

### State Nutrition Profile: Jharkhand

#### ABOUT THIS DATA NOTE

This *Data Note* describes the trends for a set of key nutrition and health outcomes, determinants, and coverage of interventions. The findings are based on data from multiple rounds of the National Family Health Surveys using estimates from reports, factsheets, or unit level data. In addition to standard prevalence-based analyses, this *Data Note* includes headcount-based analyses aligned to the POSHAN Abhiyaan monitoring framework to provide evidence that helps identify priority districts and the number of districts where public health concerns exist as per the WHO guidelines<sup>1</sup>. This *Data Note* also includes a color-coded dashboard to compare the coverage of nutrition interventions by district. It concludes with key takeaways for children, women, and men, and identifies areas for improvement.

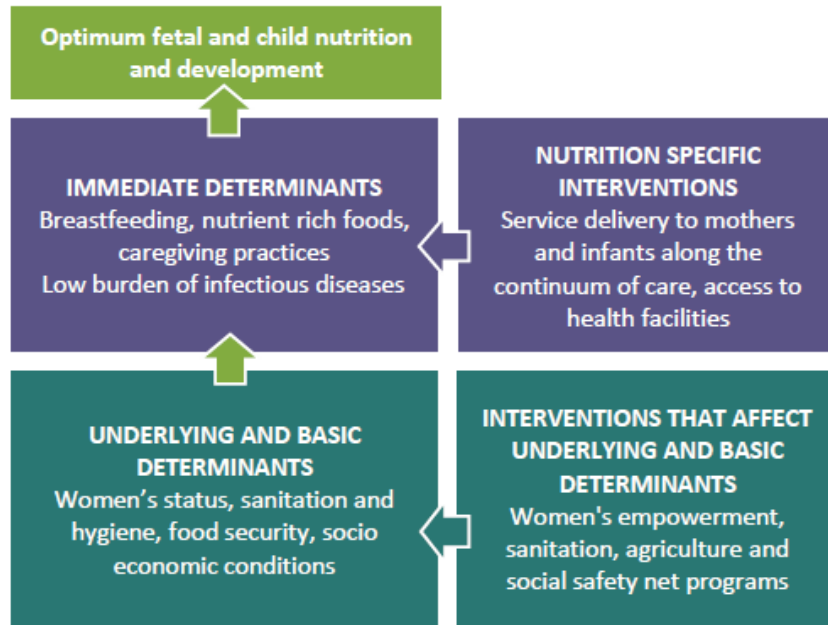
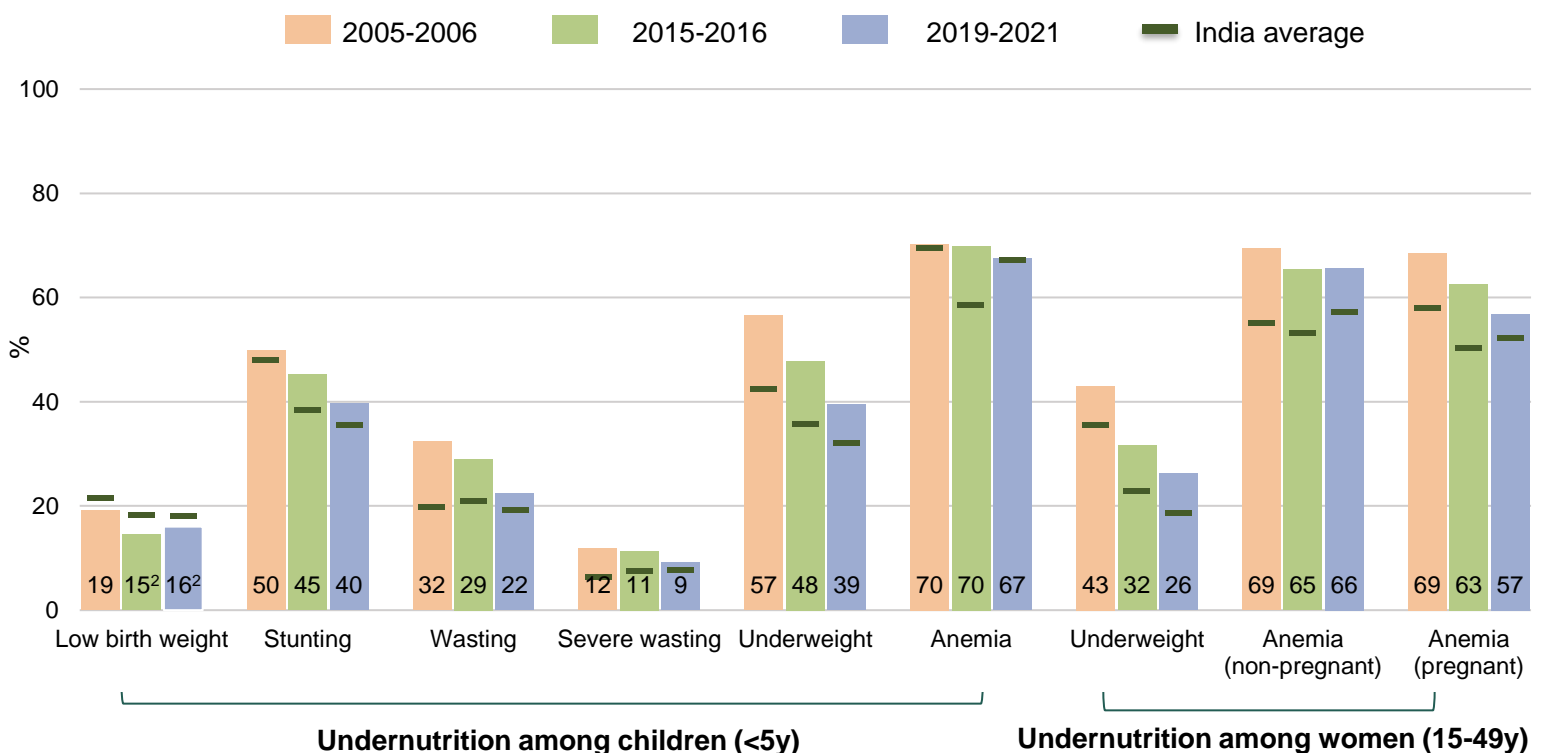


Figure 1. Trends in undernutrition outcomes 2005-2006, 2015-2016, 2019-2021



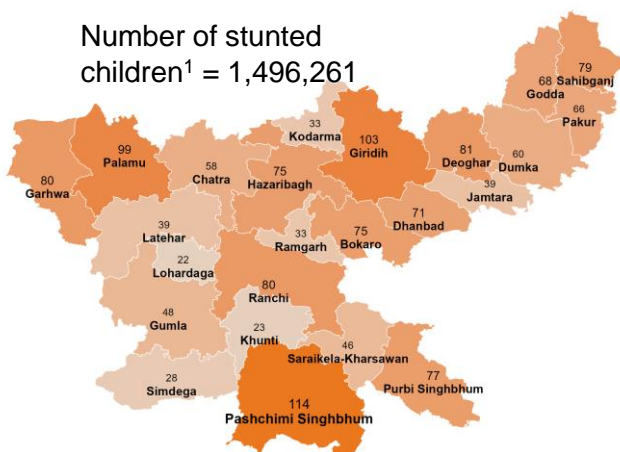
Source: NFHS-3 (2005-2006) national report and data [IFPRI estimates], NFHS-4 (2015-2016) national report, and NFHS-5 (2019-2021) national and state factsheets. Anemia among non-pregnant and pregnant women for 2005-2006 are IFPRI estimates using woman dataset. <sup>1</sup>WHO. Nutrition Landscape Information System (NLIS). Help Topic: Malnutrition in children. Stunting, wasting, overweight and underweight. (<https://apps.who.int/nutrition/landscape/help.aspx?menu=0&helpid=391&lang=EN>).

<sup>2</sup>In NFHS-3, NFHS-4, and NFHS-5, 79.5%, 30.7% and 14.4% of data were missing, respectively.

# Map 1 & 2. Number of stunted & anemic children <5y, 2019-2021

## Map 1. Stunting

Number of stunted children<sup>1</sup> = 1,496,261



Note: Number in '000s in the above figure

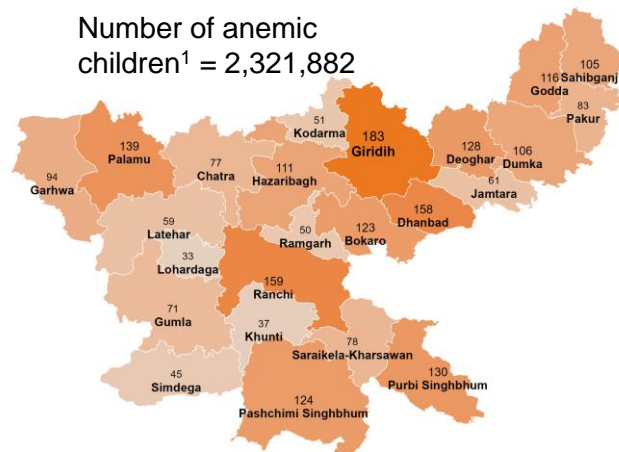
### Highest burden districts

1	Pashchimi Singhbhum	114,411
2	Giridih	103,447
3	Palamu	99,324
4	Deoghar	80,527
5	Ranchi	79,981

No. of districts with public health concern<sup>2</sup>: 24 of 24

## Map 2. Anemia

Number of anemic children<sup>1</sup> = 2,321,882



Note: Number in '000s in the above figure

### Highest burden districts

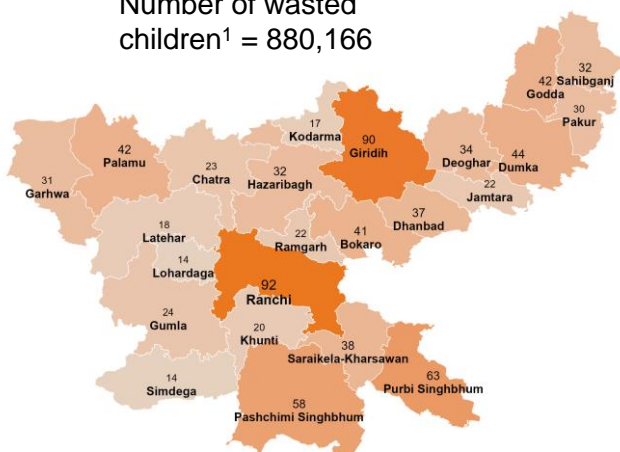
1	Chatra	182,969
2	Ranchi	159,266
3	Dhanbad	157,781
4	Palamu	139,214
5	Purbi Singhbhum	129,947

No. of districts with public health concern<sup>2</sup>: 24 of 24

# Map 3 & 4. Number of wasted children <5y, 2019-2021

## Map 3. Wasting

Number of wasted children<sup>1</sup> = 880,166



Note: Number in '000s in the above figure

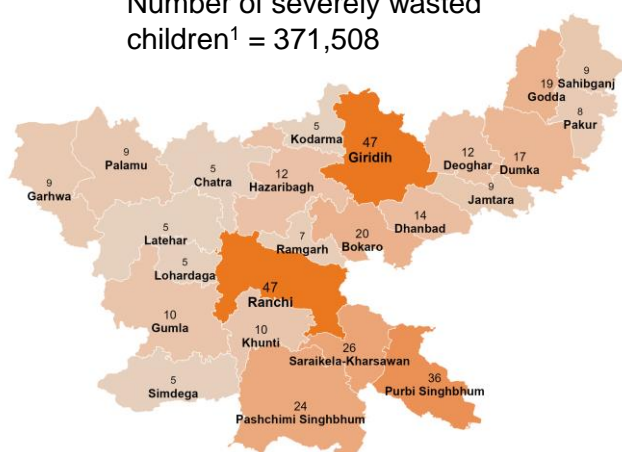
### Highest burden districts

1	Ranchi	92,318
2	Giridih	90,176
3	Purbi Singhbhum	63,064
4	Pashchimi Singhbhum	57,536
5	Dumka	43,806

No. of districts with public health concern<sup>2</sup>: 24 of 24

## Map 4. Severe Wasting

Number of severely wasted children<sup>1</sup> = 371,508



Note: Number in '000s in the above figure

### Highest burden districts

1	Ranchi	47,316
2	Giridih	47,019
3	Purbi Singhbhum	36,009
4	Saraikela-Kharsawan	26,352
5	Pashchimi Singhbhum	24,313

No. of districts with public health concern<sup>2</sup>: 24 of 24

Source: IFPRI estimates - The headcount was calculated as the product of the undernutrition prevalence, and the total eligible projected population for each district in 2019. Prevalence estimates were obtained from NFHS-5 (2019-2021) district factsheet, and the projected population for 2019 was estimated using Census 2011.

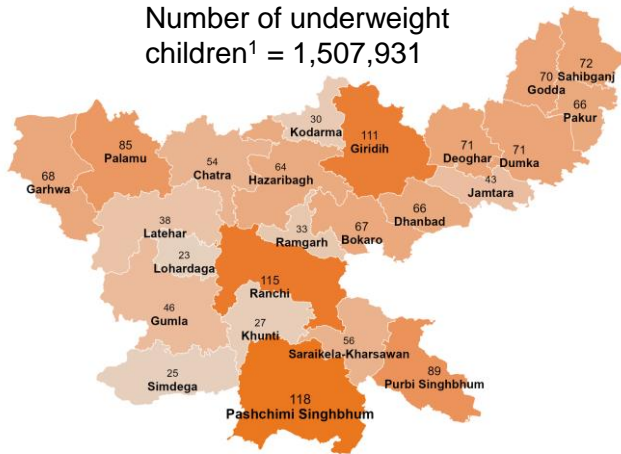
<sup>1</sup>The total number of children <5 years is 3,815,106.

<sup>2</sup>Public health concern is defined as  $\geq 20\%$  for stunting,  $\geq 40\%$  for anemia,  $\geq 10\%$  for wasting, and  $\geq 2\%$  for severe wasting (WHO 2011).

# Map 5 & 6. Number of underweight children (<5y) & women (15-49y), 2019-2021

## Map 5. Underweight children

Number of underweight children<sup>1</sup> = 1,507,931



Note: Number in '000s in the above figure

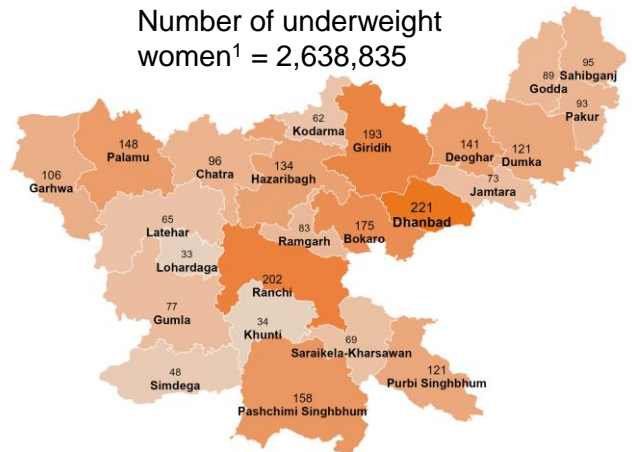
### Highest burden districts

1	Pashchimi Singhbhum	117,752
2	Ranchi	114,536
3	Giridih	111,138
4	Purbi Singhbhum	89,367
5	Palamu	84,849

No. of districts with public health concern<sup>2</sup>: 24 of 24

## Map 6. Underweight women

Number of underweight women<sup>1</sup> = 2,638,835



Note: Number in '000s in the above figure

### Highest burden districts

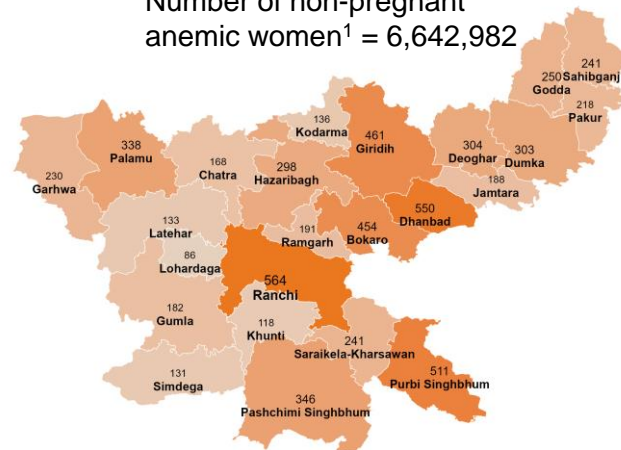
1	Dhanbad	221,043
2	Ranchi	201,750
3	Giridih	193,044
4	Bokaro	175,174
5	Pashchimi Singhbhum	157,798

No. of districts with public health concern<sup>2</sup>: 24 of 24

# Map 7 & 8. Number of anemic women (15-49y), 2019-2021

## Map 7. Anemia among non-pregnant women

Number of non-pregnant anemic women<sup>1</sup> = 6,642,982



Note: Number in '000s in the above figure

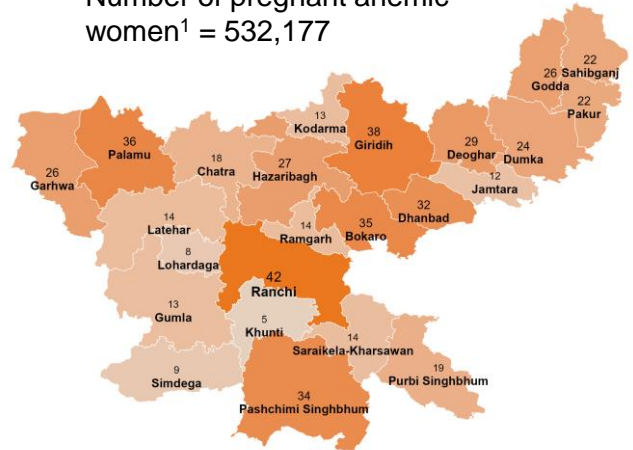
### Highest burden districts

1	Ranchi	563,988
2	Dhanbad	549,587
3	Purbi Singhbhum	511,030
4	Giridih	461,168
5	Bokaro	454,083

No. of districts with public health concern<sup>2</sup>: 24 of 24

## Map 8. Anemia among pregnant women

Number of pregnant anemic women<sup>1</sup> = 532,177



Note: Number in '000s in the above figure

### Highest burden districts

1	Ranchi	41,962
2	Giridih	38,428
3	Palamu	36,023
4	Bokaro	35,125
5	Pashchimi Singhbhum	33,964

No. of districts with public health concern<sup>2</sup>: 22 of 24

Source: IFPRI estimates - The headcount was calculated as the product of the undernutrition prevalence, and the total eligible projected population for each district in 2019. Prevalence estimates were obtained from NFHS-5 (2019-2021) district factsheets, and the projected population for 2019 was estimated using Census 2011. <sup>1</sup>The total number of children <5 years is 3,815,106, pregnant women 15-49 years is 958,104, and non-pregnant women 15-49 years is 9,141,851. <sup>2</sup>Public health concern is defined as  $\geq 20\%$  for underweight (children),  $\geq 10\%$  for underweight (women),  $\geq 40\%$  for anemia among non-pregnant women, and  $\geq 40\%$  for anemia among pregnant women (WHO 2011).

Figure 2. Trends in overweight/obesity & NCDs<sup>1</sup>  
2005-2006, 2015-2016, 2019-2021

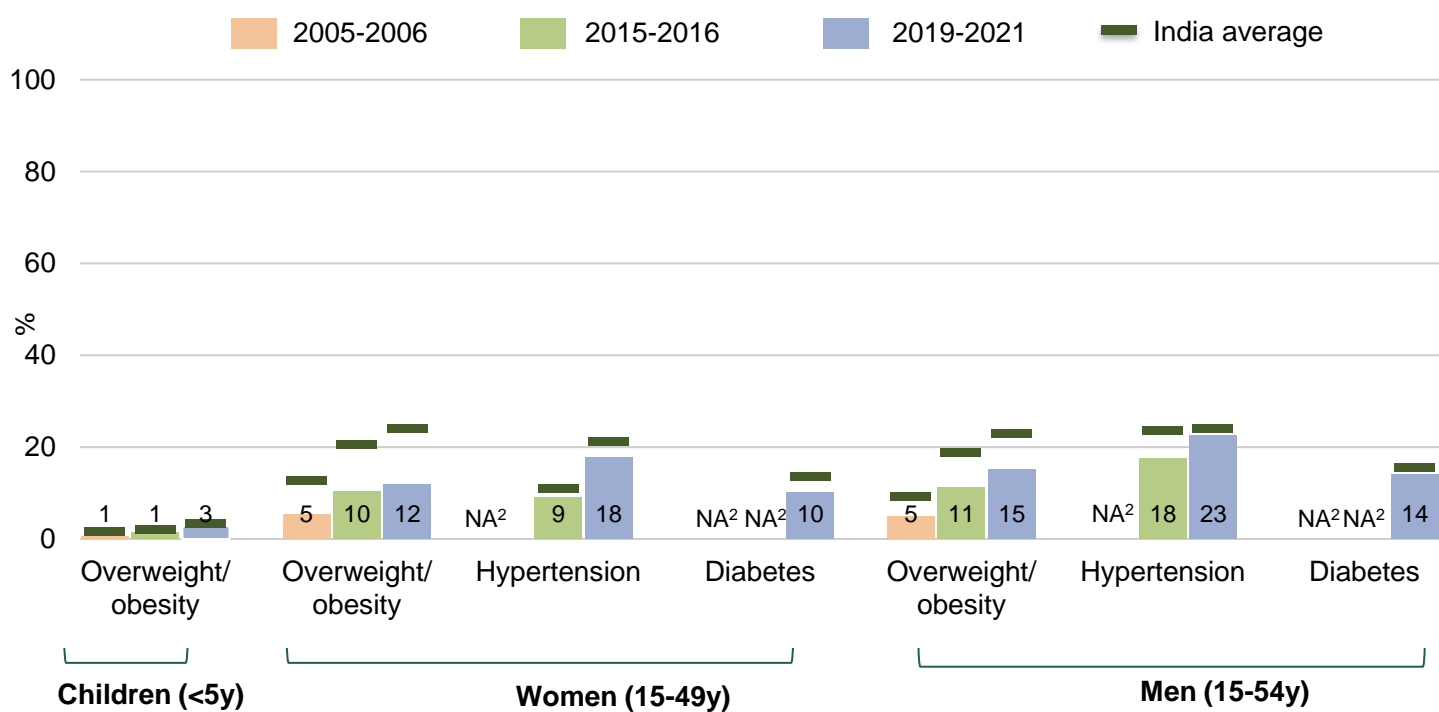


Table 1. Overweight/obesity & NCDs<sup>1</sup> at district-level  
2015-2016, 2019-2021

Category	Outcomes	Worst performing districts (pp)	Best performing districts (pp)	Highest burden districts (thousands) <sup>4</sup>	No of districts with public health concern <sup>5</sup> (total=24)
		<i>Difference between (2019-2021) &amp; (2015-2016)<sup>3</sup></i>	<i>Difference between (2019-2021) &amp; (2015-2016)<sup>3</sup></i>	2019-2021	2019-2021
Children <5 years	Overweight/obesity	Sarai-Khar <sup>6</sup> : +8.2 Khunti: +5.2	Hazaribagh: -1.6 Palamu: -1.5	Giridih: 17 Ranchi: 12	0
	Overweight/obesity	Sahibganj: +6.7 Garhwa: +6.1	Sarai-Khar <sup>6</sup> : -5.9 Pa Sing <sup>6</sup> : -2.2	Pu Sing <sup>6</sup> : 146 Ranchi: 142	0
Women (15-49 years)	Hypertension	Ramgarh: +12.7 Bokaro: +12.1	Khunti: -0.5	Ranchi: 187 Dhanbad: 158	3
	Diabetes	<i>Not Available<sup>2</sup></i>		Pu Sing <sup>6</sup> : 92 Ranchi: 92	0
Men (15-54 years)	Overweight/obesity	<i>Not Available<sup>2</sup></i>			
	Hypertension	Bokaro: +11.6 Hazaribagh: +10.4	Chatra: -4.8 Sarai-Khar <sup>6</sup> : -3.7	Dhanbad: 227 Ranchi: 221	18
	Diabetes	<i>Not Available<sup>2</sup></i>		Pu Sing <sup>6</sup> : 132 Dhanbad: 119	1

Source: NFHS-3 (2005-2006) national report, NFHS-4 (2015-16) national report and data [IFPRI estimates] and NFHS-5 (2019-2021) national and state factsheets. Diabetes not available in NFHS-4. pp: percentage points.

<sup>1</sup>NCDs: non-communicable diseases. <sup>2</sup>Indicates unavailability of data for a particular indicator in the specified NFHS round. Diabetes data for NFHS-4 are not included in the NFHS-5 factsheet because definition of diabetes is not comparable between NFHS-4 and 5.

<sup>3</sup>The difference is calculated only between districts that are comparable between 2015-2016 and 2019-2021. All districts are comparable between the time periods. <sup>4</sup>Burden: The headcount was calculated as the product of the overweight/obesity prevalence and the total eligible projected population for each district in 2019. Prevalence estimates were obtained from NFHS-5 (2019-2021) district factsheet and projected population for 2019 was estimated using Census 2011.

<sup>5</sup>Public health concern is defined as prevalence  $\geq 15\%$  for overweight/obesity (children),  $\geq 20\%$  for overweight/obesity (women and men),  $\geq 20\%$  hypertension (women and men), and  $\geq 20\%$  diabetes (women and men) (WHO 2011).

<sup>6</sup>District codes: Sarai-Khar: Saraikela-Kharsawan; Pa Sing: Paschimi Singhbhum; Pu Sing: Purbi Singhbhum.

Figure 3. Trends in immediate determinants (%)  
2005-2006, 2015-2016, 2019-2021

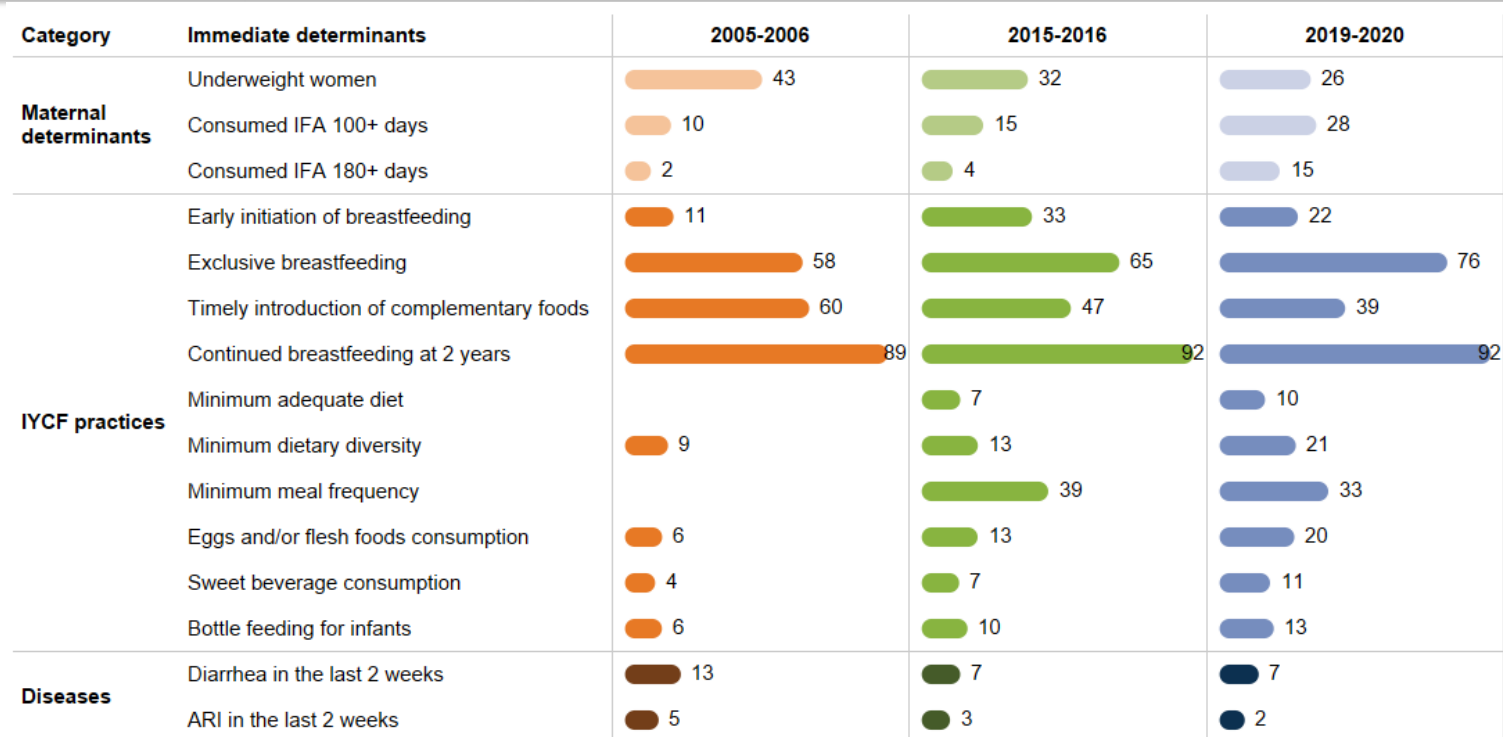


Table 2. Immediate determinants at district-level  
2015-2016, 2019-2021

Category	Immediate determinants	Worst performing districts (pp)	Best performing districts (pp)	Top coverage districts (%) <sup>2</sup>
		<i>Difference between (2019-2021) &amp; (2015-2016)<sup>1</sup></i>	<i>Difference between (2019-2021) &amp; (2015-2016)<sup>1</sup></i>	2019-2021
Maternal determinants	Underweight women	Latehar: +1.1 Pa Sing <sup>4</sup> : +0.7	Sarai-Khar <sup>4</sup> : -14.5 Godda: -12.0	Pu Sing <sup>4</sup> : 15.5 Sarai-Khar <sup>4</sup> : 20.3
	Consumed IFA 100+ days	Deoghar: -2.1 Dhanbad: -1.8	Pu Sing <sup>4</sup> : +39.4 Simdega: +39.2	Pu Sing <sup>4</sup> : 54.6 Gumla: 47.8
IYCF practices	Early initiation of breastfeeding	Sarai-Khar <sup>4</sup> : -27.2 Godda: -26.7	Kodarma: +3.2	Lohardaga: 40.5 Palamu: 29.7
	Exclusive breastfeeding	Bokaro: -13.2 Godda: -8.4	Chatra: +35.9 Garhwa: +35.8	Ranchi: 89.0 Garhwa: 87.5
	Timely introduction of complementary foods	Chatra: -16.1	<i>Not Available<sup>3</sup></i>	Chatra: 47.8 Latehar: 29.6
	Minimum adequate diet	Dumka: -8.8 Simdega: -6.8	Hazaribagh: +14.7 Ranchi: +12.3	Ranchi: 18.7 Bokaro: 16.4
Diseases	Diarrhea in the 2 two weeks	Bokaro: +11.1 Jamtara: +8.5	Palamu: -13.5 Pu Sing <sup>4</sup> : -7.1	Pu Sing <sup>4</sup> : 1.9 Sahibganj: 3.4
	ARI in the last 2 weeks	Sarai-Khar <sup>4</sup> : +2.6 Jamtara: +2.5	Pakur: -4.8 Garhwa: -4.8	Garhwa: 0.2 Lohardaga: 0.6

pp: percentage points.

Source: NFHS-3 (2005-2006) national and state reports and data [IFPRI estimates], NFHS-4 (2015-2016) state report and data [IFPRI estimates], and NFHS-5 (2019-21) national and state reports, factsheets, and data [IFPRI estimates].

Note: Definitions of IYCF indicators are based on WHO guidelines.

<sup>1</sup>The difference is calculated only between districts that are comparable between 2015-2016 and 2019-2021.

<sup>2</sup>For all indicators, top coverage districts refer to the districts with the highest prevalence in immediate determinants, except for underweight women, diarrhea in the last 2 weeks, and ARI in the last 2 weeks, for which it refers to the districts with the lowest prevalence in coverage.

<sup>3</sup>Indicates unavailability of data for a particular indicator in the specified NFHS round.

<sup>4</sup>District codes: Sarai-Khar: Saraikela-Kharsawan; Pa Sing: Paschimi Singhbhum; Pu Sing: Purbi Singhbhum.

Figure 4. Trends in underlying determinants (%)  
2005-2006, 2015-2016, 2019-2021



Table 3. Underlying determinants at district-level  
2015-2016, 2019-2021

Category	Underlying determinants	Worst performing districts (pp)	Best performing districts (pp)	Top coverage districts (%) <sup>2</sup>
		<i>Difference between (2019-2021) &amp; (2015-2016)<sup>1</sup></i>	<i>Difference between (2019-2021) &amp; (2015-2016)<sup>1</sup></i>	<i>2019-2021</i>
Maternal determinants	Women with ≥10 years education	Deoghar: -4.8	Garhwa: +11.3 Palamu: +9.1	Ranchi: 49.5 Pu Sing <sup>3</sup> : 46.8
	Women 20-24 years married before age of 18 years	Jamtara: +6.7 Pa Sing <sup>3</sup> : +3.0	Garhwa: -27.5 Chatra: -17.4	Simdega: 15.9 Sarai-Khar <sup>3</sup> : 19.2
	Women 15-19 years with child or pregnant	Sahibganj: +5.4 Dhanbad: +3.9	Garhwa: -10.2 Godda: -5.6	Pu Sing <sup>3</sup> : 3.7 Khunti: 4.3
Household determinants	HHs with improved drinking water source	Pu Sing <sup>3</sup> : -1.5 Pakur: -0.8	Gumla: +27.9 Giridih: +22.2	Palamu: 94.9 Jamtara: 93.0
	HHs using improved sanitation facility	<i>Not Applicable<sup>4</sup></i>	Simdega: +62.4 Lohardaga: +48.1	Ranchi: 77.2 Simdega: 71.3
	HHs with electricity	<i>Not Applicable<sup>4</sup></i>	Chatra: +49.3 Garhwa: +33.2	Ranchi: 99.3 Lohardaga: 99.2

pp: percentage points.

Source: NFHS-3 (2005-2006) national and state reports and data [IFPRI estimates], NFHS-4 (2015-2016) national and state reports and data [IFPRI estimates], and NFHS-5 (2019-2021) state and district factsheets, state report, and data [IFPRI estimates].

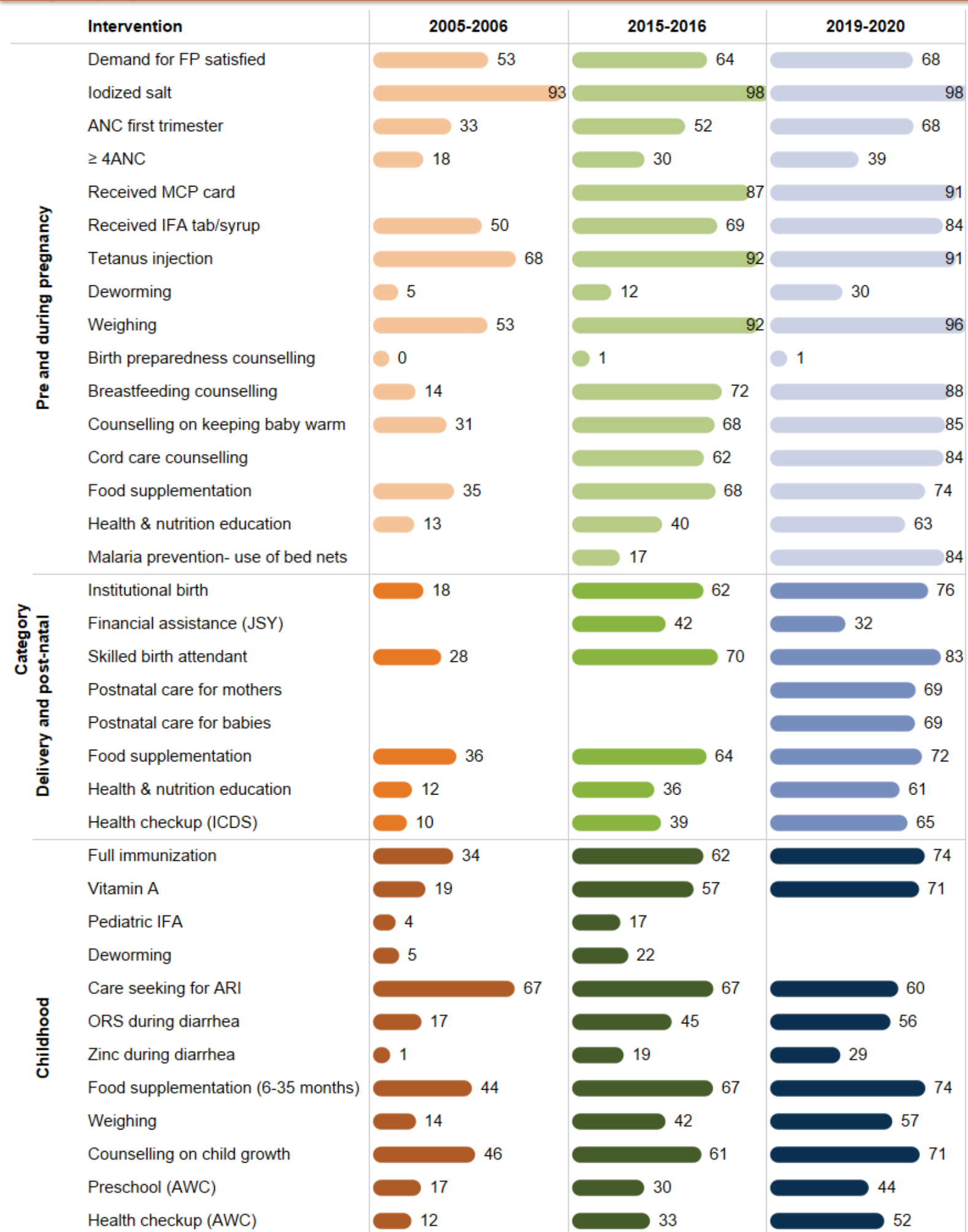
<sup>1</sup>The difference is calculated only between districts that are comparable between 2015-2016 and 2019-2021.

<sup>2</sup>For all indicators, top coverage districts refer to the districts with the highest prevalence in underlying determinants, except for women 20-24 years married before age of 18 years and women 15-19 years with child or pregnant for which it refers to the districts with the lowest prevalence in coverage.

<sup>3</sup>District codes: Sarai-Khar: Saraikela-Kharsawan; Pa Sing: Paschimi Singhbhum; Pu Sing: Purbi Singhbhum.

<sup>4</sup>Prevalence did not decrease in any of the districts.

Figure 5. Trends in coverage of interventions across the first 1000 days (%), 2005-2006, 2015-2016, 2019-2021



Source: NFHS-3 (2005-2006) national and state reports and data [IFPRI estimates], NFHS-4 (2015-2016) national and state reports and data [IFPRI estimates], NFHS-5 (2019-2021) state factsheet, state and national report, and data [IFPRI estimates].

Note 1: Refer to district dashboard for the inter-district variability in the coverage of interventions.

# Intervention coverage at district-level, 2019-2021

<20%      20-<40%      40-<60%      60-<80%      >=80%      Not Available

District name	Pre-pregnancy		Pregnancy										Delivery & postnatal										Early childhood														
	Demand for FP satisfied	lodized salt	ANC first trimester	≥4 ANC	Received MCP card	Received IFA tab/syrup	Tetanus injection	Demorning	Weighing	Birth preparedness counselling	Breastfeeding counselling	Counselling on keeping baby warm	Cord care counselling	Food supplementation	Health & nutrition education	Malaria prevention- use of bed nets	Institutional birth	Financial assistance (ISY)	Skilled birth attendant	Postnatal care for mothers	Postnatal care for babies	Food supplementation	Health & nutrition education	Health checkup	Full immunization	Vitamin A	Paediatric IFA	Demorning	Care seeking for ARI	ORS during diarrhoea	Zinc during diarrhoea	Food supplementation (6-35 months)	Weighing	Counselling on child growth	Preschool at AWC	Health checkup	
Jharkhand	67.6	97.7	68.0	38.6	91.5	83.6	90.8	30.0	96.2	0.5	88.1	84.9	84.0	74.1	63.4	84.5	75.8	31.6	82.5	69.1	68.7	72.4	60.5	64.7	73.9	70.9	18.6	22.4	59.8	55.6	28.9	74.2	56.6	71.2	44.0	52.3	
Bokaro	76.5	95.7	68.2	48.7	87.9	88.0	90.0	24.6	99.4	1.2	89.4	86.9	80.4	66.0	53.5	81.0	80.9	25.2	86.5	73.5	70.0	66.1	52.0	56.3	71.0	80.2	22.1	20.3	62.1	67.4	34.2	71.2	55.9	63.2	48.8	56.2	
Chatra	74.4	97.8	57.1	32.4	93.1	83.4	84.9	23.9	90.4	0.0	90.4	85.6	88.6	65.5	59.4	91.3	71.5	25.8	73.5	61.2	59.1	56.4	48.8	51.9	71.7	70.7	23.4	25.6	50.3	71.8	54.5	69.9	51.2	54.1	54.1	54.1	
Deoghar	63.5	98.3	58.1	30.7	83.1	68.4	89.2	18.6	90.0	0.0	82.6	81.1	77.9	67.7	48.3	76.4	61.3	39.9	72.3	55.6	56.4	66.6	41.7	50.0	54.5	53.3	5.7	10.9	56.0	21.8	8.6	62.9	36.5	55.2	41.0	35.1	35.1
Dhanbad	67.1	98.3	65.4	44.6	88.7	76.6	92.3	26.3	96.2	0.3	84.3	78.1	80.1	53.5	40.1	60.4	78.8	22.9	83.6	73.2	74.3	56.7	43.8	49.2	66.1	74.5	12.2	12.4	71.7	29.5	18.1	63.9	41.7	68.1	34.2	44.1	44.1
Dumka	59.4	97.6	64.9	39.3	95.1	79.3	94.1	29.7	97.0	0.0	76.6	67.4	65.1	87.4	70.7	72.9	60.3	34.2	69.0	54.9	57.1	84.8	67.3	75.1	78.9	70.0	14.4	20.2	54.2	81.2	64.1	71.5	45.9	59.6	59.6	59.6	
Garhwa	68.8	97.5	66.3	29.8	87.1	77.3	92.1	21.2	92.4	0.5	85.9	84.3	87.7	70.1	55.7	89.5	84.0	34.2	88.2	70.3	70.6	65.9	51.8	59.0	77.2	61.2	18.7	24.8	69.8	18.8	18.6	58.2	36.9	64.7	24.9	37.0	37.0
Giridih	71.8	96.8	57.9	42.1	86.7	77.2	86.0	16.5	95.9	0.6	88.7	89.6	86.5	64.7	51.1	86.5	70.7	28.8	76.7	61.3	61.0	63.0	49.2	53.8	70.6	69.6	16.9	16.4	51.2	72.5	48.2	74.3	53.7	59.4	44.7	54.0	54.0
Godda	66.3	98.9	63.1	39.2	93.4	83.7	95.7	29.4	94.9	0.0	90.7	90.1	88.4	78.6	63.5	89.9	70.2	35.8	83.3	67.9	66.8	73.2	62.9	67.4	63.9	62.9	22.3	24.6	49.0	59.9	18.1	74.6	64.6	73.8	56.4	63.8	63.8
Gumla	66.6	97.7	81.5	49.3	97.9	94.0	96.1	49.2	98.7	0.2	97.4	94.6	94.0	85.6	80.2	92.2	83.8	38.5	90.2	82.4	78.4	82.6	78.5	82.2	85.3	84.4	28.1	32.4	71.4	86.5	70.7	81.5	70.3	70.2	70.2	70.2	
Hazaribagh	74.2	95.0	59.8	36.4	89.0	87.7	88.5	16.5	96.0	1.1	80.7	76.7	71.3	74.3	64.4	81.7	82.0	25.5	85.6	65.4	67.7	70.5	66.5	77.0	63.0	78.8	15.5	22.2	50.1	64.4	21.3	79.3	53.3	54.1	47.7	50.4	50.4
Jamtara	68.4	98.3	66.7	36.0	95.1	74.6	89.3	23.8	97.4	2.4	85.3	79.7	83.2	78.7	73.5	81.2	75.4	38.2	82.5	69.9	66.5	77.0	63.0	64.3	78.8	82.5	23.4	28.5	50.1	64.4	21.3	79.3	53.3	54.1	47.7	50.4	50.4
Khunti	61.9	97.4	71.3	37.4	95.1	91.3	91.7	31.8	98.3	0.4	84.1	83.2	77.2	82.0	74.3	91.4	73.8	45.0	80.1	63.9	61.0	81.9	71.0	75.1	71.9	79.3	23.4	28.5	64.1	53.6	14.2	79.1	69.5	78.0	58.1	67.4	67.4
Kodarma	74.8	99.2	77.8	47.6	89.7	81.8	92.0	28.7	96.2	0.1	87.6	81.2	83.5	74.5	66.0	90.5	91.3	26.3	94.5	75.8	78.0	67.1	57.5	65.1	73.8	76.6	21.0	28.1	65.7	61.1	23.9	70.1	58.4	80.4	44.1	56.4	56.4
Latehar	65.6	96.8	75.0	43.1	98.0	93.9	94.2	44.3	97.1	0.0	92.7	90.7	90.9	84.9	77.1	85.6	70.3	35.9	83.8	70.7	61.7	81.8	73.7	76.7	75.0	85.9	35.7	41.3	77.6	70.2	51.0	86.9	71.2	78.7	61.2	73.8	73.8
Lohardaga	58.4	99.4	79.0	37.7	93.0	89.6	95.1	47.8	98.9	0.0	94.7	90.5	92.4	86.4	79.2	97.3	84.1	43.6	92.1	79.2	82.1	87.3	77.9	81.9	88.2	71.7	15.5	25.8	78.7	59.7	82.5	43.5	59.2	59.2	59.2	59.2	
Pakur	67.4	97.0	71.6	26.6	91.0	80.6	91.9	27.2	94.9	0.6	82.2	81.1	76.3	83.2	61.1	93.0	64.6	46.2	74.2	61.6	60.0	73.7	55.2	60.9	69.4	56.6	13.1	19.6	65.9	74.0	51.2	70.2	36.9	49.2	49.2	49.2	
Palamu	71.9	96.6	73.1	33.8	91.5	83.2	92.6	31.6	93.8	1.1	90.3	87.2	90.8	79.0	65.1	92.0	74.9	26.2	83.4	70.3	70.1	76.7	63.6	68.4	80.9	63.5	20.3	24.5	51.9	75.5	52.6	75.1	40.2	53.4	53.4	53.4	
Pashchimi Singhbhum	53.0	96.9	62.6	34.9	92.0	87.5	89.8	26.8	99.3	0.4	81.4	79.7	73.6	85.8	81.2	85.4	67.9	46.4	70.1	58.8	61.5	82.8	70.3	71.0	87.0	72.7	15.9	29.4	52.2	79.0	84.0	66.7	71.6	51.5	62.2	62.2	62.2
Purbi Singhbhum	65.2	99.4	78.2	40.7	91.6	89.3	95.3	44.9	100.0	0.4	92.5	86.7	92.6	75.7	73.0	87.8	94.0	33.8	96.4	84.0	85.9	72.6	70.6	72.9	88.8	71.7	20.5	29.5	70.4	64.8	87.1	44.2	64.1	64.1	64.1	64.1	
Rangarh	71.8	97.8	63.4	40.9	90.8	89.5	93.4	22.3	95.8	3.3	81.8	81.3	77.3	64.9	52.7	76.5	79.0	23.4	89.7	78.0	75.8	66.0	54.6	57.5	81.8	78.2	11.3	13.1	65.7	50.4	31.9	73.7	57.0	61.3	40.0	51.7	51.7
Ranchi	69.8	99.0	77.8	35.2	93.6	90.5	90.3	51.9	100.0	0.3	92.7	88.6	89.5	71.3	67.2	88.1	87.3	28.3	94.7	83.1	84.5	74.1	69.5	71.2	73.8	75.5	23.4	25.9	75.7	67.4	83.3	55.9	65.7	65.7	65.7	65.7	
Sahibganj	53.4	98.2	67.1	36.2	94.1	80.5	83.8	29.4	92.9	0.0	95.9	92.2	93.2	72.8	66.2	96.3	64.7	25.6	75.7	64.8	61.0	60.4	54.8	57.1	66.0	67.1	20.9	24.1	58.9	67.5	56.0	77.3	48.2	54.8	54.8	54.8	
Saraikela-Kharsawan	70.8	96.8	85.1	54.4	98.8	92.3	92.3	50.8	99.3	0.3	98.4	97.4	96.3	84.0	80.1	81.5	81.8	37.2	89.1	77.2	73.9	87.4	83.7	86.6	80.9	89.0	34.6	36.4	78.3	71.3	51.5	87.6	73.0	72.8	65.5	70.9	70.9
Simdega	43.0	98.9	71.0	34.4	97.7	93.8	84.5	35.0	98.2	0.0	90.2	90.1	89.2	89.2	86.0	94.3	75.7	40.4	78.1	61.5	62.3	87.5	75.8	80.4	79.3	73.8	24.7	26.0	48.4	85.0	11.3	84.7	69.3	71.1	52.1	68.4	68.4

Source: NFHS-5 district factsheets and state reports (2019-21) and data [IFPRI estimates].

Note 1: In NFHS-5 district factsheets, estimate for indicators with sample size <25 is not reported.

# Table 4. Intervention coverage at district level 2015-2016, 2019-2021

Category	Interventions	Worst performing districts (pp) <i>Difference between (2019-2021) &amp; (2015-2016)<sup>1</sup></i>	Best performing districts (pp) <i>Difference between (2019-2021) &amp; (2015-2016)<sup>1</sup></i>	Top coverage districts (%) <i>2019-2021</i>
Pregnancy	ANC first trimester	Deoghar: -4.1	Latehar: +46.7 Pa Sing <sup>2</sup> : +43.0	Sarai-Khar <sup>2</sup> : 85.1 Gumla: 81.5
	≥4 ANC visits	Pu Sing <sup>2</sup> : -9.9 Kodarma: -9.8	Sarai-Khar <sup>2</sup> : +28.5 Latehar: +28.1	Sarai-Khar <sup>2</sup> : 54.4 Gumla: 49.3
	Received MCP Card	Hazaribagh: -7.3 Giridih: -5.5	Palamu: +18.1 Garhwa: +17.9	Sarai-Khar <sup>2</sup> : 98.8 Latehar: 98.0
	Tetanus injection	Simdega: -9.4 Giridih: -7.9	Latehar: +14.7 Palamu: +9.9	Gumla: 96.1 Godda: 95.7
Delivery and post-natal	Institutional birth	<i>Not Applicable<sup>3</sup></i>	Pa Sing <sup>2</sup> : +30.5 Simdega: +26.6	Pu Sing <sup>2</sup> : 94.0 Kodarma: 91.3
	Skilled birth attendant	<i>Not Applicable<sup>3</sup></i>	Pa Sing <sup>2</sup> : +29.5 Latehar: +23.6	Pu Sing <sup>2</sup> : 96.4 Ranchi: 94.7
	Postnatal care for mothers	<i>Not Applicable<sup>4</sup></i>	<i>Not Applicable<sup>4</sup></i>	Pu Sing <sup>2</sup> : 84.0 Ranchi: 83.1
	Postnatal care for babies	<i>Not Applicable<sup>4</sup></i>	<i>Not Applicable<sup>4</sup></i>	Pu Sing <sup>2</sup> : 85.9 Ranchi: 84.5
Early childhood	Full immunization	Deoghar: -9.8 Dhanbad: -7.4	Pa Sing <sup>2</sup> : +37.2 Chatra: +29.7	Pu Sing <sup>2</sup> : 88.8 Lohardaga: 88.2
	Vitamin A supplementation	Pakur: -11.4 Hazaribagh: -0.8	Jamtara: +31.5 Sarai-Khar <sup>2</sup> : +30.3	Sarai-Khar <sup>2</sup> : 89.0 Latehar: 85.9
	Care seeking for ARI	Godda: -32.2 Giridih: -28.8	Gumla: +14.4 Latehar: +12.5	Sarai-Khar <sup>2</sup> : 78.3 Latehar: 77.6
	ORS treatment during diarrhea	Garhwa: -26.9 Dhanbad: -10.3	Latehar: +19.3 Godda: +17.9	Simdega: 85.0 Pa Sing <sup>2</sup> : 79.0
	Zinc treatment during diarrhea	Hazaribagh: -10.1 Garhwa: -7.1	Ramgarh: +21.2 Latehar: +16.2	Sarai-Khar <sup>2</sup> : 51.5 Latehar: 51.0

## Key takeaways

**Children:** Stunting prevalence declined by 5 percentage points (pp) between 2006 and 2016 and 2016 and 2021, respectively. Underweight declined by 9pp between 2006 and 2016 and 2016 and 2021, respectively. There was no change in anemia between 2006 and 2016 but it did decline by 3pp between 2016 and 2021.

**Women:** Underweight declined by 11pp between 2006 and 2016 and further declined by 6pp between 2016 and 2021. Anemia among pregnant women declined by 6pp between 2006 and 2016 and 2016 and 2021, respectively. Overweight/obesity increased by 5pp between 2006 and 2016 and by 2pp between 2016 and 2021.

**Men:** Overweight/obesity increased by 6pp between 2006 and 2016 and by 4pp between 2016 and 2021.

**Attention is needed to improve** (%s in 2021):

- **Outcomes:** Stunting (40%), underweight (39%), wasting (22%), and anemia among children (67%); anemia among women (57-66%)
- **Immediate determinants:** 180+ IFA consumption (15%), timely introduction of complementary foods (39%), minimum adequate diet for children (10%)
- **Underlying determinants:** Women with ≥ 10 years education (33%); early marriage (32%); improved sanitation (57%)
- **Coverage of interventions:** ≥ 4 ANC (39%), deworming during pregnancy (30%); financial assistance (32%) and zinc during diarrhea (29%)

pp: percentage points. Source: NFHS-3 state and national reports and data [IFPRI estimates], NFHS-4 (2015-2016) state and national reports and data [IFPRI estimates], and NFHS-5 (2019-2021) state reports/factsheets. Note: Interventions' coverage are based on the last child data

<sup>1</sup>The difference is calculated only between districts that are comparable between 2015-2016 and 2019-2021. All districts are comparable between the time periods.

<sup>2</sup>District codes: Sarai-Khar: Saraikela-Kharsawan; Pa Sing: Paschimi Singhbhum; Pu Sing: Purbi Singhbhum. <sup>3</sup>Prevalence did not decrease in any of the districts.

<sup>4</sup>Indicators postnatal care for women and babies are not comparable between NFHS-4 and 5.

# Indicator definition

Nutrition outcomes	Definition
<b>Low birth weight<sup>3,5</sup></b>	% live births in 5 years (y) preceding the survey with a reported birth weight <2.5 kilograms (kg), based on either a written record or the mother's recall
<b>Stunting</b>	% children 0-59 months (m) whose height-for-age z score < -2 standard deviations (SD)
<b>Wasting</b>	% children 0-59 m whose weight-for-height z score < -2SD
<b>Severe wasting</b>	% children 0-59 m whose weight-for-height z score < -3SD
<b>Underweight children</b>	% children 0-59 m whose weight-for-age z score < -2SD
<b>Anemia among children</b>	% children 6-59 m whose haemoglobin (Hb) <11.0 g/dl
<b>Underweight women</b>	% women 15-49 y whose Body Mass Index (BMI)<18.5 kg/m <sup>2</sup> ; sample excluded pregnant women and women with a birth in the preceding 2 m
<b>Anemia among non-pregnant women<sup>1</sup></b>	% non-pregnant women 15-49 y whose Hb<12.0 g/dl
<b>Anemia among pregnant women<sup>1</sup></b>	% pregnant women 15-49 y whose Hb<11.0 g/dl
<b>Overweight/obesity – children</b>	% children 0-59 m whose weight-for-height z score > 2SD
<b>Overweight/obesity – women</b>	% women 15-49 y whose BMI ≥25.0 kg/m <sup>2</sup> ; sample excluded pregnant women and women with a birth in the preceding 2 m
<b>Overweight/obesity – men</b>	% men 15-49 y whose BMI ≥25.0 kg/m <sup>2</sup>
<b>Hypertension among women<sup>2,3,10</sup></b>	% women 15-49 y with elevated blood pressure (systolic ≥140 mm Hg or diastolic ≥90 mm Hg) or are currently taking medication to control blood pressure
<b>Hypertension among men<sup>2,3,10</sup></b>	% men 15-54 y with elevated blood pressure (systolic ≥140 mm Hg or diastolic ≥90 mm Hg) or are currently taking medication to control blood pressure
<b>Diabetes among women<sup>10</sup></b>	% women 15-49 y with high (>140 mg/dl) or very high (>160 mg/dl) blood sugar or are currently taking medication to control blood sugar
<b>Diabetes among men<sup>10</sup></b>	% men 15-54 y with high (>140 mg/dl) or very high (>160 mg/dl) blood sugar or are currently taking medication to control blood sugar
Immediate determinants	Definition
<b>Underweight women</b>	% women 15-49 y whose BMI<18.5 kg/m <sup>2</sup> ; sample excluded pregnant women and women with a birth in the preceding 2 m
<b>Consumed IFA 100+ days<sup>1</sup></b>	% women 15-49 y who consumed iron folic acid (IFA) for 100 days or more during pregnancy for the most recent live birth in the 5 y preceding the survey
<b>Consumed IFA 180+ days<sup>1</sup></b>	% women 15-49 y who consumed IFA for 180 days or more during pregnancy for the most recent live birth in the 5 y preceding the survey
<b>Early initiation of breastfeeding<sup>1,2,3,8,9</sup></b>	% youngest children <2 y who started breastfeeding <1 hour of birth
<b>Exclusive breastfeeding</b>	% youngest children 0-5 m who were fed exclusively with breastmilk the previous day
<b>Timely introduction of complementary foods</b>	% youngest children 6-8 m living with their mother who received solid or semi-solid food and breastmilk
<b>Continued breastfeeding at 2 years<sup>1,3,4,5,6</sup></b>	% youngest children 12-23 m living with their mother who were fed breastmilk during the previous day
<b>Minimum adequate diet<sup>2,3,4,5,9,10</sup></b>	% youngest children 6-23 m who consumed a minimum acceptable diet during the previous day
<b>Minimum dietary diversity<sup>1,2,3,4,5,9</sup></b>	% youngest children 6-23 m who consumed foods and beverages from at least 5 out of 8 defined food groups during the previous day
<b>Minimum meal frequency<sup>2,3,4,5,9,10</sup></b>	% youngest children 6-23 m who consumed solid, semi-solid or soft foods (but also including milk feeds for non-breastfed children) at least the minimum number of times during the previous day
<b>Eggs and/or flesh foods consumption<sup>1,2,3,4,5,9</sup></b>	% youngest children 6-23 m who consumed egg and/or flesh food during the previous day
<b>Sweet beverage consumption<sup>1,2,3,4,5,9</sup></b>	% youngest children 6-23 m who consumed a sweet beverage during the previous day
<b>Bottle feeding for infants<sup>1,2,3,4,5,9</sup></b>	% youngest children 0-23 m who were fed from a bottle with a nipple during the previous day
<b>Diarrhea in the last 2 weeks</b>	% children <5 y who had diarrhea in the 2 weeks preceding the survey
<b>ARI in the last 2 weeks</b>	% children <5 y who had symptoms of acute respiratory infection (ARI) in the 2 weeks preceding the survey
Underlying determinants	Definition
<b>Women with ≥10 years of education</b>	% women 15-49 y with ≥10 y of schooling
<b>Women 20-24 years married before age of 18 years<sup>1</sup></b>	% women 20-24 y who were married when <18 y
<b>Women 15-19 years with child or pregnant<sup>10</sup></b>	% women 15-19 y who were mothers or pregnant at the time of the survey
<b>HHS with improved drinking water source</b>	% population living in households whose source of drinking water is piped into dwelling/yard/plot, piped to neighbour, public tap/standpipe, tube well or borehole, protected dug well, protected spring, rainwater, tanker truck, cart with small tank, bottled water, or community RO plant
<b>HHS using improved sanitation facility</b>	% population living in households using flush to pipe sewer system, flush to septic tank, flush to pit latrine, ventilated improved pit (VIP)/biogas latrine, pit latrine with slab or twin pit/composting toilet, which is not shared with any other household
<b>HHS with hand washing facility<sup>2,4,10</sup></b>	% households where a place for washing hands with water and soap was present
<b>Open defecation<sup>6,7</sup></b>	% households that have no toilet facility/defecate in open space or field
<b>Safe disposal of feces<sup>3,4,5</sup></b>	% youngest children <5 y living with their mother whose stools were disposed of safely
<b>HHS with BPL card<sup>3,5,6,7</sup></b>	% households possessing a BPL card
<b>HHS with electricity</b>	% population living in households with electricity

Note: Unless specified, state and district estimates taken from NFHS-3 national/state report for NFHS-3, NFHS-4 national/state report or NFHS-5 factsheet for NFHS-4, and NFHS-5 national/state report or factsheet for NFHS-5.

<sup>1</sup>Indicator estimated using NFHS-3 unit-level data (state level)

<sup>2</sup>Indicator estimated using NFHS-4 unit-level data (state level)

<sup>3</sup>Indicator estimated using NFHS-4 unit-level data (district level)

<sup>4</sup>Indicator estimated using NFHS-5 unit-level data state level

<sup>5</sup>Indicator estimated using NFHS-5 unit-level data (district level)

<sup>6</sup>Indicator estimated using NFHS-4 unit-level data for union territories as their summary reports are not available (state level)

<sup>7</sup>Indicator estimated using NFHS-5 unit-level data for union territories as their summary reports are not available (state level)

<sup>8</sup>Indicator estimated using NFHS-5 unit-level data for union territories as their summary reports are not available (district level)

<sup>9</sup>Indicator constructed following WHO guidelines

<sup>10</sup>Indicator not available in NFHS-3 and/or 4 tool or not comparable between NFHS-3/4 and 5

# Indicator definition

Interventions	Definition
<b>Demand for FP satisfied</b> <sup>1,3,5</sup>	% currently married women 15-49 years (y) with demand for family planning (FP) satisfied by modern methods
<b>Iodized salt</b>	% households using iodized salt
<b>ANC first trimester</b>	% women 15-49 y who received antenatal care (ANC) during the first trimester for the most recent live birth in the 5 y preceding the survey
<b>≥ 4ANC<sup>1</sup></b>	% women 15-49 y who received ≥4 ANC visits for the most recent live birth in the 5 y preceding the survey
<b>Received MCP card<sup>10</sup></b>	% women 15-49 y who received a mother and child protection (MCP) card during pregnancy for the most recent live birth in the 5 y preceding the survey
<b>Received IFA tab/syrup<sup>3,8</sup></b>	% women 15-49 y who received IFA (given or purchased) during pregnancy for the most recent live birth in the 5 y preceding the survey
<b>Tetanus injection<sup>1</sup></b>	% women 15-49 y whose most recent live birth in the 5 y preceding the survey was protected against neonatal tetanus
<b>Deworming- pregnancy<sup>3,8</sup></b>	% women 15-49 y who took deworming medication during pregnancy for the most recent live birth in the 5 y preceding the survey
<b>Weighing- pregnancy<sup>3,5,6,7</sup></b>	% women 15-49 y who were weighed during ANC for the most recent live birth in the 5 y preceding the survey
<b>Birth preparedness counselling<sup>1,2,3,4,5</sup></b>	% women 15-49 y with a child 0-60 months (m) who had ≥1 contacts with a community health worker in the 3 m preceding the survey and were advised on birth preparedness
<b>Breastfeeding counselling<sup>1,3,5,6,7</sup></b>	% women 15-49 y who met with a community health worker in the last 3 m of pregnancy for the most recent live birth in the 5 y preceding the survey and were advised on breastfeeding
<b>Counselling on keeping baby warm<sup>1,5,6,7</sup></b>	% women 15-49 y who met with a community health worker in the last 3 m of pregnancy for the most recent live birth in the 5 y preceding the survey and were advised on keeping the baby warm
<b>Cord care counselling<sup>5,6,7,10</sup></b>	% women 15-49 y who met with a community health worker in the last 3 m of pregnancy for the most recent live birth in the 5 y preceding the survey and were advised on cord care
<b>Food supplementation – pregnancy<sup>3,5</sup></b>	% women 15-49 y with a child <6 y who received food supplements from ICDS during pregnancy
<b>Health &amp; nutrition education – pregnancy<sup>5</sup></b>	% women 15-49 y with a child <6 y who received health and nutrition education from ICDS during pregnancy
<b>Malaria prevention- use of bed nets<sup>2,4,5,10</sup></b>	% women 15-49 y who slept under a treated bed net during pregnancy of the most recent live birth in the 5 y preceding the survey
<b>Institutional birth</b>	% live births in the 5 y preceding the survey to women 15-49 y delivered in a health facility
<b>Financial assistance (JSY)<sup>6,7,8,10</sup></b>	% women 15-49 y who received financial assistance under Janani Suraksha Yojana (JSY) for the most recent live birth that took place in a health facility in the 5 y preceding the survey
<b>Skilled birth attendant</b>	% live births in the 5 y preceding the survey to women 15-49 y that were assisted by a skilled provider
<b>Postnatal care for mothers<sup>10</sup></b>	% women 15-49 y who received postnatal care from a doctor/nurse/LHV/auxiliary nurse midwife (ANM)/midwife/other health personnel <2 days of delivery for the most recent live birth in the 5 y preceding the survey
<b>Postnatal care for babies<sup>10</sup></b>	% most recent live births in the 5 y preceding the survey to women 15-49 y with a postnatal check for the newborn from a doctor/nurse/LHV/ANM/midwife/other health personnel <2 days of delivery
<b>Food supplementation – postnatal<sup>3,5</sup></b>	% women 15-49 y with a child <6 y who received food supplements from ICDS during breastfeeding
<b>Health &amp; nutrition education – postnatal<sup>3,5</sup></b>	% women 15-49 y with a child <6 y who received health and nutrition education from ICDS during breastfeeding
<b>Health checkup (ICDS)<sup>3,5</sup></b>	% women 15-49 y with a child <6 y who received a health check-up from ICDS during breastfeeding
<b>Full immunization</b>	% children 12-23 m fully vaccinated based on information from either vaccination card or mother's recall
<b>Vitamin A – early childhood<sup>1</sup></b>	% children 9-35 m who received a vitamin A dose in the 6 m preceding the survey
<b>Pediatric IFA<sup>3,4,5,10</sup></b>	<sup>11</sup> % children 6-59 m who were given iron supplements in the 7 days preceding the survey <sup>12</sup> % children 6-36 m who were given iron supplements in the 7 days preceding the survey
<b>Deworming – early childhood<sup>3,4,5,10</sup></b>	<sup>11</sup> % children 6-59 m who received deworming medication in the 6 m preceding the survey <sup>12</sup> % children 6-36 m who received deworming medication in the 6 m preceding the survey
<b>Care seeking for ARI</b>	% children <5 y with fever or symptoms of ARI in the 2 weeks preceding the survey taken to a health facility or health provider
<b>ORS during diarrhea</b>	% children <5 y with diarrhea in the 2 weeks preceding the survey who received Oral Rehydration Solutions (ORS)
<b>Zinc during diarrhea</b>	% children <5 y with diarrhea in the 2 weeks preceding the survey who received zinc
<b>Food supplementation (children 6-35 months)<sup>1,2,3,4,5</sup></b>	% youngest children 6-35 m who received food supplements from ICDS in the 12 m preceding the survey
<b>Weighing – early childhood<sup>3,5</sup></b>	% children <5 y who were weighed at an anganwadi centre (AWC) or ICDS centre in the 12 m preceding the survey
<b>Counselling on child growth<sup>3,5,10</sup></b>	% mothers with a child <5 y who received counselling from an ICDS/anganwadi worker or ANM after they were weighed at an AWC in the 12 m preceding the survey
<b>Preschool (AWC)<sup>3,5</sup></b>	% children 36-71 m who went for early childhood care/preschool at an AWC in the 12 m preceding the survey
<b>Health checkup (AWC)<sup>3,5</sup></b>	% children <6 y who received health checkups from an AWC in the 12 m preceding the survey

Note: Unless specified, state and districts estimates taken from NFHS-3 national/state report for NFHS-3, NFHS-4 national/state report or NFHS-5 factsheet for NFHS-4, and NFHS-5 national/state report or factsheet for NFHS-5.

<sup>1</sup>Indicator estimated using NFHS-3 unit-level data (state level)

<sup>2</sup>Indicator estimated using NFHS-4 unit-level data (state level)

<sup>3</sup>Indicator estimated using NFHS-4 unit-level data (district level)

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<sup>8</sup>Indicator estimated using NFHS-5 unit-level data for union territories as their summary reports are not available (district level)

<sup>9</sup>Indicator constructed following WHO guidelines

<sup>10</sup>Indicator not available in NFHS-3 and/or 4 tool or not comparable between NFHS-3/4 and 5

<sup>11</sup>Definition as per NFHS-3 and 4 construction

<sup>12</sup>Definition as per NFHS-5 construction

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*Disclaimer: The maps used in this Data Note are based on the districts in NFHS-5 factsheets/reports. The boundaries shown do not imply any official endorsement or acceptance by IFPRI.*

## ABOUT POSHAN

Partnerships and Opportunities to Strengthen and Harmonize Actions for Nutrition in India (POSHAN) is a multi-year initiative that aims to support the use of data and evidence in decision-making for nutrition in India. It is supported by the Bill & Melinda Gates Foundation and led by IFPRI in India.  
<http://poshan.ifpri.info/>

## ABOUT DATA NOTES

POSHAN Data Notes focus on data visualization to highlight geographic and/or thematic issues related to nutrition in India. They draw on multiple sources of publically available data.

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