

Data Note

No. 56 | SEPTEMBER 2021

WEST BENGAL

State Nutrition Profile: West Bengal

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 here are based on data from the National Family Health Survey (NFHS) 3 (2005-2006), 4 (2015-2016) and 5 (2019-2020). In addition to standard prevalence-based analyses, this Data Note includes headcount-based analyses, aligned to the POSHAN Abhiyaan monitoring framework and using data from NFHS- 5 to provide evidence that helps identify priority districts and number of districts in the state with public health concern as per the WHO guidelines¹. 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 & men and identifies areas where the state has potential to improve.

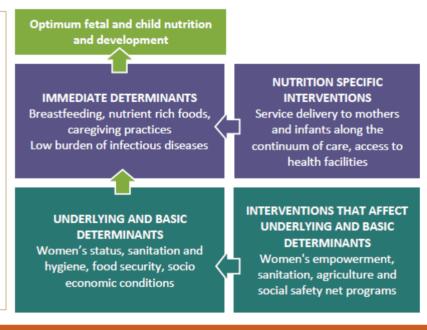
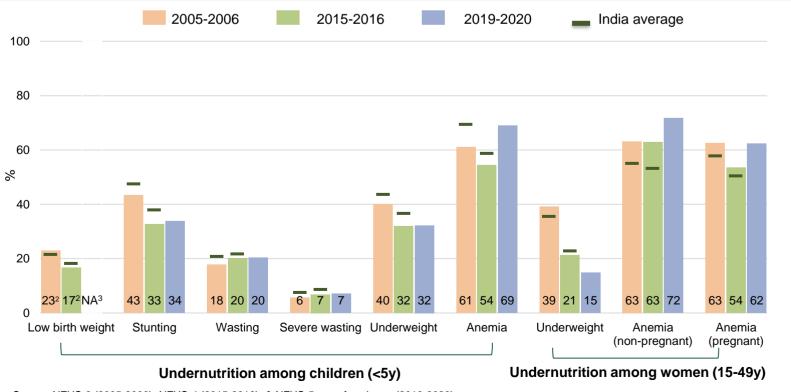


Figure 1. Trends in undernutrition outcomes 2005-2006, 2015-2016, 2019-2020



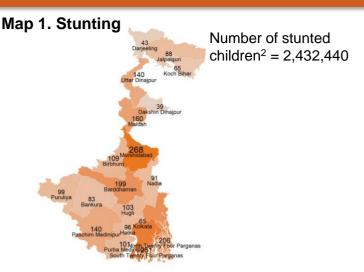
Source: NFHS-3 (2005-2006), NFHS-4 (2015-2016), & NFHS-5 state factsheets (2019-2020).

Note: Adult nutrition outcomes are based on the woman dataset, while child nutrition outcomes are based on all child data.

¹WHO. Nutrition Landscape Information System (NLiS). Help Topic: Malnutrition in children. Stunting, wasting, overweight and underweight.

(helpid=391&lang=EN); ²In NFHS-3, 49.3% of data was missing, while 13.9% of data was missing in NFHS-4. ³NA refers to the unavailability of data for a particular indicator in the specified NFHS round.

Map 1 & 2. Number of stunted & anemic children <5y, 2019-2020



Note: Number in '000s in the above figure

	Highest burden distri	cts
1	Murshidabad	267,553
2	South 24 Parganas	250,741
3	North 24 Parganas	205,594
4	Barddhaman	199,000
5	Maldah	160,360

No. of districts with public health concern¹: 20 of 20

Map 2. Anemia Dargeeling Japaiguri 138 Uttar Dinajpur Dakshin Dinajpur Dakshin Dinajpur Dakshin Dinajpur Dakshin Dinajpur Dakshin Dinajpur Addis Date of anemic children² = 4,517,462 Number of anemic children² = 4,517,462

Note: Number in '000s in the above figure

	Highest burden o	listricts
1	Murshidabad	435,397
2	South 24 Parganas	432,072
3	Barddhaman	360,982
4	North 24 Parganas	330,040
5	Pashchim Medinipur	267,639

No. of districts with public health concern¹: 20 of 20

Map 3 & 4. Number of wasted children <5y, 2019-2020

Map 3. Wasting



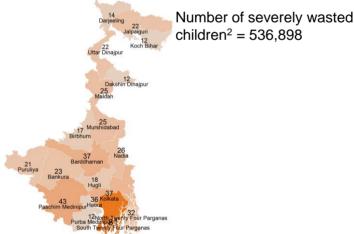
Note: Number in '000s in the above figure

children <5 years is 6,977,232.

	Highest burden o	listricts
1	South 24 Parganas	144,842
2	Pashchim Medinipur	136,781
3	Barddhaman	128,086
4	Murshidabad	109,576
5	North 24 Parganas	84,395

No. of districts with public health concern¹: 20 of 20

Map 4. Severe Wasting



Note: Number in '000s in the above figure

	Highest burden o	districts
1	South 24 Parganas	80,620
2	Pashchim Medinipur	43,336
3	Kolkata	37,194
4	Barddhaman	36,832
5	Howrah	36,488

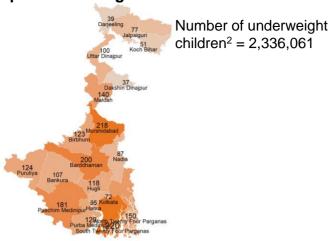
No. of districts with public health concern1: 20 of 20

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 (2019-2020; all child data) and projected population for 2019 was estimated using Census 2011. Note: The newly formed districts, for which no spatial boundaries were available, were not depicted on the maps.

¹Public health concern is defined as ≥20% for stunting, ≥40% for anemia , ≥10% for wasting, and ≥2% for severe wasting (WHO 2011). ²The total number of

Map 5 & 6. Number of underweight children (<5y) & women (15-49y), 2019-2020

Map 5. Underweight children

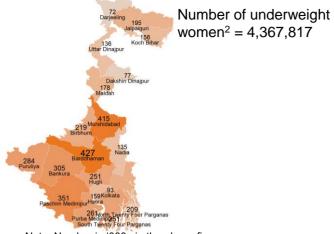


Note: Number in '000s in the above figure

	Highest burden	districts
1	South 24 Parganas	219,996
2	Murshidabad	217,807
3	Barddhaman	199,550
4	Pashchim Medinipur	180,568
5	North 24 Parganas	149,753

No. of districts with public health concern¹: 20 of 20

Map 6. Underweight women



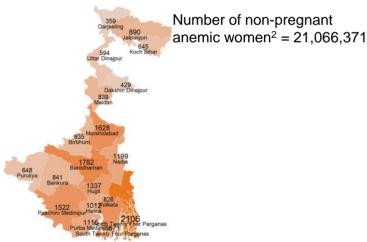
Note: Number in '000s in the above figure

	Highest burden dist	ricts
1	Barddhaman	426,647
2	Murshidabad	415,279
3	Pashchim Medinipur	350,745
4	Bankura	304,791
5	Puruliya	283,857

No. of districts with public health concern¹: 17 of 20

Map 7 & 8. Number of anemic women (15-49y), 2019-2020

Map 7. Anemia among non-pregnant women

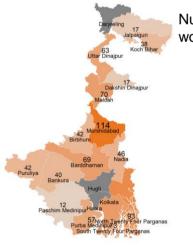


Note: Number in '000s in the above figure

	Highest burden	districts
1	North 24 Parganas	2,106,259
2	Barddhaman	1,781,590
3	Murshidabad	1,627,725
4	South 24 Parganas	1,571,494
5	Pashchim Medinipur	1,521,752

No. of districts with public health concern¹: 20 of 20

Map 8. Anemia among pregnant women



Number of pregnant anemic women² = 810,586

Note: Number in '000s in the above figure

	Highest burden	districts
1	Murshidabad	114,422
2	North 24 Parganas	93,405
3	South 24 Parganas	73,385
4	Maldah	70,157
5	Barddhaman	69,254

No. of districts with public health concern¹: 16 of 16

Figure 2. Trends in overweight/obesity & NCDs¹ 2005-2006, 2015-2016, 2019-2020

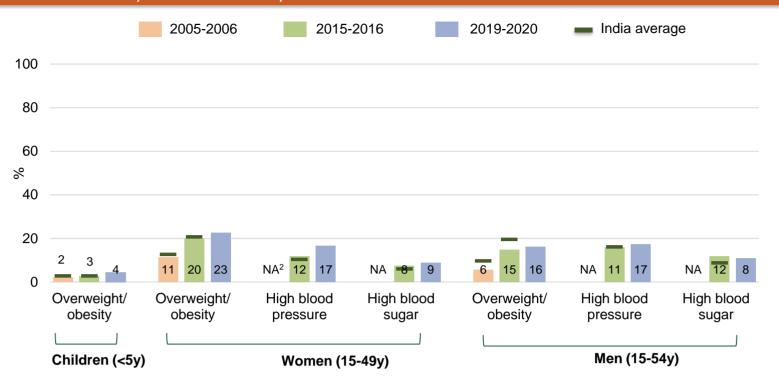


Table 1. Overweight/obesity & NCDs¹ at district-level 2015-2016, 2019-2020

Category	Outcomes	Worst performing districts (pp)	Best performing districts (pp)	Highest burden districts (thousands) ⁴	No of districts with public health concern ⁵ (total=20)
		Difference between (2019-2020) & (2015-2016) ³	Difference between (2019-2020) & (2015- 2016)	2019-2020	2019-2020
Children <5 years	Overweight/ obesity	S 24 Parg ⁶ : +5.2 Utt Dinaj ⁶ : +4.7	Cooch Behar: -2.0 Dak Dinaj ⁶ : -1.2	S 24 Parg: 47 N 24 Parg ⁶ : 41	0
	Overweight/ obesity	Murshidabad: +10.4 Maldah: +10.0	Kolkata: -11.5 Howrah: -3.1	N 24 Parg: 850 Hooghly: 616	13
Women (15-49 years)	High blood pressure	S 24 Parg: +9.9 Bankura: +7.6	Dak Dinaj: -1.8 Utt Dinaj: -1.4	N 24 Parg: 518 S 24 Parg: 483	3
	High blood sugar	Puruliya: +5.3 Dak Dinaj: +5.0	N 24 Parg: -1.7 Hooghly: -1.0	N 24 Parg: 312 Barddhaman: 204	0
	Overweight /obesity	Data not available at d	istrict-level		
Men (15-54 years)	High blood pressure	Howrah: +11.6 Hooghly: +9.0	Kolkata: -9.1 Maldah: -7.0	N 24 Parg: 493 S 24 Parg: 448	6
	High blood sugar	Puruliya: +6.5 Utt Dinaj: +5.1	Kolkata: -11.0 S 24 Parg: -7.1	N 24 Parg: 427 Barddhaman: 286	0

Source: NFHS-3 (2005-2006), NFHS-4 (2015-2016), and NFHS-5 state and district factsheets (2019-2020). pp: percentage points.

Note: Adult nutrition outcomes are based on the woman/man dataset, while child nutrition outcomes are based on all child data.

¹NCDs: non-communicable diseases. ²NA refers to the unavailability of data for a particular indicator in the specified NFHS round. ³The difference is calculated only between districts that are comparable between 2015-2016 and 2018-2019. All districts except Purba Barddhaman and Paschim Barddhaman are not comparable between the time periods. ⁴Burden: 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 (2019-2020) and projected population for 2019 was estimated using Census 2011. ⁵Public health concern is defined as prevalence ≥15% for overweight/obesity (children), ≥20% for overweight/obesity (women and men), ≥20% high blood pressure (women and men), and ≥20% high sugar (women and men) (WHO 2011). ⁶District codes: S 24 Parg- South 24 Parganas; N 24 Parg-North 24 Parganas; Dak Dinaj: Dakshin Dinajpur; Utta Dinajpur.

Figure 3. Trends in immediate determinants (%) 2005-2006, 2015-2016, 2019-2020

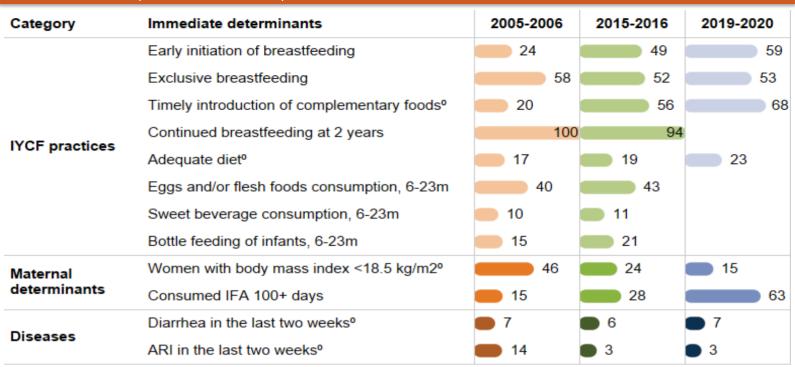


Table 2. Immediate determinants at district-level 2015-2016, 2019-2020

Category	Immediate determinants	Worst performing districts (pp)	Best performing districts (pp)	Top coverage districts (%) ²
		Difference between (2019-2020) & (2015-2016) ¹	Difference between (2019-2020) & (2015-2016)	2019-2020
	Early initiation of breastfeeding	S 24 Parag³: -14.5 Bankura: -7.1	Pu Medi³: 30.3 Hooghly: 30.2	Birbhum: 72.0 Nadia: 71.8
IYCF	Exclusive breastfeeding	Murshidabad: -10.5 Cooch Behar: -10.1	S 24 Parag: +40.9 Birbhum: +24.3	S 24 Parag: 73.5 Utt Dinaj ³ : 66.4
practices	Timely introduction of complementary foods ⁰	Data not available at distric	t-level	
	Adequate diet ^o	Nadia: -14.8 Pa Medi ³ : -9.2	Maldah: +18.2 Kolkata: +17.8	Dak Dinaj³: 34.2 Pu Bard³: 34.1
Maternal determinants	Women with BMI<18.5 kg/m20	Not applicable ⁴	Puruliya: -22.0 Pa Medi³: -14	Kolkata: 6.6 N 24 Parg³: 6.5
determinants	Consumed IFA 100+ days	Not applicable	Utt Dinaj: +53.2 N 24 Parg: +51.8	Dak Dinaj: 76.2 N 24 Parg: 73.3
Diagona	Diarrhea in the last two weeks ⁰	Bankura: +7.7 Birbhum: +3.4	Jalpaiguri: -7.0 Dak Dinaj: -6.0	Dak Dinaj: 2.7 N 24 Parg: 2.0
Diseases	ARI in the last two weeks ⁰	Birbhum: +4.3 Nadia, Kolkata: +2.4	Cooch Behar: -5.5 N 24 Parg: -3.5	Pa Medi: 1.4 Hooghly: 0.8

Source: NFHS-3 (2005-2006), NFHS-4 (2015-2016), and NFHS-5 state and district factsheets (2019-2020). pp: percentage points.

Note: Immediate determinants are based on the last child data; data on 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 (2019-20)/state report

Olndicator definition differs slightly between NFHS-4 and NFHS-5; ¹The difference is calculated only between districts that are comparable between 2015-2016 and 2018-2019. All districts except Purba Barddhaman and Paschim Barddhaman are not comparable between the time periods. ²For all indicators, top coverage districts refer to the districts with the highest prevalence in immediate determinants, except for women with a BMI of 18.5 kg/m², 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. ³District codes: Pu Medi- Purba Medinipur, Pa Medi: Paschim Medinipur; Pu Bard: Purba Barddhaman; S 24 Parg- South 24 Parganas; N 24 Parg- North 24 Parganas; Dak Dinaj: Dakshin Dinajpur; Utt Dinaj: Uttar Dinajpur. ⁴Prevalence did not increase or decrease in any of the districts.

Figure 4. Trends in underlying determinants (%) 2005-2006, 2015-2016, 2019-2020



Table 3. Underlying determinants at district-level 2015-2016, 2019-2020

Category	Underlying determinants	Worst performing districts (pp)	Best performing districts (pp)	Top coverage districts (%) ²
		Difference between (2019-2020) & (2015-2016) ¹	Difference between (2019-2020) & (2015-2016)	2019-2020
	Women who are literate ⁰	Pu Medi ⁴ : -9.5 Nadia: -8.6	Utt Dinaj⁴: +15.3 Purulia: +7.1	Kolkata: 87.6 S 24 Parg ⁴ : 85.6
Maternal determinants	Women with ≥10 years education ⁰	Birbhum: -0.8 Pu Medi: -0.6	S 24 Parg: +16.3 N 24 Parg ⁴ : +11.8	Kolkata: 55.4 Darjeeling: 41.3
determinants	Girls 20-24 years married before age of 18 years ⁰	Pu Medi: +3.6	Jalpaiguri: -28.0 Utt Dinaj: -24.9	Jalpaiguri: 18.7 Kolkata: 16.7
	Women 15-19 years with child or pregnant	Pa Medi ⁴ : +9.4 Cooch Behar: +3.7	Purulia: -9.7 Murshidabad: -8.9	Darjeeling: 6.3 Kolkata: 4.9
	HHs with improved drinking water source ⁰	Pu Medi: -11.7 Bankura: -0.4	Maldah: +15.3 Jalpaiguri: +11.5	S 24 Parg: 100 Utt Dinaj: 99.8
Household determinants	HHs with improved sanitation facility ⁰	Not applicable ³	Dak Dinaj: +36.9 Utt Dinaj: +34.2	Darjeeling: 83.0 N 24 Parg: 80.4
	HHs with electricity ⁰	Pa Medi: -2.4 Kolkata: -0.2	S 24 Parg: +11.8 Utt Dinaj: +9.5	Kolkata: 99.6 N 24 Parg: 99.5

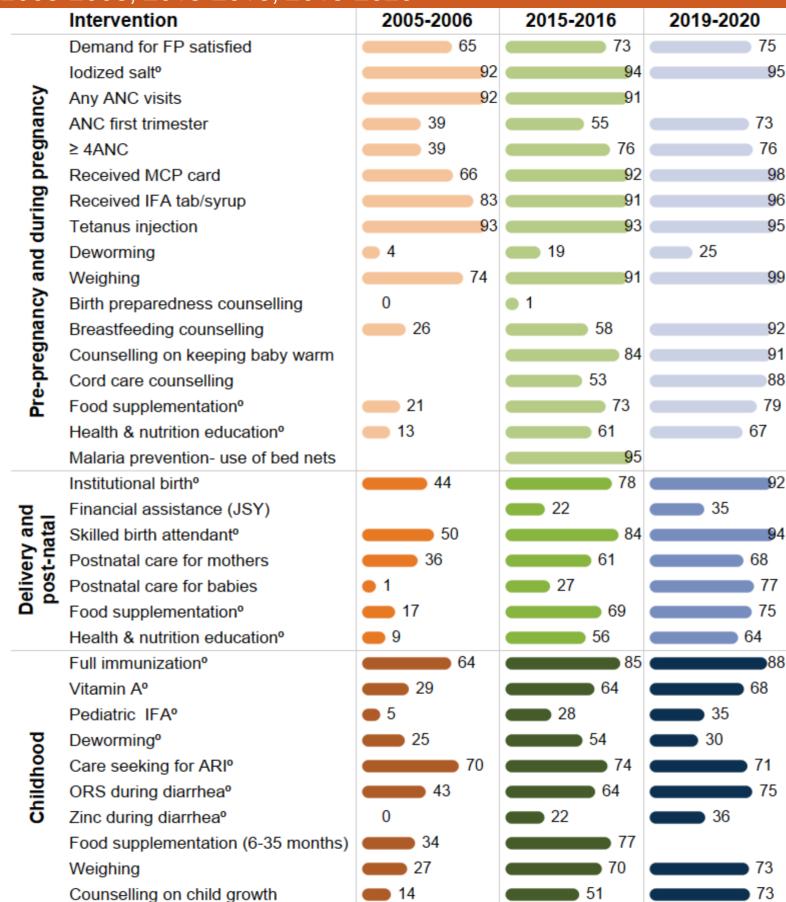
Source: NFHS-3 (2005-2006), NFHS-4 (2015-2016), and NFHS-5 state and district factsheets and state reports (2019-2020).

Note: Underlying determinants are based on the last child data; safe disposal of feces not available in NFHS-5 factsheets (2019-20)/state report and data on HHs with hand washing facility not available in NFHS-3 (2005-06) and NFHS-5 factsheets (2019-20)/state report. Data on open defecation and HHs with BPL card for 2019-2020 are taken from NFHS-5 state reports.

 $^{^{\}mbox{\scriptsize 0}}\mbox{Indicator}$ definition differs slightly between NFHS-4 and NFHS-5.

¹The difference is calculated only between districts that are comparable between 2015-2016 and 2018-2019. All districts except Purba Barddhaman and Paschim Barddhaman are not comparable between the time periods. ²For all indicators, top coverage districts refer to the districts with the highest prevalence in underlying determinants, except for girls 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. ³Prevalence did not increase or decrease in any of the districts. ⁴District codes: Pu Medi- Purba Medinipur, Pa Medi: Paschim Medinipur; Pu Bard: Purba Barddhaman; S 24 Parg- South 24 Parganas; N 24 Parg North 24 Parganas; Dak Dinaj: Dakshin Dinajpur; Uttar Dinajpur.

Figure 5. Trends in interventions across the first 1000 days (%) 2005-2006, 2015-2016, 2019-2020



Source: NFHS-3 (2005-2006), NFHS-4 (2015-2016) & NFHS-5 state factsheets and state reports (2019-2020). Olndicator comparable between NFHS-3 and NFHS-4 but differs slightly from NFHS-5.

Note 1: Interventions' coverage is based on the last child data.

Note 2: The following information is not available in the NFHS-5 factsheets and state reports (2019-20): receipt of at least one ANC visit, birth preparedness counselling, malaria prevention and food supplementation (6-35m). Information on use of bed nets during pregnancy is not available in NFHS-3 data (2006). Note 3: Data on food supplementation and health and nutrition education during pregnancy and post-natal care, and weight measurement during childhood and counselling on child growth for 2019-2020 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, 2019-2020

District name	Pre- pregnancy							Pregnancy	ıncy							Deli	very & p	Delivery & postnata	a					Ear	Early childhood	pooq			
	97 rof bnem90 beifzifez fles besibol	stisiv JNA ynA	SMC first trimester	DNA Þ≤	Preceived MCP card All bevieces	tab/syrup	Tetanus injection	Deworming Weighing	Birth preparedness counselling	Counselling on Keeping baby warm	Cord care counselling	Food supplementation Food supplementation	education Malaria prevention-	stan bed To seu	Financial assistance	(JSY) Skilled birth attendant	Postnatal care for	mothers Postnatal care for	babies Food supplementation	Health & nutrition education	noitezinummi llu7	A nimeJiV	A4I ɔirɹsibəs٩	Deworming	Care seeking for ARI	690 Sauring diarrhea	noitetnementetion Food supplementetion (s-35 months)	gnidgieW	blido no gnillesnuoO dfworg
WEST BENGAL	94.5		72.6 7	75.8	98.4 9	96.1 9	94.6 25	5.3						91.7	7 35.2	.2 94.1	1 68.0	0 76.8	8		87.8	68.4		71	6.	75.3 36.1	0		
Bankura	86.8		74.7	75.7	99.5	95.5	89.5 24	24.2						93.3	3 36	9 93	.8 67.2	2 76.5	10		85.0	73.4		7	71.1 87.	3 44.	2		
Birbhum	93.3		81.9	78.4	98.7	94.8	98.4 29.	8.6						90:3	3 46.8	.8 92.2	2 67.5	5 81.7	7		81.6	58.4		7	78.9	68.1 31.	2		
Dakshin Dinajpur	97.3		70.9	76.4	9.66	97.9	95.3 19	19.0						91.	.4 50.3	3 94.	0 83.2	2 89.1			92.6	67.2		7	75.5				
Darjeeling	7.76		85.0	79.2	96.8	96.3	96.6	32.3						786	4 44.7	7 99.2	2 73.9	9 84.7			94.2	76.2		7	78.6				
Haora	97.4		84.8	82.7 9	96.5	96.5	97.8 35.	5.5						95.	5 40.7	96 _ 2	7.07 6.	7 79.8	8		87.8	70.1		5:	53.8				
Hugli	90.5		76.0 7	72.2	9.86	9.96	92.2 19.	1.1						97.0	.0 20.	1 97	.4 56.7	7 76.7			95.4	75.0		9	62.8				
Jalpaiguri	94.8		8 2.77	88.4	100.0	97.3	96.6 29.8	9.8						92.8	43.	.76 5.	7 74.8	8 82.5	10		87.9	65.5		80	6.0				
Koch Bihar	9.76		71.3 7	77.3	9.66	98.3	96.6	27.8						93.0	0 46	8 92.	5 71.9	6 79.7			94.2	61.4		59.	8.6				
Kolkata	986		74.2	71.7	94.4	91.4 10	100.0	7.0						1.76	.5 18.6	E. 69 3.	3 72.8	8 84.6	9		80.2	58.0							
Maldah	8.76		8.77	87.8	99.7	96.3	93.1 19	19.0						87.	7 38.4	4 88.	9 61.6	6 67.9	6.		87.2	57.7		9	65.0				
Murshidabad	92.5		73.9	6.99	97.3	91.6	91.1 26.	5.1						87.0	.0 30.6	.6 92.3	3 49.8	8 67.6	9		90.0	67.7		8	83.0 71	.5 35.	6		
Nadia	0.96		61.1 7	71.2	98.4 9	95.8	95.7 20.	6.0							7 23.8	8 98.	6 89.4	4 89.5	6		89.9	74.0		9	69.2				
North Twenty Four Parganas	98.9		72.7	6.68	98.7 9	97.7	97.7 20	20.7						97.	.5 32.0	86 0	.3 87.8	8 92.4	t		92.8	78.1							
Paschim Barddhaman	8.68		70.3	70.4	95.5	93.6	96.6 22.	2.5						8.68	8 31	.4 91.3	3 64.1	1 70.5	10		62.4	9.09		8	86.3 81	.2 48.	6		
Paschim Medinipur	93.8		52.6	63.1	99.1	97.8	96.2 31.	1.7						87.0	.6 35.3	.3 95.1	1 79.7	5.08 7	6		76.9	78.3		7	72.1				
Purba Barddhaman	95.2		72.5	80.5	100.0	97.2	90.8	3.4						96.0	34.	6 94.	3 65.2	2 75.0	0.		97.2	65.2		5	9.95				
Purba Medinipur	0.06		69.3	56.8	98.8	92.6	87.1 25.	9.5						91.5	20	3 94.	.6 48.5	5 58.1			88.4	83.7		7	72.5				
Puruliya	89.7		59.1	57.8	98.0	96.2 9	91.2 30.	0.0						868	.8 39.7	7 91	.4 51.5	5 68.4	4		84.7	0.89		9	66.7 7.3	72.8 35.	9.		
South Twenty Four Parganas	94.1		77.1	87.5	98.6	98.5	96.4 29.	9.1						91.0	0 46.9	93	.2 67.0	.07 0.8	∞.		91.7	58.8		19	6.09				
Uttar Dinaipur	93.7		76.6	70.1	97.8	94.9	96.7 25	25.9						76.	9 39	3 84.7	2 60.5	69.6	4		84.4	67.4		84.	1	64.9 50.	9		

Source: NFHS-5 district factsheets and state reports (2019-20).

receipt of at least one ANC visit, weighing, birth preparedness and breastfeeding counselling, counselling on keeping baby warm, cord care counselling, food supplementation, health and nutrition education and Note 1: The following information is not available in the NFHS-5 factsheets and state reports (2019-20): (1) Information on preconception and pregnancy-related indicators including demand for FP satisfied, malaria prevention; (2) Lactation-related indicators including, food supplementation and health and nutrition education; and (3) early childhood-related indicators including pediatric IFA, deworming, food

Source: NFHS-5 district & state factsheets (2019-20)

supplementation (6-35m), weighing and counselling on child growth. Information on use of bed nets during pregnancy not available in NFHS-3 data (2005-2006). Note 2: Food supplementation during early childhood is for children aged 6-35 months; counselling on child growth during early childhood is conducted after taking weight measurement

Table 4. Intervention coverage at district level 2015-2016, 2019-2020

Category	Interventions	Worst performing districts (pp)	Best performing districts (pp)	Top coverage districts (%)
		Difference between (2019-2020) & (2015-2016) ²	Difference between (2019-2020) & (2015-2016)	2019-2020
	ANC first trimester	Nadia: -7.2 Kolkata: -1.7	Utt Dinaj ³ : +39.7 Maldah: +35.4	Darjeeling: 85 Howrah: 84.8
Pregnancy	≥4 ANC visits	Pu Medi ³ : -22.5 Pa Medi ³ : -20.9	Maldah: +30.3 Utt Dinaj: +27	N 24 Parg³: 89.9 Jalpaiguri: 88.4
	Received MCP Card	Not applicable ¹	Maldah: +17.2 Kokata: +15.9	Jalpaiguri: 100 Pu Bard: 100
	Tetanus injection	Pu Medi: -8.5 Murshidabad: -7.4	Utt Dinaj: +10.0 Kolkata: +9.0	Kolkata: 100 Birbhum: 98.4
Delivery and post-natal	Institutional birth°	Not applicable ¹	S 24 Parg: +36.0 Maldah: +28.7	Darjeeling: 98.4 Nadia: 97.7
	Skilled birth attendant°	Not applicable ¹	Maldah: +24.6 S 24 Parg: +24.4	Kolkata: 99.3 Darjeeling: 99.2
	Postnatal care for mothers	Hooghly: -13 Pu Medi: -11.9	N 24 Parg: +29.6 Nadia: +28.8	Nadia: 89.4 N 24 Parg: 87.8
	Postnatal care for babies°	Not applicable ¹	N 24 Parg: +74.7 Dak Dinaj: +68	N 24 Parg: +92.4 Nadia: +89.9
Early childhood	Full immunization	Pa Medi: -15.0 Bankura: -11.1	Utt Dinaj: +18.2 Cooch Behar: +18	Pu Bard: 97.2 Hooghly: 95.4
	Vitamin A supplementation°	Dak Dinaj: -10.3 S 24 Parg: -10.2	N 24 Parg: +24.4 Madhubani: +14.9	Pu Medi: 83.7 Pa Medi: 78.3
	Care seeking for ARI°	Howrah: -27.6 Bankura: -21.8	Pu Medi: +18.1 Hooghly: +16.6	Pa Bard: 86.3 Utt Dinaj: 84.1
	ORS treatment during diarrhea°	Birbhum: -10.6 Utt Dinaj: -0.9	Bankura: +31.3 Purulia: +21.2	Bankura: 87.3 Pa Bard: 81.2
	Zinc treatment during diarrhea°	Not applicable ¹	Murshidabad: +27.6 Utt Dlnaj: +24.0	Utt Dinaj: 50.6 Pa Bard: 48.9

Key takeaways

Children: Stunting prevalence declined by 10 percentage points (pp) between 2006 and 2016 and increased by 1pp between 2016 and 2020. Underweight declined by 8pp between 2006 and 2016 and no further improvements between 2016 and 2020. Anemia declined by 7pp between 2006 and 2016 but increased by 15pp between 2016 and 2020. Women: Underweight declined by 18pp between 2006 and 2016 and further declined by 6pp between 2016 and 2020. Anemia among non-pregnant women and pregnant women increased by 9pp and 8pp between 2016 and 2020. respectively. Overweight/obesity increased by 9pp between 2006 and 2016 and by 3pp between 2016 and 2020. Men: Overweight/obesity increased by 9pp between 2006 and 2016 and by 1pp between 2016 and 2020. Attention is needed to improve (%s in 2020):

- **Outcomes**: Stunting (34%), underweight (32%), wasting (20%) and anemia among children (69%); anemia among women (62-72%)
- *Immediate determinants:* Early initiation of breastfeeding (59%), exclusive breastfeeding (53%), adequate diet for children (23%); 100+ IFA consumption (63%)
- *Underlying determinants:* Women with ≥10 years education (33%); early marriage (42%); improved sanitation (68%)
- **Coverage of interventions:** Health and nutrition education (64-67%); postnatal care for mothers (68%); Vitamin A (68%) and zinc during diarrhea (36%)

pp: percentage points; Source: NFHS-3 (2005-2006), NFHS-4 (2015-2016), and NFHS-5 state and district factsheets (2019-2020). Note: Interventions' coverage are based on the last child data. ⁰Indicator definition differs slightly between NFHS-4 and NFHS-5. ¹Prevalence did not increase or decrease in any of the districts. ²The difference is calculated only between districts that are comparable between 2015-2016 and 2018-2019. All districts except Purba Barddhaman and Paschim Barddhaman are not comparable between the time periods. ³District codes: Pu Medi- Purba Medinipur, Pa Medi: Paschim Medinipur; Pu Bard: Purba Barddhaman; S 24 Parg- South 24 Parganas; N 24 Parg- North 24 Parganas; Dak Dinaj: Dakshin Dinajpur; Utt Dinaj: Uttar Dinajpur.

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/m2)
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 Overweight/obesity - women	Percentage of children aged 0-59 months who are overweight i.e., weight-for-height z score > 2SD Percentage of men aged 15-54 who are overweight or obese (BMI ≥25.0 kg/m2)
Overweight/obesity - men	Percentage of men aged 15-54 who are overweight or obese (BMI ≥25.0 kg/m2)
High blood pressure among women^	Percentage of women aged 15-49 with elevated blood pressure (Systolic >140 mm Hg or diastolic >90 mm Hg)
High blood pressure among men^	Percentage of men aged 15-54 with elevated blood pressure (Systolic >140 mm Hg or diastolic >90 mm Hg)
High sugar level among women^	Percentage of women aged 15-49 with elevated blood pressure (Systolic >140 mm Hg or diastolic >90 mm Hg)
High sugar level among men^	Percentage of men aged 15-54 with high blood sugar levels (141-160 mg/dl)
Immediate determinants	
Early initiation of breastfeeding	Percentage of children under aged 3 years breastfed within one hour of birth for the last child born in the 3 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 ⁰	¹ Percentage of youngest children aged 6-8 months living with mother who received solid or semi-solid food during the previous day; ² 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 who were fed breast milk during the previous day Percentage of youngest children 6–23 months of age who consumed a minimum acceptable diet during the previous
Adequate diet	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 ^{\$} Bottle feeding for infants ^{\$}	Percentage of youngest children 6–23 months of age who consumed a sweet beverage during the previous day Percentage of youngest children 0–23 months of age who were fed from a bottle with a nipple during the previous day
Women with body mass index <18.5 kg/m ² °	¹ Percentage of women aged 15-49 with a youngest child < 5 years who have BMI below normal (BMI <18.5 kg/m²); ² Percentage of women aged 15-49 whose BMI is below normal (BMI <18.5 kg/m²)
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
Diarrhea in the last two weeks ⁰	¹ Percentage of youngest children under age five who had diarrhea in the two weeks preceding the survey; ² Percentage of children under age 5 who had diarrhea in the 2 weeks preceding the survey
ARI in the last two weeks ⁰	¹ Percentage of youngest children under age five who had symptoms of acute respiratory infection (ARI) in the two weeks preceding the survey; ² Percentage of children under age five who had symptoms of acute respiratory
	infection (ARI) in the two weeks preceding the survey
Underlying determinants	
Women who are literate ⁰	¹ Percentage of women aged 15-49 with a birth in five years preceding the survey who are literate i.e., those who completed standard 6 or higher and can read a whole sentence; ² Percentage of women aged 15-49 who are literate i.e., those who completed standard 9 or higher and can read a whole sentence or part of a sentence.
Women with ≥10 years education ⁰	¹ Percentage of women aged 15-49 with a birth in five years preceding the survey with 10 or more years of schooling; ² Percentage of women aged 15-49 with 10 or more years of schooling
Girls 20-24 years married before age of 18 years ⁰	¹ Percentage of women aged 20-24 years with a birth in five years preceding the survey who were married before age 18 years; ² Percentage of women aged 20-24 years who were married before age 18 years
Women 15-19 years with child or pregnant	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 ⁰	¹ Percentage of youngest children under age 5 living in household that use an improved source of drinking water; ² Population living in households that use an improved sanitation facility
HHs with improved sanitation facility ⁰	¹ Percentage of youngest children under age 5 living in household that uses improved toilet facility; ² Population living in households that use an improved sanitation facility
HHs with hand washing facility ^{^\$}	Percentage of youngest children under age 5 living in household that had soap and water for washing hands
Open defecation [®] Safe disposal of feces ^{\$}	Percentage of youngest children under age 5 living in household that has no toilet facility/defecates in open Percentage of youngest children living with mother whose stools were disposed of safely
HHs with BPL card [®]	Percentage of youngest children under age 5 living in households with BPL card
HHs with electricity ⁰	¹ Percentage of youngest children under age 5 living in household that has electricity; ² Population living in households with electricity

[^]Indicator not available in NFHS-3. Indicator not available in NFHS-5 factsheets/state reports Indicator comparable between NFHS-3 and NFHS-4 but differs slightly from NFHS-5. [@] Indicator not available in NFHS-5 factsheets but available in NFHS-5 states reports.
¹ Definition per NFHS-3/NFHS-4. ² Definition as per NFHS-5 factsheet.

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 ^o	¹ Percentage of women aged 15-49 living in HHs that use iodized salt; ² Percentage of households using iodized salt
Any ANC visits\$	Percentage of women aged 15-49 with a live birth in the five years who received at least one ANC for the last birth
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
Descrived MCD cord	Survey
Received MCP card	Percentage of mothers who registered last pregnancy in the 5 years preceding the survey for which she received a
Received IFA tab/syrup®	Mother and Child Protection (MCP) card Percentage of women who received IFA (given or purchased) tablets during the pregnancy for their most recent live
Received if A tab/syrup	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
5: 4	ANC for the last birth
Birth preparedness counselling\$	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; calculated among women aged 15-49 who gave birth in the five years
Breastfeeding counselling@	preceding the survey Percentage of women who met with a community health worker in the last three months of pregnancy and received
Dreastreeding counselling	advice on breastfeeding (for the last pregnancy in the five years preceding the survey)
Counselling on keeping baby	Percentage of women who met with a community health worker in the last three months of pregnancy and received
warm [®]	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 -	¹ Percentage of youngest children under age 5 whose mother received supplementary food from AWC during
pregnancy [®]	pregnancy; ³ Among children under 6 years, percentage whose mother received specific benefits from AWC during
	pregnancy: supplementary food
Health & nutrition education –	¹ Percentage of mothers who received health and nutrition education from an Anganwadi Centre (AWC) during last
pregnancy [®]	pregnancy in the five years preceding the survey; ³ Among children under 6 years, percentage whose mother received
Malaria prevention- use of bed	specific benefits from AWC during pregnancy: health and nutrition education Percentage of women who used mosquito net during the pregnancy for their most recent live birth in the 5 years
nets ^{\\$}	preceding the survey
Institutional birth ⁰	Percentage of women aged 15-49 who gave birth in health/institutional facility for their most recent live birth in the 5
	years preceding the survey; ² 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 ⁰	¹ Percentage of women whose last delivery was attended by a skilled health personnel for their most recent live birth
	in the 5 years preceding the survey; ² Percentage of births attended by skilled health personnel for births in the 5
Postnatal care for mothers	years before the survey Percentage of mothers who received postnatal care from a doctor/nurse/LHV/ANM/midwife/other health personnel
1 Ostriatal care for mothers	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®	¹ Percentage of youngest children under age 5 whose mother received supplementary food from AWC while
	breastfeeding; ³ Among children under 6 years, percentage whose mother received specific benefits from AWC while
	breastfeeding: supplementary food
Health & nutrition education –	¹ Percentage of youngest children under age 5 whose mother received health check-ups from AWC while
postnatal [@]	breastfeeding; ³ Among children under 6 years, percentage whose mother received specific benefits from AWC while
Full immunication()	breastfeeding: health and nutrition education
Full immunization ⁰	¹ Percentage of youngest living children aged 12-23 months fully vaccinated based on information from either vaccination card or mother's recall; ² Percentage of children aged 12-23 months fully vaccinated based on information
	from either vaccination card or mother's recall
Vitamin A – early childhood ⁰	¹ Percentage of youngest children aged 6-59 months who received Vitamin A supplementation in the last 6 months
manner cany annunced	preceding the survey; 2 Percentage of children aged 9-35 months who received a vitamin A dose in the last 6 months
Pediatric IFA ^{0@}	Percentage of youngest children aged 6-59 months who received iron supplements in the past 7 days preceding the
	survey
Deworming – early childhood ^{0@}	Percentage of youngest children aged 6-59 months who received deworming tablets in the last 6 months preceding
	the survey
Care seeking for ARI ⁰	¹ Percentage of youngest 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; ² Percentage of children under age 5 years with fever or symptoms
ORS during diarrhea ⁰	of ARI in the 2 weeks preceding the survey taken to a health facility or health provider ¹Percentage of youngest children under age 5 years with diarrhea in the 2 weeks preceding the survey who received
OKS during diarrileas	oral rehydration salts (ORS); 2Percentage of children under age 5 years with diarrhea in the 2 weeks preceding the
	survey who ORS
Zinc during diarrhea ⁰	¹ Percentage of youngest children under age 5 years with diarrhea in the 2 weeks preceding the survey who
Ç	received zinc; ² Percentage of children under age 5 years with diarrhea in the 2 weeks preceding the survey who
	received zinc
Food supplementation (children 6-	Percentage of youngest children aged 6-35 months who received food supplements from AWC in the 12 months
35 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

[^]Indicator not available in NFHS-3. \$Indicator not available in NFHS-5 factsheets/state reports. @Indicator not available in NFHS-5 factsheets but available in NFHS-5 states reports. OIndicator comparable between NFHS-3 and NFHS-4 but differs slightly from NFHS-5.

¹Definition per NFHS-3/NFHS-4. ²Definition as per NFHS-5 factsheet. ³Definition as per NFHS-5 state reports.

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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

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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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