



सत्यमेव जयते

Government of India

Ministry of Health and Family Welfare

# NATIONAL FAMILY HEALTH SURVEY - 4

## 2015-16

## STATE FACT SHEET

## KERALA



(स्थापना / Established in 1956)

बेहतर भविष्य के लिए क्षमता निर्माण  
Capacity Building for a Better Future

**International Institute for Population Sciences**  
(Deemed University)  
**Mumbai**

## Introduction

The National Family Health Survey 2015-16 (NFHS-4), the fourth in the NFHS series, provides information on population, health and nutrition for India and each State / Union territory. NFHS-4, for the first time, provides district-level estimates for many important indicators.

The contents of previous rounds of NFHS are generally retained and additional components are added from one round to another. In this round, information on malaria prevention, migration in the context of HIV, abortion, violence during pregnancy etc. have been added. The scope of clinical, anthropometric, and biochemical testing (CAB) or Biomarker component has been expanded to include measurement of blood pressure and blood glucose levels. NFHS-4 sample has been designed to provide district and higher level estimates of various indicators covered in the survey. However, estimates of indicators of sexual behaviour, husband's background and woman's work, HIV/AIDS knowledge, attitudes and behaviour, and, domestic violence will be available at State and national level only.

As in the earlier rounds, the Ministry of Health and Family Welfare, Government of India designated International Institute for Population Sciences, Mumbai as the nodal agency to conduct NFHS-4. The main objective of each successive round of the NFHS has been to provide essential data on health and family welfare and emerging issues in this area. NFHS-4 data will be useful in setting benchmarks and examining the progress in health sector the country has made over time. Besides providing evidence for the effectiveness of the ongoing programmes, the data from NFHS-4 help in identifying need for new programmes with area specific focus.

Four Survey Schedules - Household, Woman's, Man's and Biomarker - were canvassed in local language using Computer Assisted Personal Interviewing (CAPI). In the Household Schedule, information was collected on all usual members of the household and visitors who stayed in the household the previous night as well as socio-economic characteristics of the household, water and sanitation, health insurance, number of deaths in the household in the three years preceding the survey etc. Information on the woman's characteristics, marriage, fertility, children's immunizations and childcare, nutrition, contraception, reproductive health, sexual behaviour, HIV/AIDS, domestic violence, etc. was canvassed in the Woman's Schedule. The Man's Schedule covered the man's characteristics, marriage, his number of children, contraception, fertility preferences, nutrition, sexual behaviour, attitudes towards gender roles, HIV/AIDS, etc. The Biomarker Schedule covered measurements of height, weight and haemoglobin levels for children; measurements of height, weight, haemoglobin levels, blood pressure, and random blood glucose level for women aged 15-49 years and men aged 15-54 years. In addition, women and men were requested to provide a few drops of blood from a finger prick for laboratory testing for HIV.

This fact sheet provides information on key indicators and trends for Kerala. The figures of NFHS-4 and that of earlier rounds may not be strictly comparable due to differences in sample size and NFHS-4 will be a benchmark for future surveys. NFHS-4 fieldwork for Kerala was conducted from 8 March 2016 to 3 October 2016 by Society for Promotion of Youth & Masses (SPYM) and gathered information from 11,555 households, 11,033 women, and 1,864 men. Fact sheets for each district of Kerala are also available separately.

# Kerala - Key Indicators

Indicators	NFHS-4 (2015-16)			NFHS-3 (2005-06)
	Urban	Rural	Total	Total
<b>Population and Household Profile</b>				
1. Population (female) age 6 years and above who ever attended school (%)	96.5	94.5	95.4	89.8
2. Population below age 15 years (%)	20.3	20.1	20.2	25.4
3. Sex ratio of the total population (females per 1,000 males)	1,058	1,040	1,049	1,124
4. Sex ratio at birth for children born in the last five years (females per 1,000 males)	1,062	1,032	1,047	925
5. Children under age 5 years whose birth was registered (%)	97.3	98.1	97.7	88.6
6. Households with electricity (%)	99.5	98.9	99.2	91.0
7. Households with an improved drinking-water source <sup>1</sup> (%)	95.7	93.0	94.3	69.1
8. Households using improved sanitation facility <sup>2</sup> (%)	98.7	97.5	98.1	90.5
9. Households using clean fuel for cooking <sup>3</sup> (%)	65.2	50.6	57.4	27.8
10. Households using iodized salt (%)	98.8	98.1	98.4	82.6
11. Households with any usual member covered by a health scheme or health insurance (%)	45.3	49.8	47.7	8.9
<b>Characteristics of Adults (age 15-49)</b>				
12. Women who are literate (%)	98.4	97.3	97.9	93.0
13. Men who are literate (%)	98.8	98.6	98.7	95.5
14. Women with 10 or more years of schooling (%)	74.1	70.5	72.2	48.7
<b>Marriage and Fertility</b>				
15. Women age 20-24 years married before age 18 years (%)	7.7	7.5	7.6	15.4
16. Men age 25-29 years married before age 21 years (%)	1.8	3.8	2.8	2.9
17. Total fertility rate (children per woman)	1.6	1.6	1.6	1.9
18. Women age 15-19 years who were already mothers or pregnant at the time of the survey (%)	2.7	3.2	3.0	5.8
<b>Infant and Child Mortality Rates (per 1,000 live births)</b>				
19. Infant mortality rate (IMR)	6	5	6	15
20. Under-five mortality rate (U5MR)	8	6	7	16
<b>Current Use of Family Planning Methods (currently married women age 15-49 years)</b>				
21. Any method <sup>4</sup> (%)	53.3	52.9	53.1	68.6
22. Any modern method <sup>4</sup> (%)	50.6	50.1	50.3	57.9
23. Female sterilization (%)	45.7	45.9	45.8	48.7
24. Male sterilization (%)	0.1	0.1	0.1	1.0
25. IUD/PPIUD (%)	1.5	1.7	1.6	2.3
26. Pill (%)	0.3	0.1	0.2	0.4
27. Condom (%)	3.0	2.2	2.6	5.5
<b>Unmet Need for Family Planning (currently married women age 15-49 years)<sup>5</sup></b>				
28. Total unmet need (%)	14.3	13.2	13.7	9.8
29. Unmet need for spacing (%)	8.8	7.9	8.3	6.1
<b>Quality of Family Planning Services</b>				
30. Health worker ever talked to female non-users about family planning (%)	17.9	16.2	17.0	11.3
31. Current users ever told about side effects of current method <sup>6</sup> (%)	55.0	56.1	55.6	46.7

<sup>1</sup> Piped water into dwelling/yard/plot, public tap/standpipe, tube well or borehole, protected dug well, protected spring, rainwater, community RO plant. <sup>2</sup> Flush to piped sewer system, flush to septic tank, flush to pit latrine, ventilated improved pit (VIP)/biogas latrine, pit latrine with slab, twin pit/composting toilet, which is not shared with any other household. <sup>3</sup> Electricity, LPG/natural gas, biogas. <sup>4</sup> Includes other methods that are not shown separately

<sup>5</sup> Unmet need for family planning refers to fecund women who are not using contraception but who wish to postpone the next birth (spacing) or stop childbearing altogether (limiting). Specifically, women are considered to have unmet need for spacing if they are:

- At risk of becoming pregnant, not using contraception, and either do not want to become pregnant within the next two years, or are unsure if or when they want to become pregnant.

- Pregnant with a mistimed pregnancy.

- Postpartum amenorrhic for up to two years following a mistimed birth and not using contraception.

Women are considered to have unmet need for limiting if they are:

- At risk of becoming pregnant, not using contraception, and want no (more) children.

- Pregnant with an unwanted pregnancy.

- Postpartum amenorrhic for up to two years following an unwanted birth and not using contraception.

Women who are classified as infecund have no unmet need because they are not at risk of becoming pregnant. Unmet need for family planning is the sum of unmet need for spacing plus unmet need for limiting.

<sup>6</sup> Based on current users of female sterilization, IUD/PPIUD, injectables and pill who started using that method in the past 5 years.

'na' not available

( ) Based on 25-49 unweighted cases

\* Percentage not shown; based on fewer than 25 unweighted cases

## Kerala - Key Indicators

Indicators	NFHS-4 (2015-16)			NFHS-3 (2005-06)
	Urban	Rural	Total	Total
<b>Maternal and Child Health</b>				
<b>Maternity Care (for last birth in the 5 years before the survey)</b>				
32. Mothers who had antenatal check-up in the first trimester (%)	96.1	94.2	95.1	91.9
33. Mothers who had at least 4 antenatal care visits (%)	88.4	91.7	90.1	93.0
34. Mothers whose last birth was protected against neonatal tetanus <sup>7</sup> (%)	96.1	96.7	96.4	88.7
35. Mothers who consumed iron folic acid for 100 days or more when they were pregnant (%)	69.6	64.9	67.1	70.1
36. Mothers who had full antenatal care <sup>8</sup> (%)	63.0	59.5	61.2	66.7
37. Registered pregnancies for which the mother received Mother and Child Protection (MCP) card (%)	82.0	86.1	84.2	na
38. Mothers who received postnatal care from a doctor/nurse/LHV/ANM/midwife/other health personnel within 2 days of delivery (%)	87.6	89.6	88.7	84.6
39. Mothers who received financial assistance under Janani Suraksha Yojana (JSY) for births delivered in an institution (%)	19.1	21.5	20.4	na
40. Average out of pocket expenditure per delivery in public health facility (Rs.)	6,848	6,944	6,901	na
41. Children born at home who were taken to a health facility for check-up within 24 hours of birth (%)	*	*	*	*
42. Children who received a health check after birth from a doctor/nurse/LHV/ANM/midwife/other health personnel within 2 days of birth (%)	48.0	50.1	49.1	na
<b>Delivery Care (for births in the 5 years before the survey)</b>				
43. Institutional births (%)	99.8	99.9	99.8	99.3
44. Institutional births in public facility (%)	35.6	40.8	38.3	35.6
45. Home delivery conducted by skilled health personnel (out of total deliveries) (%)	0.1	0.1	0.1	0.1
46. Births assisted by a doctor/nurse/LHV/ANM/other health personnel (%)	99.9	100.0	99.9	99.4
47. Births delivered by caesarean section (%)	37.1	34.6	35.8	30.1
48. Births in a private health facility delivered by caesarean section (%)	39.2	38.1	38.6	32.7
49. Births in a public health facility delivered by caesarean section (%)	33.5	29.8	31.4	26.0
<b>Child Immunizations and Vitamin A Supplementation</b>				
50. Children age 12-23 months fully immunized (BCG, measles, and 3 doses each of polio and DPT) (%)	82.2	82.0	82.1	75.3
51. Children age 12-23 months who have received BCG (%)	98.3	97.9	98.1	96.3
52. Children age 12-23 months who have received 3 doses of polio vaccine (%)	89.6	87.6	88.5	83.1
53. Children age 12-23 months who have received 3 doses of DPT vaccine (%)	90.5	90.3	90.4	84.0
54. Children age 12-23 months who have received measles vaccine (%)	90.3	88.6	89.4	82.1
55. Children age 12-23 months who have received 3 doses of Hepatitis B vaccine (%)	82.7	82.1	82.4	na
56. Children age 9-59 months who received a vitamin A dose in last 6 months (%)	74.3	74.5	74.4	31.5
57. Children age 12-23 months who received most of the vaccinations in public health facility (%)	72.6	81.7	77.6	66.0
58. Children age 12-23 months who received most of the vaccinations in private health facility (%)	27.4	18.3	22.4	30.7
<b>Treatment of Childhood Diseases (children under age 5 years)</b>				
59. Prevalence of diarrhoea (reported) in the last 2 weeks preceding the survey (%)	2.7	4.0	3.4	6.8
60. Children with diarrhoea in the last 2 weeks who received oral rehydration salts (ORS) (%)	(40.5)	54.9	49.4	32.4
61. Children with diarrhoea in the last 2 weeks who received zinc (%)	(5.4)	19.4	14.1	na
62. Children with diarrhoea in the last 2 weeks taken to a health facility (%)	(69.5)	80.4	76.3	63.3
63. Prevalence of symptoms of acute respiratory infection (ARI) in the last 2 weeks preceding the survey (%)	0.6	1.0	0.8	2.7
64. Children with fever or symptoms of ARI in the last 2 weeks preceding the survey taken to a health facility (%)	90.2	89.9	90.1	80.7
<b>Child Feeding Practices and Nutritional Status of Children</b>				
65. Children under age 3 years breastfed within one hour of birth <sup>9</sup> (%)	63.7	64.8	64.3	55.4
66. Children under age 6 months exclusively breastfed <sup>10</sup> (%)	55.0	51.3	53.3	56.2
67. Children age 6-8 months receiving solid or semi-solid food and breastmilk <sup>10</sup> (%)	(64.2)	62.4	63.1	(93.9)
68. Breastfeeding children age 6-23 months receiving an adequate diet <sup>10,11</sup> (%)	19.5	22.7	21.3	na
69. Non-breastfeeding children age 6-23 months receiving an adequate diet <sup>10,11</sup> (%)	*	(20.6)	22.3	na
70. Total children age 6-23 months receiving an adequate diet <sup>10,11</sup> (%)	19.9	22.5	21.4	na
71. Children under 5 years who are stunted (height-for-age) <sup>12</sup> (%)	19.8	19.5	19.7	24.5
72. Children under 5 years who are wasted (weight-for-height) <sup>12</sup> (%)	16.0	15.5	15.7	15.9
73. Children under 5 years who are severely wasted (weight-for-height) <sup>13</sup> (%)	7.1	6.1	6.5	4.1
74. Children under 5 years who are underweight (weight-for-age) <sup>12</sup> (%)	15.5	16.7	16.1	22.9

<sup>7</sup> Includes mothers with two injections during the pregnancy of her last birth, or two or more injections (the last within 3 years of the last live birth), or three or more injections (the last within 5 years of the last birth), or four or more injections (the last within 10 years of the last live birth), or five or more injections at any time prior to the last birth. Not exactly comparable with NFHS-3 due to differences in definition. <sup>8</sup> Full antenatal care is at least four antenatal visits, at least one tetanus toxoid (TT) injection and iron folic acid tablets or syrup taken for 100 or more days. <sup>9</sup> Based on the last child born in the 5 years before the survey. <sup>10</sup> Based on the youngest child living with the mother. <sup>11</sup> Breastfed children receiving 4 or more food groups and a minimum meal frequency, non-breastfed children fed with a minimum of 3 Infant and Young Child Feeding Practices (fed with other milk or milk products at least twice a day, a minimum meal frequency that is receiving solid or semi-solid food at least twice a day for breastfed infants 6-8 months and at least three times a day for breastfed children 9-23 months, and solid or semi-solid foods from at least four food groups not including the milk or milk products food group). <sup>12</sup> Below -2 standard deviations, based on the WHO standard. <sup>13</sup> Below -3 standard deviations, based on the WHO standard.

## Kerala - Key Indicators

Indicators	NFHS-4 (2015-16)			NFHS-3 (2005-06)
	Urban	Rural	Total	Total
<b>Nutritional Status of Adults (age 15-49 years)</b>				
75. Women whose Body Mass Index (BMI) is below normal (BMI < 18.5 kg/m <sup>2</sup> ) <sup>14</sup> (%)	9.1	10.2	9.7	18.0
76. Men whose Body Mass Index (BMI) is below normal (BMI < 18.5 kg/m <sup>2</sup> ) (%)	8.4	8.6	8.5	21.5
77. Women who are overweight or obese (BMI ≥ 25.0 kg/m <sup>2</sup> ) <sup>14</sup> (%)	33.5	31.5	32.4	28.1
78. Men who are overweight or obese (BMI ≥ 25.0 kg/m <sup>2</sup> ) (%)	31.1	26.3	28.5	17.9
<b>Anaemia among Children and Adults<sup>15</sup></b>				
79. Children age 6-59 months who are anaemic (<11.0 g/dl) (%)	35.5	35.9	35.7	44.5
80. Non-pregnant women age 15-49 years who are anaemic (<12.0 g/dl) (%)	36.7	33.0	34.7	32.8
81. Pregnant women age 15-49 years who are anaemic (<11.0 g/dl) (%)	22.7	22.5	22.6	33.8
82. All women age 15-49 years who are anaemic (%)	36.3	32.6	34.3	32.8
83. Men age 15-49 years who are anaemic (<13.0 g/dl) (%)	12.6	11.0	11.7	8.0
<b>Blood Sugar Level among Adults (age 15-49 years)<sup>16</sup></b>				
<b>Women</b>				
84. Blood sugar level - high (>140 mg/dl) (%)	8.4	9.0	8.7	na
85. Blood sugar level - very high (>160 mg/dl) (%)	4.8	4.8	4.8	na
<b>Men</b>				
86. Blood sugar level - high (>140 mg/dl) (%)	13.7	12.6	13.1	na
87. Blood sugar level - very high (>160 mg/dl) (%)	4.7	7.7	6.3	na
<b>Hypertension among Adults (age 15-49 years)</b>				
<b>Women</b>				
88. Slightly above normal (Systolic 140-159 mm of Hg and/or Diastolic 90-99 mm of Hg) (%)	4.8	6.1	5.5	na
89. Moderately high (Systolic 160-179 mm of Hg and/or Diastolic 100-109 mm of Hg) (%)	0.6	1.0	0.8	na
90. Very high (Systolic ≥180 mm of Hg and/or Diastolic ≥110 mm of Hg) (%)	0.6	0.5	0.5	na
<b>Men</b>				
91. Slightly above normal (Systolic 140-159 mm of Hg and/or Diastolic 90-99 mm of Hg) (%)	5.6	9.3	7.5	na
92. Moderately high (Systolic 160-179 mm of Hg and/or Diastolic 100-109 mm of Hg) (%)	1.5	1.2	1.3	na
93. Very high (Systolic ≥180 mm of Hg and/or Diastolic ≥110 mm of Hg) (%)	0.5	0.8	0.7	na
<b>Women Age 15-49 Years Who Have Ever Undergone Examinations of:</b>				
94. Cervix (%)	61.7	61.0	61.3	na
95. Breast (%)	34.0	32.9	33.4	na
96. Oral cavity (%)	51.5	50.1	50.8	na
<b>Knowledge of HIV/AIDS among Adults (age 15-49 years)</b>				
97. Women who have comprehensive knowledge <sup>17</sup> of HIV/AIDS (%)	42.5	43.6	43.1	32.7
98. Men who have comprehensive knowledge <sup>17</sup> of HIV/AIDS (%)	51.8	49.8	50.8	40.9
99. Women who know that consistent condom use can reduce the chances of getting HIV/AIDS (%)	74.9	73.5	74.2	65.2
100. Men who know that consistent condom use can reduce the chances of getting HIV/AIDS (%)	86.1	83.7	84.8	82.4
<b>Women's Empowerment and Gender Based Violence (age 15-49 years)</b>				
101. Currently married women who usually participate in household decisions (%)	91.7	92.4	92.1	88.0
102. Women who worked in the last 12 months who were paid in cash (%)	21.4	19.4	20.4	28.0
103. Ever-married women who have ever experienced spousal violence (%)	13.7	14.8	14.3	16.4
104. Ever-married women who have experienced violence during any pregnancy (%)	0.9	1.6	1.2	na
105. Women owning a house and/or land (alone or jointly with others) (%)	31.1	38.4	34.9	na
106. Women having a bank or savings account that they themselves use (%)	70.3	70.8	70.6	27.0
107. Women having a mobile phone that they themselves use (%)	81.1	81.2	81.2	na
108. Women age 15-24 years who use hygienic methods of protection during their menstrual period <sup>18</sup> (%)	91.7	88.5	90.0	na
<b>Tobacco Use and Alcohol Consumption among Adults (age 15-49 years)</b>				
109. Women who use any kind of tobacco (%)	0.1	1.4	0.8	1.8
110. Men who use any kind of tobacco (%)	23.6	27.5	25.7	43.5
111. Women who consume alcohol (%)	2.4	0.9	1.6	0.7
112. Men who consume alcohol (%)	32.8	40.8	37.0	45.2
113. Women who tried to stop smoking or using tobacco in any other form during the past 12 months <sup>19</sup> (%)	*	43.5	44.6	na
114. Men who tried to stop smoking or using tobacco in any other form (during the past 12 months) <sup>19</sup> (%)	21.3	23.7	22.6	na

<sup>14</sup> Excludes pregnant women and women with a birth in the preceding 2 months. <sup>15</sup> Haemoglobin in grams per decilitre (g/dl). Among children, prevalence is adjusted for altitude. Among adults, prevalence is adjusted for altitude and for smoking status. <sup>16</sup> Random blood sugar measurement (including those under medication).

<sup>17</sup> Comprehensive knowledge means knowing that consistent use of condoms every time they have sex and having just one uninfected faithful sex partner can reduce the chance of getting HIV/AIDS, knowing that a healthy-looking person can have HIV/AIDS, and rejecting two common misconceptions about transmission or prevention of HIV/AIDS. <sup>18</sup> Locally prepared napkins, sanitary napkins and tampons are considered as hygienic methods of protection. <sup>19</sup> Based on those who currently smoke or use tobacco

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