3,678,301	607,265	353,455	58.20	11,814	317,410	16,305	7,926	24,231	6.86

Source: Provincial Health Office, Trece Martires City

Barangay Nutrition Scholars

Barangay Nutrition Scholar (BNS) is a barangay-based worker appointed by the Punong Barangay and registered by the Provincial Health Office through the Municipal Health Office and has undergone the required training in accordance with law and regulations and responsible for the delivery of nutrition and related services particularly to target beneficiaries.

BNS are considered the frontliners in providing the basic health and nutrition services to their communities. One of the responsibilities of barangay nutrition scholars is identifying malnourished children by visiting each house in their area and weighing each child of the household. It is called Operation Timbang (OPT). They measure the height of the children, using a height board, and also their weight. And then they will calculate whether these are right for their age.

Table 5BB shows that there were 851 barangay nutrition scholars in Cavite. The City of Dasmariñas has the most number of BNS with 165, followed by City of Imus (97) and City of Bacoor with 69 BNS. The municipality of Amadeo has the least number of BNS (7).



Table 5BB Number of Barangay Nutrition Scholars, Province of Cavite: 2015

City/Municipality	Number of Barangays	Number of BNS
1st District	144	86
Cavite City	84	35
Kawit	23	11
Noveleta	16	17
Rosario	21	23
2nd District	73	69
City of Bacoor	73	69
3rd District	97	97
City of Imus	97	97
4th District	75	165
City of Dasmariñas	75	165
5th District	105	102
Carmona	14	11
Gen. Mariano Alvarez	27	27
Silang	64	64
6th District	113	160
Amadeo	26	7
City of General Trias	33	59
Tanza	41	44
Trece Martires City	13	50
7th District	226	172
Alfonso	32	32
Gen. E. Aguinaldo	14	14
Indang	36	17
Magallanes	16	16
Maragondon	27	27
Mendez	24	20
Naic	30	10
Tagaytay City	37	36
Ternate	10	10
Total	829	851

Source: City/Municipal Nutrition Offices