

## Vital Health Indices and Nutrition

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 5.14 shows that the province of Cavite has 60 hospitals providing various 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) hospitals are classified as Level-2 general hospitals. Health services in Level 2 category, include Level-1 services and departmentalized clinical services, respiratory units, ICU, NICU and HRPU, high risk pregnancy unit, tertiary clinical laboratory, and 2nd level x-ray. There are two (2) are level-3 general hospitals in the province, 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 5.14 List of Licensed Government and Private Hospitals, Province of Cavite: as of December 31, 2016**

City/Municipality by District	Name of Hospital	Complete Address	Authorized Bed Capacity	Classification	Level	Service Capability
<b>1<sup>st</sup> District</b>						
Cavite City	Cavite Naval Hospital	Naval Pascual Ledesma, Fort San Felipe Cavite City	100	Government	Level 1	Clinical Laboratory (Secondary) X-Ray, Pharmacy
	Dra. Olivia Salamanca Memorial District Hospital	P. Gomez St, Cavite City	50	Government	Level 1	Clinical Laboratory (Secondary) X-Ray, Pharmacy
	Bautista Hospital	375 P. Burgos Ave., Caridad Cavite City	60	Private	Level 2	Clinical Laboratory (Tertiary, X-Ray, Pharmacy, CT-Scan
	A. De La Cruz Maternity Hospital	910 Crescini St. Caridad Cavite	11	Private	Level 1	Clinical Laboratory (Secondary) X-Ray, Pharmacy
	Cavite Medical Center	Dalahican Cavite City	60	Private	Level 2	Clinical Laboratory (Tertiary, X-Ray, Pharmacy, Dialysis (6)

City/Municipality by District	Name of Hospital	Complete Address	Authorized Bed Capacity	Classification	Level	Service Capability
Kawit	Kawit Kalayaan Hospital	San Sebastian Kawit Cavite	25	Government	Level 1	Clinical Laboratory (Primary)
Noveleta	Binakayan Hospital and Medical Center	179 Covelandia Rd., Brgy. Balsahan-Bisita, Binakayan Kawit Cavite	100	Private	Level 1	
	St. Martin Maternity and Pediatric Hospital	Salcedo II, Noveleta Cavite	50	Private	Level 1	Clinical Laboratory (Secondary) X-Ray, Pharmacy
Rosario	E. Contreras Medical Clinic	General Trias Drive, Poblacion, Rosario Cavite	24	Private	Level 1	Clinical Laboratory (Secondary) X-Ray, Pharmacy
	Our Savior Hospital, Inc.	General Trias Drive, Rosario Cavite	30	Private	Level 1	Clinical Laboratory(Secondary) X-Ray, Pharmacy
<b>2<sup>nd</sup> District</b>						
City of Bacoor	Bacoor District Hospital	Reyville Subdivision, Brgy. Habay II, City of Bacoor, Cavite	10	Government	Level 1	none
	Bacoor Doctors Medical Center	Molino Boulevard, Bayanan, City of Bacoor, Cavite	60	Private	Level 1	Clinical Laboratory (Secondary) X-Ray, Pharmacy, Blood Station
	Crisostomo General Hospital	Tirona Hi-way, Dulong Bayan, City of Bacoor	20	Private	Level 1	Clinical Laboratory (Secondary) X-Ray, Pharmacy
	Metro South Medical Center	National Road, Molino IV, City of Bacoor	50	Private	Level 2	Clinical Laboratory (Tertiary) X-Ray, Pharmacy, Dialysis (5)
	Molino Doctors Hospital	National Road, Molino II City of Bacoor	38	Private	Level 1	Clinical Laboratory (Secondary) X-Ray, Pharmacy, Dialysis (6), Mammography
	Prime Global Care Medical Center, Inc.	Blk 3, Lots 6,7,8 Cabeza's Corner Avenida Rizal, Bahayang Pag-asa Molino V, City of Bacoor	12	Private	Level 1	Clinical Laboratory (Secondary) X-Ray, Pharmacy
	Southeast Asian Medical Center, Inc.	Molino Road, Brgy. Molino II, City of Bacoor	50	Private	Level 2	Clinical Laboratory (Tertiary, X-Ray, Pharmacy, CT-Scan, Mammography, HIV Testing
	St. Dominic Medical Center, Inc.	Aguinaldo Highway, Talaba, City of Bacoor, Cavite	100	Private	Level 2	Clinical Laboratory(Tertiary)X-Ray, Pharmacy, CT Scan, Blood Station
	YR - St. Michael Medical Hospital, Inc.	220 Molino II, City of Bacoor, Cavite	48	Private	Level 1	Secondary Clinical Laboratory, X-Ray, Pharmacy, Blood Station
<b>3<sup>rd</sup> District</b>						
City of Imus	Imus Family Hospital, Inc.	Justineville II, Subdivision 2, Palico, City of Imus, Cavite	15	Private	Level 1	Clinical Laboratory(Secondary)X-Ray, Pharmacy
	Medical Center Imus	Diversion Road, Palico IV, City of Imus Cavite	90	Private	Level 1	-

City/Municipality by District	Name of Hospital	Complete Address	Authorized Bed Capacity	Classification	Level	Service Capability
	Our Lady of the Pillar Medical Center	Tamsui Avenue, Bayan Luma, City of Imus Cavite	98		Level 1	Clinical Laboratory(Tertiary)Blood Station, HIV Testing, Laboratory, Clinical Laboratory(Secondary)X-Ray, Pharmacy, Blood Station
	Paredes Primary Care Center	M. Paredes Bldg, Aguinald Highway, Bayan Luma IV, City of Imus	17	Private	Level 1	
<b>4<sup>th</sup> District</b>						
City of Dasmarinas	Asia Medic Family Hospital and Medical Center	Old Pala-pala Road, Sampaloc I, City of Dasmarinas	77	Private	Level 1	Clinical Laboratory(Secondary)X-Ray, Pharmacy
	Dasmarinas City Medical Center Inc.	Salawag Crossing, Salawag, City of Dasmarinas Cavite	60	Private	Level 1	Clinical Laboratory(Tertiary)X-Ray, Pharmacy, CT-Scan, Blood Station
	De La Salle University Medical Center	Congressional Avenue, City of Dasmarinas	250	Private	Level 3	Clinical Laboratory(Tertiary)X-Ray, Pharmacy, CT-Scan, Blood Station, HIV Testing, Mammography
	Emilio Aguinaldo College Medical Center	Brgy. Salitran II, City of Dasmarinas Cavite	154	Private	Level 2	Clinical Laboratory(Tertiary)X-Ray, Pharmacy, CT-Scan, Dialysis (4)
	Pagamutan Ng Damariñas	Burol I, City of Dasmarinas	119	Government	Level 1	
	St. Paul Hospital Cavite Inc.	Burol II, Bagong Bayan, City of Dasmarinas, Cavite	100	Private	Level 2	Clinical Laboratory(Tertiary)X-Ray, Pharmacy
<b>5<sup>th</sup> District</b>						
Carmona	Pagamutan Bayan Ng Carmona Carmona Hospital Medical Center	252 San Jose St. Barangay II	15	Government	Infirmarv	UTZ, X-Ray, Pharmacy, Clinical Lab etc. X-Ray, Ultrasound, Mammography, Pharmacy
		Macaria Business Center, Gov's. Drive, Purificacion St. Brgy. Mabuhay	71	Private	Level 1	
Silang	Estrella Hospital	Km 43 General Aguinaldo Highway, San Miguel Silang Cavite	20	Private	Level 1	Clinical Laboratory(Secondary)X-Ray, Pharmacy
	St. Mazonod Hospital Inc.	B113 L7 and 8 AFP Housing Bulihan Silang Cavite	12	Private	Level 1	Clinical Laboratory(Secondary)X-Ray, Pharmacy
	Velazco Hospital	J.P. Rizal St. Sabutan Silang Cavite	25	Private	Level 1	Clinical Laboratory(Secondary)X-Ray, Pharmacy, Dialysis (8)
	Silang Doctors Hospital	M.H. Del Pilar St., San Vicente 1, Silang, Cavite	10	Private	Level 1	
	Adventist University Hospital	Balibago, Tagaytay Road, Putting Kahoy	10	Private	Level 1	
	Silang Specialist Medical Center	Bypass, San Vicente II, Silang, Cavite	100	Private	Level 1	
General Mariano Alvarez	San Jose Hospital and Medical Center Inc.	Governor's Drive, Brgy, Maderan Gen. M. Alvarez, Cavite	25	Private	Level 1	Clinical Laboratory(Secondary)X-Ray, Pharmacy
	CarSigma District Hospital	Brgy. Poblacion I, Gen. M. Alvarez	19	Government	Level 1	
<b>6<sup>th</sup> District</b>						
City of General Trias	General Trias Medicare Hospital	Brgy. Pinagtupuhan, City of General Trias Cavite	10	Government	Level 1	Clinical Laboratory(Primary)
	Divine Grace Medical Center	Bypass Road, Tejero, City of General Trias, Cavite	50	Private	Level 1	-

City/Municipality by District	Name of Hospital	Complete Address	Authorized Bed Capacity	Classification	Level	Service Capability
Tanza	General Trias Maternity and Pediatric Hospital	Tejero, City of General Trias, Cavite	50	Private	Level 1	Clinical Laboratory(Secondary)X-Ray, Pharmacy, Dialysis (3)
	Gentri Doctors Medical Center Inc.	Governor's Drive Metropolis Green, Manggahan, City of General Trias, Cavite	69	Private	Level 1	Clinical Laboratory(Tertiary)X-Ray, Pharmacy, CT Scan, Blood Station, Dialysis (6)
	Gentri Medical Center and Hospital Inc.	Santosan St. Brgy. Manggahan, City of General Trias, Cavite	50	Private	Level 1	Clinical Laboratory(Tertiary)X-Ray, Pharmacy, Blood Station, Dialysis (4)
	JNRAL Family Corporation	A. Soriano Highway, Sahud Ulan Tanza Cavite	22	Private	Level 1	Clinical Laboratory(Secondary)X-Ray, Pharmacy
	Tanza Family General Hospital	A. Soriano Highway, Daang Amaya 2 Tanza Cavite	44	Private	Level 1	Clinical Laboratory(Secondary)X-Ray, Pharmacy, Dialysis (4) CT-Scan
Trece Martires City	General Emilio Aguinaldo Memorial Hospital	Brgy. Luciano Trece Martires City	284	Government	Level 3	Clinical Laboratory(Tertiary), X-ray, Pharmacy, CT-Scan, HIV Testing, Blood Bank
	M.V Santiago Medical Center	Brgy. De Ocampo Trece Martires City	75	Private	Care Facility	Clinical Laboratory(Secondary), X-ray, Pharmacy, CT-Scan, Dialysis (4)
	Cavite Center for Mental Health	38 Indang-Trece Road, Brgy. Luciano, Trece martires City	250	Government	Custodial Psychiatric	
<b>7<sup>th</sup> District</b>						
Alfonso	DLS-Dr. Rodolfo Poblete Memorial Hospital	Burgos St. Brgy 1. Alfonso Cavite	20	Private	Level 1	Clinical Laboratory(Secondary) Xray, Pharmacy
Maragondon Naic	Cavite Municipal Hospital	Maragondon Cavite	10	Government	Level 1	Clinical Laboratory(Primary)Pharmacy
	Naic Doctors Hospital, Inc.	Daang Makina Naic Cavite	30	Private	Level 1	-
	Naic Medicare Hospital	Antero Soriano Hi-Way	22	Private	Infirmery	Clinical Laboratory (Secondary) X-Ray, Pharmacy
Tagaytay City	First Filipino Saint Hospital	Governors Drive	50	Private	Level 1	
	UniHealth-Tagaytay Hospital and Medical Center	E. Aguinaldo Highway Silang Crossing East Rotonda Tagaytay City	90	Private	Level 1	-
	Ospital Ng Tagaytay	Kaybagal South (Poblacion), Tagaytay City	12	Government	Level 1	

Source: Provincial Health Office, Trece Martires City

## Hospital Bed-Population Ratio

One of indicators in measuring health service accessibility of hospital and other related facilities is sufficient hospital beds. As standard set by the Philippine Statistics Authority-National Statistics Coordination Board (PSA-NSCB), there should be one (1) hospital bed per 1,000 population. As shown in Table 5.15, the province of Cavite listed 60 hospitals of which the 12 government-owned hospitals had a combined bed capacity of 686, while private hospitals (47) had a combined bed capacity of 2,431. Bed population ratio stood at 0.82 hospital bed per 1,000 population using the 2016 projected population. Among seven districts, District 1 and 4 exceeded the standard bed-population ratio with a rate of 1.49 and 1.13, respectively. Cavite

City with 2.82 with 6 hospitals got the highest rate in District 1 followed by Trece Martires City with 2.14 per 1,000 individuals in the area. It can also be said that the province has a significantly sufficient hospital beds with an approximately one bed (rate of 0.82) per 1,000 individual.

**Table 5.15 Distribution of Hospital and Bed Population Ratio by City/Municipality, Province of Cavite: 2016**

City/Municipality by District	Government Hospital		Private Hospital		Total		Projected Population 2016	Authorized Bed Capacity	Rate per 1000 Population
	Number of Hospital	Bed Capacity	Number of Hospital	Bed Capacity	Number of Hospital	Bed Capacity			
<b>1<sup>st</sup> District</b>	<b>4</b>	<b>185</b>	<b>7</b>	<b>335</b>	<b>11</b>	<b>520</b>	<b>348,939</b>	<b>520</b>	<b>1.49</b>
Cavite City	3	160	3	131	6	291	103,130	291	2.82
Kawit	1	25	1	100	2	125	84,506	125	1.48
Noveleta	0	0	1	50	1	50	46,686	50	1.07
Rosario	0	0	2	54	2	54	114,617	54	0.47
<b>2<sup>nd</sup> District</b>	<b>1</b>	<b>10</b>	<b>8</b>	<b>378</b>	<b>9</b>	<b>388</b>	<b>617,269</b>	<b>388</b>	<b>0.63</b>
City of Bacoor	1	10	8	378	9	388	617,269	388	0.63
<b>3<sup>rd</sup> District</b>	<b>0</b>	<b>0</b>	<b>4</b>	<b>220</b>	<b>4</b>	<b>220</b>	<b>426,846</b>	<b>220</b>	<b>0.52</b>
City of Imus	0	0	4	220	4	220	426,846	220	0.52
<b>4<sup>th</sup> District</b>	<b>1</b>	<b>119</b>	<b>6</b>	<b>645</b>	<b>7</b>	<b>764</b>	<b>676,173</b>	<b>764</b>	<b>1.13</b>
City of Dasmariñas	1	119	6	645	7	764	676,173	764	1.13
<b>5<sup>th</sup> District</b>	<b>2</b>	<b>34</b>	<b>9</b>	<b>273</b>	<b>11</b>	<b>307</b>	<b>516,373</b>	<b>307</b>	<b>0.59</b>
Carmona	1	15	2	71	3	86	102,569	86	0.84
Gen. Mariano Alvarez	1	19	1	25	2	44	158,523	44	0.28
Silang	0	0	6	177	6	177	255,281	177	0.69
<b>6<sup>th</sup> District</b>	<b>2</b>	<b>294</b>	<b>8</b>	<b>385</b>	<b>10</b>	<b>679</b>	<b>770,601</b>	<b>679</b>	<b>0.88</b>
Amadeo	0	0	0	0	0	0	38,505	0	0.00
City of General Trias	1	10	5	244	6	254	330,001	254	0.77
Tanza	0	0	2	66	2	66	234,115	66	0.28
Trece Martires City	1	284	1	75	2	359	167,980	359	2.14
<b>7<sup>th</sup> District</b>	<b>3</b>	<b>44</b>	<b>5</b>	<b>195</b>	<b>8</b>	<b>239</b>	<b>448,983</b>	<b>239</b>	<b>0.53</b>
Alfonso	0	0	1	20	1	20	52,487	20	0.38
Gen. E. Aguinaldo	0	0	0	0	0	0	23,252	0	0.00
Indang	0	0	0	0	0	0	66,301	0	0.00
Magallanes	0	0	1	5	1	5	23,024	5	0.22
Maragondon	1	10	0	0	1	10	38,202	10	0.26
Mendez-Nuñez	0	0	0	0	0	0	32,126	0	0.00
Naic	1	22	2	80	3	102	116,546	102	0.88
Tagaytay City	1	12	1	90	2	102	73,071	102	1.40
Ternate	0	0	0	0	0	0	23,975	0	0.00
<b>Total</b>	<b>13</b>	<b>686</b>	<b>47</b>	<b>2,431</b>	<b>60</b>	<b>3,117</b>	<b>3,805,185</b>	<b>3,117</b>	<b>0.82</b>

Source: Provincial Health Office, Trece Martires City



## Local Health Facilities

Rural health units (RHUs) are created for every municipality to improve access to primary health care facilities and services in the barangay. 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.

In 2016, there are 38 RHUs operating in the province. City of Bacoor has seven (7) RHUs, Cavite City (5), City of Imus, (3), Gen. Mariano Alvarez (2), Silang (2), and the rest has one (1) RHU per city/municipality.

Meanwhile, barangay health station (BHS), as the primary health care facility at the barangay level, 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.

There are 578 BHS in the province. Most of them are situated in Silang (66), City of Imus (53), City of Dasmariñas (49), and City of Bacoor (41) (Table 5.16).

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 5.16 Number of Rural Health Units, Barangay Health Stations and Barangay Health Workers by City/Municipality, Province of Cavite: 2015 and 2016**

City/Municipality	Number of Barangays	Rural Health Units		Barangay Health Units		Barangay Health Workers	
		2015	2016	2015	2016	2015	2016
<b>1<sup>st</sup> District</b>	<b>143</b>	<b>9</b>	<b>9</b>	<b>54</b>	<b>57</b>	<b>294</b>	<b>292</b>
Cavite City	84	5	5	0	0	54	54
Kawit	23	2	2	22	23	86	84
Noveleta	16	1	1	13	13	33	33
Rosario	20	1	1	19	21	121	121
<b>2<sup>nd</sup> District</b>	<b>73</b>	<b>7</b>	<b>7</b>	<b>40</b>	<b>41</b>	<b>110</b>	<b>112</b>
City of Bacoor	73	7	7	40	41	110	112
<b>3<sup>rd</sup> District</b>	<b>97</b>	<b>3</b>	<b>3</b>	<b>82</b>	<b>53</b>	<b>72</b>	<b>71</b>
City of Imus	97	3	3	82	53	72	71
<b>4<sup>th</sup> District</b>	<b>75</b>	<b>2</b>	<b>1</b>	<b>84</b>	<b>49</b>	<b>215</b>	<b>215</b>
City of Dasmariñas	75	2	1	84	49	215	215
<b>5<sup>th</sup> District</b>	<b>105</b>	<b>5</b>	<b>5</b>	<b>106</b>	<b>106</b>	<b>311</b>	<b>322</b>
Carmona	14	1	1	12	12	109	109
Gen. Mariano Alvarez	27	2	2	28	28	86	97
Silang	64	2	2	66	66	116	116
<b>6<sup>th</sup> District</b>	<b>113</b>	<b>4</b>	<b>4</b>	<b>101</b>	<b>104</b>	<b>364</b>	<b>364</b>
Amadeo	26	1	1	14	14	50	50
City of Gen. Trias	33	1	1	35	37	152	152
Tanza	41	1	1	36	36	97	97
Trece Martires City	13	1	1	16	17	65	65
<b>7<sup>th</sup> District</b>	<b>223</b>	<b>9</b>	<b>9</b>	<b>180</b>	<b>168</b>	<b>1,013</b>	<b>1,024</b>
Alfonso	32	1	1	27	27	164	164
Gen. E. Aguinaldo	14	1	1	10	9	95	106
Indang	36	1	1	32	27	80	80
Magallanes	16	1	1	16	11	90	90
Maragondon	27	1	1	9	9	266	266
Mendez-Nuñez	24	1	1	24	24	71	71
Naic	30	1	1	27	26	142	142
Tagaytay City	34	1	1	34	34	48	48
Ternate	10	1	1	1	1	57	57
<b>Total</b>	<b>829</b>	<b>39</b>	<b>38</b>	<b>647</b>	<b>578</b>	<b>2,379</b>	<b>2,400</b>

Source: Provincial Health Office, Trece Martires City

## 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 56 doctors, 38 dentists, 202 nurses and 329 midwives employed in the city/municipal health offices. These resulted to the doctor-population ratio of 1:67,950 and dentist-population ratio of 1:100,136. As observed, this figure is too far to the standard doctor-population ratio of 1:20,000 and dentist-population ratio of 1:20,000. It is also noted that nurses comprising 33.38% of the total number of health personnel, has led to nurse-to-population ratio of 1:18,838. The standard ratio is 1:20,000, meaning the province has 12 nurses above the standard requirement. Moreover, midwives had marked the ratio of 1:11,566 against the standard ratio of 1:5,000 resulting to a backlog of 432 to meet the required 761 midwives. Based on estimates, there is a need to hire additional health personnel in RHUs particularly 134 doctors, and 152 dentists (Table 5.17).

**Table 5.17 Health Manpower to Population Ratio by City/Municipality, Province of Cavite: 2016**

District/City/Municipality	2016 Projected Population	Doctors	Doctors-Population Ratio	Dentist	Dentist-Population Ratio	Nurse	Nurse-Population Ratio	Midwives	Midwives-Population Ratio
<b>1<sup>st</sup> District</b>	<b>348,939</b>	<b>12</b>	<b>1: 29,078</b>	<b>8</b>	<b>1: 43,617</b>	<b>28</b>	<b>1: 12,462</b>	<b>55</b>	<b>1: 6,344</b>
Cavite City	103,130	7	1: 14,733	1	1: 103,130	10	1: 10,313	20	1: 5,157
Kawit	84,506	2	1: 42,253	2	1: 42,253	6	1: 14,084	10	1: 8,451
Noveleta	46,686	1	1: 46,686	1	1: 46,686	1	1: 46,686	6	1: 7,781
Rosario	114,617	2	1: 57,309	4	1: 28,654	11	1: 10,420	19	1: 6,032
<b>2<sup>nd</sup> District</b>	<b>617,269</b>	<b>7</b>	<b>1: 88,181</b>	<b>6</b>	<b>1: 102,878</b>	<b>27</b>	<b>1: 22,862</b>	<b>43</b>	<b>1: 14,355</b>
City of Bacoor	617,269	7	1: 88,181	6	1: 102,878	27	1: 22,862	43	1: 14,355
<b>3<sup>rd</sup> District</b>	<b>426,846</b>	<b>4</b>	<b>1: 106,711</b>	<b>5</b>	<b>1: 85,369</b>	<b>20</b>	<b>1: 21,342</b>	<b>34</b>	<b>1: 12,554</b>
Imus	426,846	4	1: 106,711	5	1: 85,369	20	1: 21,342	34	1: 12,554
<b>4<sup>th</sup> District</b>	<b>676,173</b>	<b>2</b>	<b>1: 338,087</b>	<b>1</b>	<b>1: 676,173</b>	<b>21</b>	<b>1: 32,199</b>	<b>31</b>	<b>1: 21,812</b>
City of	676,173	2	1: 338,087	1	1: 676,173	21	1: 32,199	31	1: 21,812
<b>5<sup>th</sup> District</b>	<b>516,373</b>	<b>10</b>	<b>1: 51,637</b>	<b>4</b>	<b>1: 129,093</b>	<b>20</b>	<b>1: 25,819</b>	<b>63</b>	<b>1: 8,196</b>
Carmona	102,569	5	1: 20,514	2	1: 51,285	6	1: 17,095	16	1: 6,411
Gen. Mariano Alvarez	158,523	1	1: 158,523	0	0: 158,523	7	1: 22,646	19	1: 8,343
Silang	255,281	4	1: 63,820	2	1: 127,641	7	1: 36,469	28	1: 9,117
<b>6<sup>th</sup> District</b>	<b>770,601</b>	<b>9</b>	<b>1: 85,622</b>	<b>7</b>	<b>1: 110,086</b>	<b>59</b>	<b>1: 13,061</b>	<b>51</b>	<b>1: 15,110</b>
Amadeo	38,505	1	1: 38,505	1	1: 38,505	1	1: 38,505	4	1: 9,626
City of Gen. Trias	330,001	3	1: 110,000	3	1: 110,000	40	1: 8,250	20	1: 16,500
Tanza	234,115	4	1: 58,529	1	1: 234,115	12	1: 19,510	13	1: 18,009
Trece Martires	167,980	1	1: 167,980	2	1: 83,990	6	1: 27,997	14	1: 11,999
<b>7<sup>th</sup> District</b>	<b>448,983</b>	<b>12</b>	<b>1: 37,415</b>	<b>7</b>	<b>1: 64,140</b>	<b>27</b>	<b>1: 16,629</b>	<b>52</b>	<b>1: 8,634</b>
Alfonso	52,487	1	1: 52,487	0	0: 52,487	7	1: 7,498	5	1: 10,497
Gen. E. Aguinaldo	23,252	1	1: 23,252	0	0: 23,252	1	1: 23,252	5	1: 4,650
Indang	66,301	2	1: 33,151	0	0: 66,301	4	1: 16,575	6	1: 11,050
Magallanes	23,024	1	1: 23,024	1	1: 23,024	2	1: 11,512	6	1: 3,837
Maragondon	38,202	1	1: 38,202	1	1: 38,202	1	1: 38,202	4	1: 9,550
Mendez-Nuñez	32,126	1	1: 32,126	1	1: 32,126	3	1: 10,709	3	1: 10,709
Naic	116,546	2	1: 58,273	1	1: 116,546	4	1: 29,137	14	1: 8,325
Tagaytay City	73,071	2	1: 36,535	2	1: 36,535	4	1: 18,268	6	1: 12,178
Ternate	23,975	1	1: 23,975	1	1: 23,975	1	1: 23,975	3	1: 7,992
<b>Total</b>	<b>3,805,185</b>	<b>56</b>	<b>1: 67,950</b>	<b>38</b>	<b>1:100,136</b>	<b>202</b>	<b>1: 18,838</b>	<b>329</b>	<b>1: 11,566</b>

Source: 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 5.18).

Crude birth rate is the ratio of live births per 1,000 population during a given period. For the year 2016, the crude birth rate in the province is 11.07 births per 1,000 total populations, compared to 12.03 per 1,000 total populations in 2015, which recorded a decrease of 0.96 (7.98%) 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 0.8% in 2016 (3.44%) from 3.41% in 2015. 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.

Infant Mortality Rate refers to the number of deaths among infants (below one-year) per 1,000 live births. The province’s infant mortality rate for the year 2016 increased by 1.2% from the previous year’s rate of 10.94%.

Maternal mortality rate includes 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 52.00 in 2015 to 54.91 in 2016. Having a physician, nurse or midwife who has formal training present during the birth decreases the maternal mortality rate.

**Table 5.18 Vital Health Indices, Province of Cavite: 2014 to 2016**

Vital Health Indices	2014	2015	2016
Crude Birth Rate	13.43	12.03	11.07
Crude Death Rate	2.71	3.41	3.44
Infant Mortality Rate	7.53	10.94	12.13
Maternal Mortality Rate	51.00	52.00	54.91

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 2016, the ten leading causes of morbidity were Acute Upper Respiratory Tract Infection with a rate of 3,638.26 per 100,000 populations, followed by Acute Lower Respiratory Tract Infection (907.82), Hypertension (746.74), Accidents (642.67), Sermatosis (537.20), Disorder of the Urinary System (478.32), Disorder of the Gastrointestinal Tract (336.83), Intestinal Infectious Diseases (128.38), Diabetes Mellitus (121.34), and Arthropathies (53.89). (Table 5.19)

**Table 5.19 Ten Leading Causes of Morbidity (Rate per 100,000 population), Province of Cavite: 2016**

No.	Cases	Number	Rate/ 100,000 population
1	Acute Upper Respiratory Infections	143,539	3,638.26
2	Acute Lower Respiratory Infections	35,820	907.92
3	Hypertension	29,461	746.74
4	Accidents	25,355	642.67
5	Sermatosis	21,194	537.20
6	Disorder of the Urinary System	18,871	478.32
7	Disorder of Gastrointestinal Tract	13,289	336.83
8	Intestinal Infectious Diseases	5,065	128.38
9	Diabetes Mellitus	4,787	121.34
10	Arthropathies	2,126	53.89

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 are Heart Diseases (101.51 per 100,000 population), Pneumonia (52.34), followed by Malignant Neoplasms (30.11), Accidents (19.31),



Hypertensive Failures (18.73) Renal Failure (17.01), Cerebrovascular Diseases (12.07), Diabetes Mellitus (12.01), Acute Upper Respiratory Tract Infection (9.89), and Tuberculosis (8.69). (Table 5.20).

**Table 5.20 Ten Leading Causes of Mortality (Rate per 100,000 population) Province of Cavite: 2016**

No.	Cases	Number	Rate/ 100,000 population
1	Heart Diseases	4,005	101.51
2	Pneumonia	2,065	52.34
3	Malignant Neoplasm	1,188	30.11
4	Accidents	762	19.31
5	Hypertensive Diseases	739	18.73
6	Renal Diseases	671	17.01
7	Cerebrovascular Diseases	476	12.07
8	Diabetes Mellitus	474	12.01
9	Acute Upper Respiratory Tract Infection	390	9.89
10	Tuberculosis	343	8.69

Source: Provincial Health Office, Trece Martires City

### Ten 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 are hemorrhage and eclampsia (Table 5.21).

**Table 5.21 Leading Causes of Maternal Mortality 2016**

Cases	Number
Haemorrhage	15
Eclampsia	6
Others	3
<b>Total</b>	<b>24</b>

### 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 2016 are complication during pregnancy (labor and delivery), followed by respiratory and cardiovascular disorder, pneumonia, acute upper respiratory infections, blood dyscracia, congenital malformation, heart diseases, disorder of the nervous system, metabolic disorder, and intestinal infectious diseases. (Table 5.22). With this data, the DOH is still working to achieve the 100% medical facility deliveries in the province.

**Table 5.22 Ten Leading Causes of Infant Mortality (Rate per 100,000 population), Province of Cavite: 2016**

No.	Cases	Number	Rate/ 100,000 population
1	Complication during pregnancy, labor and delivery	133	3.85
2	Respiratory and cardiovascular disorder	127	3.68
3	Pneumonia	84	2.43
4	Acute Upper Respiratory Infections	59	1.71
5	Blood Dyscracia	50	1.45
6	Congenital Malformation	39	1.13
7	Heart Diseases	20	0.58
8	Disorder of the nervous system	14	0.4
9	Metabolic disorder	11	0.31
10	Intestinal infectious diseases	9	0.26

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 master list 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 2016, about 873,277 children ages 0-71 months old are targeted for OPT Plus, of which 63.03% or 550,466 have been subjected to weighing. From the 550,466 children weighed, 506,091 children are categorized normal that results to a normal prevalence rate of 91.94%. Of the total 27,357 underweight children, 18,638 are considered as underweight while 8,719 are severely underweight.

In terms of underweight and severely underweight prevalence rate, the City of Bacoor got the highest prevalence of 10.7% and 7.48%, respectively. The municipality of Tagaytay City has the lowest rate of 0.94% and 0.03%, correspondingly (Table 5.23).

## 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 to be 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 and monitoring their progress through a systematic nutrition program. 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 5.24 shows that there were 861 barangay nutrition scholars in Cavite. The City of Dasmariñas has the most number of BNS with 165, followed by City of Imus with 97 BNS and City of Bacoor with 69 BNS. The municipality of Amadeo has the least number of BNS (7).



Table 5.23 Operation Timbang Results among 0-71 Months Old Preschool Children by City/Municipality, Province of Cavite: 2016

Municipalities/ Cities	2016 Population	Estimated Number of Preschoolers (13.5%)	Number of PS Weighed	Percent Coverage	Overweight		Normal		Underweight		Severely Underweight	
					Number	Prevalence (%)	Number	Prevalence (%)	Number	Prevalence (%)	Number	Prevalence (%)
<b>1<sup>st</sup> District</b>	<b>338,707</b>	<b>45,725</b>	<b>27,072</b>	<b>59.21</b>	<b>1,320</b>	<b>4.88</b>	<b>24,456</b>	<b>90.34</b>	<b>941</b>	<b>3.48</b>	<b>355</b>	<b>1.31</b>
Cavite City	102,104	13,784	6,745	48.93	273	4.05	6,031	89.41	325	4.82	116	1.72
Kawit	85,408	11,530	7,237	62.77	445	6.15	6,432	88.88	252	3.48	108	1.49
Noveleta	47,864	6,462	3,569	55.23	54	1.51	3,400	95.26	107	3.00	8	0.22
Rosario	103,331	13,950	9,521	68.25	548	5.76	8,593	90.25	257	2.70	123	1.29
<b>2<sup>nd</sup> District</b>	<b>703,974</b>	<b>95,036</b>	<b>46,722</b>	<b>49.16</b>	<b>2,660</b>	<b>5.69</b>	<b>35,533</b>	<b>76.05</b>	<b>5,034</b>	<b>10.77</b>	<b>3,495</b>	<b>7.48</b>
City of Bacoor	703,974	95,036	46,722	49.16	2,660	5.69	35,533	76.05	5,034	10.77	3,495	7.48
<b>3<sup>rd</sup> District</b>	<b>384,214</b>	<b>51,869</b>	<b>22,909</b>	<b>44.17</b>	<b>1,003</b>	<b>4.38</b>	<b>20,718</b>	<b>90.44</b>	<b>844</b>	<b>3.68</b>	<b>344</b>	<b>1.50</b>
City of Imus	384,214	51,869	22,909	44.17	1,003	4.38	20,718	90.44	844	3.68	344	1.50
<b>4<sup>th</sup> District</b>	<b>725,962</b>	<b>98,005</b>	<b>61,630</b>	<b>62.88</b>	<b>1,205</b>	<b>1.96</b>	<b>58,646</b>	<b>95.16</b>	<b>1,286</b>	<b>2.09</b>	<b>493</b>	<b>0.80</b>
City of Dasmariñas	725,962	98,005	61,630	62.88	1,205	1.96	58,646	95.16	1,286	2.09	493	0.80
<b>5<sup>th</sup> District</b>	<b>502,509</b>	<b>67,839</b>	<b>46,193</b>	<b>68.09</b>	<b>1,740</b>	<b>3.77</b>	<b>42,724</b>	<b>92.49</b>	<b>1,263</b>	<b>2.73</b>	<b>466</b>	<b>1.01</b>
Carmona	96,443	13,020	8,899	68.35	331	3.72	8,319	93.48	180	2.02	69	0.78
Gen. Mariano Alvarez	153,622	20,739	17,364	83.73	632	3.64	15,954	91.88	570	3.28	208	1.20
Silang	252,444	34,080	19,930	58.48	777	3.90	18,451	92.58	513	2.57	189	0.95
<b>6<sup>th</sup> District</b>	<b>866,651</b>	<b>116,998</b>	<b>84,412</b>	<b>72.15</b>	<b>2,227</b>	<b>2.64</b>	<b>78,624</b>	<b>93.14</b>	<b>2,474</b>	<b>2.93</b>	<b>1,087</b>	<b>1.29</b>
Amadeo	38,348	5,177	3,404	65.75	120	3.53	3,154	92.66	79	2.32	51	1.50
City of Gen. Trias	392,477	52,984	33,863	63.91	1,570	4.64	30,164	89.08	1,375	4.06	754	2.23
Tanza	256,023	34,563	26,756	77.41	210	0.78	26,149	97.73	273	1.02	124	0.46
Trece Martires City	179,803	24,273	20,389	84.00	327	1.60	19,157	93.96	747	3.66	158	0.77
<b>7<sup>th</sup> District</b>	<b>403,036</b>	<b>54,410</b>	<b>36,728</b>	<b>67.50</b>	<b>1,004</b>	<b>2.73</b>	<b>34,567</b>	<b>94.12</b>	<b>935</b>	<b>2.55</b>	<b>222</b>	<b>0.60</b>
Alfonso	53,641	7,242	4,647	64.17	170	3.66	4,347	93.54	109	2.35	21	0.45
Gen. E. Aguinaldo	19,330	2,610	1,712	65.61	40	2.34	1,621	94.68	44	2.57	7	0.41
Indang	68,007	9,181	5,802	63.20	302	5.21	5,282	91.04	164	2.83	54	0.93
Magallanes	22,847	3,084	2,109	68.38	69	3.27	1,911	90.61	94	4.46	35	1.66
Maragondon	37,100	5,009	3,414	68.16	110	3.22	3,091	90.54	163	4.77	50	1.46
Mendez-Nuñez	31,894	4,306	2,859	66.40	136	4.76	2,612	91.36	87	3.04	24	0.84
Naic	96,790	13,067	9,904	75.80	101	1.02	9,559	96.52	215	2.17	29	0.29
Tagaytay City	73,427	9,913	6,281	63.36	76	1.21	6,144	97.82	59	0.94	2	0.03
Ternate	20,212	2,729	2,096	76.82	72	3.44	1,944	92.75	67	3.20	13	0.62
<b>Total</b>	<b>7,511,399</b>	<b>873,277</b>	<b>550,466</b>	<b>63.03</b>	<b>17,018</b>	<b>3.09</b>	<b>506,091</b>	<b>91.94</b>	<b>18,638</b>	<b>3.39</b>	<b>8,719</b>	<b>1.58</b>

Source: Provincial Health Office, Trece Martires City

Table 5.24 Number of Barangay Nutrition Scholars, Province of Cavite: 2016

City/Municipality	Number of Barangay	Number of BNS	Percentage
<b>1<sup>st</sup> District</b>	<b>144</b>	<b>86</b>	<b>59.72</b>
Cavite City	84	35	41.67
Kawit	23	11	47.83
Noveleta	16	17	106.25
Rosario	21	23	109.52
<b>2<sup>nd</sup> District</b>	<b>73</b>	<b>69</b>	<b>94.52</b>
City of Bacoor	73	69	94.52
<b>3<sup>rd</sup> District</b>	<b>97</b>	<b>97</b>	<b>100.00</b>
City of Imus	97	97	100.00
<b>4<sup>th</sup> District</b>	<b>75</b>	<b>165</b>	<b>220.00</b>
City of Dasmariñas	75	165	220.00
<b>5<sup>th</sup> District</b>	<b>105</b>	<b>102</b>	<b>97.14</b>
Carmona	14	11	78.57
Gen. Mariano Alvarez	27	27	100.00
Silang	64	64	100.00
<b>6<sup>th</sup> District</b>	<b>113</b>	<b>160</b>	<b>141.59</b>
Amadeo	26	7	26.92
City of Gen Trias	33	59	178.79
Tanza	41	44	107.32
Trece Martires City	13	50	384.62
<b>7<sup>th</sup> District</b>	<b>226</b>	<b>182</b>	<b>80.53</b>
Alfonso	32	32	100.00
Gen. E. Aguinaldo	14	14	100.00
Indang	36	17	47.22
Magallanes	16	16	100.00
Maragondon	27	27	100.00
Mendez-Nuñez	24	20	83.33
Naic	30	10	33.33
Tagaytay City	37	36	97.30
Ternate	10	10	100.00
<b>Total</b>	<b>833</b>	<b>861</b>	<b>103.36</b>

Source: Provincial Health Office, Trece Martires City

