FACT SHEET, DELHI	Quality of Family Planning Services ^o
NATIONAL FAMILY HEALTH SURVEY, 1999	Percent told about side effects of method27.3
NATIONAL FAMILI HEALIH SURVEI, 1999	Percent who received follow-up services
Sample Size	Childhood Mortality
Households	Infant mortality rate ⁷
Ever-married women age 15–492,477	Under-five mortality rate ⁷
Characteristics of Households	Safe Motherhood and Women's Reproductive Health
Percent with electricity97.7	Percent of births ⁸ within 24 months of previous birth28.3
Percent within 15 minutes of safe water supply ¹ 93.7	•
Percent with flush toilet85.5	Percent of births ³ whose mothers received:
Percent with no toilet facility5.6	Antenatal check-up from a health professional
Percent using govt. health facilities for sickness29.1	Antenatal check-up in first trimester
Percent using iodized salt (at least 15 ppm)89.2	Two or more tetanus toxoid injections
Characteristics of Women ²	Iron and folic acid tablets or syrup77.8
Percent urban	December 1997
Percent illiterate 29.1	Percent of births ³ whose mothers were assisted at
Percent completed high school and above	delivery by a:
Percent Hindu 85.0	Doctor
	ANM/nurse/midwife/LHV6.7
Percent Muslim 8.1	Traditional birth attendant
Percent Sikh	
Percent regularly exposed to mass media	Percent ⁵ reporting at least one reproductive
Percent working in the past 12 months	health problem
Status of Women ²	Awareness of AIDS
Percent involved in decisions about own health68.7	Percent of women ² who have heard of AIDS79.2
Percent with control over some money82.3	referred women who have heard of AIDS
	Child Health
Marriage	Percent of children age 0–3 months exclusively
Percent never married among women age 15–1990.5	breastfed
Median age at marriage among women age 20–4919.6	Median duration of breastfeeding (months)22.6
Fertility and Fertility Preferences	Percent of children ⁹ who received vaccinations:
Total fertility rate (for the past 3 years)2.4	BCG92.0
Mean number of children ever born to women 40–493.68	DPT (3 doses)
Median age at first birth among women age 25–4921.2	Polio (3 doses)
Percent of births ³ of order 3 and above39.4	Measles 77.5
Mean ideal number of children ⁴ 2.4	All vaccinations 69.8
Percent of women with 2 living children wanting	7 III vaccinations
another child11.7	Percent of children ¹⁰ with diarrhoea in the past
	2 weeks who received oral rehydration salts (ORS)39.1
Current Contraceptive Use ⁵	, , , , , , , , , , , , , , , , , , ,
Any method63.8	Percent of children ¹⁰ with acute respiratory infection in
	the past 2 weeks taken to a health facility or provider 83.3
Any modern method56.3	pass
Pill4.0	Nutrition
IUD6.2	Percent of women with anaemia ¹¹
Condom	Percent of women with moderate/severe anaemia ¹¹ 10.9
Female sterilization	Percent of children age 6–35 months with anaemia 1169.0
Male sterilization2.3	Percent of children age 6–35 months with moderate/
	severe anaemia ¹¹
Any traditional method7.1	Percent of children chronically undernourished
Rhythm/safe period4.5	(stunted) ¹²
Withdrawal	Percent of children acutely undernourished (wasted) ¹² 12.5
	Percent of children underweight ¹² 34.7
Other traditional or modern method	referred of children underweight
Unmet Need for Family Planning ⁵	6p
Percent with unmet need for family planning	⁶ For current users of modern methods
Percent with unmet need for spacing	⁷ For the 5 years preceding the survey (1994–98)
refeelt with uninet need for spacing	⁸ For births in the past 5 years (excluding first births)
	⁹ Children age 12–23 months
	¹⁰ Children under 3 years
The second secon	¹¹ Anaemia–haemoglobin level < 11.0 grams/decilitre (g/dl)
Water from pipes, hand pump, covered well, or tanker truck	for children and pregnant women and < 12.0 g/dl for
² Ever-married women age 15–49	nonpregnant women. Moderate/severe anaemia
³ For births in the past 3 years	-haemoglobin level < 10.0 g/dl.
Excluding women giving non-numeric responses	¹² Stunting assessed by height-for-age, wasting assessed by
⁵ Among currently married women age 15–49	weight-for-height, underweight assessed by weight-for-age

Quality of Family Planning Services⁶

SUMMARY OF FINDINGS

The second National Family Health Survey (NFHS-2), conducted in 1998–99, provides information on fertility, mortality, family planning, and important aspects of health, nutrition, and health care. The International Institute for Population Sciences (IIPS) coordinated the survey, which collected information from a nationally representative sample of approximately 90,000 ever-married women age 15–49 from 26 states of India. These states comprise more than 99 percent of India's population.

IIPS also coordinated the first National Family Health Survey (NFHS-1) in 1992–93. Most of the types of information collected in NFHS-2 were also collected in the earlier survey, making it possible to identify trends over the intervening period of six and one-half years. In addition, the NFHS-2 questionnaire covered a number of new or expanded topics with important policy implications, such as reproductive health, women's autonomy, domestic violence, women's nutrition, anaemia, and salt iodization.

In Delhi, NFHS-2 field staff collected information from 2,763 households between 10 March 1999 and 18 April 1999 and interviewed 2,477 eligible women in these households. In addition, the survey collected information on 820 children born to eligible women in the three years preceding the survey. One health investigator on each survey team measured the height and weight of eligible women and young children and took blood samples to assess lead levels in the blood and the prevalence of anaemia.

Background Characteristics of the Survey Population

About nine-tenths (92 percent) of the population lives in the urban part of Delhi. The age distribution is typical of populations that have recently experienced a fertility decline, with relatively low proportions in the younger and older age groups. Thirty-three percent of the population are below age 15, and 4 percent are age 65 and above. The sex ratio is 842 females for every 1,000 males in rural Delhi and 896 females for every 1,000 males in urban Delhi.

The survey provides a variety of demographic and socioeconomic background information. In the state as a whole, 84 percent of household heads are Hindu, 8 percent are Muslim, and 5 percent are Sikh. No other religious group comprises more than 1 percent of Delhi's population. Muslims live disproportionately in the rural part of Delhi, where they comprise 11 percent of household heads. Eighteen percent of household heads belong to scheduled castes, 1 percent belong to scheduled tribes, and 15 percent belong to other backward classes (OBCs). Two-thirds of household heads do not belong to any of these groups.

Questions about housing conditions and the standard of living of households indicate some improvements since the time of NFHS-1. Ninety-eight percent of households in Delhi have electricity, and 87 percent have piped drinking water, up from 96 percent and 84 percent, respectively, in NFHS-1. Six percent of households do not have any toilet facility, down from 16 percent in NFHS-1.

Ninety-one percent of males and 78 percent of females age six and above are literate, an increase of 6–7 percentage points from literacy rates at the time of NFHS-1. Ninety-one percent of children age 6–14 currently attend school, up from 87 percent in NFHS-1. The proportion of

this age group who are attending school is the same for boys and girls. At ages 15–17, the proportion attending school is slightly higher for girls (75 percent) than for boys (70 percent).

Women in Delhi tend to marry late, compared with women in most other Indian states. The proportion of women age 15–19 who have already married is 10 percent, including less than 1 percent who are married but *gauna* has yet to be performed. In rural Delhi, 18 percent of women age 15–19 have already married. Older women are more likely than younger women to have married at an early age: 15 percent of women who are now age 45–49 married before they were 15, compared with 1 percent of women who are now age 15–19. Although this indicates that the proportion of women who marry young is declining rapidly, 20 percent of women in Delhi still marry before reaching the legal minimum age of 18 years. The mean age at marriage in Delhi (calculated from age-specific proportions never-married) is 25.8 years for men and 21.9 years for women. On average, women marry men who are 3.9 years older than they are.

As part of an increasing emphasis on gender issues in NFHS-2, the survey asked women about their participation in household decisionmaking. In Delhi, 95 percent of women are involved in decisionmaking on at least one of four selected topics. A much lower proportion (69 percent), however, are involved in making decisions about their own health care. Twenty-one percent of women do work other than housework, and 96 percent of these women work for cash. Almost two-thirds (65 percent) of women who earn cash can decide independently how to spend the money that they earn. Sixty-four percent of working women who earn cash report that their earnings constitute at least half of total family earnings, including 34 percent who report that the family is entirely dependent on their earnings.

Fertility and Family Planning

Fertility continues to decline in Delhi. At current fertility levels, women will have an average of 2.4 children each throughout their childbearing years, one of the lowest levels in India. The total fertility rate is down from 3.0 children per woman at the time of NFHS-1 and is now approaching the replacement level of just over two children per woman.

Efforts to encourage the trend towards lower fertility might usefully focus on groups within the population who have higher fertility than average. In Delhi, poor women, illiterate women, Muslim women, and scheduled-caste women have somewhat higher fertility than other women. There is still a fair amount of fertility at very young ages, inasmuch as women age 15–19 account for 8 percent of total fertility. Studies in India and elsewhere have shown that health and mortality risks increase when women give birth at such young ages—both for the women themselves and for their children.

The appropriate design of family planning programmes depends, to a large extent, on women's fertility preferences. Women may have large families because they want many children, or they may prefer small families but, for a variety of reasons, may have more children than they actually want. For 13 percent of births during the three years preceding NFHS-2, mothers report that they did not want the pregnancy at all, and for another 10 percent of births mothers say that they would have preferred to delay the pregnancy. When asked about their preferred family size, more than half (53 percent) of women who already have three children and nearly two-fifths (37 percent) of women with four or more children respond that they consider the two-child family ideal. This gap between women's actual fertility experience and what they

want or would consider ideal suggests a need for expanded or improved family welfare services to help women achieve their fertility goals. In Delhi, 86 percent of women want at least one son, and 82 percent want at least one daughter. A preference for sons is indicated by the fact that 23 percent want more sons than daughters but only 3 percent want more daughters than sons.

If women in Delhi are not using family planning, it is not due to lack of knowledge. Knowledge of contraception is nearly universal: more than 99 percent of currently married women know at least one modern family planning method. Women are most familiar with female and male sterilization and the pill (each 99 percent), followed by the condom (97 percent) and the IUD (95 percent). Knowledge of modern spacing methods has increased by 2–5 percentage points since the time of NFHS-1. However, use rates for these methods remain rather low, especially for the pill and the IUD.

Sixty-four percent of married women are currently using some method of contraception, up from 60 percent at the time of NFHS-1. Female sterilization is by far the most popular method: 26 percent of currently married women are sterilized, up from 20 percent at the time of NFHS-1. By contrast, only 2 percent of women report that their husbands are sterilized, down from 3 percent at the time of NFHS-1. Overall, sterilization accounts for 45 percent of total contraceptive use. Use rates for modern temporary methods are 4 percent for the pill, 6 percent for the IUD, and 18 percent for the condom.

Contraceptive prevalence does not vary widely among socioeconomic groups, although Muslim women and women living in households with a low standard of living are somewhat less likely than other women to use contraception. Sikh women, more-educated women, and women from households with a high standard of living are all more likely than other women to use the three modern spacing methods—pill, IUD, and condom (especially condom).

Given the heavy emphasis on sterilization, women tend to adopt family planning only after they have achieved their desired family size. As a result, contraceptive use can be expected to rise steadily with age and with number of living children. In Delhi, contraceptive use goes up with age, peaking at 81 percent for women age 35–39. Use also goes up with the number of children, peaking at 78 percent for women with three living children. Son preference (which is evident in all population groups but lower in Delhi than in many other states) appears to have some effect on contraceptive use. Women who have one or more sons are generally more likely to use contraception than women who have the same number of children but have only daughters. Yet son preference is not a major obstacle to contraceptive acceptance in Delhi: More than half of women with two or more daughters but no sons are using contraception.

Six percent of currently married women are not using contraception but say that they want to wait at least two years before having another child. Another 8 percent are not using contraception although they do not want any more children. These women are described as having an 'unmet need' for family planning. Unmet need is highest for young women who are particularly interested in spacing their births. These results underscore the need for strategies that provide spacing as well as terminal methods in order to meet the changing needs of women over their lifecycle.

For many years, the Government of India has been using electronic and other mass media to promote family planning. Exposure to mass media is quite high in Delhi, where 100 percent of residents of rural Delhi live in villages that are electrified and 92 percent live in villages that

have a cable connection. Among the different types of media, television has the broadest reach across all categories of women, including those who are poor and illiterate. Overall, 90 percent of ever-married women watch television at least once a week. Only 7 percent of women are not regularly exposed to television, radio, or other types of media. Ninety-two percent of women saw or heard a family planning message in the media during the few months preceding the survey. Given the relatively high level of exposure to television, it is not surprising that women are more likely to have seen or heard a family planning message on television than through any other type of media. Exposure to family planning messages is relatively low among disadvantaged socioeconomic groups, but still high in absolute terms: Messages reached 82 percent of illiterate women, 52 percent of women from households with a low standard of living, 89 percent of women belonging to scheduled castes, and 83 percent of women belonging to other backward classes.

More than half (52 percent) of women who use modern contraception obtained their method from a government hospital or other source in the public sector. Thirty-two percent obtained their method from the private medical sector. The private medical sector, along with shops, is the major source of pills and condoms, however.

An important indication of the quality of family planning services is the information that women receive when they obtain contraception and the extent to which they receive follow-up services after accepting contraception. In Delhi, 44 percent of users of modern contraceptives who were motivated by someone to use their method were also told about at least one other method. Only 27 percent were told by a health or family planning worker about possible side effects of the method they adopted, at the time of adopting the method. On the other hand, 62 percent of contraceptive users have received follow-up services.

The median age for female sterilization in Delhi has risen slightly in recent years and is now 29.0 years. The rise in median age at sterilization probably reflects, at least in part, increases in the use of modern temporary methods among younger women.

Infant and Child Mortality

NFHS-2 provides estimates of infant and child mortality and factors associated with the survival of young children. During the five years preceding the survey, the infant mortality rate was 47 deaths at age 0–11 months per 1,000 live births, down from 65 per 1,000 live births in NFHS-1. The child mortality rate, at 9 deaths at age 1–4 years per 1,000 children reaching age one, was down from 19 per 1,000 in NFHS-1. Expressed differently, according to NFHS-2, 1 out of every 21 children die in the first year of life, and 1 in 18 die before reaching age five. Child-survival programmes might usefully focus on specific groups of children with particularly high infant and child mortality rates, including children of illiterate mothers, children of scheduled-caste mothers, and children from households with less than a high standard of living.

Efforts to promote child survival also need to concentrate on very young mothers and mothers whose children are closely spaced. Infant mortality is almost three times higher among children born to mothers under age 20 than among children born to mothers age 20–29 (92 deaths, compared with 33, per 1,000 live births). Infant mortality is also about three times higher among children born less than 24 months after a previous birth than among children born after a gap of 48 months or more (62 deaths, compared with 21, per 1,000 live births). Clearly, efforts to

expand the use of temporary contraceptive methods for delaying and spacing births would help reduce infant mortality as well as fertility.

Health and Health Care

Promotion of maternal and child health has been one of the most important components of the Reproductive and Child Health Programme of the Government of India. One goal is for each pregnant woman to receive at least three antenatal check-ups plus two tetanus toxoid injections and a full course of iron and folic acid supplementation. In Delhi, mothers of 84 percent of the children born in the three years preceding NFHS-2 received at least one antenatal check-up, and mothers of 68 percent of the children received at least three antenatal check-ups. For 85 percent of these children, mothers received the recommended number of tetanus toxoid vaccinations, and for 78 percent of children, mothers received iron and folic acid supplementation. Coverage by all three interventions is somewhat lower for women in disadvantaged socioeconomic groups than for other women. Coverage is also low for women who already have four or more children.

The Reproductive and Child Health Programme encourages women to deliver in a medical facility or, if at home, with assistance from a trained health professional and to receive at least three check-ups after delivery. During the three years preceding NFHS-2, 59 percent of births in Delhi were delivered in a medical facility, and 35 percent were delivered in the respondent's own home. Among births delivered at the respondent's own home, 19 percent were assisted by a health professional (doctor, auxiliary nurse-midwife, nurse, or lady health visitor) and 76 percent by a traditional birth attendant. Only 20 percent of births outside a medical facility were followed by a postpartum check-up within two months of delivery. Overall, these results show that health services in Delhi are reaching many more women during pregnancy than during delivery or after childbirth. They also point to the important role of traditional birth attendants for the substantial proportion of births that occur at home.

The Government of India recommends that breastfeeding should begin immediately after childbirth and that infants should be exclusively breastfed for about the first four months of life. Although breastfeeding is nearly universal in Delhi, very few children begin breastfeeding immediately after birth—only 24 percent in the first hour and 51 percent in the first day. Only 13 percent of children under four months of age are exclusively breastfed. The median duration of breastfeeding is 23 months, or slightly under two years, and the median duration of exclusive breastfeeding or breastfeeding plus water only is 1.7 months. At age 6–9 months, all children should be receiving solid or mushy food in addition to breast milk. However, only 37 percent of children age 6–9 months receive the recommended combination of breast milk and solid/mushy foods.

NFHS-2 uses three internationally recognized standards to assess children's nutritional status—weight-for-age, height-for-age, and weight-for-height. Children who are more than two standard deviations below the median of an international reference population are considered underweight (measured in terms of weight-for-age), stunted (height-for-age), or wasted (weight-for-height). Stunting is a sign of chronic, long-term undernutrition, wasting is a sign of acute, short-term undernutrition, and underweight is a composite measure that takes into account both chronic and acute undernutrition.

Based on international standards, in Delhi 35 percent of children under age three years are underweight, 37 percent are stunted, and 13 percent are wasted. Although child nutritional status has improved in Delhi since the time of NFHS-1, when 41 percent of young children were underweight, 40 percent were stunted, and 13 percent were wasted, undernutrition is still a serious problem. Undernutrition is particularly high among children from disadvantaged socioeconomic groups. The prevalence of undernutrition is about the same for girls and boys. Anaemia is also a serious problem among Delhi's children. More than two-thirds (69 percent) of children age 6–35 months are anaemic, including a large majority of children in every subgroup of the population.

Child immunization is an important component of child-survival programmes in India, with efforts focussing on six serious but preventable diseases—tuberculosis, diphtheria, pertussis, tetanus, polio, and measles. The objective of the Universal Immunization Programme (UIP), launched in 1985–86, was to increase immunization coverage against these diseases to at least 85 percent of infants by 1990. In NFHS-2 in Delhi, 70 percent of children age 12–23 months are fully vaccinated, another 25 percent have received some but not all of the recommended vaccinations, and 5 percent have not been vaccinated at all.

Immunization coverage, although far from complete, has improved substantially since NFHS-1, when only 58 percent of children were fully vaccinated and 7 percent had not been vaccinated at all. Coverage of individual vaccines in Delhi is also much higher than would appear from information on full coverage alone. Ninety-two percent of children age 12–23 months have been vaccinated against tuberculosis, 80 percent have received three doses of DPT vaccine, and 81 percent have received three doses of polio vaccine. Full immunization coverage is not as high as it might be, in large part because only 78 percent of children have been vaccinated against measles. Dropout rates for the series of DPT and polio vaccinations are also a problem. Ninety-one percent of children received the first DPT vaccination, but only 80 percent received all three doses; 94 percent received the first polio vaccination, but only 81 percent received all three doses. It is also recommended that children under age five years should receive oral doses of vitamin A every six months starting at age nine months. However, only 33 percent of children age 12–35 months have received any vitamin A supplementation, and only 17 percent received a dose of vitamin A in the six months preceding the survey.

NFHS-2 collected information on the prevalence and treatment of three health problems that cause considerable mortality in young children—fever, acute respiratory infection (ARI), and diarrhoea. In Delhi, 36 percent of children under age three were ill with fever during the two weeks preceding the survey, 17 percent were ill with ARI, and 30 percent had diarrhoea. About four-fifths of the children who became ill with ARI or diarrhoea were taken to a health facility or health-care provider. Knowledge of the appropriate treatment of diarrhoea is fairly high in Delhi, compared with most other Indian states. Seventy-four percent of mothers of children age less than 3 years know about oral rehydration salt (ORS) packets. On the other hand, 15 percent of mothers incorrectly believe that when children are sick with diarrhoea, they should be given less to drink than usual. Sixty-eight percent of children with diarrhoea received some form of oral rehydration therapy (ORT), including 39 percent who received ORS. The percentage of children with diarrhoea who received ORS has increased substantially since NFHS-1, when it was only 19 percent, suggesting that there has been substantial improvement in the management of childhood diarrhoea.

Childhood lead poisoning is thought to be widespread in India. Lead is a toxicant which is harmful to the development of the brain and central nervous system of young children. In Delhi, an additional blood test for lead in the blood was administered to children under age three, and lead levels in the blood were estimated using LeadCare Analyzers. In Delhi, 45 percent of children under age three were found to have an elevated lead level in the blood ($\geq 10.0 \,\mu g/dl$).

Based on a weight-for-height index (the body mass index), 12 percent of women in Delhi are undernourished. Nutritional deficiency is particularly serious for women in disadvantaged socioeconomic groups. Women who are undernourished themselves are also much more likely than other women to have children who are undernourished. Overall, 41 percent of women in Delhi have some degree of anaemia, and 11 percent are moderately to severely anaemic. Anaemia is a serious problem among women in every population group, with prevalence rates ranging from 35 to 56 percent.

In Delhi, 89 percent of households use cooking salt that is iodized at the recommended level of 15 parts per million, suggesting that iodine deficiency disorders are rather rare. Households with a low standard of living are much less likely than other households to be using adequately iodized cooking salt.

More than one-third (37 percent) of currently married women in Delhi report some type of reproductive-health problem, including abnormal vaginal discharge, symptoms of urinary tract infections, and pain or bleeding associated with intercourse. Among these women, 50 percent have not sought any advice or treatment. These results suggest a need to expand reproductive-health services and information programmes that encourage women to discuss their problems with a health-care provider.

In recent years, there has been growing concern about domestic violence in India. NFHS-2 found that in Delhi, there is some acceptance among ever-married women that the beating of wives by husbands is justified under some circumstances, but less acceptance than in many other Indian states. Twenty-one percent of women accept at least one of six reasons as a justification for a husband beating his wife. Domestic violence itself is not very common. Fourteen percent of ever-married women in Delhi report that they have experienced beatings or physical mistreatment since age 15, and 8 percent report having experienced such violence during the 12 months preceding the survey. Most of these women have been beaten or physically mistreated by their husbands. Domestic violence against women is especially prevalent for illiterate women (20 percent), scheduled-caste women (22 percent), and women living in households with a low standard of living (31 percent) or a medium standard of living (22 percent).

Only 1 percent of women received a home visit from a health or family planning worker during the 12 months preceding the survey.

The survey also collected information on the prevalence of tuberculosis, asthma, malaria, and jaundice among all household members. Disease prevalence based on reports from household heads must be interpreted with caution, however. The survey found that about half of one percent of Delhi's population suffer from active tuberculosis, and 1 percent suffer from asthma. Another 0.6 percent suffered from malaria during the three months preceding the survey,

and 0.9 percent suffered from jaundice during the 12 months preceding the survey. Men are more likely than women to suffer from each of these conditions.

Most households in Delhi (53 percent) go to a private doctor for treatment when a family member is ill. Overall, 29 percent use the public medical sector, and 70 percent use the private medical sector (including private doctors, private hospitals and clinics and other facilities). Even among households with a low standard of living, only 33 percent normally use the public medical sector when members become ill. Most respondents are generally satisfied with the health care they receive. Ratings on quality of services are lower for public-sector facilities than for private-sector facilities. In the case of public-sector facilities, about half of respondents are somewhat critical of staff attitudes and cleanliness of the facilities.

NFHS-2 also collected information on selected lifestyle indicators for household members. According to household respondents, 24 percent of men and 2 percent of women smoke, 18 percent of men and less than 1 percent of women drink alcohol, and 13 percent of men and 3 percent of women chew *paan masala* or tobacco.

Although the spread of HIV/AIDS is a major concern in India, 21 percent of women in Delhi have not heard of AIDS. Awareness of AIDS is particularly low among rural women, illiterate women, Muslim women, women from scheduled castes and other backward classes, women living in households with a low standard of living, and women not regularly exposed to any mass media. Among women who have heard of AIDS, 97 percent learned about the disease from television and 36 percent from radio, suggesting that government efforts to promote AIDS awareness through the electronic mass media have achieved some success. Among women who have heard of AIDS, however, almost one-quarter (24 percent) do not know of any way to avoid infection. Survey results suggest that health personnel could play a much larger role in promoting AIDS awareness. In Delhi, only 2 percent of women who know about AIDS learned about the disease from a health worker.