

Vision and Goals

Healthy City Gangnam District



Vision

By enhancing community participation and intersectoral collaboration, Healthy City Gangnam District will ensure the highest level of health and quality of life and states the vision as:

- **Warm and Friendly Gangnam**
- **Green and Clean Gangnam**
- **Future-Oriented Gangnam**

Goals

- **Promote an Active and Healthy Community**

The health and well-being of the community will be established through “settings”, supportive social and physical environments that enables people to increase control over and improve their health. Actions will include Healthy Schools Gangnam Initiative, promoting Healthy Workplace and increased role of the Health Promotion Center and other Community Centers around the Gangnam District.

- **Create Sustainable Environment**

Gangnam District is a home to excellent natural environment such as the Yangjae Stream, Tan Stream and the Daemo Mountain. Healthy City Gangnam District will strive to create an environment where the citizens have full opportunity to enjoy these beautiful nature surroundings and increase neighborhood green space by planting more trees and building more parks.

- **Activate Education and Culture**

Building empowerment and social capital for the participation of the citizens is a key factor in the Healthy City Gangnam District approach. An active social environment to create maximized support and participation will be promoted through actions aimed towards citizen groups in all levels, such as schools, workplace, culture centers, shopping areas, sports clubs, leisure clubs and support groups, etc.

- **Develop Innovative Transportation System**

Gangnam District has been known for its efforts in discovering innovative solutions to problems. We have a working group who will analyze effects and design plans to build a monorail transportation system to resolve the notorious traffic situations in Gangnam District. A new system with emphasis on sustainability and health such as monorail systems and bicycle paths will be operated in the near future.

- **Create a Safe and Friendly City**

Ensuring safety is an essential factor in enhancing quality of life. Gangnam District will operate CCTV systems, install more streetlights and practice more safety inspections and in buildings, roads, worksites and other areas that have a risk to the citizens' safety to propose ways to improve the quality of Gangnam's safety.

- **Develop Future-oriented City Infrastructure**

The relationship between urban planning and health is critical and Gangnam District will put health and physical, mental and social well-being on the top of all issues. Ensuring affordable housing, building sustainable apartments and roads, renovating old structures will be a key action area where more emphasis should be on ensuring a healthy physical environment for the well-being of the citizens.

- **Create Lively Community Economy**

Gangnam District is one of the main centers of economy and commerce in Korea. The citizens are relatively higher in the socioeconomic status. However, a remarkable inequality exists in a few areas where the unprivileged live under government assistance. More actions towards the economic well-being of the district in reducing unemployment and securing household economy will be implemented to create a livelier community economy.

District Profile

Healthy City Gangnam District



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1. General Information

This picture illustrates Samsung-dong area, with the Korea World Trade Center Building in the center.



This is an aerial photo of Gangnam District.



1) History

Gangnam District had been a part of Taewang-myon and Unju-myon, Kangju-gun and Sangbuk-myon, Kwachun-gun, Kyunggi Province during the Yi Dynasty. By the Law 1172 enacted on Jan. 1, 1963, some parts of Kwangju-gun and Shiheung-gun, Kyunggi Province were included in Seoul. The Onju branch office, Sonpa Branch Office and Chunho Branch Office were then established, respectively.

By the 6548th Presidential Decree on Jul. 1, 1973, the Yongdong Branch of Sungdong District was established. It governs 4 districts in the Unju Branch Office, Jamshil-dong in Sungdong District, Irwon-dong and Segok-dong in Songpa Branch Office, Seocho-dong and Yangjae-dong and Jamwon-dong in Sonpa Branch Office of Yongdeungpo District. By the 7816th Presidential Decree of Oct. 1, 1979, 5 dongs(Jamshil 1- dong to Jamshil 5-dong) were included in Kangdong District with the administrative district intervention. And by the 12367th Presidential Decree enacted on Jan. 1, 1988, Seocho District was separated from Gangnam District.

Due to local government law, Gangnam District was promoted to a self-governing district as of May 1, 1988. It now governs 15 legal dongs and 26 administrative dongs.

2) Symbols

(1) Municipal Emblem



The dynamic elliptical form in the middle of this emblem represents development for the future. The Korean characters “ㄱ” and “ㄴ” are the initial of Gangnam and these vivid images are integrated in the harmony of round and diagonal shapes. They also imply the cozy living atmosphere and modern buildings, symbolizing lively residential and business area.

(2) Official Tree – Ginkgo

The ginkgo tree symbolizes good health, longevity and nobility.

(3) Official Flower - Magnolia

The magnolia flower, with its blossoms in the early spring, symbolizes people's love for nature and high spirits.

(4) Official Bird – Magpie

Koreans regard this bird as a messenger of good news. It symbolizes progress and harmony of our district.

3) Geographical Information

Gangnam District is located in southeast Seoul. The east borders with Songpa district at Tanchun, and the west with Seocho district at Gangnamdaero. The south borders with Seongnam City, Gyunggi Province at Mt. Daemo in Saegok-dong and the north borders with Seongdong district at the Han River.

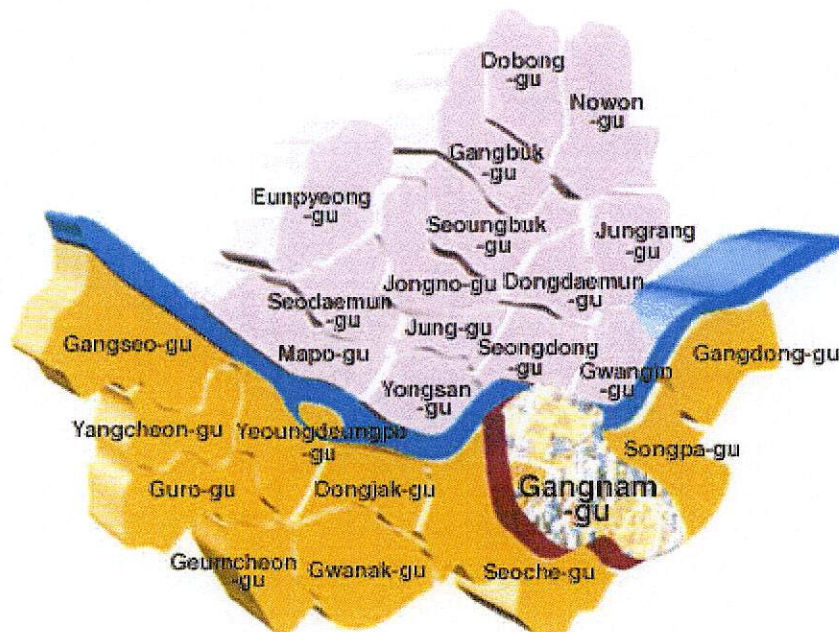


Chart 1. Map of Seoul (Gangnam District Website,2005)

The area of Gangnam District was 85.44km² in 1987. After its division in 1988, the Gangnam area was reduced to 38.97 km². As of December, 1999, the residential area constitutes up to 51.8%, the commercial area 5.7%, and the green area 42.7% of the total area.

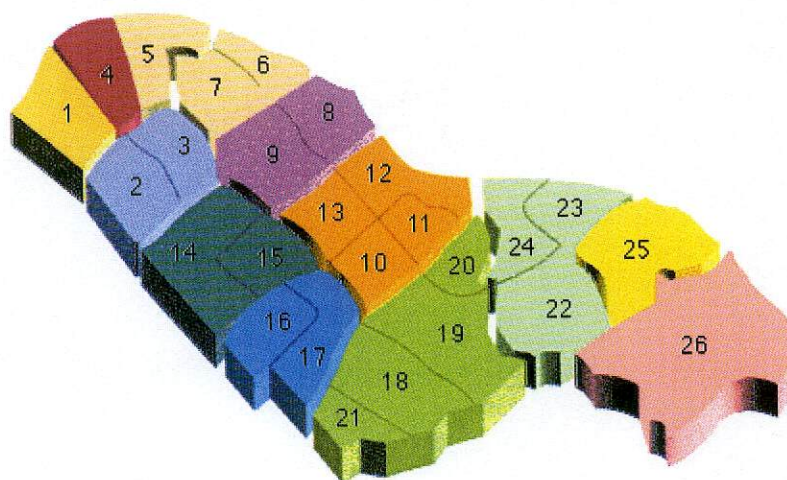


Chart 2. Map of Gangnam District and Dongs (Gangnam District Website, 2005)

1: Sinsa-dong	10: Deachi 1-dong	19: Gaepo 2-dong
2: Nonhyeon 1-dong	11: Deachi 2-dong	20: Gaepo 3-dong
3: Nonhyeon 2-dong	12: Deachi 3-dong	21: Gaepo 4-dong
4: Apgujeong 1-dong	13: Deachi 4-dong	22: Irwonbon-dong
5: Apgujeong 2-dong	14: Yeoksam 1-dong	23: Irwon 1-dong
6: Cheongdam 1-dong	15: Yeoksam 2-dong	24: Irwon 2-dong
7: Cheongdam 2-dong	16: Dogok 1-dong	25: Suseo-dong
8: Samseong 1-dong	17: Dogok 2-dong	26: Segok-dong
9: Samseong 2-dong	18: Gaepo 1-dong	

4) Demographical Information

(1) Total Population

The total population in 2004 was 531,517 people, of which 258,371 males(48.6%) and 273,146 females (51.4%). The population constitutes 5.17% of the total population of Seoul City, which is 10,287,847. The population density shows an average of 13,439persons/ km² with Daechi-dong being ranking the densest area with 42,279persons/ km².

Breaking the population into age groups, 15.77% of the population are between the ages 0-14, 78.61% are between ages 15-64 and those aged over 65 constitute 5.62% of the residents.

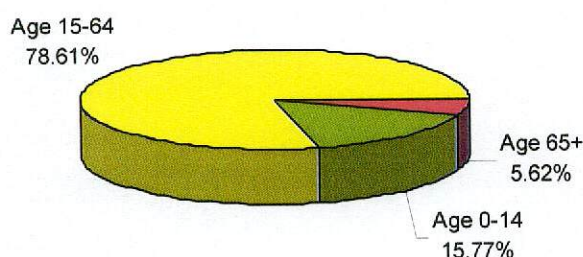


Chart 3. Population by Age Groups (National Registry, 2004)

The age group with the most people is ages 25-29, which counts 10.50% of the total. Children between ages 0-4 and ages 5-9 count 3.75% and 4.91%, respectively. This is lower than the average of Seoul, which is 5.1% and 6%. However, young adults between ages 10-14 and 15-19 constitute 7.11% and 7.8%, respectively, which is higher than the average of Seoul, which is 6.4% for both groups. This is consistent with the higher proportion of ages 40-44 and 45-49, who are the parents of these young adults, implying that most of the families consist of children attending secondary school.

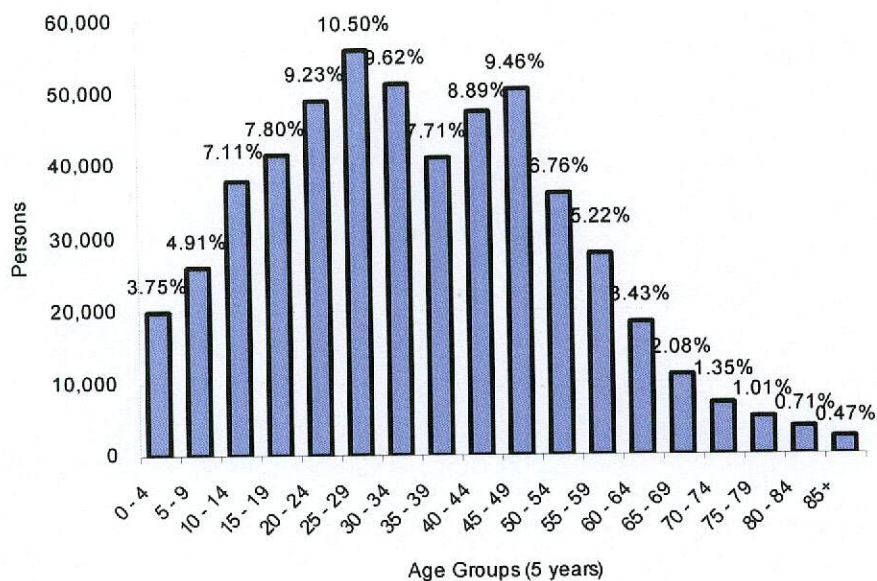


Chart 4. Population Distribution by Age (5 Years) (National Registry, 2004)

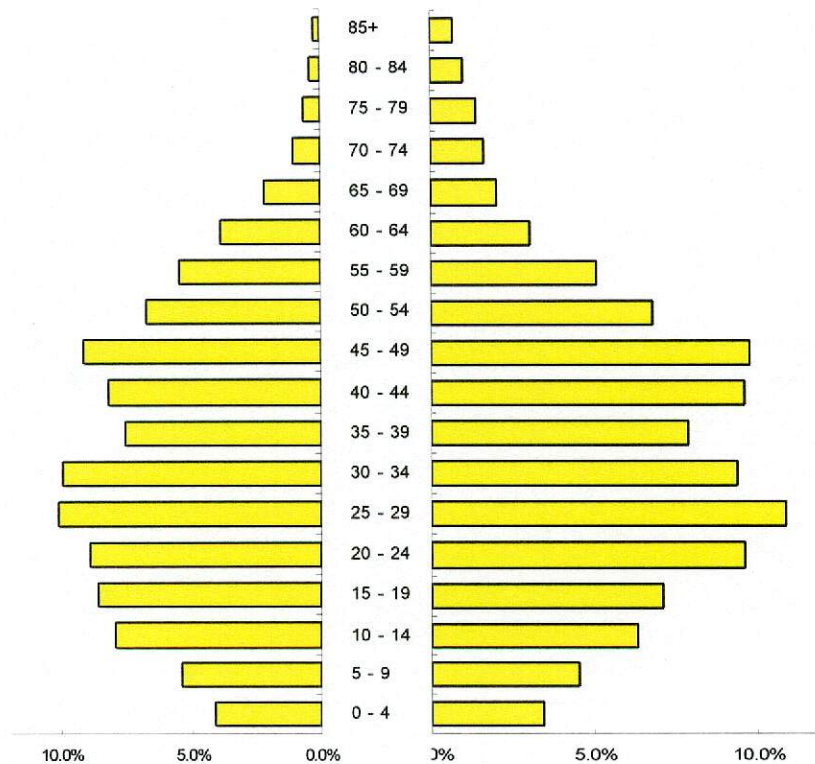


Chart 5. Age Pyramid (National Registry, 2004)

There is an average of 20,582 people living in each dong. The number of people living by dong is shown in the following chart. Yeoksam 1-dong provides residence for the most people, 34,435, and Segok-dong the least of 6,046.

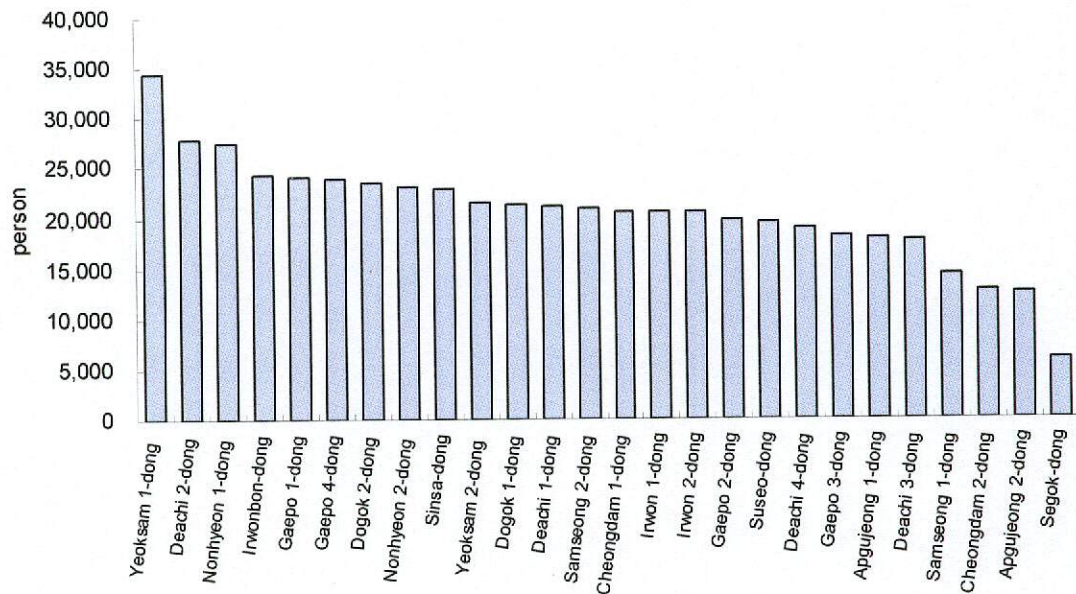


Chart 6. Number of Residents by Area("dongs") (National Registry, 2004)

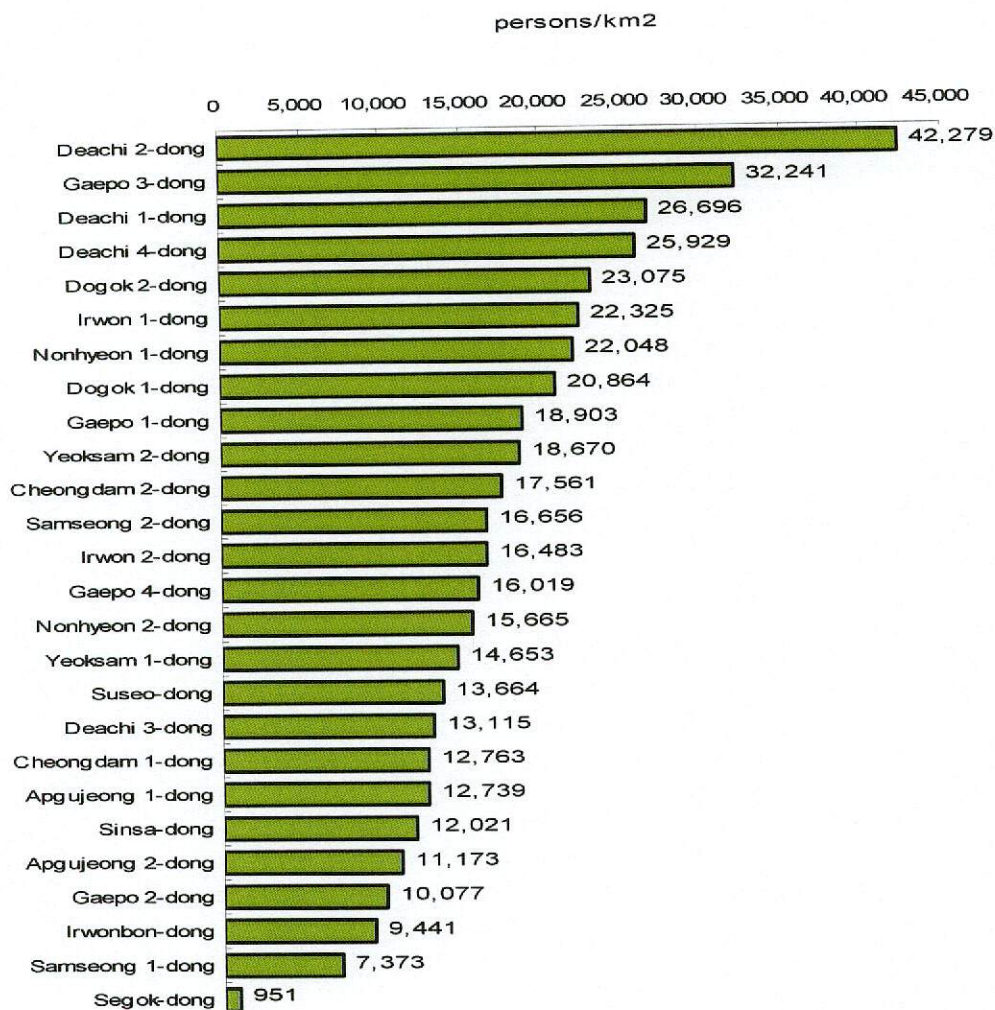


Chart 7. Population Density by Area("dongs") (National Registry, 2004)

(2) Population Transition

The crude birth rate in the 1990s was between 10-12 births/1,000 persons and reduced significantly to 3.0 births/1,000persons in 2002 and is slowly on the rise recently. The crude death rate shows similar patterns, with the lowest rates in 2002 and rising again to 3.0 deaths/1,000persons currently.

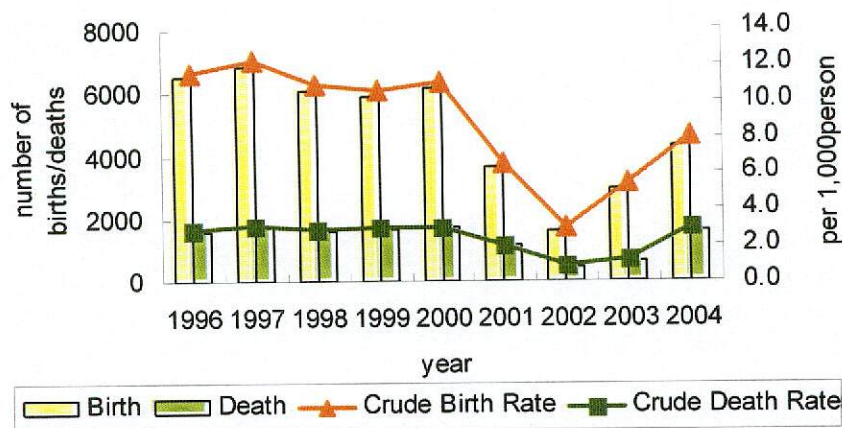


Chart 8. Birth/Death Statistics (Gangnam Statistical Information, 2005)

A total of 3,739 couples got married and 1,167 couples got divorced in 2004. Marriages and divorce numbers do not show a distinctive trend, though the number of marriages differs from year to year whereas the number of divorce shows a gradual increase since 1998.

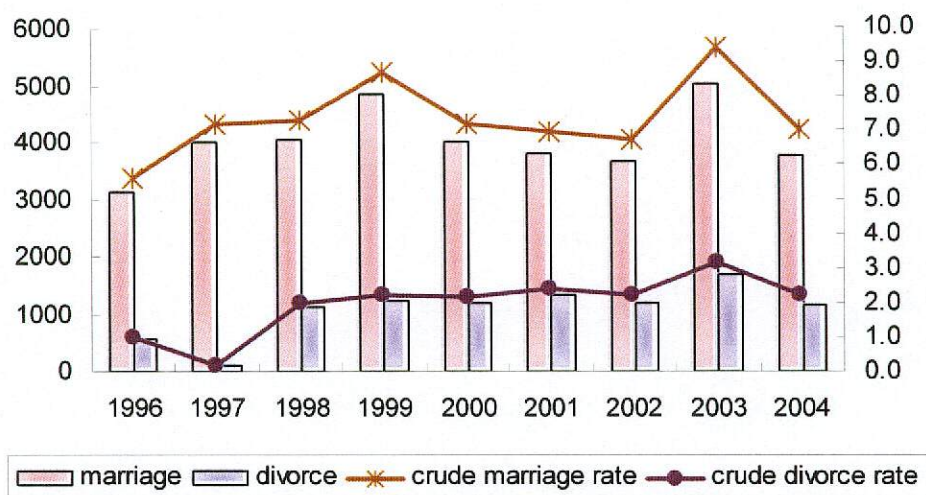


Chart 9. Marriage and divorce (Gangnam Statistical Information, 2005)

5) Administration

(1) Municipal Budget

The total revenue for public services in Gangnam District for 2004 was KRW 404,674 million (USD 404,674 million). This year the revenue is expected at KRW 434,493 million (USD 434,493 million).

	2005		2004		Variation
	Amount (million won)	Ratio (%)	Amount (million won)	Ratio (%)	Amount (million won)
Total	434,493	100.0	404,674	100.0	29,819
General Accounts	395,497	91.0	359,377	88.7	+36,120
Special Accounts	38,996	9.0	45,297	11.3	+6,301
Medical Care Fund	101	0.1	103	0.1	2
Saemaeul Income Support	435	0.1	435	0.1	50
Parking Lot	38,460	8.8	44,759	11.1	Δ2,860

The settled expenditure of general accounts for the fiscal year 2005 is KRW 395,497,366(USD 395,497,366), of which KRW 163,040,247(USD 163,040,247) is allocated to general administration, KRW 176,824,305 (USD 176,824,305) to social development, KRW 49,986,381 (USD 49,986,381) to economic development.

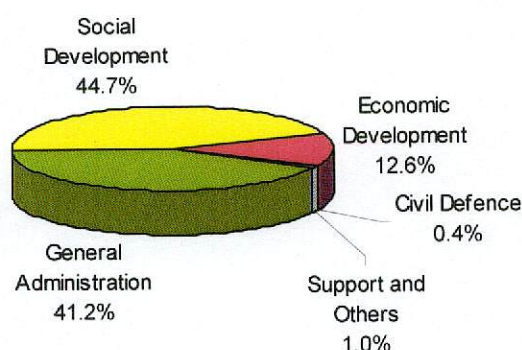


Chart 10. Expenditure of General Accounts (Gangnam District Website, 2005)

Breakdown of social development expenditure is shown in the following chart. Most of the expenditure is allocated towards the Healthy Living Environment Development sector, which is constituted of health services such as health and sanitation practices, health education and promotion activities, and medical services by the Health Center. Also environmental services and maintenance of parks and green spaces are also included in this sector.

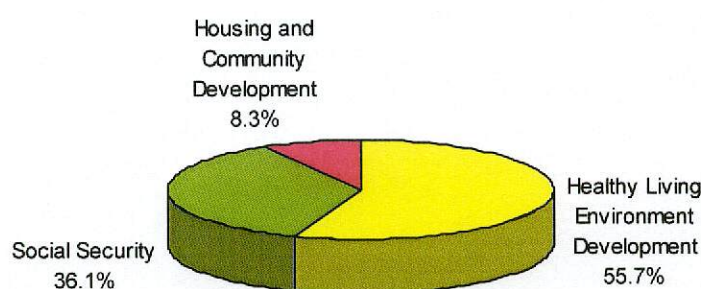


Chart 11. Breakdown of Social Development Expenditure (Gangnam District Website, 2005)

(2) Administrative Structure

Chart 12 shows the administrative organization of the District Office.

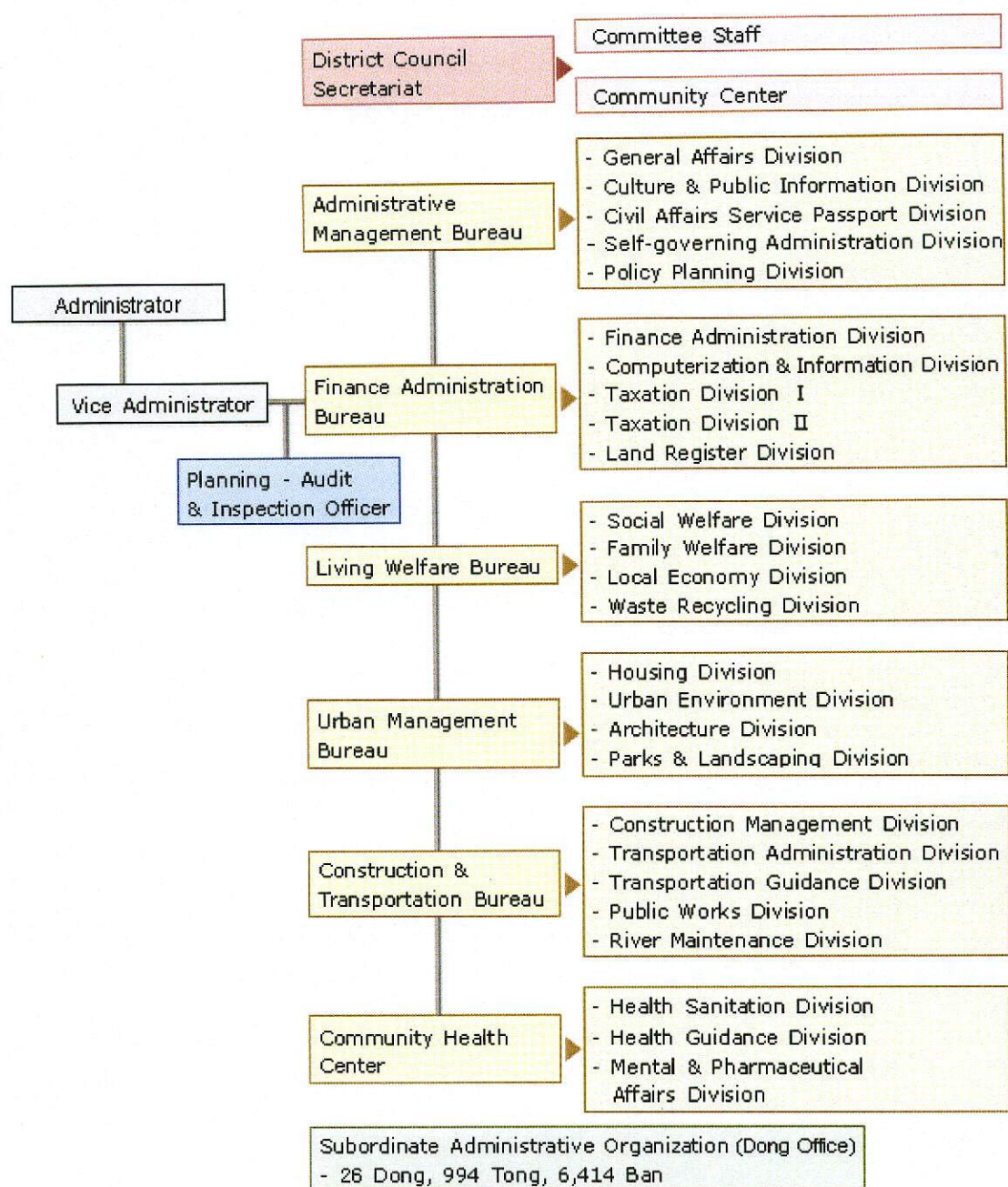


Chart 12. District Office Organization

The chart below illustrates the structure of the District Council.

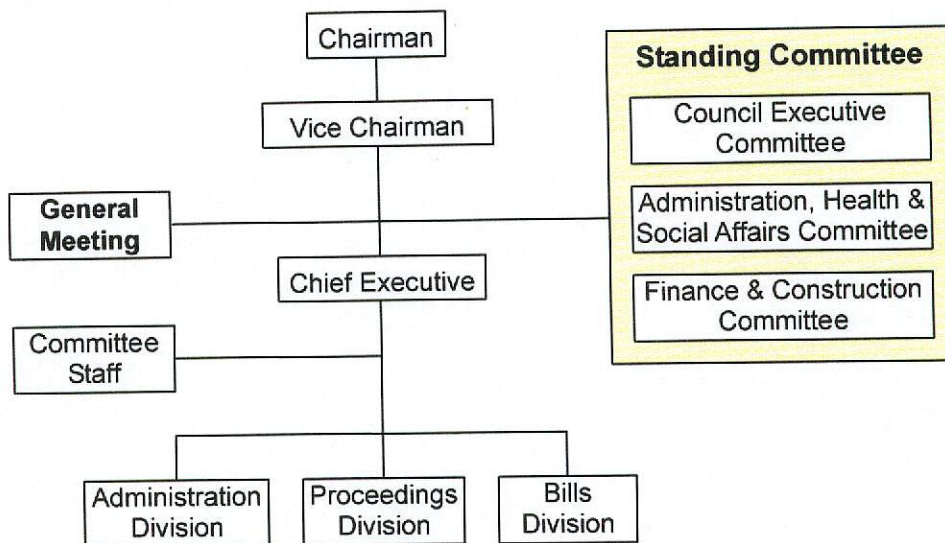


Chart 13. District Council Organization

The Healthy Cities Task Force is not yet established, but will be operated in the following structure.

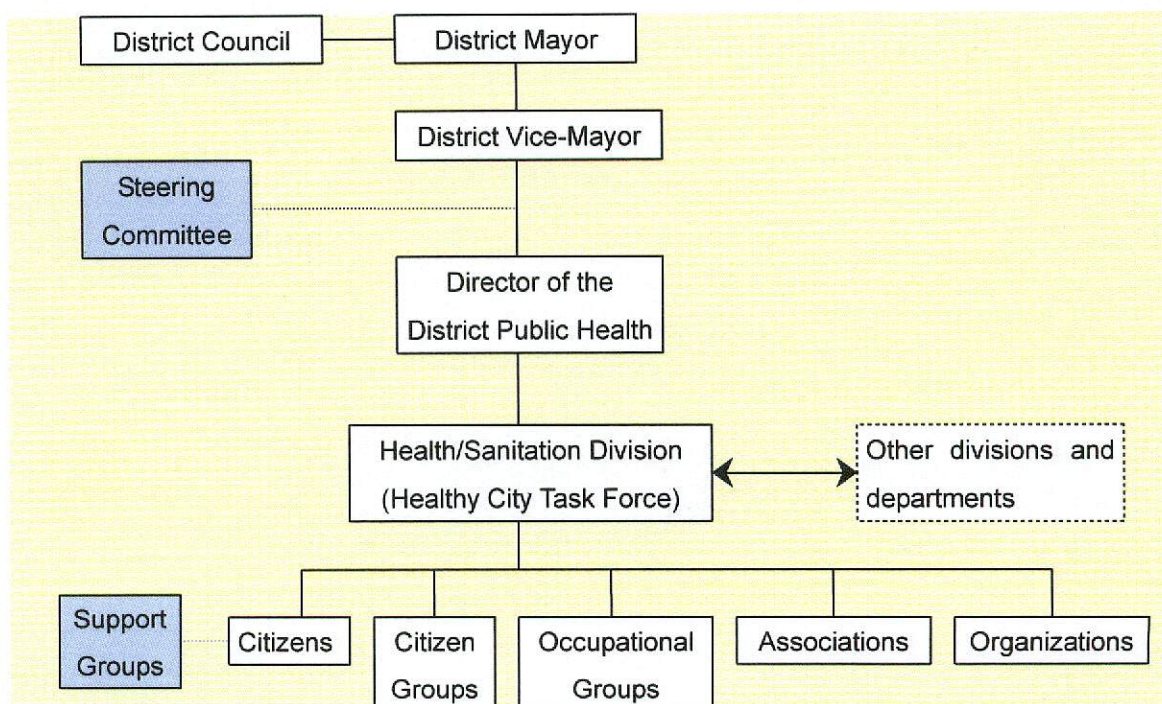


Chart 14. Healthy City Gangnam Organization

(2) Dong Offices

In Gangnam District, there are 25 sub-districts, *dongs*, which provide administrative services and welfare services on hand to the residents. More emphasis is being put into community-level participation through these dong offices.

Below is a list of the Dong Offices and their contact information.

Dong Office	Address	Telephone Number	Website
1: Sinsa-dong	Sinsa-dong 548-1	3443-6560~3	www.gangnam.go.kr/depart/sinsa
2: Nonhyeon 1-dong	Nonhyeon -dong 58-13	3443-6565~8	www.nonhyeon1.go.kr
3: Nonhyeon 2-dong	Nonhyeon -dong 114-24	3443-6569~72	www.nonhyeon2.go.kr
4: Apgujeong 1-dong	Apgujeong -dong 458	3443-6574~7	www.apgujeong1.go.kr
5: Apgujeong 2-dong	Apgujeong -dong 483	3443-6578~81	www.apgujeong2.go.kr
6: Cheongdam 1-dong	Cheongdam-dong 124-1	3443-6582~5	www.cheongdam1.go.kr
7: Cheongdam 2-dong	Cheongdam-dong 1-13	3443-6586	www.cheongdam2.go.kr
8: Samseong 1-dong	Samseong -dong 149-11	563-5893	www.samseong1.go.kr
9: Samseong 2-dong	Samseong -dong 20-2	3443-6590~3	www.samseong2.go.kr
10: Deachi 1-dong	Deachi-dong 646-2	566-2890	www.daechi1.go.kr
11: Deachi 2-dong	Deachi-dong 994-17	562-6864	www.daechi2.go.kr
12: Deachi 3-dong	Deachi-dong 985-1	556-6458	www.daechi3.go.kr
13: Deachi 4-dong	Deachi-dong 928-22	568-9311~3	www.daechi4.go.kr
14: Yeoksam 1-dong	Yeoksam-dong 641-6	568-9897	www.yeoksam1.go.kr
15: Yeoksam 2-dong	Yeoksam-dong 761-26	562-8730	www.yeoksam2.go.kr
16: Dogok 1-dong	Dogok -dong 548	3463-0377	www.dogok1.go.kr
17: Dogok 2-dong	Dogok -dong 459	571-8471~4	www.dogok2.go.kr
18: Gaepo 1-dong	Gaepo-dong 660-7	3461-6081~4	www.gaepo1.go.kr
19: Gaepo 2-dong	Gaepo-dong 189-3	3411-6071~4	www.gaepo2.go.kr
20: Gaepo 3-dong	Gaepo-dong 182	3411-5891~4	www.gaepo3.go.kr
21: Gaepo 4-dong	Poi-dong 211-4	571-8761~4	www.gaepo4.go.kr
22: Irwonbon-dong	Irwon-dong 735-3	451-7121~4	www.irwonbon.go.kr
23: Irwon 1-dong	Gaepo-dong 12-6	3411-5272~5	www.irwon1.go.kr
24: Irwon 2-dong	Irwon-dong 712-3	451-2701~4	www.irwon2.go.kr
25: Suseo-dong	Suseo-dong 718-2	459-0411~4	www.suseo.go.kr
26: Segok-dong	Segok-dong 100-4	3411-7674~4	www.segok.go.kr

6) Economy

The number of businesses counted 50,872 employing 517,603 workers in 2002. The change in numbers of businesses and employees after the economic crisis in 1998 are shown in the following charts.

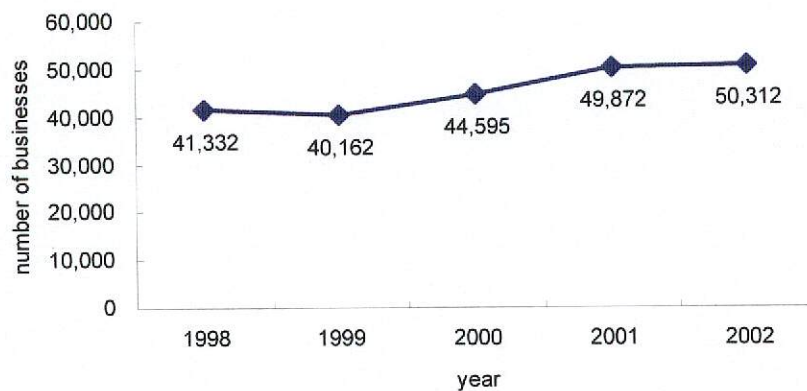


Chart 15. Number of business (Gangnam Statistical Information, 2005)

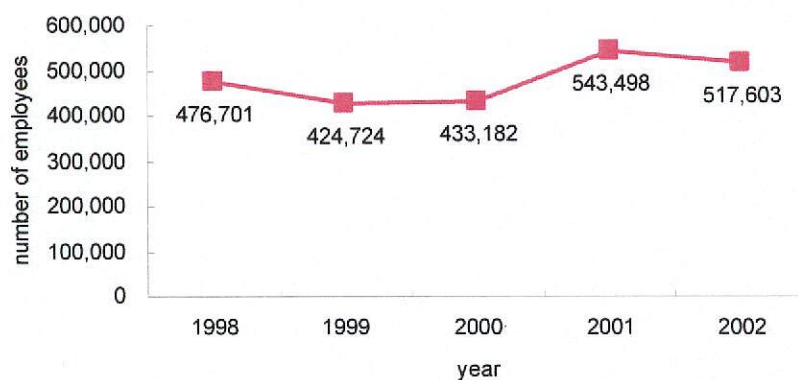


Chart 16. Number of Employees (Gangnam Statistical Information, 2005)

Meanwhile, the dong that has the most businesses is Yeoksam1-dong, with 10,287 businesses and a total of 130,735 employees, which accounts for 20.4% and 25.3% of the total, respectively.

Table 1. Regional Distribution of Businesses (Gangnam District Website, 2005)

	Business		Employees	
	Number	(%)	Number	(%)
Total	50,312	100	517,603	100
Sinsa-dong	3,090	6.1	20,935	4.0
Nonhyeon 1-dong	3,640	7.2	26,672	5.2
Nonhyeon 2-dong	4,106	8.2	43,391	8.4
Apgujeong 1-dong	1,200	2.4	14,656	2.8
Apgujeong 2-dong	1,388	2.7	9,585	1.9
Cheongdam 1-dong	1,605	3.2	17,097	3.3
Cheongdam 2-dong	1,400	2.8	12,198	2.4
Samseong 1-dong	3,492	6.9	51,356	9.9
Samseong 2-dong	2,384	4.7	24,000	4.6
Deachi 1-dong	889	1.8	5,298	1.0
Deachi 2-dong	934	1.9	3,934	0.8
Deachi 3-dong	1,925	3.8	32,529	6.3
Deachi 4-dong	2,365	4.7	26,526	5.1
Yeoksam 1-dong	10,287	20.4	130,735	25.3
Yeoksam 2-dong	1,992	4.0	28,677	5.5
Dogok 1-dong	1,320	2.6	11,469	2.2
Dogok 2-dong	1,560	3.1	19,768	3.8
Gaepo 1-dong	548	1.1	1,518	0.3
Gaepo 2-dong	613	1.2	2,216	0.4
Gaepo 3-dong	530	1.1	1,941	0.4
Gaepo 4-dong	1,995	4.0	10,533	2.0
Irwonbon-dong	434	0.9	5,787	1.1
Irwon 1-dong	925	1.8	3,195	0.6
Irwon 2-dong	438	0.9	3,374	0.7
Susco-dong	992	2.0	8,336	1.6
Segok-dong	310	0.6	1,877	0.4

Most of the establishments in Gangnam District have a workforce size 1~4 employees. But the most workers are employed to establishments that employs 20~49 employees.

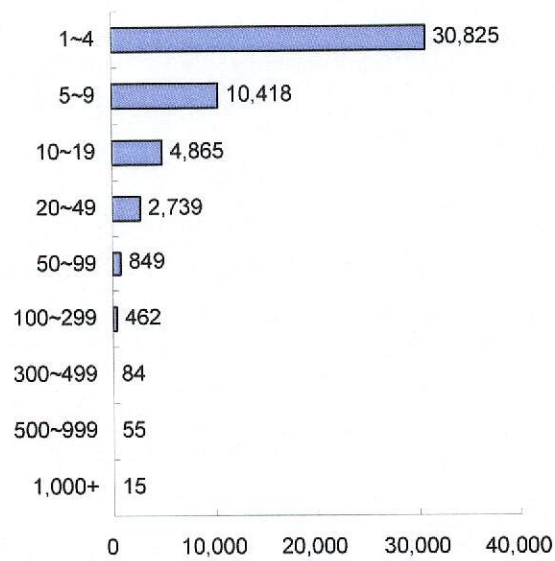


Chart 17. Number of Establishments by Workforce Size (Seoul Statistical Yearbook, 2004)

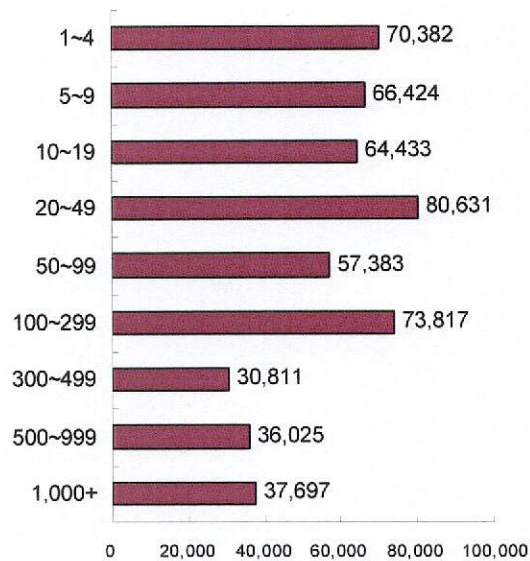


Chart 18. Number of Workers by Workforce Size (Seoul Statistical Yearbook, 2004)

2. Health Status

1) Mortality

The death data is not yet available in the district level. We only have age-specific death rates of Seoul Metropolitan City. The following table shows the death rate by age group per 100,000 persons. The following chart shows log converted death rate by age group.

Table 2. Death rates by age groups (deaths/100,000) (Seoul Metropolitan Government, 2001)

	Total	0	1-9	10-19	20-29	30-39	40-49	50-59	60-69	70-79	>80
Total	369.2	438.5	23.15	22.8	4.45	85.8	211.4	510.1	1,254.35	3,724.4	11,836.3
Male	405.2	439	25.55	27.35	4.75	116	314.65	746.35	1,808.75	5,036.1	13,837.2
Female	333	438	20.6	17.8	3.85	54.05	113.4	273.4	763.45	3,006.75	11,084.85

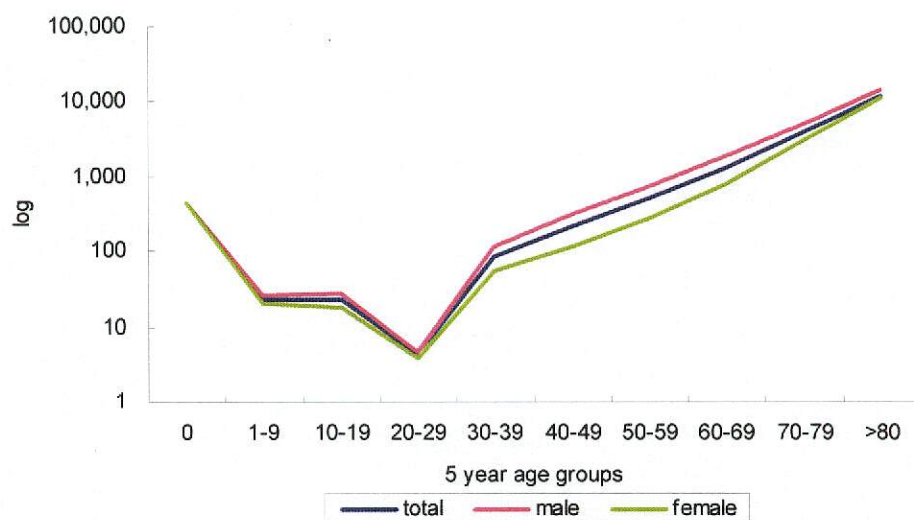


Chart 19. Log-converted death rate by age group

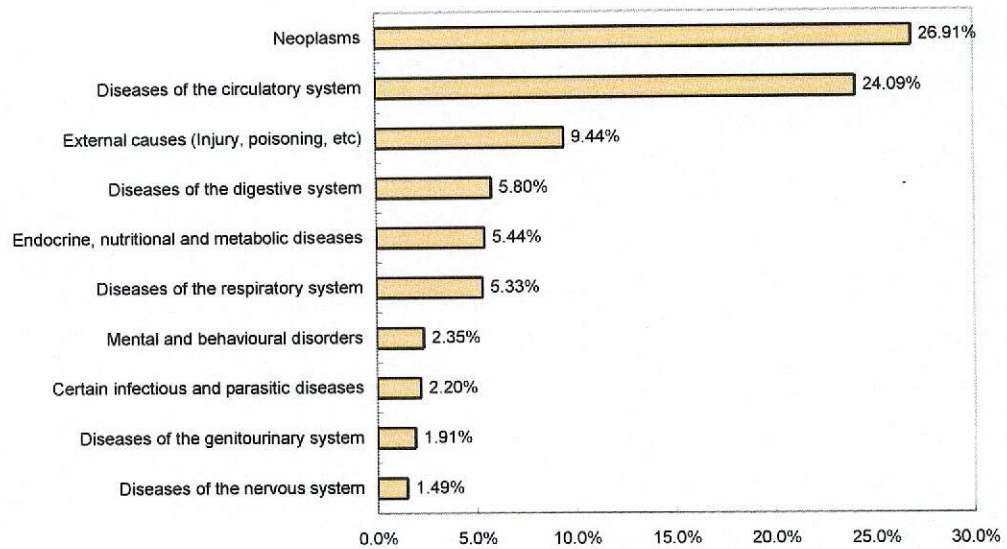


Chart 20. Leading Cause of Death (percent of total cases 37,979) (Seoul Metropolitan Government,2001)

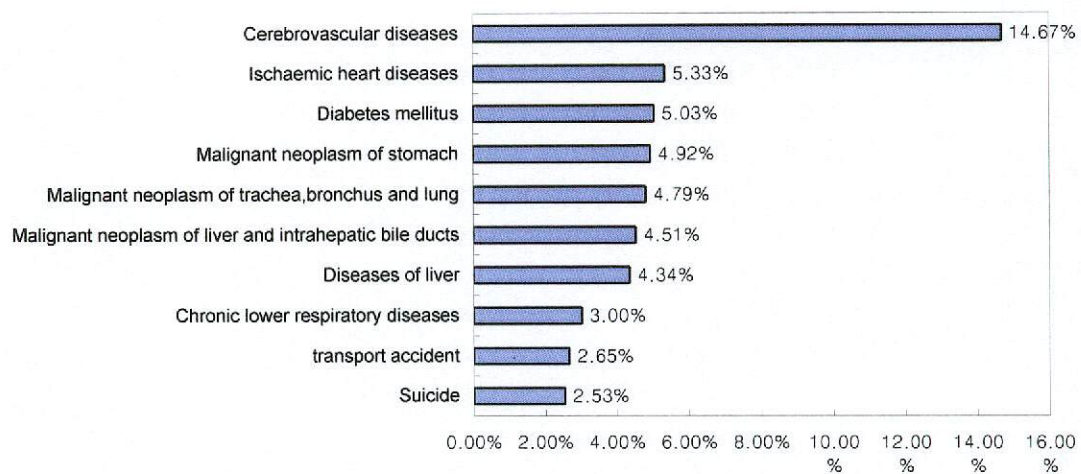


Chart 21. 10 Leading causes of death (percent of total death (37,979)) (Seoul Metropolitan Government, 2001)

2) Morbidity

The following table describes the 5 major chronic disease of each age group. Among the population of over 45 years of age, the most popular chronic condition is hypertension, followed by arthritis and diabetes. This pattern is consistent with both adults between ages 45-64 and the elderly aged over 65.

Table 3. Prevalence rate of the 5 major chronic diseases for the indicated age groups in 2001 (persons/1,000 population) (Seoulites Health Status and Medical Utilization Survey, 2002)

	Total	0-6	7-18	19-44	Over 45		
					Total	45-64	Over 65
1	Hypertension	Tooth Caries	Tooth Caries	Skin Disease	Hypertension	Hypertension	Hypertension
	47.2	19.6	54.9	57.9	148.0	118.0	259.0
2	Skin Disease	Skin Disease	Allergic Rhinitis	Tooth Caries	Arthritis	Arthritis	Arthritis
	41.9	16.6	35.2	40.8	116.0	85.8	224.0
3	Arthritis	Allergic Rhinitis	Skin Disease	Peptic Ulcer	Diabetes Mellitus	Diabetes Mellitus	Diabetes Mellitus
	37.4	8.1	33.0	31.6	70.8	55.9	125.0
4	Tooth Caries	Asthma	Empyema	Allergic Rhinitis	Peptic Ulcer	Peptic Ulcer	Peptic Ulcer
	36.7	4.1	8.6	23.5	56.9	52.1	75.0
5	Peptic Ulcer	Empyema	Asthma	Constipation	Skin Disease	Skin Disease	Skin Disease
	29.7	2.9	4.7	15.9	43.9	46.3	74.2

According to the Seoulites' Health Index Survey in 2001, there were a total of 24,586 people with hypertension, 8,314 with diabetes and 29,595 with arthritic pain in Gangnam District.

3. Lifestyles

The information on lifestyles and health behavior of the Gangnam District citizens are based on a survey conducted in 2001. An updated version on these indicators is anticipated to be surveyed during the year 2005 as part of the Gangnam District Healthy City Needs Assessment Study.

1) Smoking Behavior

The prevalence of smoking among Korean males is one of the highest in the world. 51.89 % of Seoul's male population smokes often, i.e. every day. It is said that the high smoking prevalence among men is due to the fact that men received a monthly ration of cigarettes during the compulsory military service in the past. Now the military provides free anti-smoking education.

Due to extensive national anti-tobacco campaigns the rates have been decreasing in both men and women, whereas a much stronger decrease is being observed in men.

About 22.93% of the citizens in Gangnam District are currently smoking, and 8.72 were past smokers. There is a significant difference between gender and smoking. More than 90% of the women never experienced smoking while only 34.94% of the men have never smoked. 48.24% of men are currently smoking, with the highest prevalence is shown in men in ages 25-44 where 63.52% of them smoke.

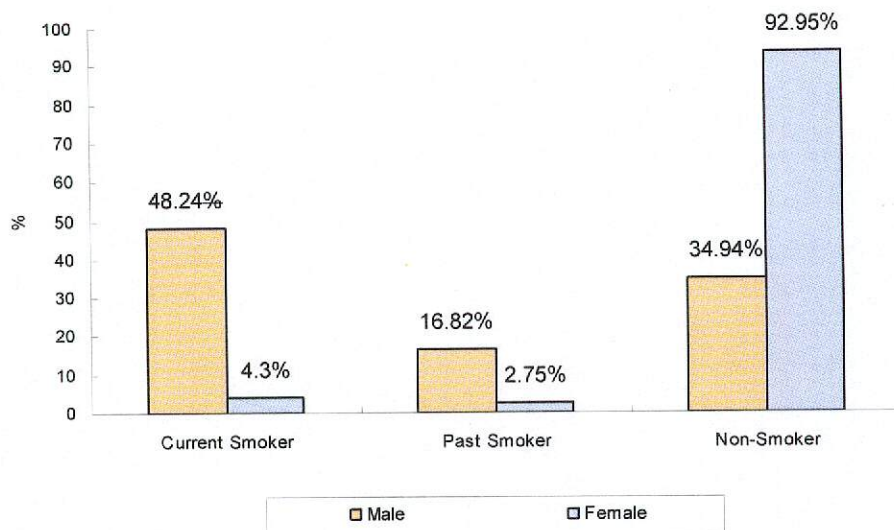


Chart 22. Prevalence of smoking (aged 15 and over) (Seoul Health Index Survey,2001)

2) Alcohol Consumption

24.7 % of Seoul's male population consumes alcohol often, i.e. every day. In general men consume more alcohol than women. 43.5% of women aged 15 and over indicated never to have consumed alcohol compared to 17.9% of the men.

The proportion of the population who consume alcohol is relatively high, 78.86% of men and 59.46% of women responded that they drink. This includes almost never drinking. But if almost never drinkers are excluded, the figure drops more in women than in men, 58.33% of men drink from time to time, where only 29.31% of women do.

Table 4. Prevalence of alcohol consumption (aged 15 and over) (Seoul Health Index Survey, 2001)

	Total	Frequent, Often and Almost Never Drinking	Frequent and Often Drinking
Total	100.0	67.69	41.62
Men	100.0	78.86	58.33
Women	100.0	59.46	29.31

There is a remarkable difference in drinking patterns between gender and age groups. Men who

are over 65 are of interest because 42.82% of them responded that they drink frequently. However, the proportion of current male drinker over 65 who drink more than 5 portions per occasion, constitute only 11.23% where among current male drinkers in younger age groups show up to 55.13%. More information can be interpreted in the following tables.

In a survey where the respondents reported how often they consumed alcohol during the last month, men and women over age 65 have a tendency to drink everyday.

Table 5. Frequency of alcohol consumption (Seoul Health Index Survey, 2001)

		Total	Non	<1/mn	2~4/mn	2~4/wk	everyday
Male	15-24	100.0	18.39	22.77	38.28	18.13	2.42
	25-44	100.0	2.80	21.30	39.91	26.88	9.11
	45-64	100.0	9.58	19.20	30.18	25.63	15.42
	Over 65	100.0	2.56	5.10	34.88	26.28	31.17
Female	15-24	100.0	7.74	35.39	43.61	12.09	1.18
	25-44	100.0	13.81	43.30	32.52	8.21	2.16
	45-64	100.0	10.54	38.76	33.24	16.68	0.78
	Over 65	100.0	9.58	74.39	-	-	16.03

3) Exercise Patterns

Most Seoulites are physically active. 34.15% of females and 28.01% of males indicated that they exercise regularly, i.e. at least 3 times per week for at least 20 minutes. Women exercise more regularly than men. 27.99% of Seoul's male population exercise 'irregularly', i.e. less than twice a week for at least 20 minutes.



Chart 23. Prevalence of exercising (aged 15 and over) (Seoul Health Index, 2001)

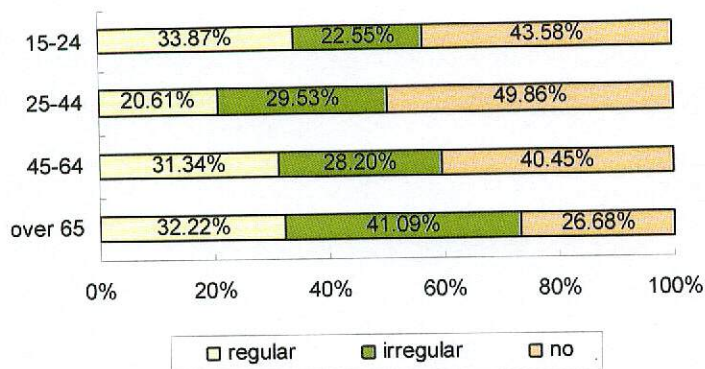


Chart 24. Prevalence of exercising by age group (males) (Seoul Health Index, 2001)

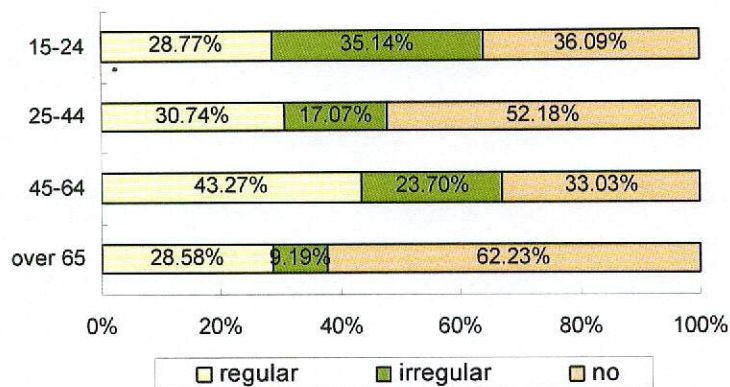


Chart 25. Prevalence of exercising by age group (females) (Seoul Health Index, 2001)

4) Sleeping Conditions

About half of all Seoulites sleep the recommended 7-8 hours per night. However, about 42.18% of Seoul's population only sleeps between 5 and 6 hours.

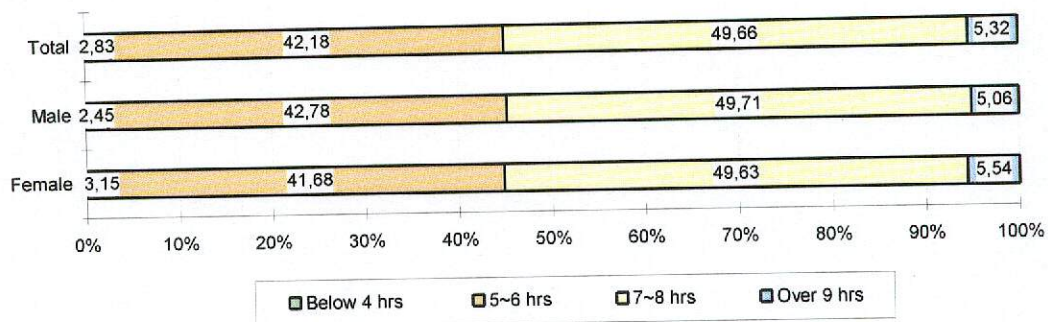


Chart 26. Average hours of sleep (aged 15 and over) (Seoul Survey, 2003)

5) Personal Health Management

Even though most Seoulites indicated that they do not exercise regularly, 39.1% of Seoulites indicated that they exercise to maintain their health. 22.8% of the population try to get sufficient rest for their health.

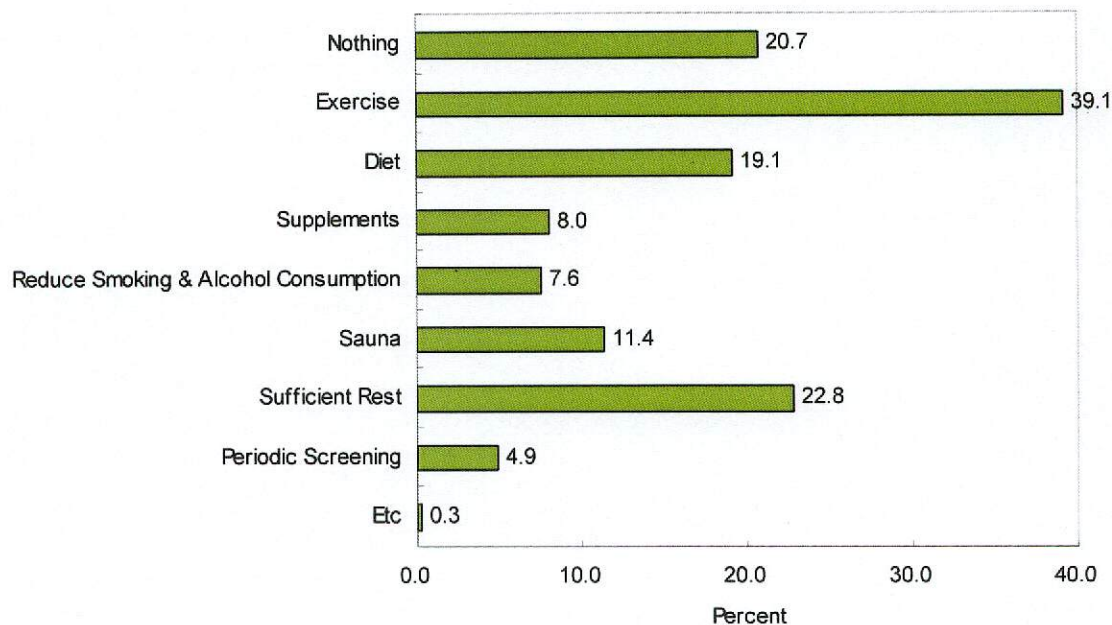


Chart 27. Personal Health Management (aged 15 and over) (Seoul Survey, 2003)

6) Breakfast

Breakfast is commonly known to be the most important meal of the day, but busy city dwellers tend to skip breakfast very often. In Gangnam District, 71.87% of men respond to always having breakfast, whereas just a little over half, 55.49% of women do. For both men and women, those who are between 15-24 years of age almost never have breakfast compared to other age groups.

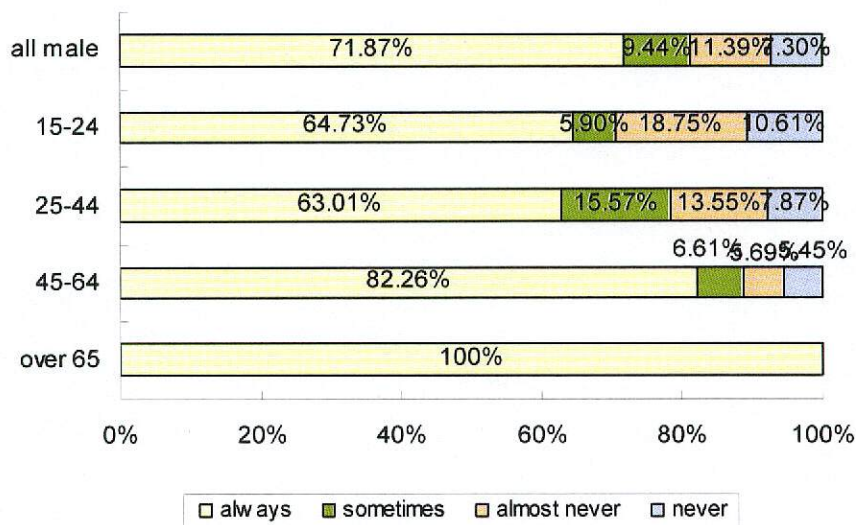


Chart 28. Prevalence of eating breakfast(male) (Seoul Health Index, 2001)

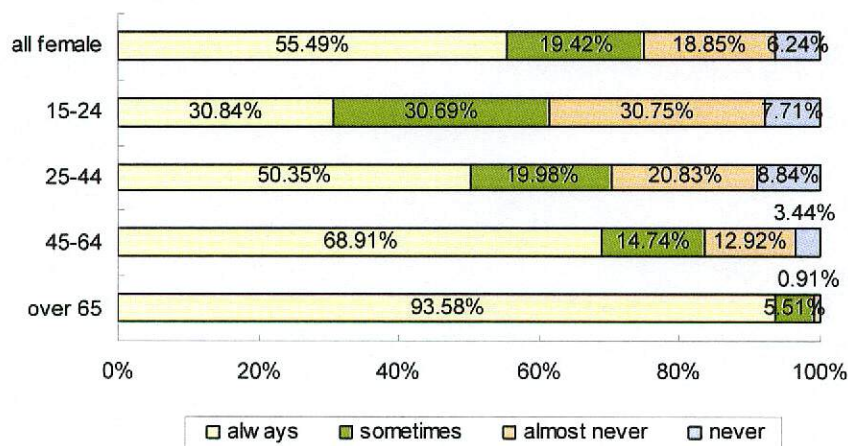


Chart 29. Prevalence of eating breakfast(female) (Seoul Health Index, 2001)

4. Physical Environment and Environmental Policy

Gangnam District operates strict environment measures to improve the quality of air and water. Along with regulations and inspections to pollutant emitting sources, Gangnam District runs a “Noise Inspection Unit” to reduce any noise that would occur. Also, Environment-friendly School Projects and Gangnam Environment Protection Team are other examples of the districts to sustain a clean environment.

1) Air Quality

In a detection station in Daechi-dong, the figures of pollutants show concentration similar to that of Seoul(Table 6). In order to preserve better air quality, Gangnam District urges buildings to convert the heating system to CNG or district heating, and runs free automobile inspections and strict regulations.

Table 6. Environment Standards and Level of Air Pollution

	SO₂	O₃	NO₂	CO
Standard	0.02ppm/yr	0.06ppm/8hrs	0.05 ppm/yr	9 ppm/yr
Seoul	0.005	0.014	0.038	0.6
Gangnam District	0.005	0.012	0.039	0.7

2) Water Quality

Clean tap water is provided to all residents in Gangnam District and an average of 444 liters is being consumed per capita daily. The total length of water supply pipes is 616.6 km.

The source of water pollution in the district is mainly from photo and car wash businesses. Below is a table of types of emission source for water pollutants.

Table 7. Water Polluting Business

	Total	Car Wash	Photo	Hospitals	Water Purification	Clothes Wash	Lab	Concrete Factory	Jewelry	Etc
# of businesses	741	139	458	8	3	3	15	1	88	26

There are 3 wastewater treatment facilities, Tancheon, Sungnam and Gwacheon, which treat 1.1million, 1.65 million and 3,000 tons, respectively, daily.

5. Physical and Social Infrastructure

1) Housing

Among the 151,646 families in Gangnam District, 140,374 families have dwellings, which is 93.8% of all families.

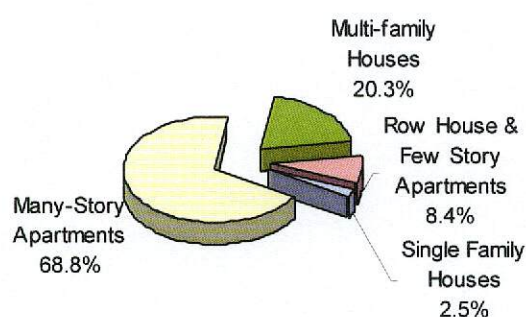


Chart 30. Types of Housing (Seoul Statistical Yearbook, 2004)

Most of the residents own their own homes (55.2%), whereas still many rent their dwellings. In Korea, there is a pre-paid lump sum system for rent, which usually covers 2 years. After the 2

years the tenants receive their prepaid lump-sum to renew their rent or to move to a new home. This pre-paid rent covers 32.1% of the residents, while monthly rent is only 11.4%.

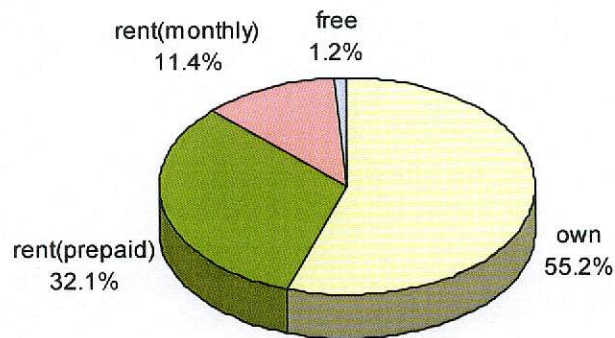


Chart 31. Housing by type of ownership (National Statistics Office, 2000)

For the low-income group who do not own a home, the National Housing Fund offers low interest loans for pre-paid lump sum rent. In 2003, the fund offered KWN 6.9 billion (USD 6.9billion) to 324 households.

2) Transportation

Gangnam District is applying a “Gangnam Transportation Vision21” policy to predict the change in transportation due to changes in construction and development and to improve the traffic situation. A study is undergoing in collaboration with professional traffic research agencies to develop a long-term transportation plan.

In 2002, there was an average of 29 million cases of transportation daily, of which 34.6% were made by subway/train, 26.0% by bus and 26.9% by automobile. During morning and evening rush hours, 65.9% and 66.4% of the commuters took mass transportation, respectively.

Table 8. Means of transportation

		Total	Automobile	Bus	Subway/Train	Taxi	Others
1996	Number/day	27,799,560	6,829,224	8,357,730	8,182,634	2,901,178	1,528,794
	Proportion(%)	100	24.6	30.1	29.4	10.4	5.5
2002	Number/day	29,680,276	7,982,832	7,705,001	10,284,673	2,194,799	1,512,971
	Proportion(%)	100	26.9	26.0	34.6	7.4	5.1
Difference (%)		6.8	16.9	-7.8	25.7	-24.3	-1.0

Parking is a major issue regarding transportation in Gangnam District, especially in the residential area where houses are concentrated. “Public parking spaces” and “resident priority parking” policies are some of the solutions to this problem.

Type of Parking Lot	Number of Lots	Number of Parking Spaces
Total	88	12,706
Public Parking Spaces (Roadside)	29	1,821
Public Parking Lots	20	9,362
Resident Priority Parking	39 Areas	9,732

In Seoul, it takes about 30~60 minutes to travel to a destination. Below is a table of estimated time per type of transportation.

Table 9. Estimated time for travel

Means		Time(Min)
One ride	Automobile	43.3
	Bus	39.7
	Subway	50.2
	Taxi	26.6
	Motorcycle, etc.	30.8
	Multiple rides	70.5

3) Parks and Green Spaces

Most of the green space in Gangnam District is constituted by Mt. Daemo, Mt. Guryong and Mt. Maebong, which accounts for 77% of the green space. Although the area of green space is larger than other districts, the actual spaces where citizens can enjoy is limited. For example, the average park space per capita is 15.38m² for Seoul whereas for Gangnam District, it is just over half of that space, 8.86m². Also more green space is located in the outer region on Gangnam District, i.e. Saegok-dong, Suseo-dong and Gaepo-dong, compared to regions nearer to the center, such as Yeoksam-dong or Nonhyun-dong.

More information on Parks in Gangnam District can be found at the Gangnam Culture Tour Leisure Site at : <http://tour.gangnam.go.kr>.

6. Health Services and Infrastructure

1) Gangnam Community Health Center

(1) General Information

The Community Health Center is responsible for securing the health of the citizens in Gangnam District. It recently moved to Samsung-dong into a 5,213 m², 7-story building of which the Health Center shares 4 stories with the Community Welfare Center.

Below is the organizational chart of the Community Health Center.

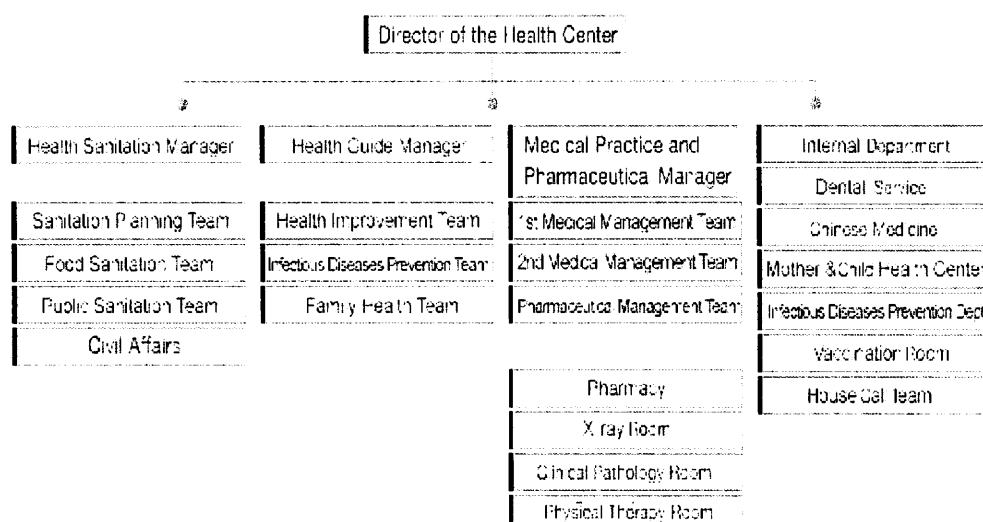


Chart 32. Organization of Gangnam Community Health Center

(2) Public Health Services

The Gangnam Community Health Center offers Public Health Services, Sanitation Services and Medical Services. More information on each service can be found in the table below.

Public Health Services	Sanitation Services	Medical Services
Health Promotion	Business Licensing	Medical Administration
National Cancer Control	Public Sanitation	Medical Law
Tuberculosis Control	Guidance	Pharmaceutical Law
Prevention/Disinfections	Sanitation Law	Medical Examination
Home Health Care	Business Inspection	Telemedicine
Chronic Disease	Sanitation Education	Medical Institution Guidance
Maternal & Child Health		
Venereal Disease		
Home Nursing		
Geriatric Health Promotion		
Vaccination		
AIDS		
Communicable Disease Control		
Rehabilitation Health		
Dementia		
Health Guide for Tourists		
Rare & Incurable Disease		
Mental Health Promotion		

(3) Community Health and Medical Plan (Phase 3)

The Community Health and Medical Plan was implemented by the Ministry of Health and Welfare since 1997, the 1st Plan was in practice during the years 1997-1998, the 2nd Plan from 1999-2002. In the 3rd 5-year Community Health and Medical Plan, Gangnam District is focusing on Chronic Disease Management and the operation of a Health Promotion Center within the Community Health Center. The estimated budget for each year is KRW 15 billion for 2003, KRW 8 billion for 2004, KRW 9.5 billion for 2005 and KRW 11 billion for 2006.

2) Health Resources

(1) Human Resources

Table 10. Number of Medical Human Resources (Seoul Statistical Yearbook 2004)

		Oriental					Nurse Aids	Pharmacists	
		Total	Physicians	Dentists	Medical Doctors	Midwives			Nurses
Seoul	Total	83,569	19,733	5,017	3,212	189	23,012	19,170	922
	Per 1,000	8.13	1.92	0.49	0.31	0.02	2.24	1.87	0.09
Gangnam District	Total	10,321	2,710	658	387	11	3,294	1,282	103
	Per 1,000	19.42	5.10	1.24	0.73	0.02	6.20	2.41	0.19

(2) Medical Institutions

There are a total of 1,584 medical institutions in Gangnam District, which accounts for 12.6% of the total number of institutions in Seoul. The average number of medical institutions in the other 24 districts is 458.4, approximately one third of the number Gangnam District hosts. There is an exceptionally large number of private clinics in the area, clearly showing the district's popularity for high quality medical treatment.

Table 11. Number of Medical Institutions (Seoul Statistical Yearbook, 2004)

	Total	General Hospitals	Hospitals	Clinics	Dental Clinics	Oriental Medicine Clinics
Number of Total Institutions in Gangnam District	1,584	5	14	861	452	252
Number of Total Beds in Gangnam District	4,643	2,882	822	616	11	212
Number of Beds per 1,000 persons	8.7	5.4	1.5	1.2	0.0	0.4
Number of Total Institutions in Seoul	12,586	63	115	6,154	3,611	2,564
Percentage of Institutions in Gangnam District	12.6%	7.9%	12.2%	14.0%	12.5%	9.8%
Average Number of Institutions of Other Districts	458.4	2.4	4.2	220.5	131.6	96.3

Reference

Seoul Statistical Yearbook, 2004.

Seoul Statistical Yearbook, 2005.

Gangnam District Statistical Database. (http://www.gangnam.go.kr/stat/statinfo_main.jsp)

Korea National Statistical Office. (www.nso.go.kr)

Seoul Survey, Seoul Metropolitan Government, 2003.

Seoulites Health Index Survey, Seoul Metropolitan Government, Korea Institute of Health and Social

Affaris, 2002.

Analysis of Priority Health Problems

Healthy City Gangnam District



Prepared by Kim, Jin Hee and Choi, Moon Sun
School of Public Health
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Analysis of Priority Health Problems

The Analysis is based on the results in the 3rd Community Health Plan(2003-2006) and the Gangnam District Health Profile. More detailed data can be found in the Profile.

1. Chronic Disease

There is a high need for chronic disease management programs among the citizens' in Gangnam District, reaching 91.4%. But there are difficulties in continuing management due to low levels of perception of these conditions, weak supportive environment and lack of mutual effort of the many sectors to ensure a healthier environment.

In the 4-year Community Health Plan(2003-2006), chronic disease management will be primarily focused towards the poverty residential areas, namely Suseo-dong, where there is a apartment complex run by the government for those how are under national assistance.

Thus, the target group will be all the people suffering from hypertension, diabetes and arthritis. However, more emphasis should be given to the risk groups and to the general population, who, by enhancing and promoting health, can

Group	Description	Population (Number of people)
General Group	All residents in Gangnam District	546,038
Risk Group	Population in risk of chronic disease	79,900
Target Group	Patients with chronic conditions (Hypertension, Diabetes and Arthritis)	62,953

2. Tobacco & Alcohol Strategies

It is widely known that smoking can contribute to cardiovascular disease, cancer and respiratory disease. Generally 50% of smokers die from smoking, half of which die during their mid-life, when one is the most economically active. Alcohol is a direct risk factor for liver cirrhosis, certain cancer, hypertension and ischemic stroke.

Men in Gangnam District show a high prevalence of smoking and alcohol consumption. Men between ages 25-64 show lower frequency in both smoking and drinking, but they tend to have riskier smoking and drinking habits. There is a high percentage of men over age 65 who drink almost daily but the percentage of binge drinkers is lower than that of the younger men.

In developing strategies supplementary to existing Gangnam District Community Health Center's plans, these different characteristics of target groups should be examined.

3. School Health

The typical Korean student is getting bigger in physical size however he is weaker than the previous generations. This is due to higher pressure in attaining better education, which the Gangnam District is famous for. Gangnam District has long been known to have prestigious secondary schools and students move to Gangnam District to get better education and consequently enter a good university. The population structure shows more teenagers and their parents living in the Gangnam area than in other districts in Seoul.

Korean students put most of their time into their studies, leaving almost none for enjoying physical activity or other healthy activities. Also, changes in eating habits and nutrition among younger students brought about higher prevalence in obesity. This is a growing health problem among younger Koreans along with myopia.

Healthy City Gangnam District will implement a pilot Healthy Schools Project this year to try to overcome these health problems among our young generation. Existing data in Basic Health Record Examination, Physical Ability Examination, etc will be analyzed to provide the baseline data for developing a strategy.

4. Workplace Health

There are 50,312 businesses and 517,603 workers in Gangnam District. Most of the workers show a high stress level, unhealthy working hours (over 8 hours daily), distinctive workplace alcohol culture, etc. Moreover, the physical and social environments are not supportive for the workers to practice a healthy lifestyle. They are pressured to work long stressful hours, participate in after-work parties, where frequently drinking alcohol is the leading activity. They also lack the time and opportunity to exercise and access to these healthy habits is often limited. Transportation to and from work is also another very stressful factor for workers due to long commute times and heavy traffic conditions. This causes workers to be less productive during the day. All these conditions lead to unhealthier and less productive workers, for example, more men and women of ages 25-44 are obese than before.

5. Health Equity – Suseo & Irwon-dong Area

Most of the poor people live in Irwon and Suseo-dong, which hosts 80% of these residents living under government assistance. Also these areas host most handicapped people. A significant inequity exists in these areas of Gangnam District where residents have limited access to adequate housing, income or medical services. These people have more unhealthy conditions, but have less means to overcome them. More emphasis is being put into health promotion efforts in these areas, where most residents have poor nutritional status, weak social support compared to higher morbidity and higher prevalence to smoking and drinking.