POSHAN
Led by IFPRI

Partnerships and Opportunities to Strengthen and Harmonize Actions for Nutrition in India

Data Note

No. 70 | MARCH 2022

JHARKHAND

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 estimates using unit-level data, data from national and state reports from the National Family Health Survey (NFHS)-3 (2005-2006) and NFHS-4 (2015-2016), and data from state factsheets and reports from NFHS-5 (2019-2021). 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 number of districts in the state with public health concern as per the WHO guidelines.[1] The *Data Note* includes a color-coded dashboard to compare the coverage of nutrition interventions across all the districts in the state. It concludes with key takeaways for children, women, and men, and identifies areas where the state has potential to improve.
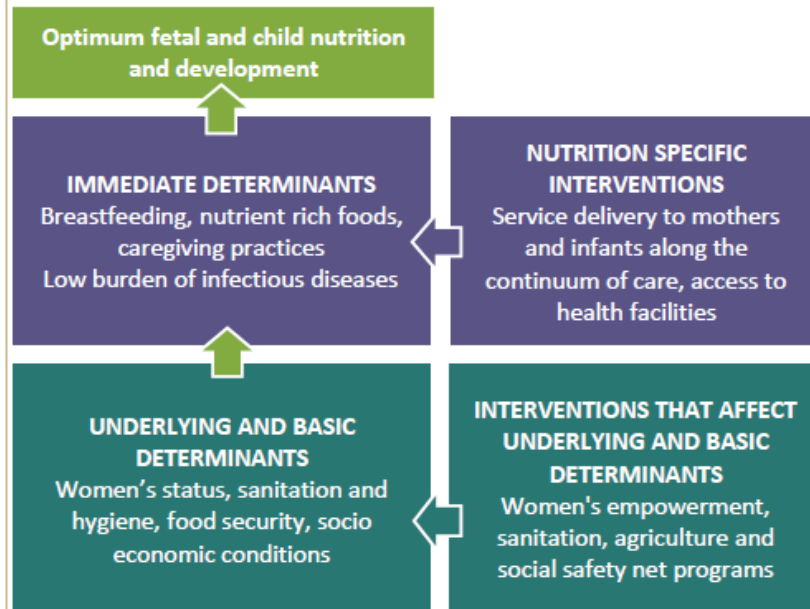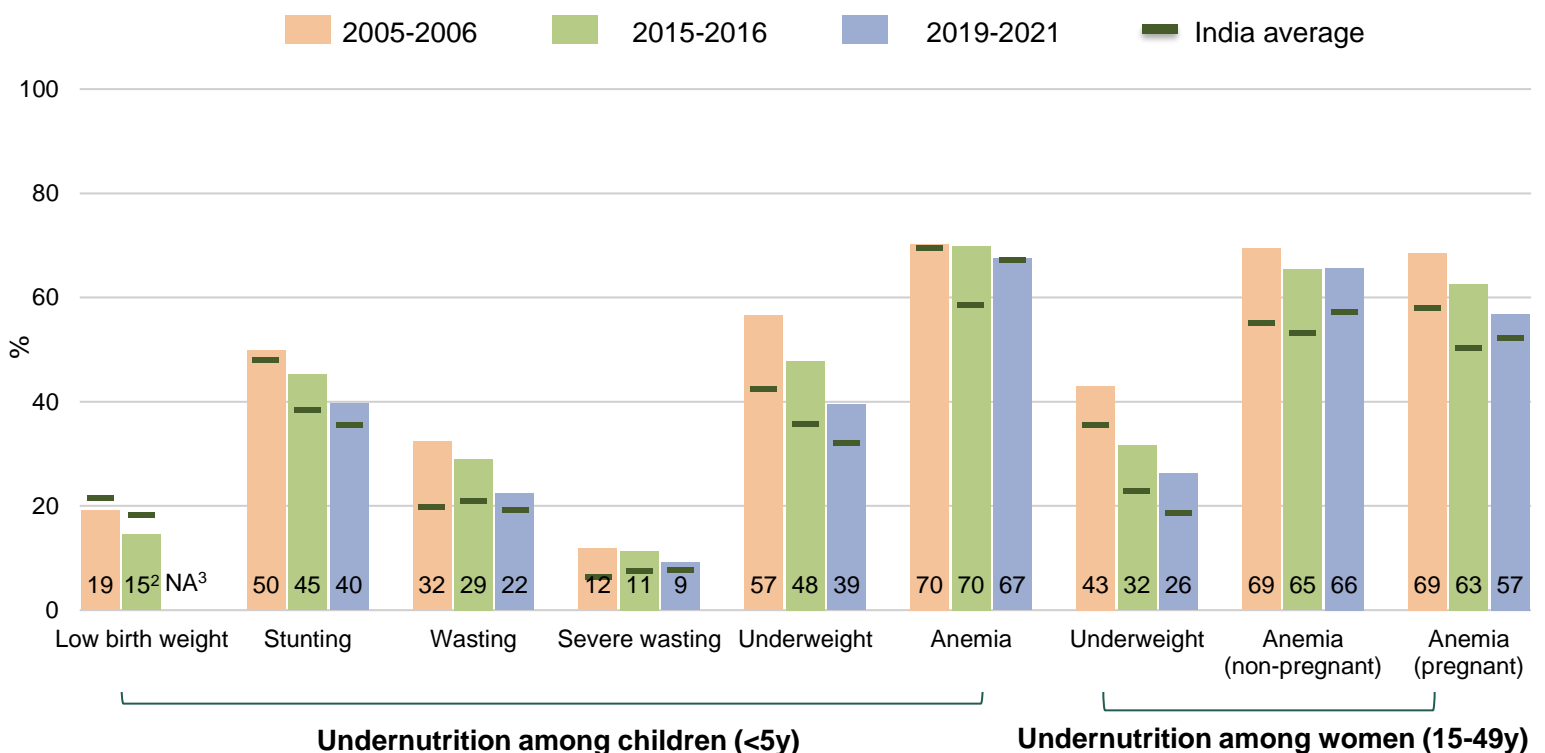

Optimum fetal and child nutrition and development

IMMEDIATE DETERMINANTS
Breastfeeding, nutrient rich foods, caregiving practices
Low burden of infectious diseases

NUTRITION SPECIFIC INTERVENTIONS
Service delivery to mothers and infants along the continuum of care, access to health facilities

UNDERLYING AND BASIC DETERMINANTS
Women's status, sanitation and hygiene, food security, socio economic conditions

INTERVENTIONS THAT AFFECT UNDERLYING AND BASIC DETERMINANTS
Women's empowerment, sanitation, agriculture and social safety net programs

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

Legend: 2005-2006 | 2015-2016 | 2019-2021 | India average

Undernutrition among children (<5y):
- Low birth weight: 19, 15[2], NA[3]
- Stunting: 50, 45, 40
- Wasting: 32, 29, 22
- Severe wasting: 12, 11, 9
- Underweight: 57, 48, 39
- Anemia: 70, 70, 67

Undernutrition among women (15-49y):
- Underweight: 43, 32, 26
- Anemia (non-pregnant): 69, 65, 66
- Anemia (pregnant): 69, 63, 57

Source: NFHS-3 (2005-2006) national report and data [IFPRI estimates] 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. [1]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); [2]In NFHS-3, 79.5% of data were missing and 30.7% of data were missing in NFHS-4. [3]NA refers to the unavailability of data for a particular indicator in the specified NFHS round.

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

Map 1. Stunting

Number of stunted
children[2] = 1,496,261
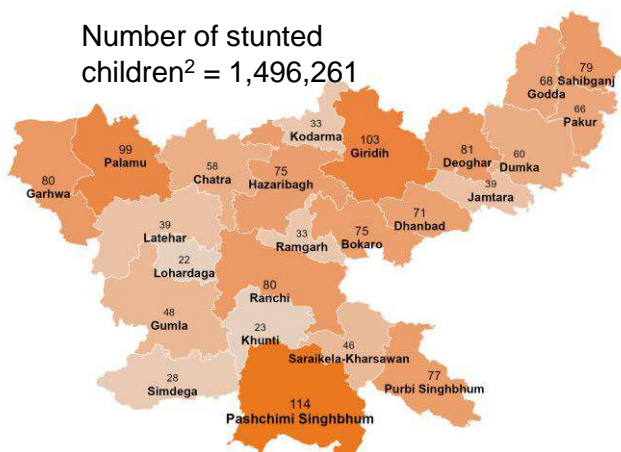
Note: Number in '000s in the above figure

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[1]: 24 of 24

Map 2. Anemia

Number of anemic
children[2] = 2,321,882
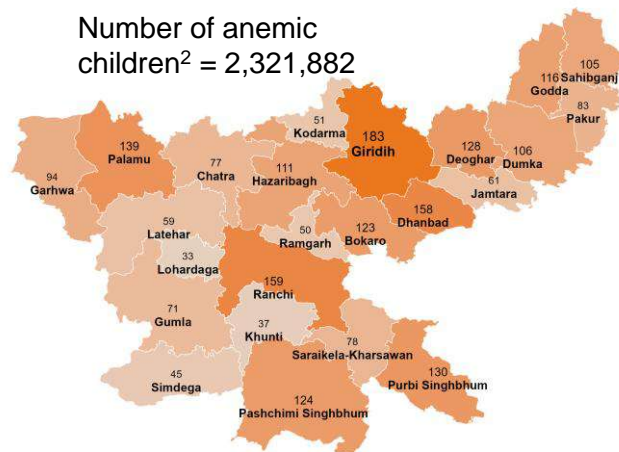
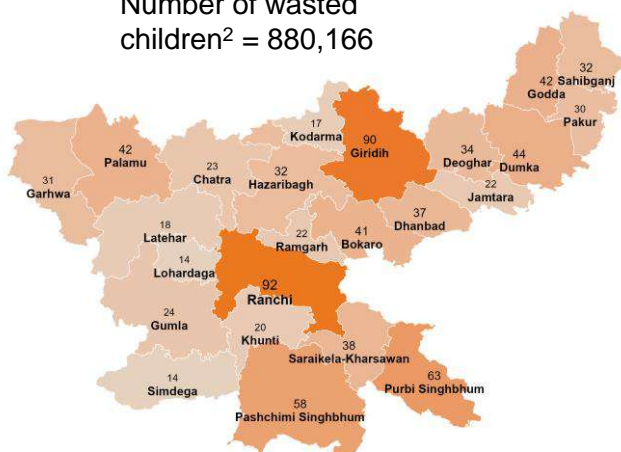Note: Number in '000s in the above figure

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[1]: 24 of 24

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

Map 3. Wasting

Number of wasted
children[2] = 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[1]: 24 of 24

Map 4. Severe Wasting

Number of severely wasted
children[2] = 371,508
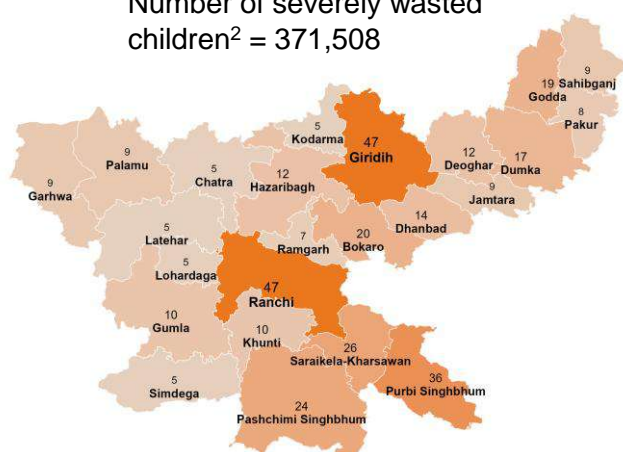
Note: Number in '000s in the above figure

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[1]: 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. [1]Public health concern is defined as ≥20% for stunting, ≥40% for anemia, ≥10% for wasting, and ≥2% for severe wasting (WHO 2011). [2]The total number of children <5 years is 3,815,106.

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

Map 5. Underweight children

Number of underweight children[2] = 1,507,931
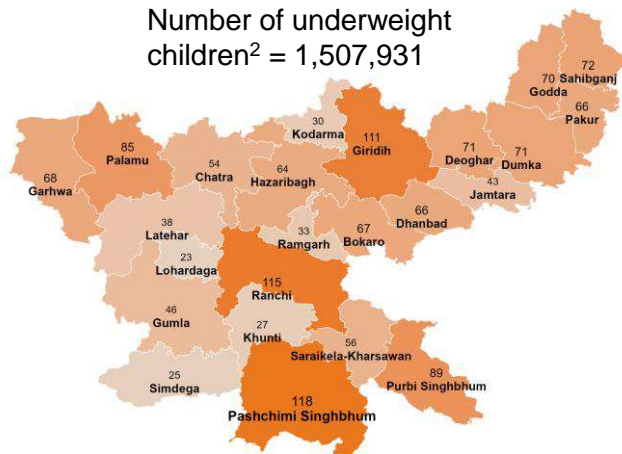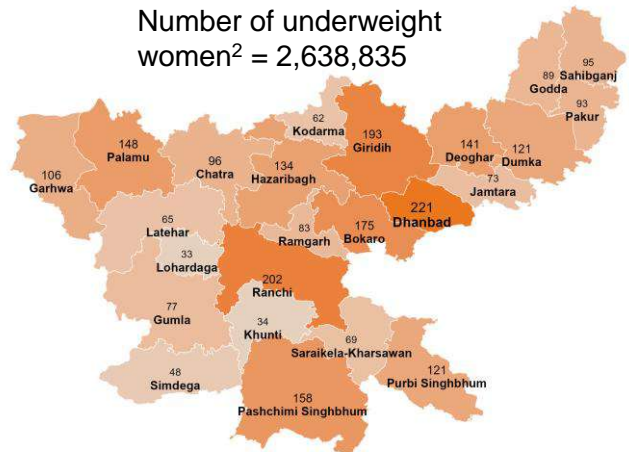

Note: Number in '000s in the above figure

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[1]: 24 of 24

Map 6. Underweight women

Number of underweight women[2] = 2,638,835

Note: Number in '000s in the above figure
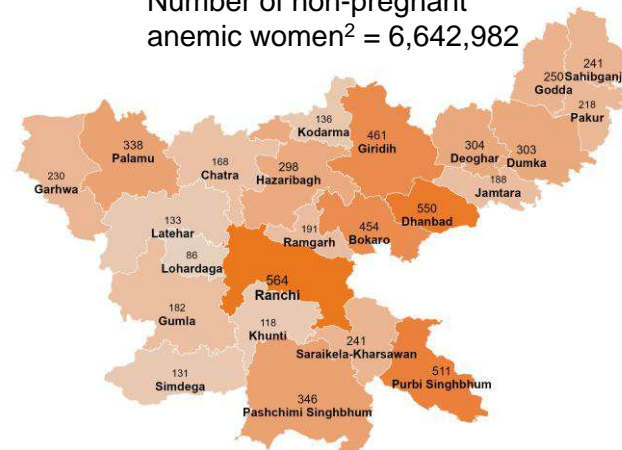
Highest burden districts

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[1]: 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[2] = 6,642,982
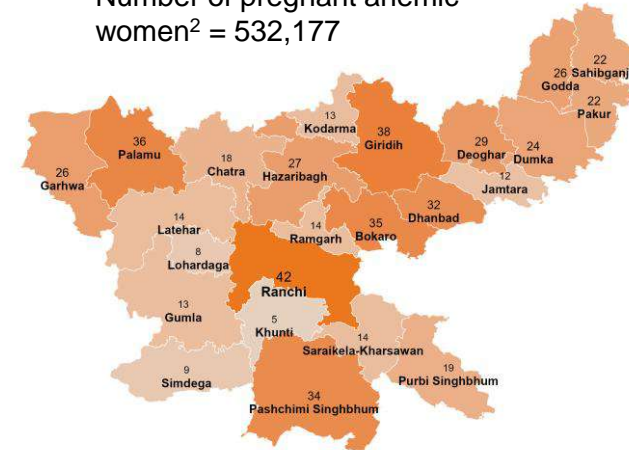

Note: Number in '000s in the above figure

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[1]: 24 of 24

Map 8. Anemia among pregnant women

Number of pregnant anemic women[2] = 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[1]: 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 factsheet, and the projected population for 2019 was estimated using Census 2011. [1]Public health concern is defined as ≥20% for underweight (children), ≥10% for underweight (women), ≥40% for anemia among non-pregnant women, and ≥40% for anemia among pregnant women (WHO 2011). [2]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.

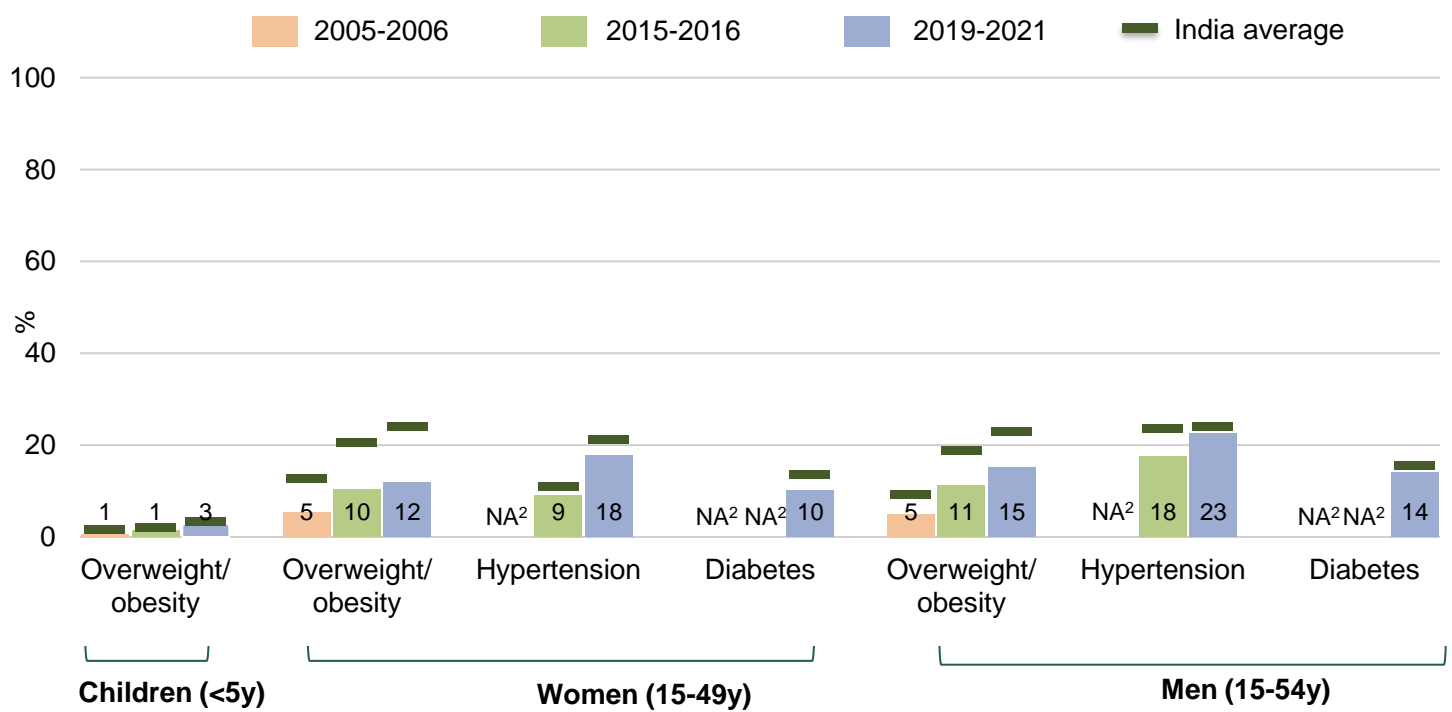# Figure 2. Trends in overweight/obesity & NCDs[1] 2005-2006, 2015-2016, 2019-2021

Legend: 2005-2006, 2015-2016, 2019-2021, India average

Children (<5y):
- Overweight/obesity: 1, 1, 3

Women (15-49y):
- Overweight/obesity: 5, 10, 12
- Hypertension: NA[2], 9, 18
- Diabetes: NA[2], NA[2], 10

Men (15-54y):
- Overweight/obesity: 5, 11, 15
- Hypertension: NA[2], 18, 23
- Diabetes: NA[2], NA[2], 14

Table 1. Overweight/obesity & NCDs[1] at district-level 2015-2016, 2019-2021

Category	Outcomes	Worst performing districts (pp)	Best performing districts (pp)	Highest burden districts (thousands)[4]	No of districts with public health concern[5] (total=24)
		Difference between (2019-2021) & (2015-2016)[3]	*Difference between (2019-2021) & (2015-2016)[3]*	*2019-2021*	*2019-2021*
Children <5 years	Overweight/obesity	Sarai-Khar[6]: +8.2 Khunti: +5.2	Hazaribagh: -1.6 Palamu: -1.5	Giridih: 17 Ranchi:12	0
Women (15-49 years)	Overweight/obesity	Sahibganj: +6.7 Garhwa: +6.1	Sarai-Khar[6]: -5.9 Pa Sing[6]: -2.2	Pu Sing[6]: 146 Ranchi:142	0
	Hypertension	Ramgarh: +12.7 Bokaro: +12.1	Khunti: -0.5	Ranchi: 187 Dhanbad: 158	3
	Diabetes	*NA[2]*		Pu Sing[6]: 92 Ranchi: 92	0
Men (15-54 years)	Overweight /obesity	*NA[2]*			
	Hypertension	Bokaro: +11.6 Hazaribagh: +10.4	Chatra: -4.8 Sarai-Khar[6]:-3.7	Dhanbad: 227 Ranchi: 221	18
	Diabetes	*NA[2]*		Pu Sing[6]: 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. Hypertension among men are IFPRI estimates for NFHS-4 using man dataset. Hypertension among women was estimated at the district-level for NFHS-4 using woman dataset. Diabetes not available in NFHS-4. pp: percentage points.[1]NCDs: non-communicable diseases. [2]NA refers to the 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. [3]The difference is calculated only between districts that are comparable between 2015-2016 and 2019-2021. All districts are comparable between the time periods. [4]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. [5]Public health concern is defined as prevalence ≥15% for overweight/obesity (children), ≥20% for overweight/obesity (women and men), ≥20% hypertension (women and men), and ≥20% diabetes (women and men) (WHO 2011). [6]District codes: Sarai-Khar: Saraikela-Kharsawan; Pa Sing: Paschimi Singhbhum; Pu Sing: Purbi Singhbhum.

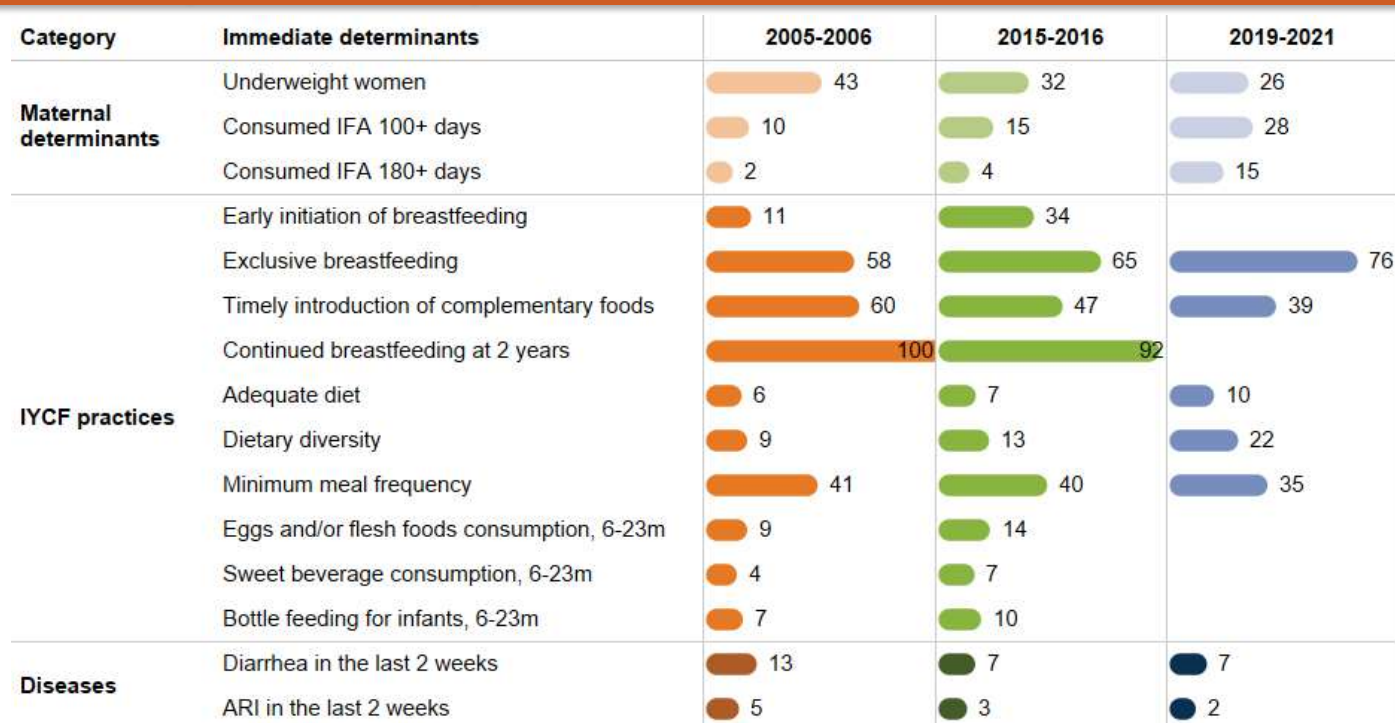# Figure 3. Trends in immediate determinants (%) 2005-2006, 2015-2016, 2019-2021

Category	Immediate determinants	2005-2006	2015-2016	2019-2021
Maternal determinants	Underweight women	43	32	26
	Consumed IFA 100+ days	10	15	28
	Consumed IFA 180+ days	2	4	15
IYCF practices	Early initiation of breastfeeding	11	34	
	Exclusive breastfeeding	58	65	76
	Timely introduction of complementary foods	60	47	39
	Continued breastfeeding at 2 years	100	92	
	Adequate diet	6	7	10
	Dietary diversity	9	13	22
	Minimum meal frequency	41	40	35
	Eggs and/or flesh foods consumption, 6-23m	9	14	
	Sweet beverage consumption, 6-23m	4	7	
	Bottle feeding for infants, 6-23m	7	10	
Diseases	Diarrhea in the last 2 weeks	13	7	7
	ARI in the last 2 weeks	5	3	2

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

Category	Immediate determinants	Worst performing districts (pp) — Difference between (2019-2021) & (2015-2016)[1]	Best performing districts (pp) — Difference between (2019-2021) & (2015-2016)[1]	Top coverage districts (%)[2] — 2019-2021
Maternal determinants	Underweight women	Latehar: +1.1 Pa Sing[4]: +0.7	Sarai-Khar[4]: -14.5 Godda: -12.0	Pu Sing[4]: 15.5 Sarai-Khar[4]: 20.3
	Consumed IFA 100+ days	Deoghar: -2.1 Dhanbad: -1.8	Pu Sing[4]: +39.4 Simdega: +39.2	Pu Sing[4]: 54.6 Gumla: 47.8
IYCF practices	Early initiation of breastfeeding	NA[3]		
	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	NA[3]	Chatra: 47.8 Latehar: 29.6
	Adequate diet	Dumka: -9.3 Simdega: -7.5	Hazaribagh: +15.4 Ranchi: +12.7	Ranchi: 19.7 Bokaro: 18.1
Diseases	Diarrhea in the last two weeks	Bokaro: +11.1 Jamtara: +8.5	Palamu: -13.5 Pu Sing[4]: -7.1	Pu Sing[4]: 1.9 Sahibganj: 3.4
	ARI in the last two weeks	Sarai-Khar[4]: +2.6 Jamtara: +2.5	Pakur: -4.8 Garhwa: -4.8	Garhwa: 0.2 Lohardaga: 0.6

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 factsheets (2019-2021). Adequate diet was estimated for NFHS-3 using last child data. Early initiation of breastfeeding, dietary diversity, minimum meal frequency, egg and/or flesh consumption, sweet beverage consumption, and bottle feeding of infants were estimated for NFHS-3 and -4 using last child data. Consumption of IFA 100+ days and consumption of IFA 180+ days were estimated for NFHS-3 using woman data. pp: percentage points.

Note: Data on early initiation of breastfeeding (children born in last 2 years), continued breastfeeding at 2 years, egg and/or flesh foods consumption, sweet beverage consumption, and bottle feeding of infants not available in NFHS-5 factsheets (2019-21)/state report. Definition of early initiation of breastfeeding is based on WHO guidelines. [1]The difference is calculated only between districts that are comparable between 2015-2016 and 2019-2021. [2]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 two weeks, and ARI in the last two weeks, for which it refers to the districts with the lowest prevalence in coverage. [3]NA refers to the unavailability of data for a particular indicator in the specified NFHS round. [4]District codes: Sarai-Khar: Saraikela-Kharsawan; Pa Sing: Paschimi Singhbhum; Pu Sing: Purbi Singhbhum.

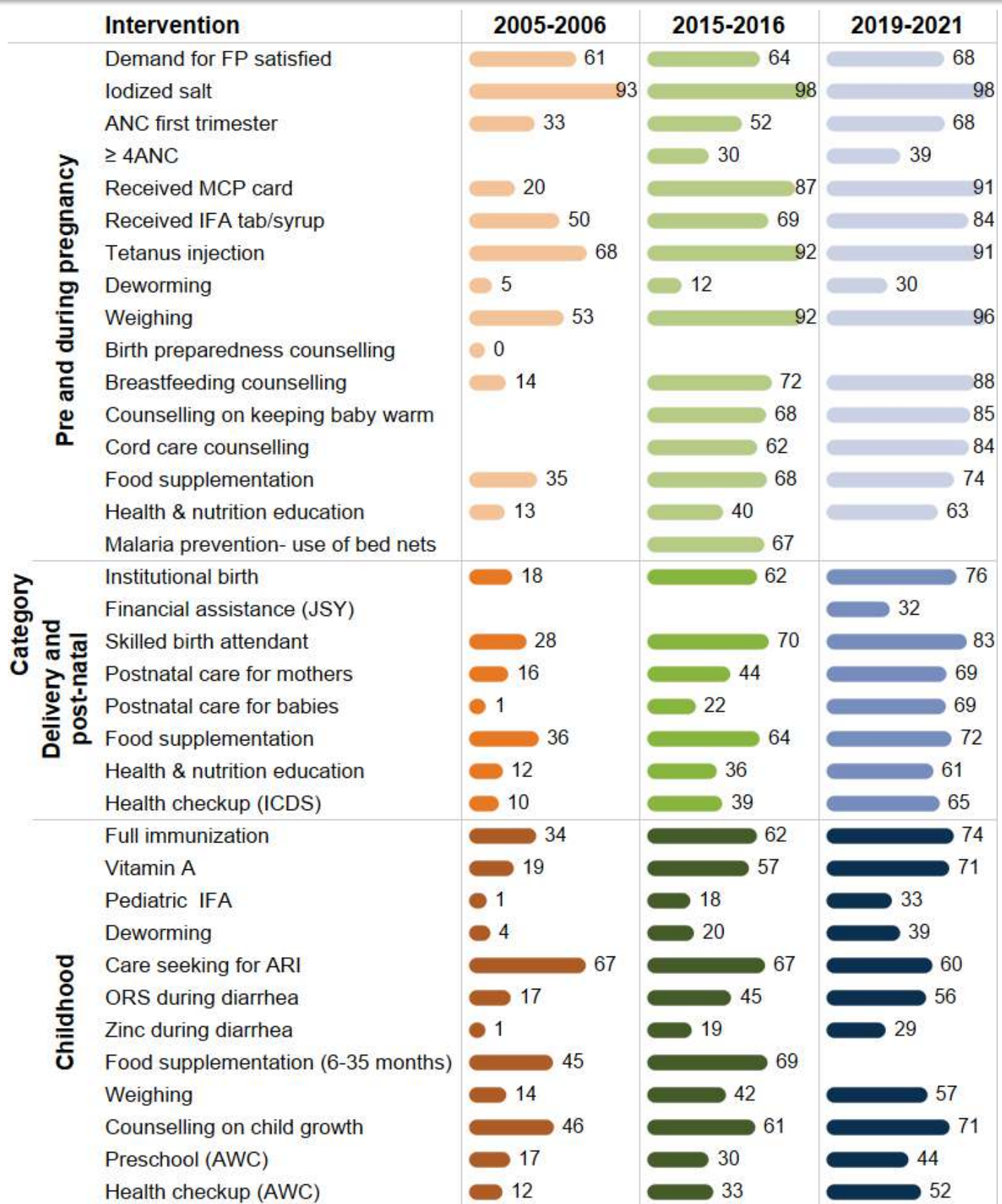# Figure 4. Trends in underlying determinants (%) 2005-2006, 2015-2016, 2019-2021

Category	Underlying determinants	2005-2006	2015-2016	2019-2021
Maternal determinants	Women with ≥10 years of education	15	29	33
	Women 20-24 years married before age of 18 years	61	38	32
	Women 15-19 years with child or pregnant		12	10
Household determinants	HHs with improved drinking water source	57	78	87
	HHs using improved sanitation facility	15	25	57
	HHs with hand washing facility		30	
	Open defecation	77	70	34
	Safe disposal of feces	10	21	
	HHs with BPL card	32	46	58
	HHs with electricity	40	81	94

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

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 factsheets and report. Women 20-24 years married before age 18 was estimated for NFHS-3 using women data.
Note: Safe disposal of feces not available in NFHS-5 factsheets (2019-21)/state report and data on HHs with hand washing facility not available in NFHS-3 (2005-06) and NFHS-5 factsheets (2019-21)/state report. Data on women 15-19 years with child or pregnant not available in NFHS-3 (2005-06).
[1]The difference is calculated only between districts that are comparable between 2015-2016 and 2019-2021. [2]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. [3]District codes: Sarai-Khar: Saraikela-Kharsawan; Pa Sing: Paschimi Singhbhum; Pu Sing: Purbi Singhbhum. [4]Prevalence did not decrease in any of the districts.

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

	Intervention	2005-2006	2015-2016	2019-2021
Pre and during pregnancy	Demand for FP satisfied	61	64	68
	Iodized salt	93	98	98
	ANC first trimester	33	52	68
	≥ 4ANC		30	39
	Received MCP card	20	87	91
	Received IFA tab/syrup	50	69	84
	Tetanus injection	68	92	91
	Deworming	5	12	30
	Weighing	53	92	96
	Birth preparedness counselling	0		
	Breastfeeding counselling	14	72	88
	Counselling on keeping baby warm		68	85
	Cord care counselling		62	84
	Food supplementation	35	68	74
	Health & nutrition education	13	40	63
	Malaria prevention- use of bed nets		67	
Delivery and post-natal	Institutional birth	18	62	76
	Financial assistance (JSY)			32
	Skilled birth attendant	28	70	83
	Postnatal care for mothers	16	44	69
	Postnatal care for babies	1	22	69
	Food supplementation	36	64	72
	Health & nutrition education	12	36	61
	Health checkup (ICDS)	10	39	65
Childhood	Full immunization	34	62	74
	Vitamin A	19	57	71
	Pediatric IFA	1	18	33
	Deworming	4	20	39
	Care seeking for ARI	67	67	60
	ORS during diarrhea	17	45	56
	Zinc during diarrhea	1	19	29
	Food supplementation (6-35 months)	45	69	
	Weighing	14	42	57
	Counselling on child growth	46	61	71
	Preschool (AWC)	17	30	44
	Health checkup (AWC)	12	33	52

(Left margin vertical label: Category)

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 factsheet and report.
Note 1: Received MCP card, birth preparedness counselling, breastfeeding counselling, counselling on keeping baby warm, cord care counselling, and postnatal care for mothers was estimated for NFHS-3 using woman data. Malaria prevention-use of bed nets was estimated for NFHS-4 using woman data. Vitamin A-early childhood was estimated for NFHS-3 using last child data. Postnatal care for babies, food supplementation-early childhood, pediatric IFA, and deworming-early childhood were estimated for NFHS-3 and -4 using last child data.
Note 2: The following information is not available in the NFHS-5 factsheets and state reports (2019-21): birth preparedness counselling, malaria prevention, and food supplementation (6-35m). Information on counselling on keeping baby warm and cord care, use of bed nets during pregnancy, and financial assistance under JSY are not available in NFHS-3 data (2005-06).
Note 3: Data on demand for family planning satisfied, received IFA, deworming, weighing, counselling on breastfeeding, keeping baby warm, cord care during pregnancy, food supplementation and health and nutrition education during pregnancy and post-natal phases, financial assistance under JSY, pediatric IFA, deworming during early childhood, weight measurement during childhood, and counselling on child growth for 2019-2021 are taken from NFHS-5 state reports.
Note 4: Refer to district dashboard for the inter-district variability in the coverage of interventions.

Intervention coverage at district-level, 2019-2021

Legend: <20% | 20-<40% | 40-<60% | 60-<80% | >=80% | Not Available

District name	Pre-pregnancy		Pregnancy														Delivery & postnatal								Early childhood											
	Demand for FP satisfied	Iodized salt	ANC first trimester	≥4 ANC	Received MCP card	Received IFA tab/syrup	Tetanus injection	Deworming	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 (JSY)	Skilled birth attendant	Postnatal care for mothers	Postnatal care for babies	Food supplementation	Health & nutrition education	Health checkup	Full immunization	Vitamin A	Paediatric IFA	Deworming	Care seeking for ARI	ORS during diarrhea	Zinc during diarrhea	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	88.0	84.9	84.9	84.0	74.1	63.4		75.8	31.6	82.5	69.1	68.7	72.4	60.5	64.7	73.9	70.9	33.0	38.5	59.8	55.6	28.9		56.6	71.2	44.0	52.3
Bokaro		95.7	68.2	48.7	87.9	88.0	90.0	24.6									80.9	25.2	86.5	73.5	70.0				71.0	80.2			62.1	67.4	34.2					
Chatra		97.8	57.1	32.4	93.1	83.4	84.9	23.9									71.5	25.8	73.5	61.2	59.1				71.7	70.7			50.3							
Deoghar		98.3	58.1	30.7	83.1	68.4	89.2	18.6									61.3	39.9	72.3	55.6	56.4				54.5	53.3			56.0	21.8	8.6					
Dhanbad		98.3	65.4	44.6	88.7	76.6	92.3	26.3									78.8	22.9	83.6	73.2	74.3				66.1	74.5			71.7	29.5	18.1					
Dumka		97.6	64.9	39.3	95.1	79.3	94.1	29.7									60.3	34.2	69.0	54.9	57.1				78.9	70.0			54.2							
Garhwa		97.5	66.3	29.8	87.1	77.3	92.1	21.2									84.0	34.2	88.2	70.3	70.6				77.2	61.2			69.8	18.8	18.6					
Giridih		96.8	57.9	42.1	86.7	77.2	86.0	16.5									70.7	28.8	76.7	61.3	61.0				70.6	69.6			51.2	72.5	48.2					
Godda		98.9	63.1	39.2	93.4	83.7	95.7	29.4									70.2	35.8	83.3	67.9	66.8				63.9	62.9			49.0	59.9	18.1					
Gumla		97.7	81.5	49.3	97.9	94.0	96.1	49.2									83.8	38.5	90.2	82.4	78.4				85.3	84.4			71.4							
Hazaribagh		95.0	59.8	36.4	89.0	87.7	88.5	16.5									82.0	25.5	85.6	65.4	67.7				70.1	71.1			67.3	54.4	20.0					
Jamtara		98.3	66.7	36.0	95.1	74.6	89.3	23.8									75.4	38.2	82.5	69.9	66.5				78.8	82.5			50.1	64.4	21.3					
Khunti		97.4	71.3	37.4	95.1	91.3	91.7	31.8									73.8	45.0	80.1	63.9	61.0				71.9	79.3			64.1	53.6	14.2					
Kodarma		99.2	77.8	47.6	89.7	81.8	92.0	28.7									91.3	26.3	94.5	75.8	78.0				73.8	76.6			65.7	61.1	23.9					
Latehar		96.8	75.0	43.1	98.0	93.9	94.2	44.3									70.3	35.9	83.8	70.7	61.7				75.0	85.9			77.6	70.2	51.0					
Lohardaga		99.4	79.0	37.7	93.0	89.6	95.1	47.8									84.1	43.6	92.1	79.2	82.1				88.2	71.7			65.9							
Pakur		97.0	71.6	26.6	91.0	80.6	91.9	27.2									64.6	46.2	74.2	61.6	60.0				69.4	56.6			51.9							
Palamu		96.6	73.1	33.8	91.5	83.2	92.6	31.6									74.9	26.2	83.4	70.3	70.1				80.9	63.5				79.0	33.0					
Pashchimi Singhbhum		96.9	62.6	34.9	92.0	87.5	89.8	26.8									67.9	46.4	70.1	58.8	61.5				87.0	72.7			52.2							
Purbi Singhbhum		99.4	78.2	40.7	91.6	89.3	95.3	44.9									94.0	33.8	96.4	84.0	85.9				88.8	71.7			65.7							
Ramgarh		97.8	63.4	40.9	90.8	89.5	93.4	22.3									79.0	23.4	89.7	78.0	75.8				81.8	78.2			65.7	50.4	31.9					
Ranchi		99.0	77.8	35.2	93.6	90.5	90.3	51.9									87.3	28.3	94.7	83.1	84.5				73.8	75.5										
Sahibganj		98.2	67.1	36.2	94.1	80.5	83.8	29.4									64.7	25.6	75.7	64.8	61.0				66.0	67.1			58.9							
Saraikela-Kharsawan		96.8	85.1	54.4	98.8	92.3	92.3	50.8									81.8	37.2	89.1	77.2	73.9				80.9	89.0			78.3	71.3	51.5					
Simdega		98.9	71.0	34.4	97.7	93.8	84.5	35.0									75.7	40.4	78.1	61.5	62.3				79.3	73.8			48.4	85.0	11.3					

Source: NFHS-5 district factsheets and state reports (2019-21).

Note 1: Data on received IFA tab/syrup, deworming during pregnancy and financial assistance (JSY) for 2019-21 are taken from NFHS-5 factsheets (2019-21).

Note 2: The following information is not available in the NFHS-5 factsheets and state reports (2019-21): (1) Information on preconception and pregnancy-related indicators, including demand for FP satisfied, weighing, birth preparedness and breastfeeding counselling, counselling on keeping baby warm, cord care counselling, health and nutrition education, and malaria prevention; (2) lactation-related indicators, including food supplementation, health and nutrition education, and health checkups; and (3) early childhood-related indicators, including pediatric IFA, deworming, food supplementation (6-35m), preschool attendance, health checkups, weighing and counselling on child growth.

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

Category	Interventions	Worst performing districts (pp)	Best performing districts (pp)	Top coverage districts (%)
		Difference between (2019-2021) & (2015-2016)[2]	*Difference between (2019-2021) & (2015-2016)[2]*	*2019-2021*
Pregnancy	ANC first trimester	Deoghar: -4.1	Latehar: +46.7 Pa Sing[3]: +43.0	Sarai-Khar[3]: 85.1 Gumla: 81.5
	≥4 ANC visits	Pu Sing[3]: -9.9 Kodarma: -9.8	Sarai-Khar[3]: +28.5 Latehar: +28.1	Sarai-Khar[3]: 54.4 Gumla: 49.3
	Received MCP Card	Hazaribagh: -7.3 Giridih: -5.5	Palamu: +18.1 Garhwa: +17.9	Sarai-Khar[3]: 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	*Not Applicable[4]*	Pa Sing[3]: +30.5 Simdega: +26.6	Pu Sing[3]: 94.0 Kodarma: 91.3
	Skilled birth attendant	*Not Applicable[4]*	Pa Sing[3]: +29.5 Latehar: +23.6	Pu Sing[3]: 96.4 Ranchi: 94.7
	Postnatal care for mothers	*Not Applicable[4]*	Pu Sing[3]: +46.6 Palamu: +40.3	Pu Sing[3]: 84.0 Ranchi: 83.1
	Postnatal care for babies	*Not Applicable[4]*	Pu Sing[3]: +78.8 Lohardaga: +69.9	Pu Sing[3]: 85.9 Ranchi: 84.5
Early childhood	Full immunization	Deoghar: -9.8 Dhanbad: -7.4	Pa Sing[3]: +37.2 Chatra: +29.7	Pu Sing[3]: 88.8 Lohardaga: 88.2
	Vitamin A supplementation	Pakur: -11.4 Hazaribagh: -0.8	Jamtara: +31.5 Sarai-Khar[3]: +30.3	Sarai-Khar[3]: 89.0 Latehar: 85.9
	Care seeking for ARI	Godda: -32.2 Giridih: -28.8	Gumla: +14.4 Latehar: +12.5	Sarai-Khar[3]: 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[3]: 79.0
	Zinc treatment during diarrhea	Hazaribagh: -10.1 Garhwa: -7.1	Ramgarh: +21.2 Latehar: +16.2	Sarai-Khar[3]: 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%), 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%); pediatric IFA (33%); deworming for children (39%) and zinc during diarrhea (29%)

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. Postnatal care for babies was estimated for NFHS-4 using last child data at the state- and district- level. pp: percentage points; Note: Interventions' coverage are based on the last child data [2]The difference is calculated only between districts that are comparable between 2015-2016 and 2019-2021. All districts are comparable between the time periods. [3]District codes: Sarai-Khar: Saraikela-Kharsawan; Pa Sing: Paschimi Singhbhum; Pu Sing: Purbi Singhbhum. [4]Prevalence did not decrease in any of the districts.

Indicator definition

Nutrition outcomes	Definition
Low birth weight$^{\$\%}$	Percentage of live births in the five years preceding the survey with a reported birth weight less than 2.5 kg, based on either a written record or the mother's recall
Stunting among children	Percentage of children aged 0-59 months who are stunted i.e., height-for-age z score < -2SD
Wasting among children	Percentage of children aged 0-59 months who are wasted i.e., weight-for-height z score < -2SD
Severe wasting among children	Percentage of children aged 0-59 months who are wasted i.e., weight-for-height z score < -3SD
Underweight children	Percentage of children aged 0-59 months who are underweight i.e., weight-for-age z score < -2SD
Anemia among children	Percentage of children aged 6-59 months who are anemic i.e., (Hb <11.0 g/dl)
Underweight women	Percentage of women aged 15-49 whose Body Mass Index (BMI) is below normal (BMI <18.5 kg/m^2); sample excluded pregnant women and women with a birth in the preceding 2 months.
Anemia among non-pregnant women*	Percentage of non-pregnant women aged 15-49 who are anemic (<12.0 g/dl)
Anemia among pregnant women*	Percentage of pregnant women aged 15-49 who are anemic (<11.0 g/dl)
Overweight/obesity - children	Percentage of children aged 0-59 months who are overweight i.e., weight-for-height z score > 2SD
Overweight/obesity - women	Percentage of women aged 15-49 who are overweight or obese (BMI ≥25.0 kg/m2); sample excluded pregnant women and women with a birth in the preceding 2 months.
Overweight/obesity – men	Percentage of men aged 15-49 who are overweight or obese (BMI ≥25.0 kg/m^2)
Hypertension among women$^{\wedge*\%}$	Percentage of women aged 15-49 with elevated blood pressure (Systolic ≥140 mm Hg or diastolic ≥90 mm Hg) or is currently taking medication to control blood pressure.
Hypertension among men$^{\wedge*}$	Percentage of men aged 15-54 with elevated blood pressure (Systolic ≥140 mm Hg or diastolic ≥90 mm Hg) or is currently taking medication to control blood pressure.
Diabetes among women$^{\wedge0}$	Percentage of women aged 15-49 with high (>140 mg/dl) or very high (>160 mg/dl) blood sugar or taking medicine to control blood sugar.
Diabetes among men$^{\wedge0}$	Percentage of men aged 15-54 with high (>140 mg/dl) or very high (>160 mg/dl) blood sugar or taking medicine to control blood sugar.

Immediate determinants	
Underweight women	Percentage of women aged 15-49 whose Body Mass Index (BMI) is below normal (BMI <18.5 kg/m^2); sample excluded pregnant women and women with a birth in the preceding 2 months.
Consumed IFA 100+ days*	Percentage of mothers aged 15-49 who consumed iron folic acid for 100 days or more during the last pregnancy in last five years preceding the survey
Consumed IFA 180+ days*	Percentage of mothers aged 15-49 who consumed iron folic acid for 180 days or more during the last pregnancy in last five years preceding the survey
Early initiation of breastfeeding$^{\#*}$	Percentage of children breastfed within one hour of birth for the last child born in the 2 years before the survey
Exclusive breastfeeding	Percentage of youngest children under age 6 months living with mother who were exclusively breastfed
Timely introduction of complementary foods	Percentage of youngest children aged 6-8 months living with mother who received solid or semi-solid food and breastmilk
Continued breastfeeding at 2 years$^{\$*\%}$	Percentage of youngest children 12–23 months of age living with mother who were fed breast milk during the previous day
Adequate diet*	Percentage of youngest children 6–23 months of age who consumed a minimum acceptable diet during the previous day
Dietary diversity$^{*@}$	Percentage of youngest children 6-23 months of age who were fed a diet that met minimum dietary diversity during the previous day.
Minimum meal frequency$^{*@}$	Percentage of youngest children 6-23 months of age who were fed the minimum recommended number of times during the previous day
Eggs and/or flesh foods consumption$^{\$*\#}$	Percentage of youngest children 6–23 months of age who consumed egg and/or flesh food during the previous day
Sweet beverage$^{\$*\#}$	Percentage of youngest children 6–23 months of age who consumed a sweet beverage during the previous day
Bottle feeding for infants$^{\$*\#}$	Percentage of youngest children 0–23 months of age who were fed from a bottle with a nipple during the previous day
Diarrhea in the last two weeks	Percentage of children under age 5 who had diarrhea in the 2 weeks preceding the survey
ARI in the last two weeks	Percentage of children under age 5 who had symptoms of acute respiratory infection (ARI) in the 2 weeks preceding the survey

Underlying determinants	
Women with ≥10 years education	Percentage of women aged 15-49 with 10 or more years of schooling
Women 20-24 years married before age of 18 years*	Percentage of women aged 20-24 years who were married before age 18 years
Women 15-19 years with child or pregnant$^\wedge$	Percentage of currently married women aged 15-49 who had their first birth before age 20 years and in the five years preceding the survey
HHs with improved drinking water source	Population living in households with an improved drinking-water source
HHs using improved sanitation facility	Population living in households that use an improved sanitation facility
HHs with hand washing facility$^{\wedge\$}$	Percentage of households in which a place for washing hands was observed.
Open defecation$^{@\%}$	Percentage of households that have no toilet facility/defecates in open
Safe disposal of feces$^{\$\%}$	Percentage of youngest children living with mother whose stools were disposed of safely
HHs with BPL card$^{@\%}$	Percentage of households with BPL card
HHs with electricity	Population living in households with electricity

Note: Unless specified, indicators values for NFHS-3 taken from either NFHS-3 national or state reports.
$^\wedge$Indicator cannot be constructed using unit-level NFHS-3 data. ^{0}Indicator cannot be constructed using unit-level NFHS-4 data. $^\$$Indicator not available in NFHS-5 factsheet/report. $^@$Indicator not available in NFHS-5 factsheet but in NFHS-5 report. $^\%$Indicator not available in NFHS-5 factsheet but available in NFHS-4 report. *Indicator estimated using NFHS-3 and/or NFHS-4 unit-level data. $^\#$Indicator constructed based on WHO guidelines.

Indicator definition

Interventions	Definition
Demand for FP satisfied@%	Percentage of currently married women aged 15-49 with demand for family planning satisfied by modern methods
Iodized salt	Percentage of households using iodized salt
ANC first trimester	Percentage of women (15-49 years of age) attended by any provider during the first trimester of pregnancy that led to the birth of the youngest child in the last 2 years
≥ 4ANC^	Percentage of mothers aged 15-49 who had at least 4 antenatal care visits for last birth in the 5 years before the survey
Received MCP card	Percentage of mothers who registered last pregnancy in the 5 years preceding the survey for which she received a Mother and Child Protection (MCP) card
Received IFA tab/syrup@%	Percentage of women who received IFA (given or purchased) tablets during the pregnancy for their most recent live birth in the 5 years preceding the survey
Tetanus injection	Percentage of women whose last birth was protected against neonatal tetanus (for last birth in the five years preceding the survey)
Deworming- pregnancy@%	Percentage of women who took an intestinal parasite drug during the pregnancy for their most recent live birth in the 5 years preceding the survey
Weighing- pregnancy@%	Percentage of women aged 15-49 with a live birth in the five years preceding the survey who were weighed during ANC for the last birth
Birth preparedness counselling0$	Percentage of women who had at least one contact with a health worker in the three months preceding the survey and were counselled on birth preparedness (for the last pregnancy in the five years preceding the survey)
Breastfeeding counselling@%	Percentage of women who met with a community health worker in the last three months of pregnancy and received advice on breastfeeding (for the last pregnancy in the five years preceding the survey)
Counselling on keeping baby warm^@%	Percentage of women who met with a community health worker in the last three months of pregnancy and received advice on keeping the baby warm for their most recent live birth in the five years preceding the survey
Cord care counselling^@%	Percentage of women who met with a community health worker in the last three months of pregnancy and received advice on cord care for their most recent live birth in the five years preceding the survey
Food supplementation - pregnancy@%	Among children under 6 years, percentage whose mother received specific benefits from AWC during pregnancy: supplementary food
Health & nutrition education – pregnancy@%	Among children under 6 years, percentage whose mother received specific benefits from AWC during pregnancy: health and nutrition education
Malaria prevention- use of bed nets^$*	Percentage of women who used mosquito net during the pregnancy for their most recent live birth in the 5 years preceding the survey
Institutional birth	Percentage of live births to women aged 15-49 in the five years preceding the survey that took place in a health/institutional facility
Financial assistance (JSY) ^@	Percentage of women who received financial assistance under JSY for their most recent live birth that took place in institutional facility in the 5 years preceding the survey
Skilled birth attendant	Percentage of births attended by skilled health personnel for births in the 5 years before the survey
Postnatal care for mothers*	Percentage of mothers who received postnatal care from a doctor/nurse/LHV/ANM/midwife/other health personnel within 2 days of delivery for their most recent live birth in the five years preceding the survey
Postnatal care for babies*	Percentage of children who received postnatal care from a doctor /nurse /LHV /ANM /midwife /other health personnel within 2 days of delivery for last birth in the 5 years before the survey
Food supplementation – postnatal@%	Among children under 6 years, percentage whose mother received specific benefits from AWC while breastfeeding: supplementary food
Health & nutrition education – postnatal@%	Among children under 6 years, percentage whose mother received specific benefits from AWC while breastfeeding: health and nutrition education
Health checkup (ICDS)@%	Among children under 6 years, percentage whose mother received specific benefits from AWC while breastfeeding: health checkup.
Full immunization	Percentage of children aged 12-23 months fully vaccinated based on information from either vaccination card or mother's recall
Vitamin A – early childhood*	Percentage of children aged 9-35 months who received a vitamin A dose in the last 6 months
Pediatric IFA*@%	Percentage of youngest children aged 6-23 months who received iron supplements in the past 7 days preceding the survey.
Deworming – early childhood*@%	Percentage of youngest children aged 6-23 months who received deworming tablets in the last 6 months preceding the survey.
Care seeking for ARI	Percentage of children under age 5 years with fever or symptoms of ARI in the 2 weeks preceding the survey taken to a health facility or health provider
ORS during diarrhea	Percentage of children under age 5 years with diarrhea in the 2 weeks preceding the survey who received ORS
Zinc during diarrhea	Percentage of children under age 5 years with diarrhea in the 2 weeks preceding the survey who received zinc
Food supplementation (children 6-35 months) $*	Percentage of youngest children aged 6-35 months who received food supplements from AWC in the 12 months preceding the survey
Weighing – early childhood@%	Percentage of youngest children under age 5 who were weighed at AWC in the 12 months preceding the survey
Counselling on child growth@%	Percentage of youngest children under age 5 whose mother received counselling from an AWC after child was weighed in the 12 months preceding the survey
Preschool at AWC@%	Percentage of children age 36-71 months who went for early childhood care/preschool at an AWC in the 12 months preceding the survey.
Health checkup (AWC)@%	Percentage of children age under 6 years who received health checkups from an AWC in the 12 months preceding the survey

Note: Unless specified, indicators values for NFHS-3 taken from either NFHS-3 national or state reports.
^Indicator cannot be constructed using unit-level NFHS-3 data. 0Indicator cannot be constructed using unit-level NFHS-4 data. $Indicator not available in NFHS-5 factsheet/report. @Indicator not available in NFHS-5 factsheet but in NFHS-5 report. %Indicator not available in NFHS-5 factsheet but available in NFHS-4 report. *Indicator estimated using NFHS-3 and/or NFHS-4 unit-level data. #Indicator constructed based on WHO guidelines.

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SUGGESTED CITATION

Ashok, S., P.H. Nguyen, S.K. Singh, R. Sarwal, N. Bhatia, R. Johnston, W. Joe, E. Sarswat, and P. Menon. 2022. *State Nutrition Profile: Jharkhand*. POSHAN Data Note 70. New Delhi, India: International Food Policy Research Institute.

ACKNOWLEDGEMENTS

PARTNERS

Institute of Economic Growth (IEG)
International Institute for Population Science (IIPS)
NITI Aayog
UNICEF

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.