State of Nutrition among Children

in Parliamentary Constituencies of India

- Stunting
- Underweight
- Wasting
- Low Birth Weight
- Anaemia

This booklet was conceptualized and prepared by Professor S.V. Subramanian, Professor Wiliam Joe, and Dr. Rockli Kim.

We would like to gratefully acknowledge the contributions of our collaborators:

Akshay Swaminathan
(Harvard College, US)

Alok Kumar
(National Institution for Transforming India, India)

Jeffrey C. Blossom
(Harvard University, US)

Rakesh Kumar
(International Institute for Population Sciences, India)

R Venkataramanan
(Tata Trusts, India)

Sunil Rajpal
(Institute of Economic Growth, India)

Yun Xu
(Independent Researcher, China)

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Contributors

S.V. Subramanian is a Professor of Population Health and Geography at Harvard University. He was the Founding Director of Graduate Studies for the interdisciplinary PhD program in Population Health Sciences at Harvard. He has published over 600 articles, book chapters, and books in the field of social and contextual determinants of health and nutritional inequalities in India and developing countries, and applied multilevel statistical models. He has been named among the Thomson Reuters Highly Cited Researchers (top 1% of cited publications in Web of Sciences) since 2015. Subramanian is the Co-Editor-in-Chief for the international journal *Social Science & Medicine (SSM),* a Co-Senior Editor for the social epidemiology office of *SSM*, and the founding Co-Editor-in-Chief of a new journal *SSM – Population Health.*

William Joe is an Assistant Professor at the Population Research Centre (PRC), Institute of Economic Growth, Delhi and a Bernard Lown Scholar at the Harvard T.H. Chan School of Public Health, Harvard University, United States. He has PhD in Economics from Jawaharlal Nehru University with research interests in Health Economics, Demography, Development Economics and Program Evaluation. In 2017, he was a Visiting Scientist at the Department of Social and Behavioral Sciences at the Harvard T.H. Chan School of Public Health. Dr. Joe's research work has appeared in prominent national and international journals. Currently he is involved in research on nutrition in India as well as monitoring of National Health Mission across high focus districts.

Rockli Kim is a Research Associate at the Harvard Center for Population and Development Studies. She received her ScD from the Department of Social and Behavioral Sciences and SM from the Department of Global Health and Population at the Harvard T.H. Chan School of Public Health. Her current research work focuses on investigating variations in individual and population health and well-being using multilevel statistical modelling, and assessing social determinants of child undernutrition and early childhood development in low- and middle-income countries.

Preface

To accelerate the rate of improvement in population health and well-being, representatives with the most direct interactions with, and accountability over, its constituents should have access to the most accurate and up-to-date evidence to develop policies that can efficiently and effectively serve its people. In India, Parliamentary Constituency is an important unit at which political discourse and action takes place.

In this informational booklet, using state-of-the-art methodologies and the 2016 National Family Health Survey, we present the first robust estimates on five indicators of child malnutrition (i.e., stunting, underweight, wasting, low birth weight, anaemia) for the 543 Parliamentary Constituencies for each state in India. These indicators are commonly used as markers of child malnutrition and are also identified for monitoring the progress under the POSHAN Abhiyaan - India's flagship programme to improve nutritional outcomes for children, adolescents, pregnant women and lactating mothers by leveraging technology, a targeted approach and convergence.

The POSHAN Abhiyaan was launched on 8th March 2018 by Prime Minister Shri Narendra Modi in Jhunjhunu, Rajasthan. The POSHAN Abhiyaan targets to reduce stunting, undernutrition, anaemia (among young children, women and adolescent girls) and low birth weight by 2%, 2%, 3% and 2% per annum respectively. As the Government of India attempts to realize the goals outlined in the POSHAN Abhiyaan to improve the nutritional status of children in India, the information generated in this report should go long way in enabling Parliamentarians to understand the extent of the undernutrition problem in their respective constituencies, and to find meaningful ways to collaborate with, and learn from, each other to find effective strategies to realizing the full health and human capital potentials of India's children.

We hope that future efforts on monitoring and surveillance of indicators of health, development and well-being will be routinely done at the Parliamentary Constituencies level.

Contents

About Poshan Abhiyaan
The National Nutrition Mission

POSHAN Abhiyaan
PM's Overarching Scheme for Holistic Nourishment
सही पोषण – देश रोशन

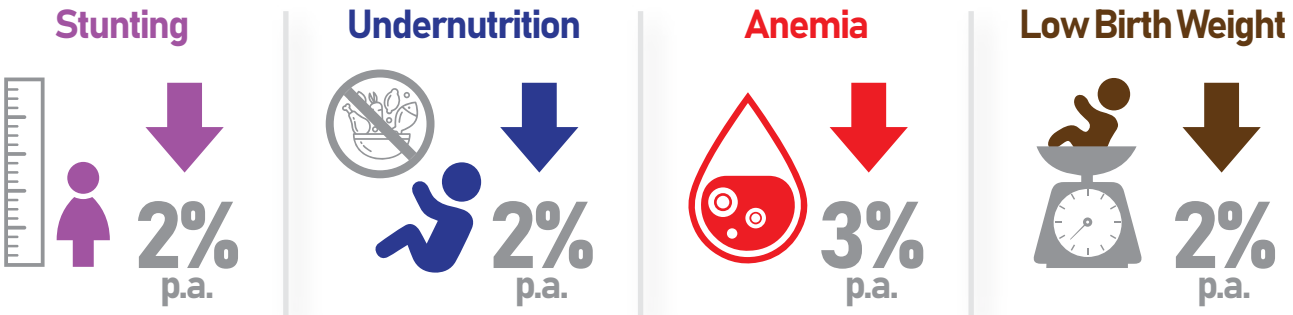
POSHAN Abhiyaan is India's flagship programme to improve nutritional outcomes for children, adolescents, pregnant women and lactating mothers by leveraging technology, a targeted approach and convergence.

In 2017, the Union Cabinet chaired by Prime Minister Shri Narendra Modi approved setting up of National Nutrition Mission (NNM) with a three year budget of Rs.9046.17 crore commencing from 2017-18.

More than 10 crore people will be benefitted by this programme. All the States and districts will be covered in a phased manner i.e. 315 districts in 2017-18, 235 districts in 2018-19 and remaining districts in 2019-20.

POSHAN Abhiyaan was launched on 8th March 2018 by the Prime Minister in Jhunjhunu, Rajasthan.

- National Nutrition Mission targets to reduce



- Although the target to reduce **Stunting** is at least **2% per annum,** Mission would strive to achieve reduction in Stunting from **38.4% to 25% by 2022**

Source: NITI Aayog. Nourishing India: The National Nutrition Strategy. New Delhi: Government of India, 2017.

Introduction

The Motivation

The Members of the Parliament help connect and shape the health and developmental priorities of the nation. Notwithstanding the dedication and efforts, the Members of the Parliament are often constrained by data inadequacy that disallows any systematic understanding of the magnitude and distribution of the problem among the constituents.

Availability of such data is critical not only to help understand how the various Parliamentary Constituencies are performing, but also to foster comparisons and conversations among the Members of the Parliaments to promote governance and action on dismantling barriers to health and health equity.

The Need

The policy discourse around nutritional issues is increasingly being driven by data, in part due to the availability as well as the perceived necessity to collect data, at the district level. At the same time, for real impact and action, political will and support is critical to the success of any public policy. Yet, data pertaining to key developmental indicators do not exist at the level of the Parliamentary Constituencies - the unit for significant political discourse and action.

Enabling data and evidence for discussions and collaborations among political leaders, policymakers and developmental stakeholders.

The Content

In this informational booklet, we use the state-of-the-art methodologies and the most recent National Family Health Survey 2015-16 to present the first robust estimates on five indicators of child malnutrition (i.e., **stunting, underweight, wasting, low birth weight,** and **anaemia**) by Parliamentary Constituencies for each state in India. These indicators are priority targets under the POSHAN Abhiyaan.

For further details related to the data and methods, please see:

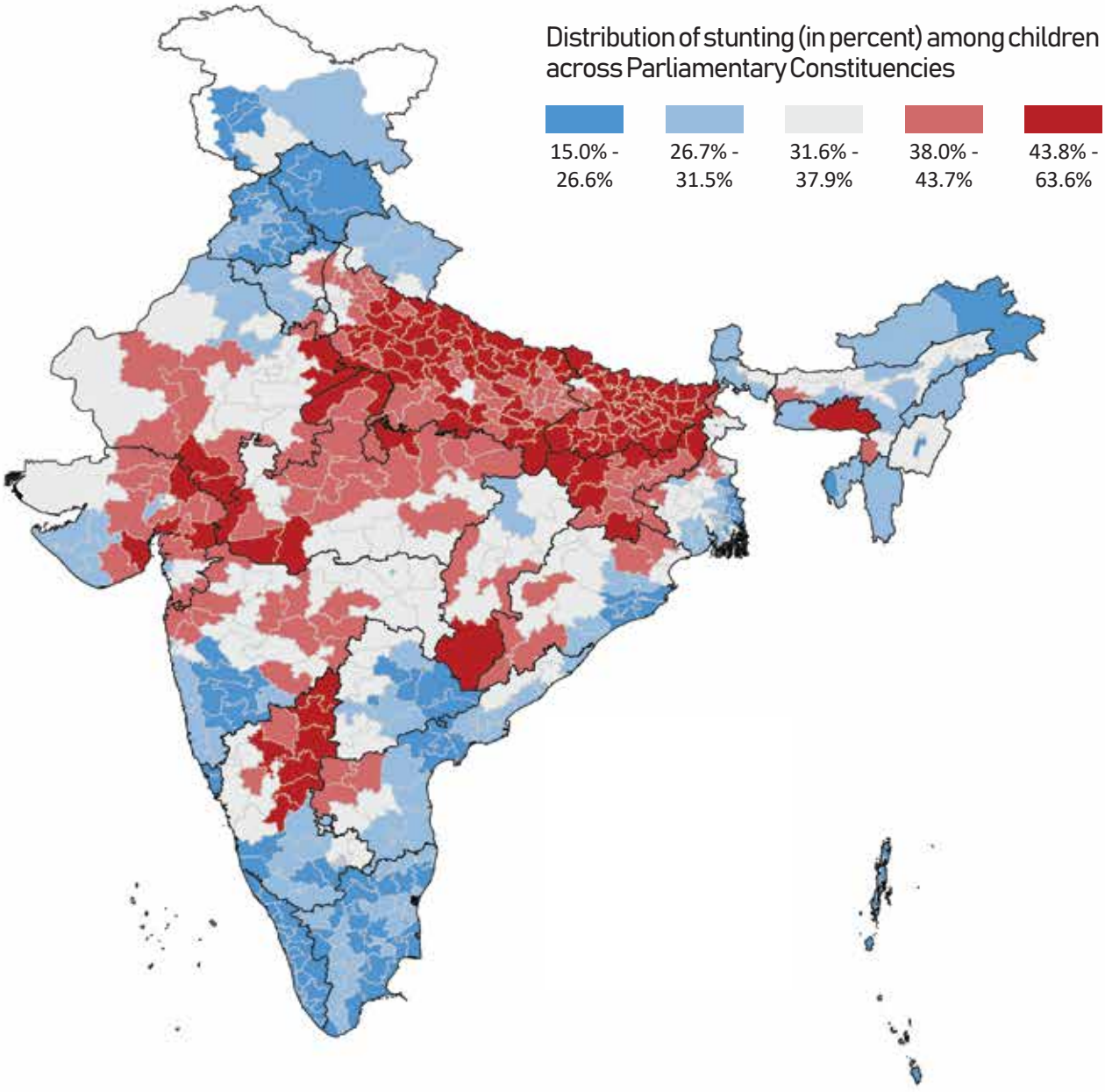
Swaminathan A, Kim R, Xu Y, Blossom J.C., Joe W, Venkataramanan R, Kumar A, & Subramanian S.V. Burden of Child Malnutrition in India: A View from Parliamentary Constituencies. Economic & Political Weekly. 2018; In press.

Kim R, Xu Y, Joe W., & Subramanian S.V. Estimates of Child Malnutrition Indicators for 543 Parliamentary Constituencies in India, 2016: A Visual and Tabular Representation. 2018; Harvard Center for Population and Development Studies Working paper, 18(2).

The Purpose

The Parliamentary Constituency- level estimates and their ranking are intended to help support discussions and collaborations among Parliamentarians, NITI leadership and relevant ministries at the national and state level to promote nutritional health in India.

Stunting

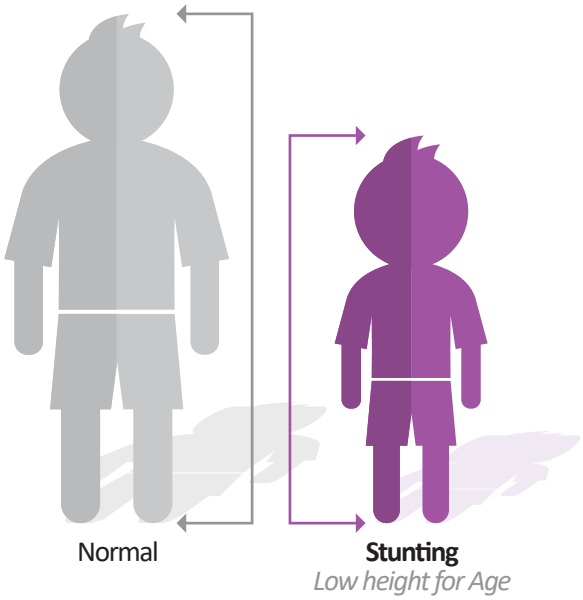


20 Parliamentary Constituencies with the **lowest stunting prevalence**

1. Kollam
2. Alappuzha
3. Mavelikkara
4. Ernakulam
5. Idukki
6. Pathanamthitta
7. Chalakudy
8. Kozhikode
9. South Goa
10. Thiruvananthapuram
11. Kottayam
12. Kasaragod
13. Thrissur
14. Attingal
15. Secunderabad
16. Kanniyakumari
17. Alathur
18. Palakkad
19. Tripura West
20. Jagatsinghpur

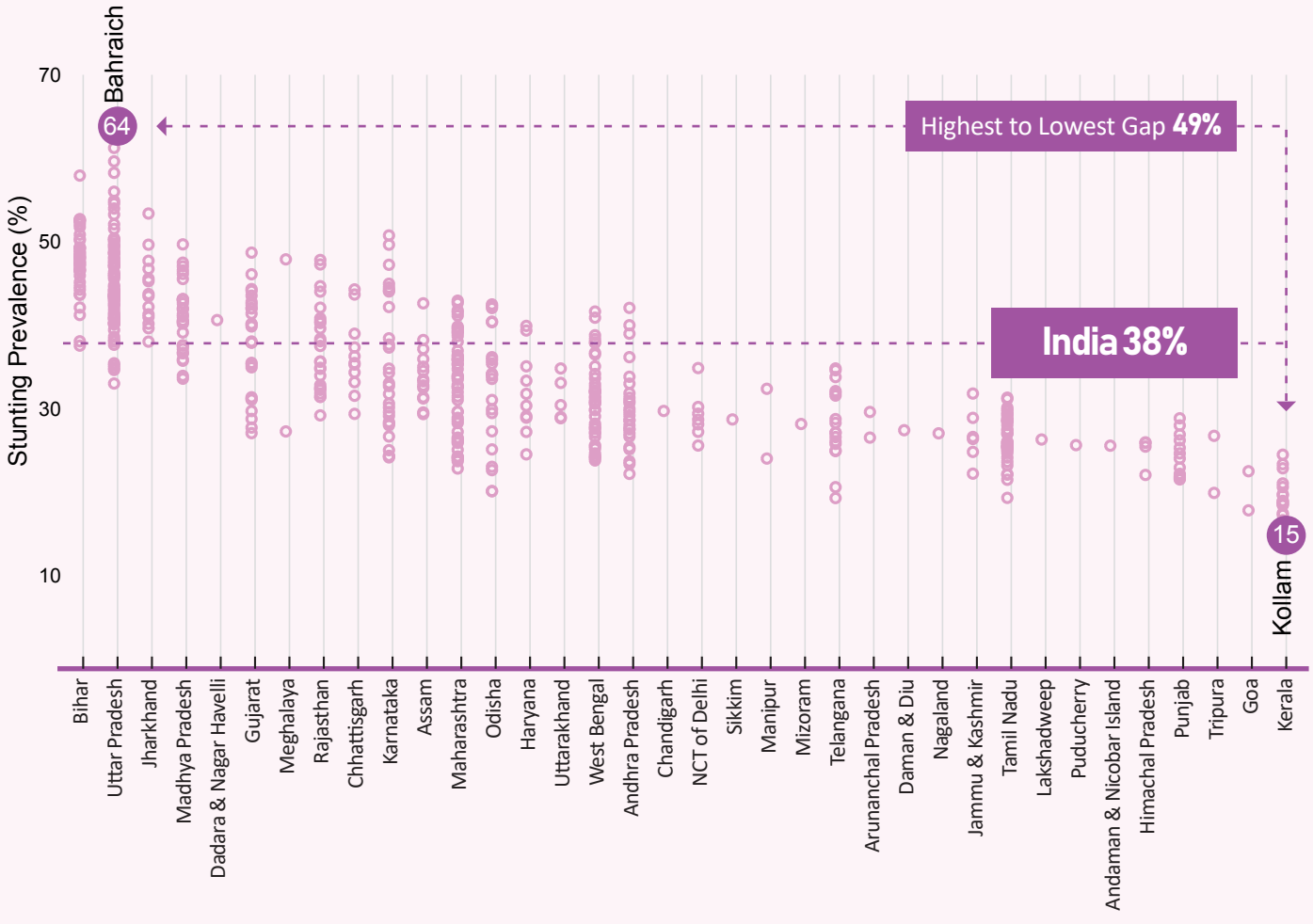
20 Parliamentary Constituencies with the **highest stunting prevalence**

1. Bahraich
2. Shrawasti
3. Kaisarganj
4. Gonda
5. Sitamarhi
6. Domriaganj
7. Dhaurahra
8. Sitapur
9. Budaun
10. Singhbhum
11. Maharajganj
12. Nalanda
13. Sheohar
14. Hajipur
15. Jhanjharpur
16. Sasaram
17. Kheri
18. Purnia
19. Fatehpur
20. Aurangabad



What is Stunting

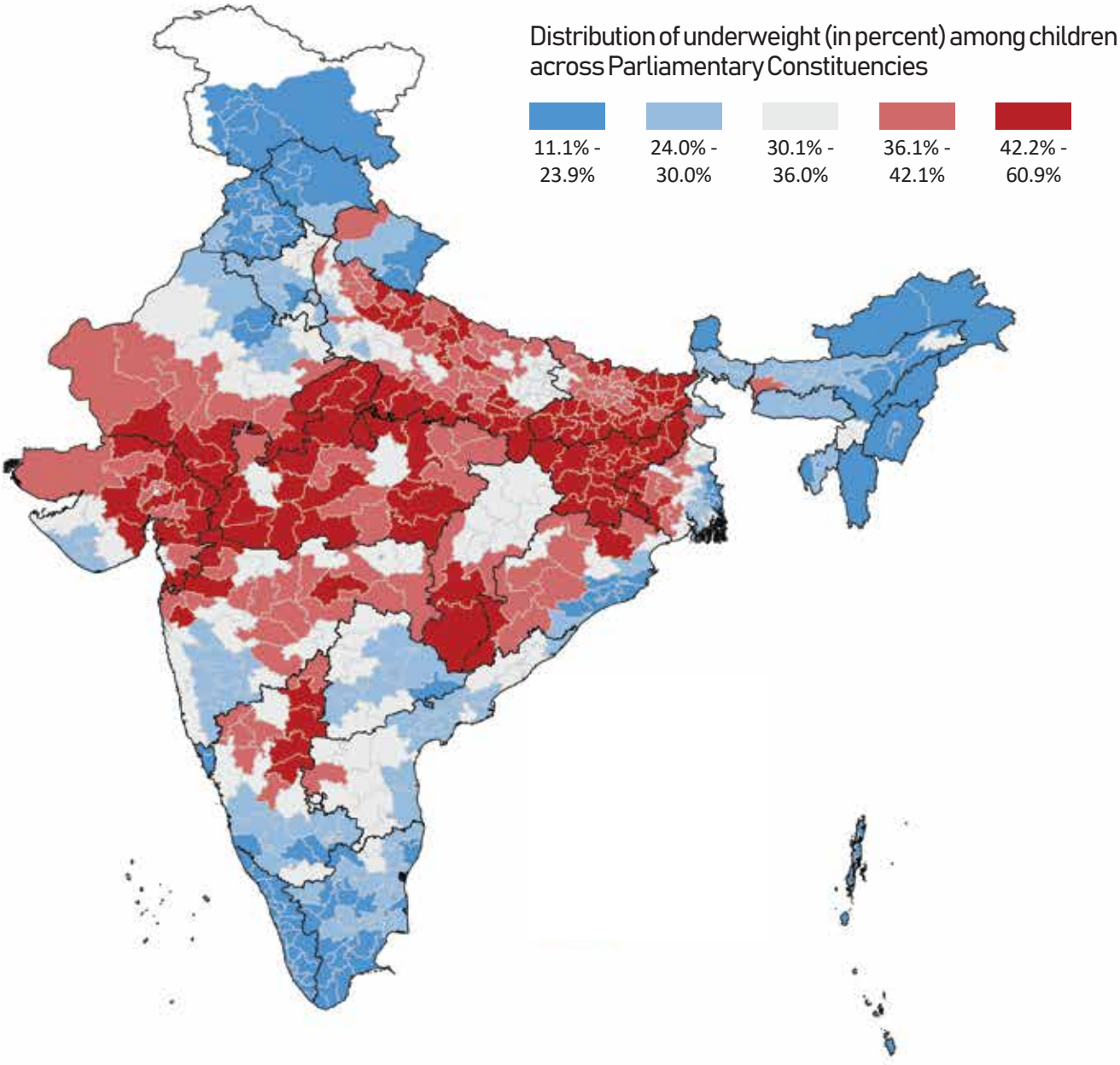
Height-for-age is a measure of linear growth retardation and cumulative growth deficits. Children whose height-for-age Z-score is below minus two standard deviations (-2 SD) from the median of the reference population are considered short for their age (stunted), or chronically undernourished.



Stunting prevalence in India is **38%**

The absolute gap between the highest and the lowest stunting prevalence across Parliamentary Constituenciess is **49%**

Underweight

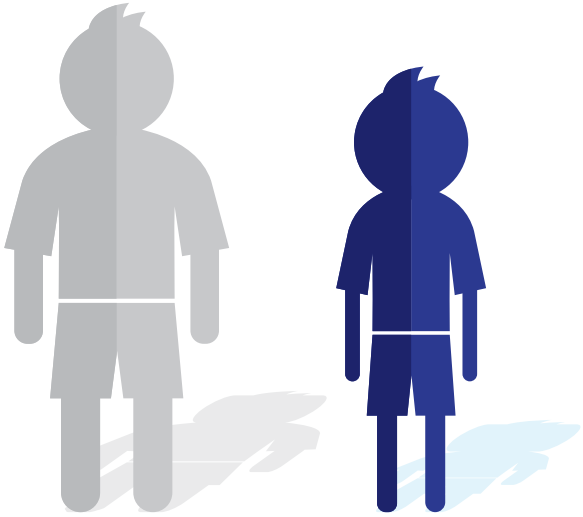


20 Parliamentary Constituencies with the **lowest underweight prevalence**

1. Anantnag
2. Kottayam
3. Inner Manipur
4. Kannur
5. Mizoram
6. Baramula
7. Pathanamthitta
8. Kollam
9. Thrissur
10. Srinagar
11. Outer Manipur
12. Chalakudy
13. Ernakulam
14. Amritsar
15. Idukki
16. Sikkim
17. Kasaragod
18. Vadakara
19. Kanniyakumari
20. Mavelikkara

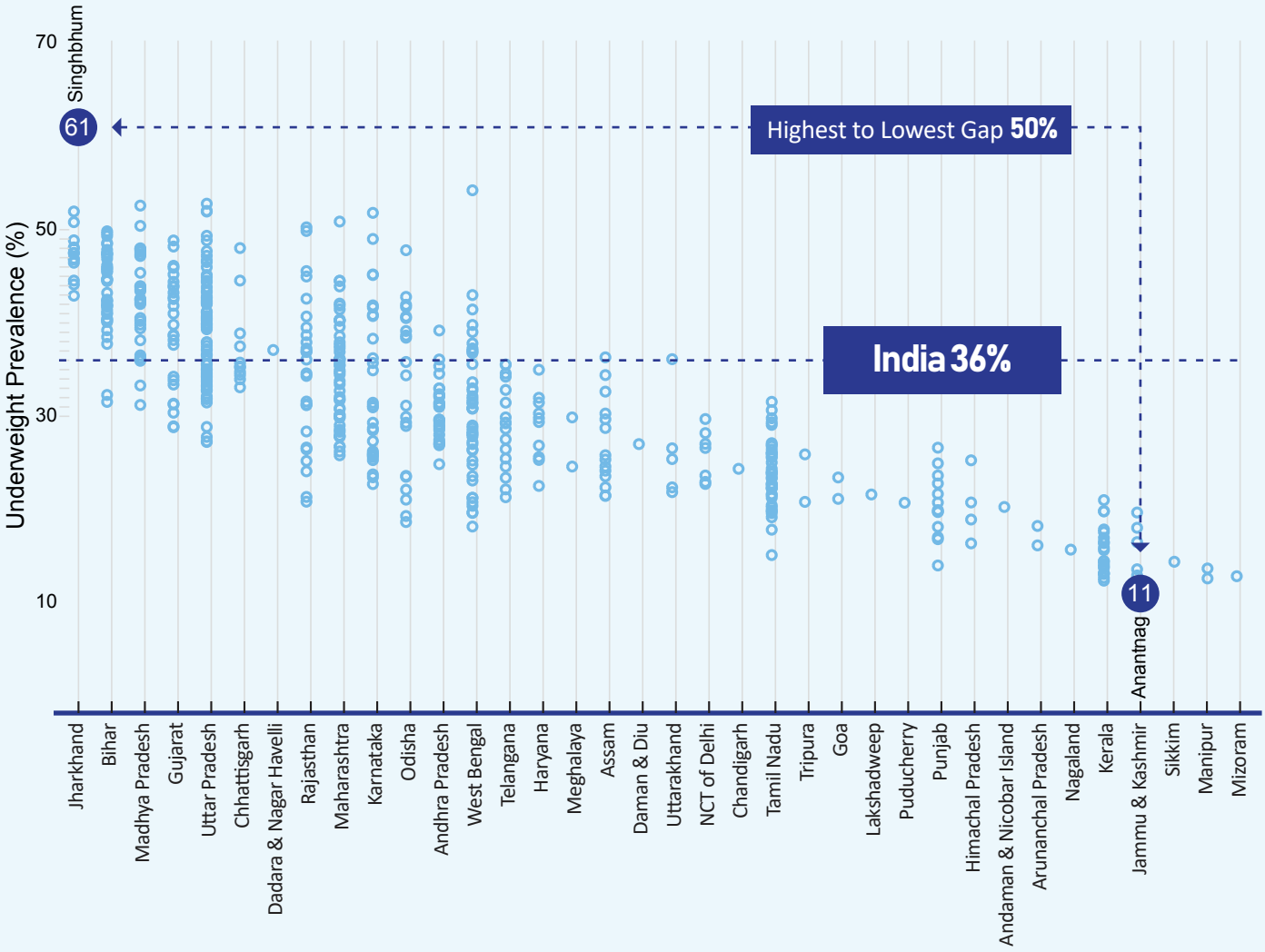
20 Parliamentary Constituencies with the **highest underweight prevalence**

1. Singhbhum
2. Puruliya
3. Budaun
4. Morena
5. Shahjahanpur
6. Khunti
7. Jaunpur
8. Gulbarga
9. Nandurbar
10. Jamshedpur
11. Khargone
12. Banswara
13. Udaipur
14. Aurangabad
15. Jahanabad
16. Machhlishahr
17. Gaya
18. Bellary
19. Dumka
20. Kaushambi



What is Underweight

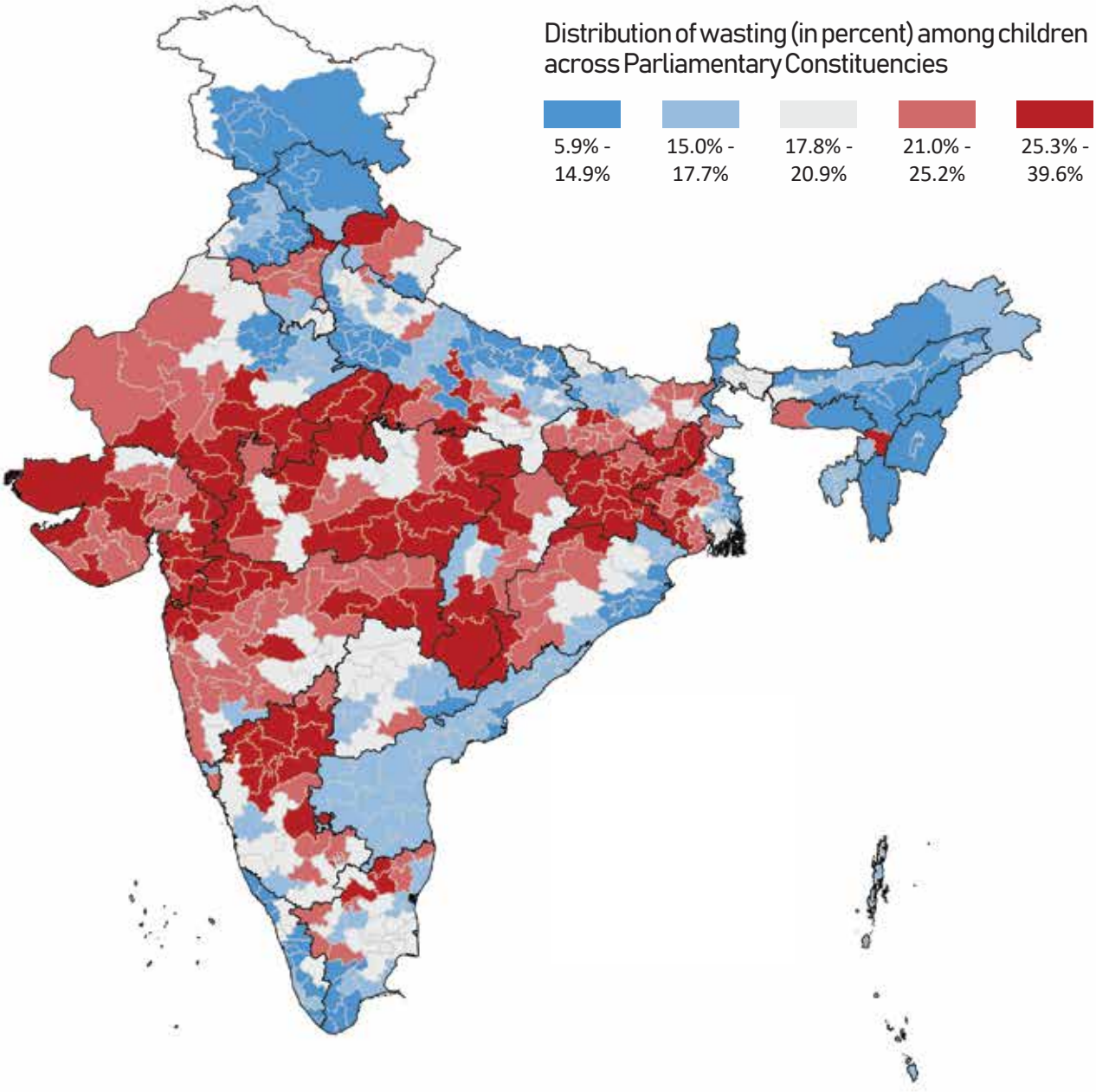
Weight-for-age is a composite index of height-for-age and weight-for-height. It takes into account both acute and chronic undernutrition. Children whose weight-for-age Z-score is below minus two standard deviations (-2 SD) from the median of the reference population are classified as underweight.



Underweight prevalence in India is **36%**

The absolute gap between the highest and the lowest underweight prevalence across Parliamentary Constituencies is **50%**

Wasting

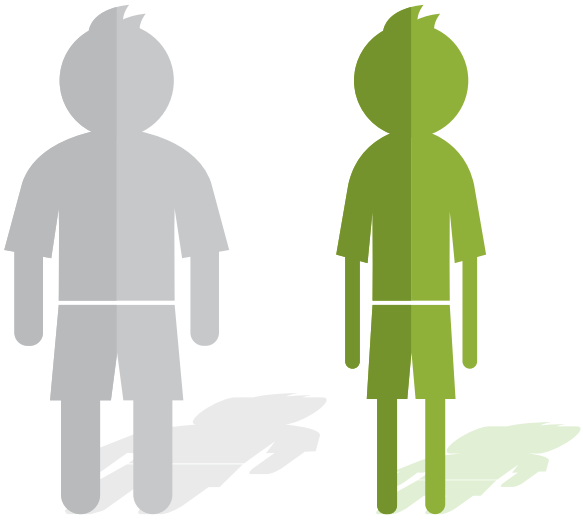


20 Parliamentary Constituencies with the **lowest wasting prevalence**

1. Inner Manipur
2. Outer Manipur
3. Mizoram
4. Anantnag
5. Baramula
6. Farrukhabad
7. Lakhimpur
8. Leh (Ladakh)
9. Gonda
10. Shrawasti
11. Kaisarganj
12. Chandigarh
13. Firozabad
14. Nagaland
15. Kanniyakumari
16. Kasaragod
17. Mainpuri
18. Nainital-Udhamsingh Nagar
19. Jorhat
20. Jammu

20 Parliamentary Constituencies with the **highest wasting prevalence**

1. Jamshedpur
2. Garhchiroli- Chimur
3. Khunti
4. Tehri Garhwal
5. Valsad
6. Nandurbar
7. Bardoli
8. Raichur
9. Giridih
10. Puruliya
11. Singhbhum
12. Banswara
13. Ambala
14. Panch Mahals
15. Bhilwara
16. Gulbarga
17. Kachchh
18. Jalgaon
19. Dharwad
20. Balaghat

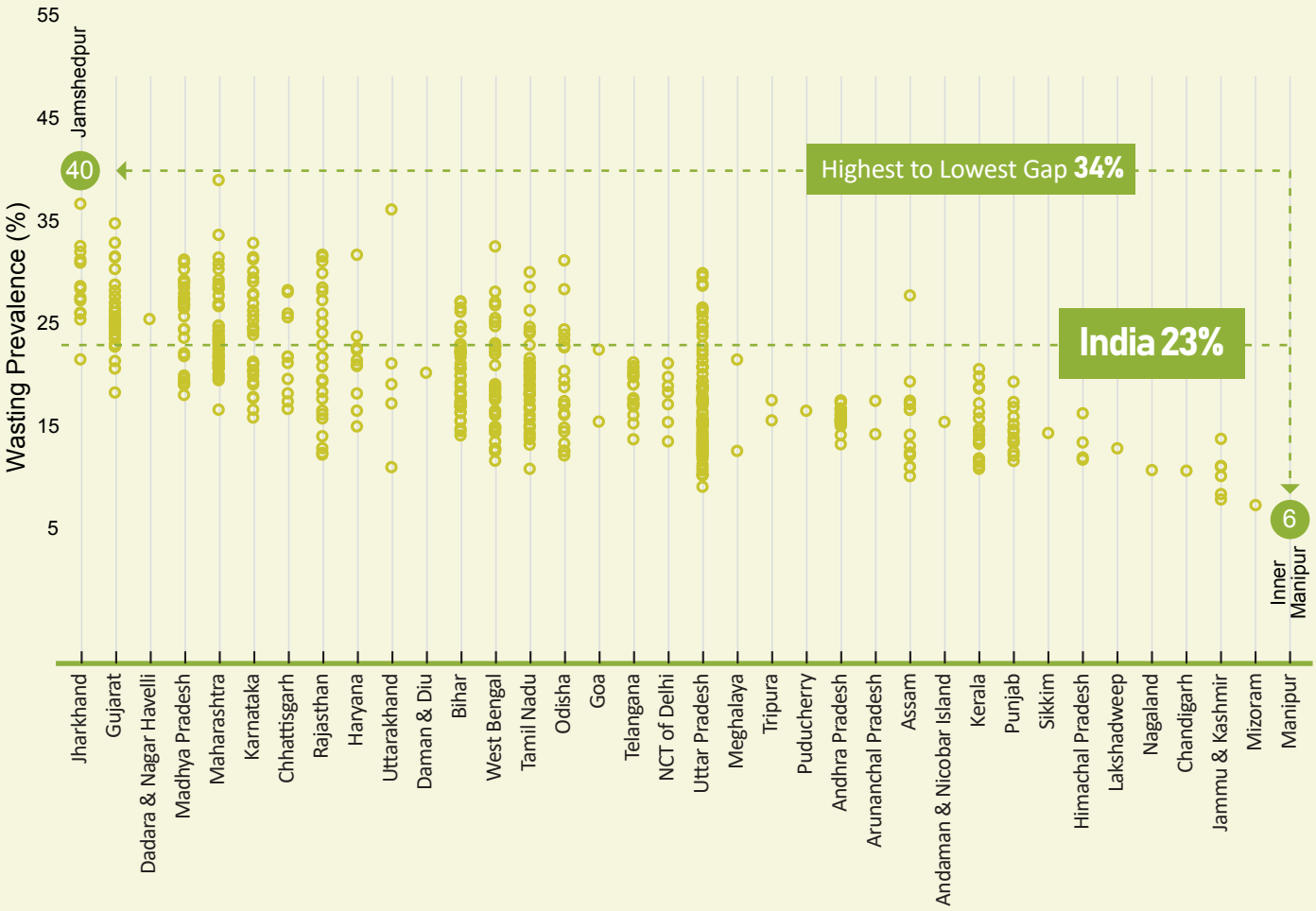


Normal

Wasting
Low weight for Height

What is wasting

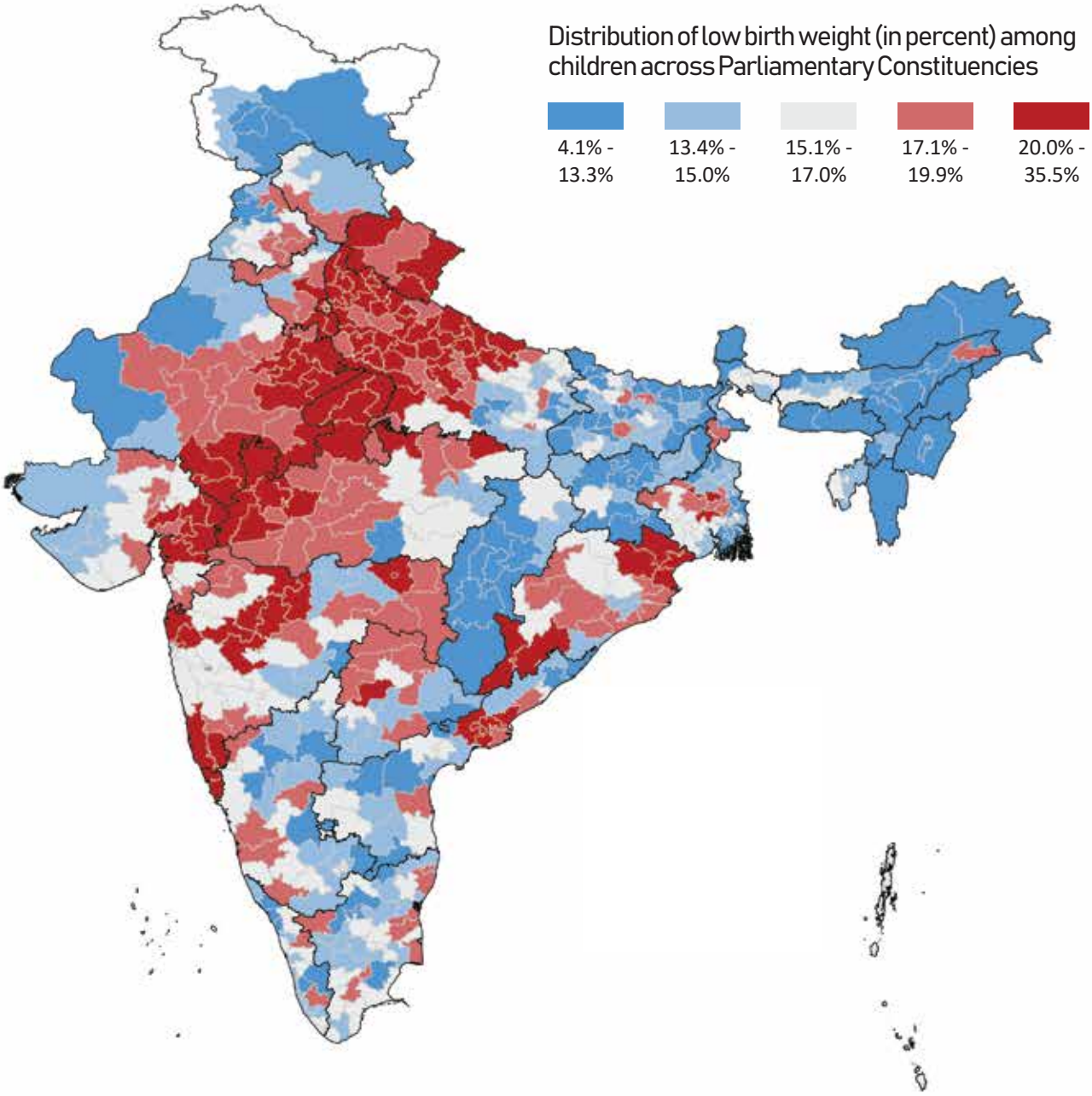
Weight-for-height index measures body mass in relation to body height or length and describes current nutritional status. Children whose Z-score is below minus two standard deviations (-2 SD) from the median of the reference population are considered thin (wasted), or acutely undernourished.



Underweight prevalence in India is **23%**

The absolute gap between the highest and the lowest wasting prevalence across Parliamentary Constituencies is **34%**

Low Birth Weight

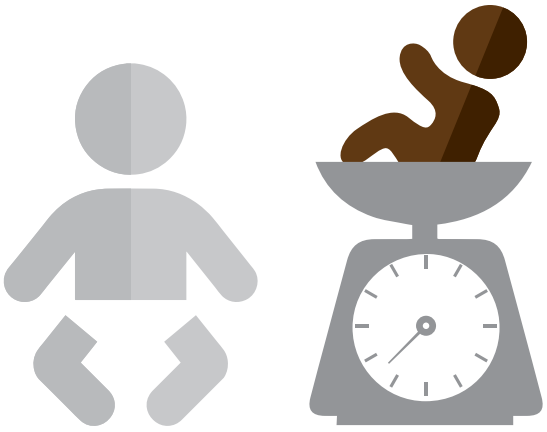


20 Parliamentary Constituencies with the **lowest low birth weight prevalence**

1. Mizoram
2. Nagaland
3. Sikkim
4. Outer Manipur
5. Inner Manipur
6. Arrah
7. Rajnandgaon
8. Raipur
9. Bilaspur
10. Bhagalpur
11. Leh (Ladakh)
12. Arunachal West
13. Banka
14. Autonomous District
15. Arunachal East
16. Shillong
17. Bastar
18. Valmiki Nagar
19. Janjgir-Champa
20. Korba

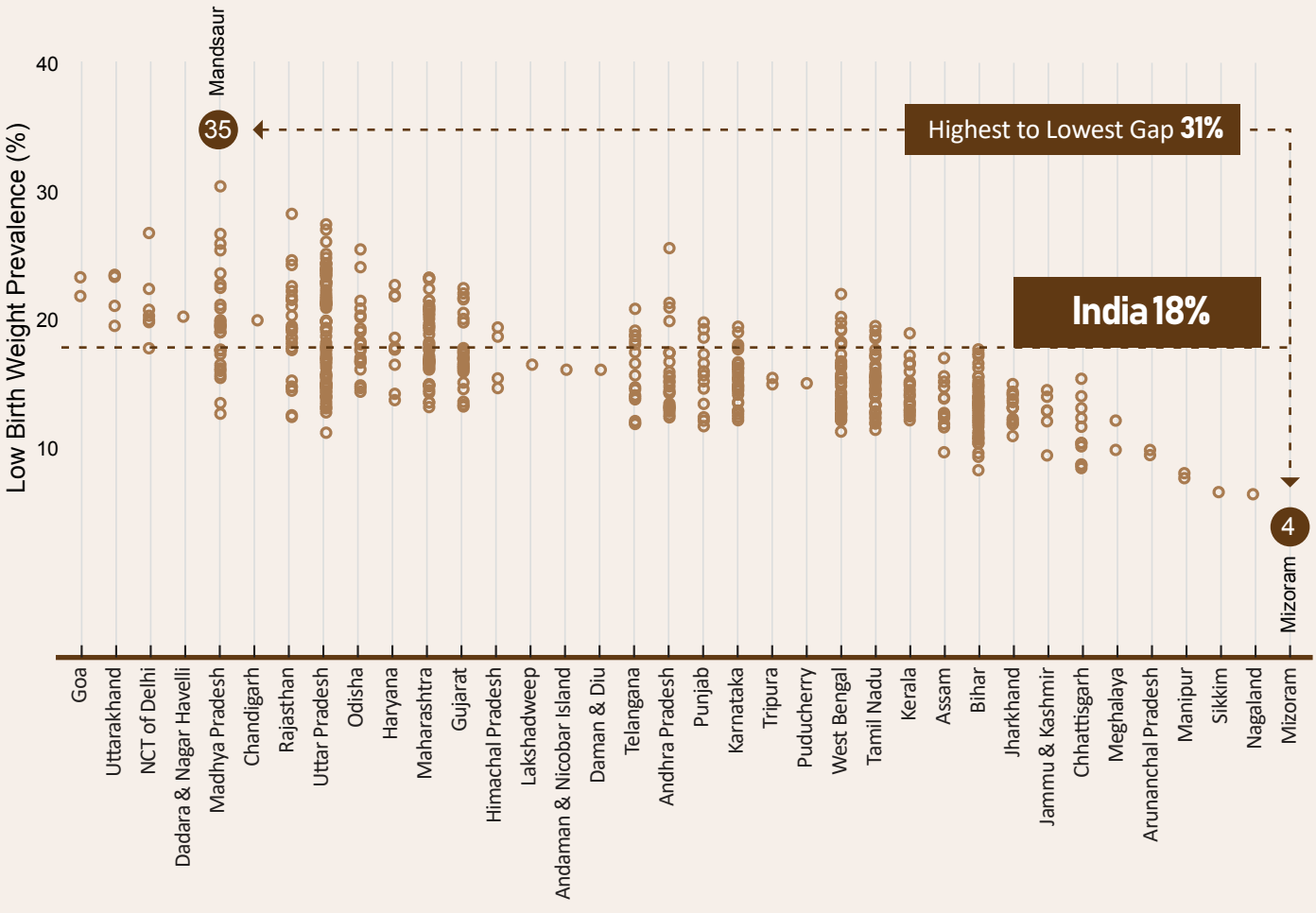
20 Parliamentary Constituencies with the **highest low birth weight prevalence**

1. Mandsaur
2. Ratlam
3. Karauli - Dhaulpur
4. Rampur
5. Sambhal
6. North West Delhi
7. Ujjain
8. Sitapur
9. Gwalior
10. Narsapuram
11. Mayurbhanj
12. Morena
13. Bahraich
14. Moradabad
15. Tonk - Sawai Madhopur
16. Muzaffarnagar
17. Firozabad
18. Kheri
19. Dausa
20. Nabarangapur



What is low birth weight

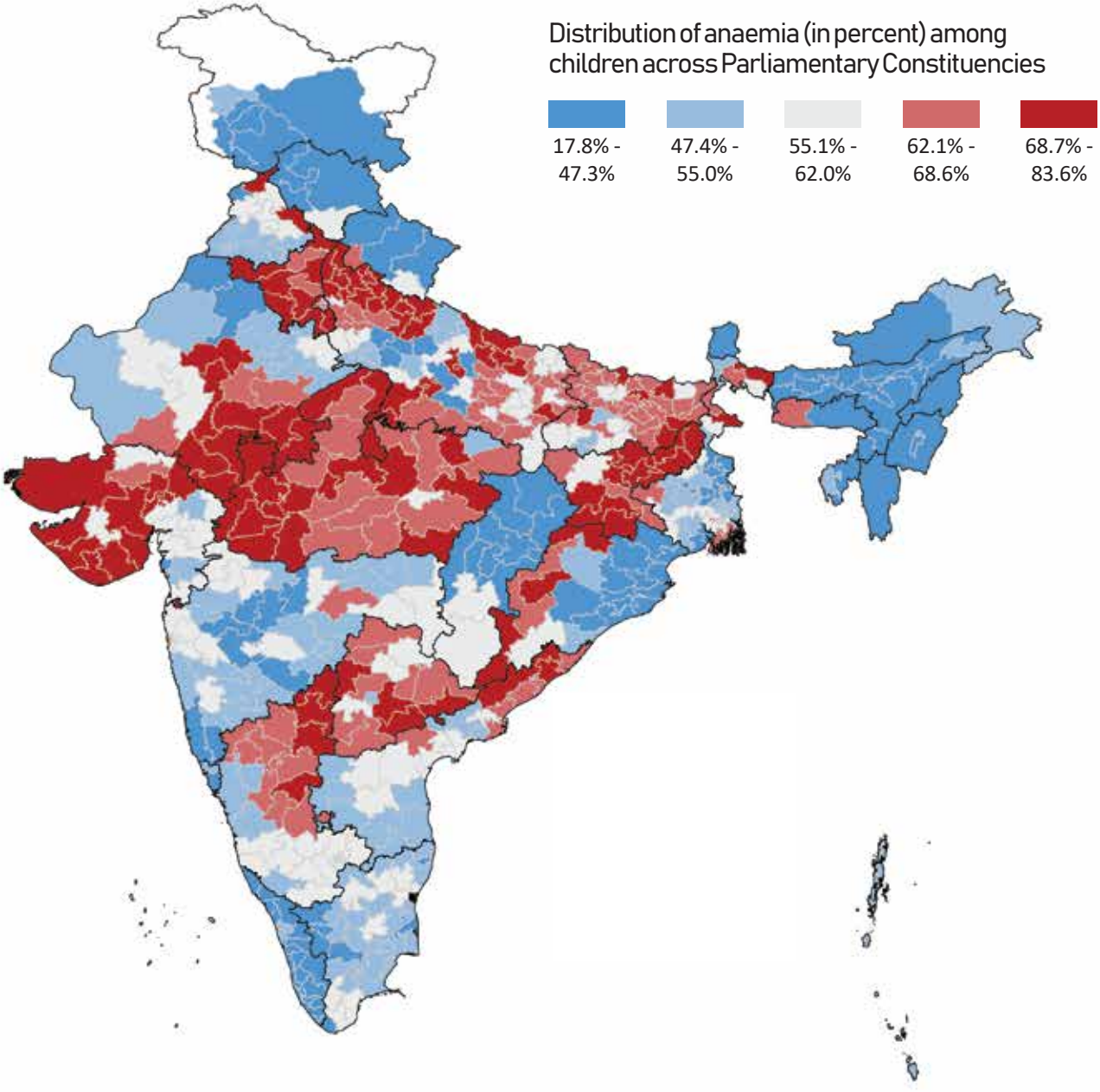
Low birth weight is a term used to describe babies who are born weighing less than 5 pounds, 8 ounces (2,500 grams). An average newborn usually weighs about 8 pounds. A low-birth-weight baby may be healthy even though he or she is small. But a low-birth-weight baby can also have many serious health problems.



Low Birth Weight prevalence in India is **18%**

The absolute gap between the highest and the lowest low birth weight prevalence across Parliamentary Constituencies is **31%**

Anaemia

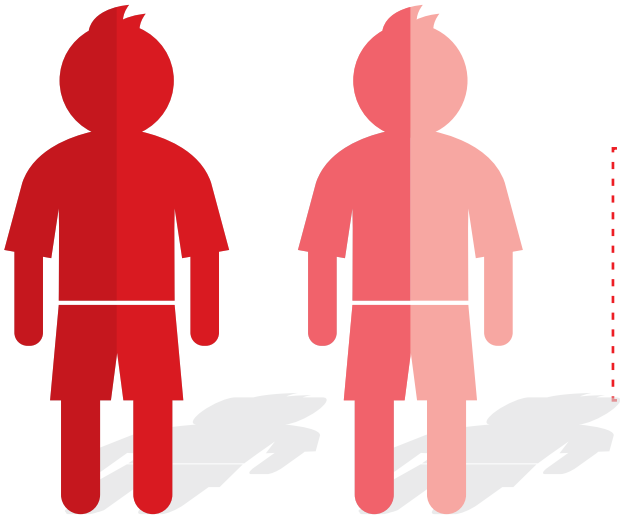


20 Parliamentary Constituencies with the **lowest anaemia prevalence**

1. Kollam
2. Bhubaneswar
3. Nagaland
4. Mizoram
5. Outer Manipur
6. Cuttack
7. Thiruvananthapuram
8. Attingal
9. Pathanamthitta
10. Inner Manipur
11. Mavelikkara
12. Bhadrak
13. Puri
14. Jagatsinghpur
15. Alappuzha
16. Autonomous District
17. Karimganj
18. Ernakulam
19. Kendrapara
20. Baleshwar

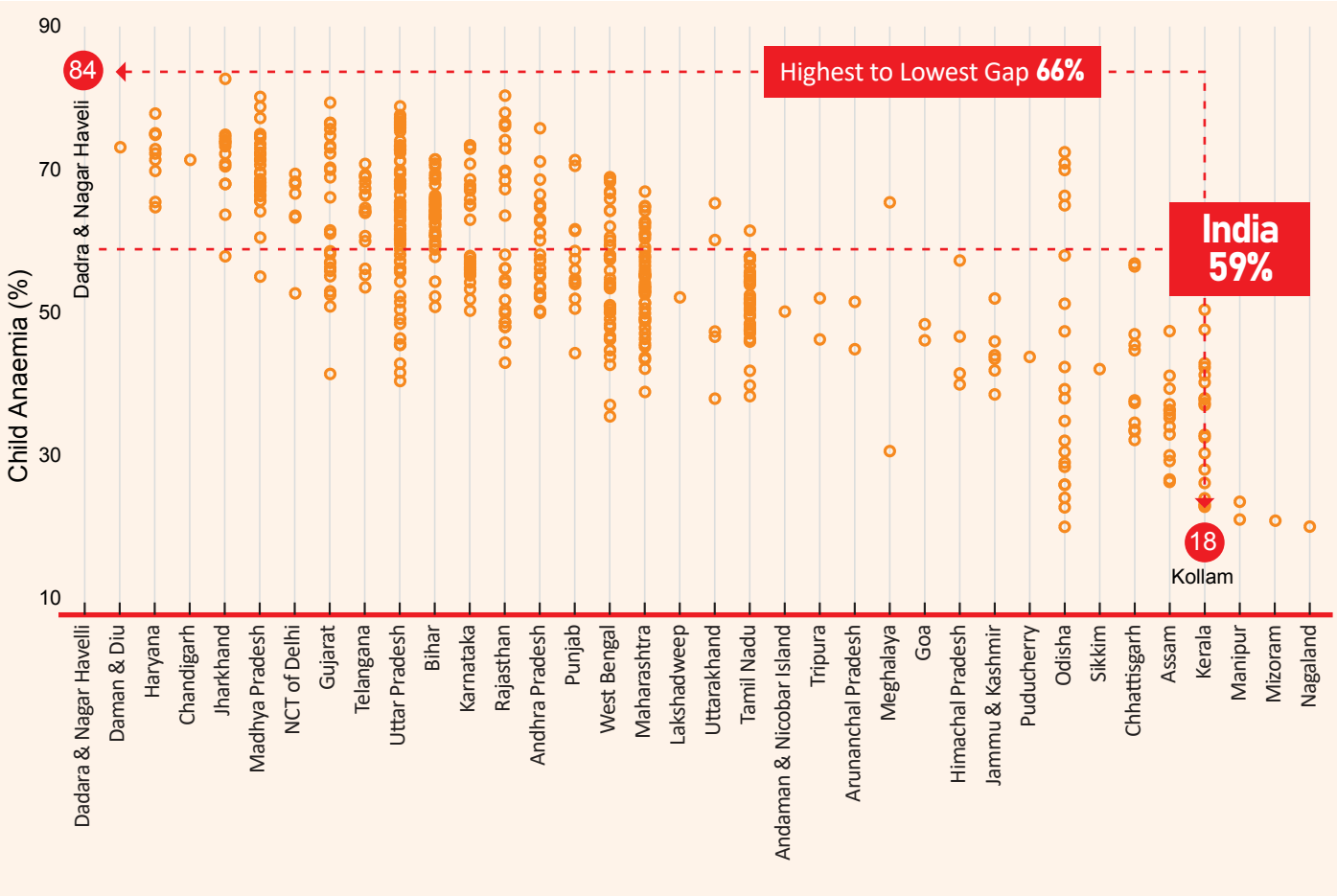
20 Parliamentary Constituencies with the **highest anaemia prevalence**

1. Dadra & Nagar Haveli
2. Singhbhum
3. Banswara
4. Khargone
5. Kachchh
6. Jalaun
7. Khandwa
8. Udaipur
9. Gurgaon
10. Muzaffarnagar
11. Dhar
12. Shahjahanpur
13. Rampur
14. Pilibhit
15. Saharanpur
16. Jamnagar
17. Junagadh
18. Kota
19. Mahesana
20. Sambhal



What is Anaemia

Anaemia is a condition that is marked by low levels of haemoglobin in the blood. Children with haemoglobin levels below 11.0 g/dl were considered to be anaemic.



Anaemia prevalence in India is **59%**

The absolute gap between the highest and the lowest anaemia prevalence across Parliamentary Constituencies is **66%**

Parliamentary Constituency
Estimates and Ranks by States

Andaman & Nicobar Island

Andaman & Nicobar Islands

25.6%	#458
20.2%	#490
15.4%	#421
16.2%	#266
50.1%	#402

Andhra Pradesh

Amlapuram

26.7%	#433
27.3%	#375
13.2%	#484
17.5%	#196
64.7%	#174

Anakapalli

30.9%	#341
32.0%	#287
15.6%	#408
17.5%	#197
65.1%	#166

Anantapur

39.0%	#200
39.1%	#170
15.6%	#410
16.0%	#274
50.2%	#401

Araku

31.9%	#318
32.2%	#282
17.3%	#346
14.4%	#370
71.1%	#78

Bapatla

25.2%	#470
29.3%	#339
15.4%	#418
14.5%	#361
57.3%	#280

Chittoor

30.7%	#343
31.3%	#303
16.7%	#372
13.2%	#440
49.9%	#406

Eluru

27.1%	#427
29.0%	#346
15.6%	#409
20.0%	#106
52.6%	#362

Guntur

22.2%	#510
27.0%	#380
17.3%	#347
15.2%	#314
60.1%	#245

Hindupur

36.2%	#237
36.0%	#218
15.1%	#430
15.7%	#285
52.5%	#364

Kadapa

33.0%	#296
32.9%	#273
16.7%	#369
13.3%	#433
55.4%	#317

#Rank: National rank ordering by % (1 indicating highest prevalence and 543 indicating lowest prevalence)

Stunting | Underweight | Wasting | Low Birth Weight | Anaemia

Kakinada

30.0% #352
27.9% #368
14.1% #461
21.0% #81
66.5% #142

Kurnool

42.1% #143
35.2% #233
17.5% #337
13.5% #419
53.6% #350

Machilipatnam

23.7% #498
26.8% #387
17.5% #335
14.3% #372
57.2% #284

Nandyal

40.0% #186
34.4% #247
16.2% #390
12.6% #474
56.2% #299

Narasaraopet

25.4% #465
29.5% #338
15.8% #401
16.8% #229
62.7% #211

Narsapuram

28.7% #390
30.9% #315
15.4% #420
25.7% #10
55.0% #327

Nellore

27.6% #412
28.4% #360
16.4% #382
17.5% #195
52.1% #370

Ongole

28.0% #405
31.0% #312
15.5% #413
13.1% #451
58.1% #261

Rajahmundry

27.6% #411
26.9% #383
15.3% #424
21.4% #71
61.1% #227

Rajampet

31.3% #333
32.9% #274
16.1% #396
14.9% #339
52.3% #367

Srikakulam

28.6% #392
29.5% #337
15.0% #433
12.9% #460
68.6% #111

Tirupati

29.7% #360
28.7% #353
15.7% #406
15.6% #293
50.1% #403

Vijayawada

23.4% #500
24.7% #426
16.1% #393
13.2% #441
53.5% #352

Visakhapatnam

29.2% #373
31.2% #307
16.7% #370
15.3% #306
63.1% #206

Vizianagaram

33.8% #282
32.1% #284
15.5% #417
12.5% #485
75.7% #25

Arunachal Pradesh

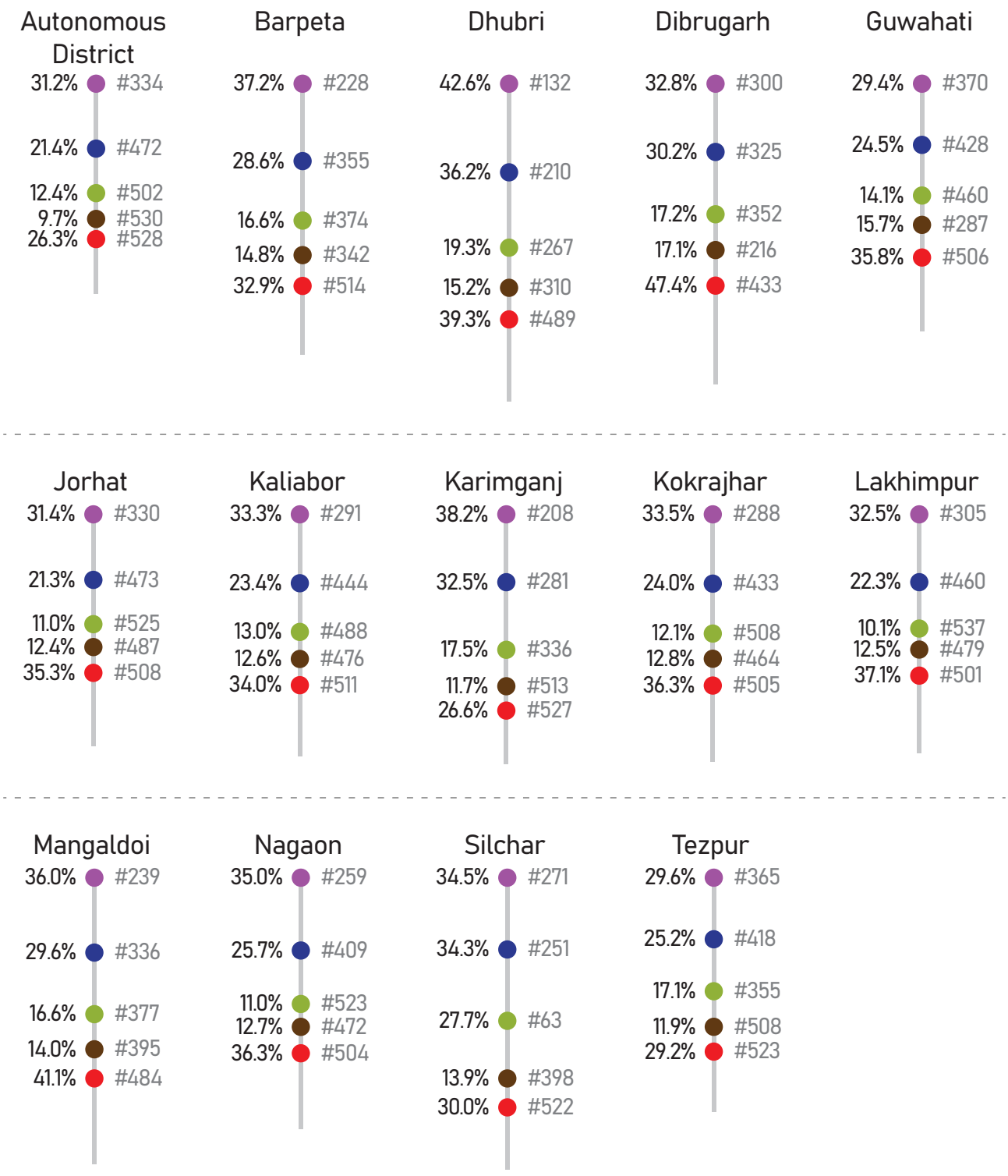
Arunachal East

29.6% #363
16.0% #521
14.2% #458
9.9% #529
44.8% #459

Arunachal West

26.6% #437
18.1% #507
17.4% #338
9.5% #532
51.5% #379

Assam



#Rank: National rank ordering by % (1 indicating highest prevalence and 543 indicating lowest prevalence)

Stunting Underweight Wasting Low Birth Weight Anaemia

Bihar

Araria
48.0% #52
45.3% #58
21.7% #190
12.5% #480
60.7% #235

Arrah
43.7% #112
48.3% #23
26.5% #85
8.3% #538
71.4% #71

Aurangabad
50.9% #20
49.7% #14
24.7% #117
16.7% #239
52.2% #369

Banka
49.3% #34
47.4% #37
24.7% #120
9.7% #531
71.4% #70

Begusarai
44.7% #92
38.4% #179
18.0% #316
15.6% #294
63.5% #196

Bhagalpur
47.3% #65
41.9% #115
23.0% #154
9.4% #534
70.4% #86

Buxar
46.0% #82
42.2% #106
18.9% #287
10.9% #520
62.1% #216

Darbhanga
48.1% #49
41.0% #131
15.5% #416
17.8% #182
68.9% #103

Gaya
49.3% #35
49.2% #17
22.3% #176
15.0% #327
60.9% #231

Gopalganj
37.6% #223
32.2% #283
16.3% #387
15.2% #311
64.9% #169

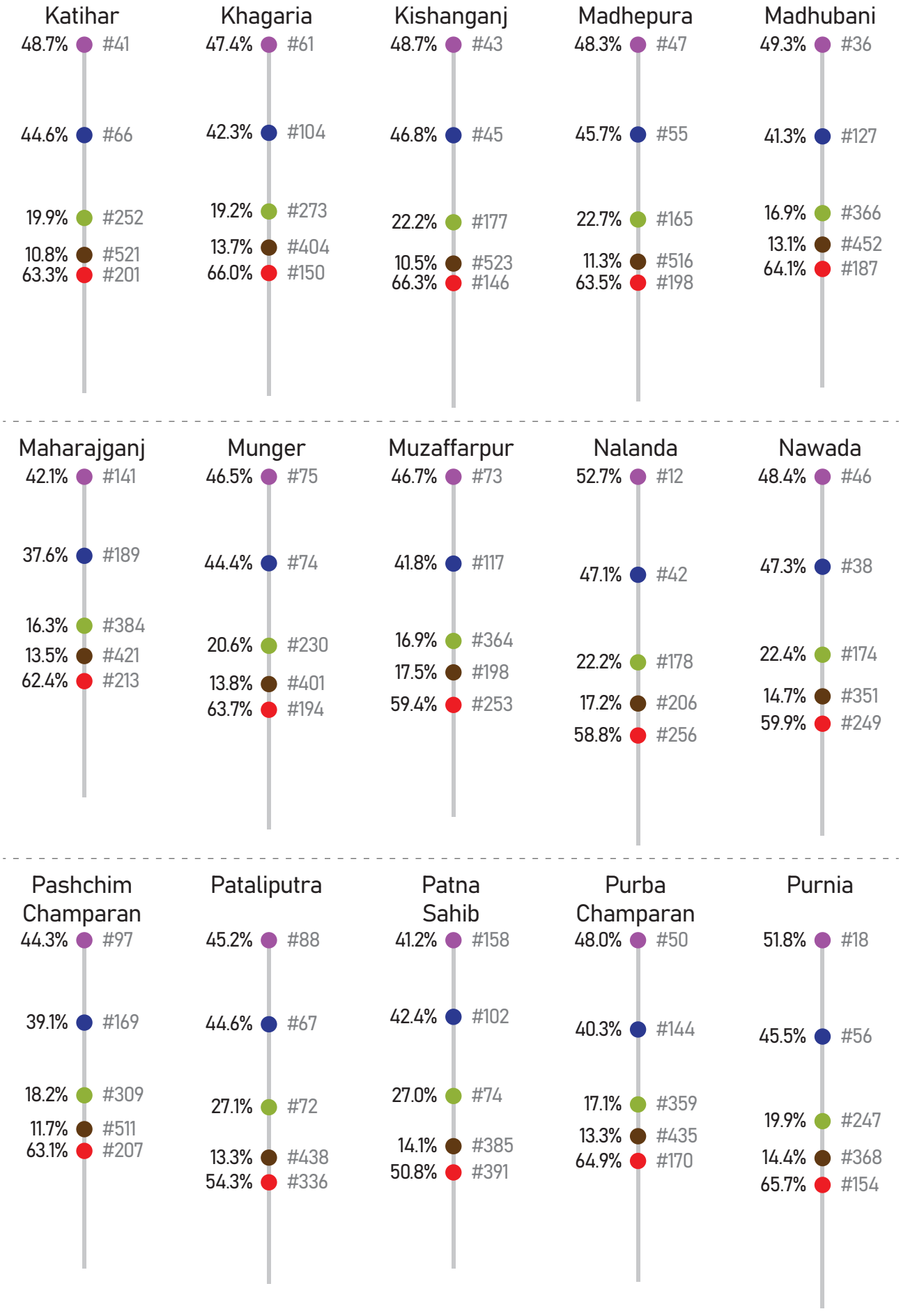
Hajipur
52.6% #14
40.1% #153
14.1% #462
10.7% #522
67.8% #125

Jahanabad
50.4% #24
49.5% #15
24.2% #135
12.7% #473
65.2% #164

Jamui
46.7% #72
47.3% #39
26.1% #91
13.4% #424
63.2% #205

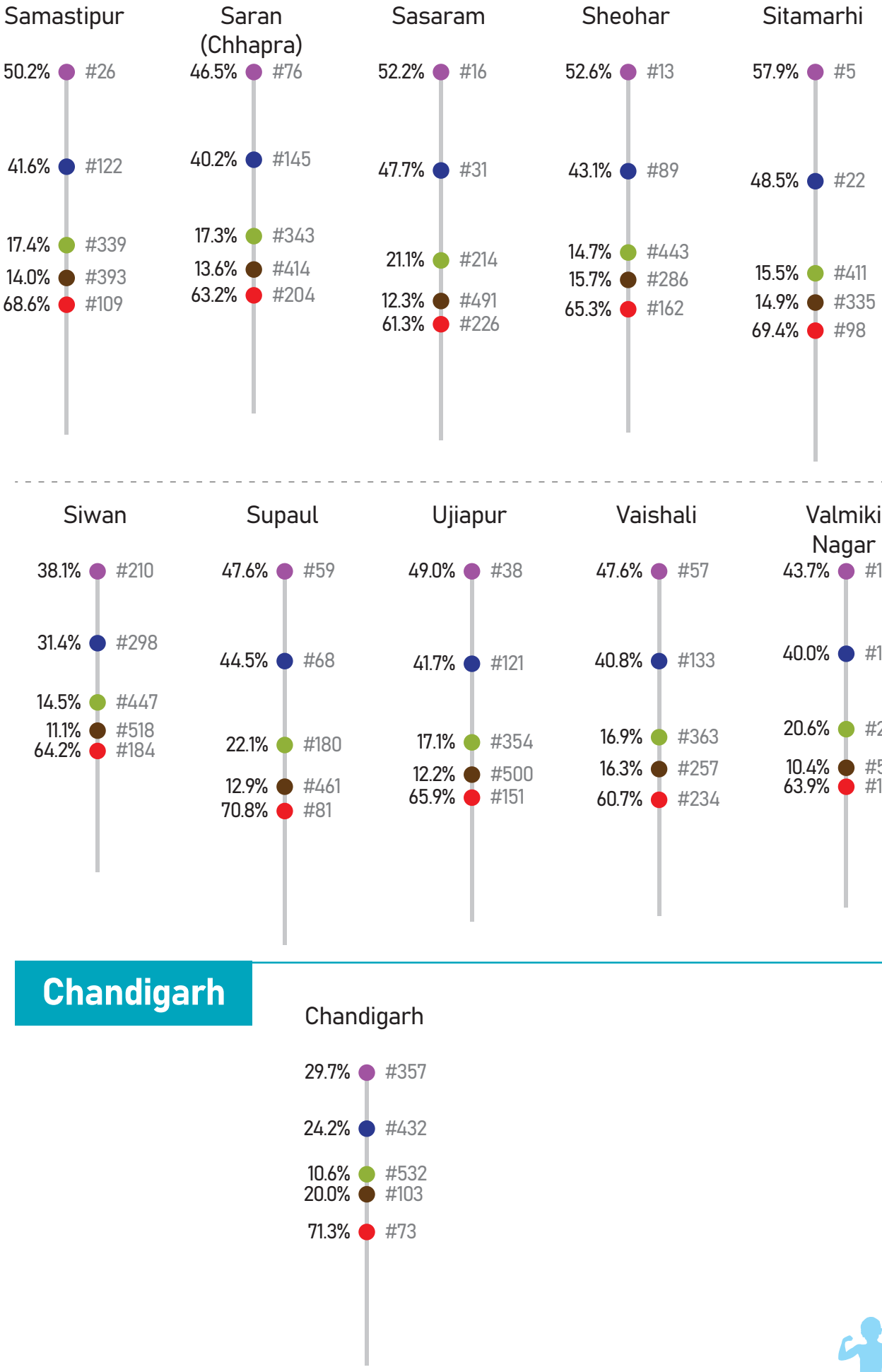
Jhanjharpur
52.5% #15
45.8% #54
18.3% #304
12.0% #505
64.4% #180

Karakat
47.1% #67
46.0% #50
22.2% #179
14.0% #392
57.8% #271



#Rank: National rank ordering by % (1 indicating highest prevalence and 543 indicating lowest prevalence)

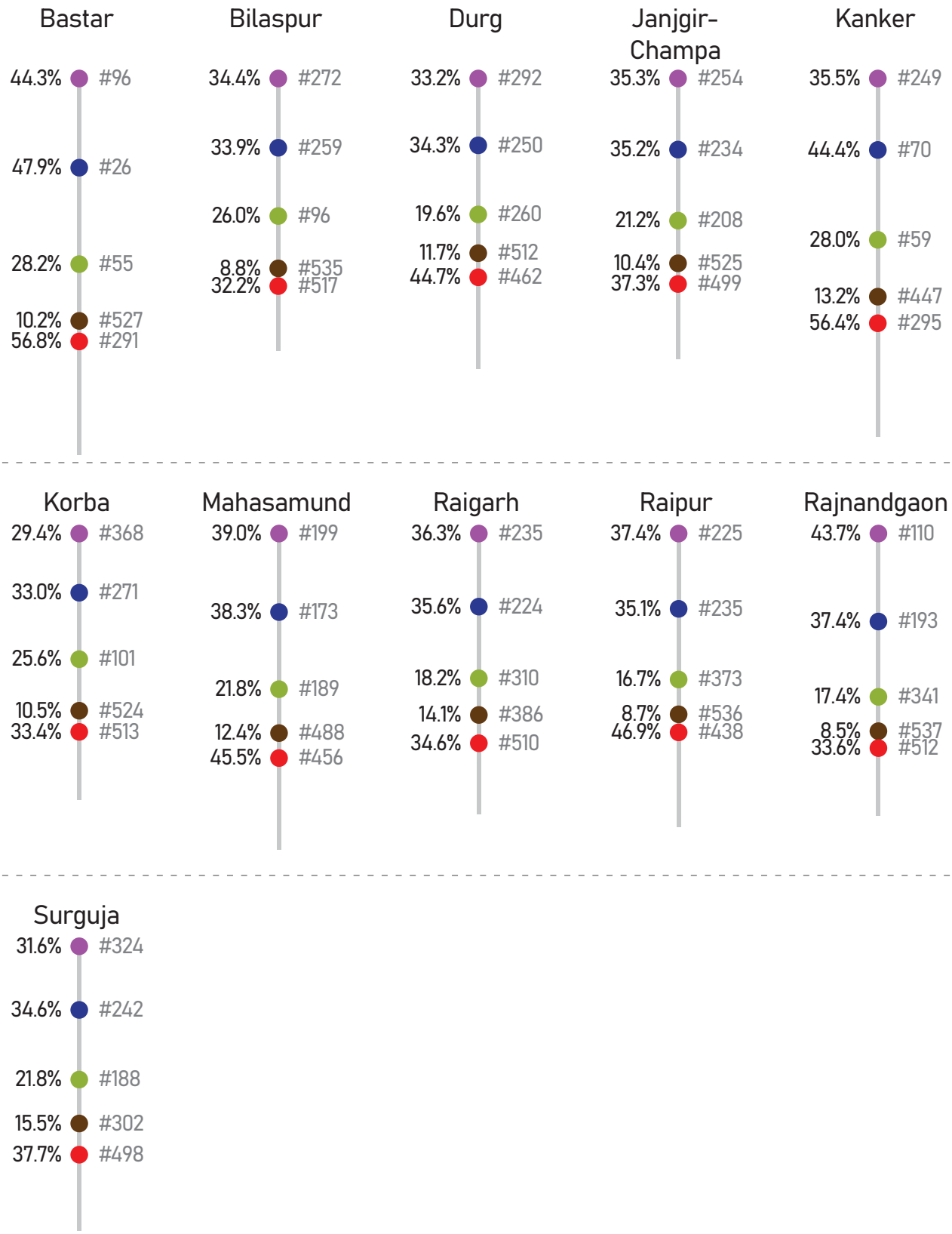
Stunting Underweight Wasting Low Birth Weight Anaemia


Samastipur
50.2% #26
41.6% #122
17.4% #339
14.0% #393
68.6% #109
Saran (Chhapra)
46.5% #76
40.2% #145
17.3% #343
13.6% #414
63.2% #204
Sasaram
52.2% #16
47.7% #31
21.1% #214
12.3% #491
61.3% #226
Sheohar
52.6% #13
43.1% #89
14.7% #443
15.7% #286
65.3% #162
Sitamarhi
57.9% #5
48.5% #22
15.5% #411
14.9% #335
69.4% #98
Siwan
38.1% #210
31.4% #298
14.5% #447
11.1% #518
64.2% #184
Supaul
47.6% #59
44.5% #68
22.1% #180
12.9% #461
70.8% #81
Ujiapur
49.0% #38
41.7% #121
17.1% #354
12.2% #500
65.9% #151
Vaishali
47.6% #57
40.8% #133
16.9% #363
16.3% #257
60.7% #234
Valmiki Nagar
43.7% #108
40.0% #154
20.6% #235
10.4% #526
63.9% #193

Chandigarh

Chandigarh
29.7% #357
24.2% #432
10.6% #532
20.0% #103
71.3% #73

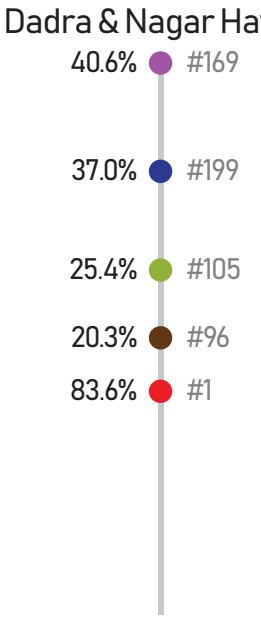
Chhattisgarh



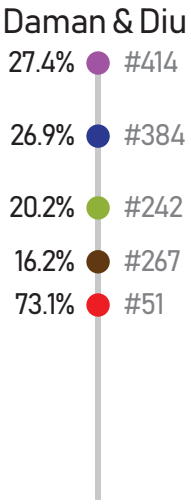
#Rank: National rank ordering by % (1 indicating highest prevalence and 543 indicating lowest prevalence)

Stunting Underweight Wasting Low Birth Weight Anaemia

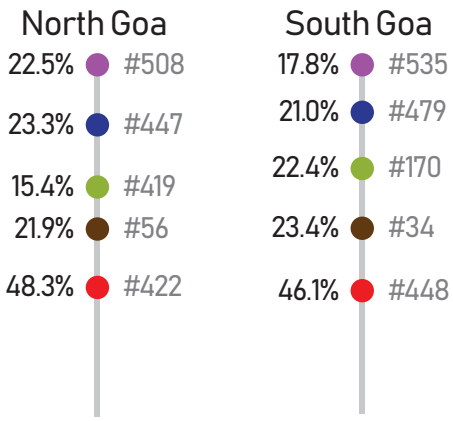
Dadra & Nagar Haveli



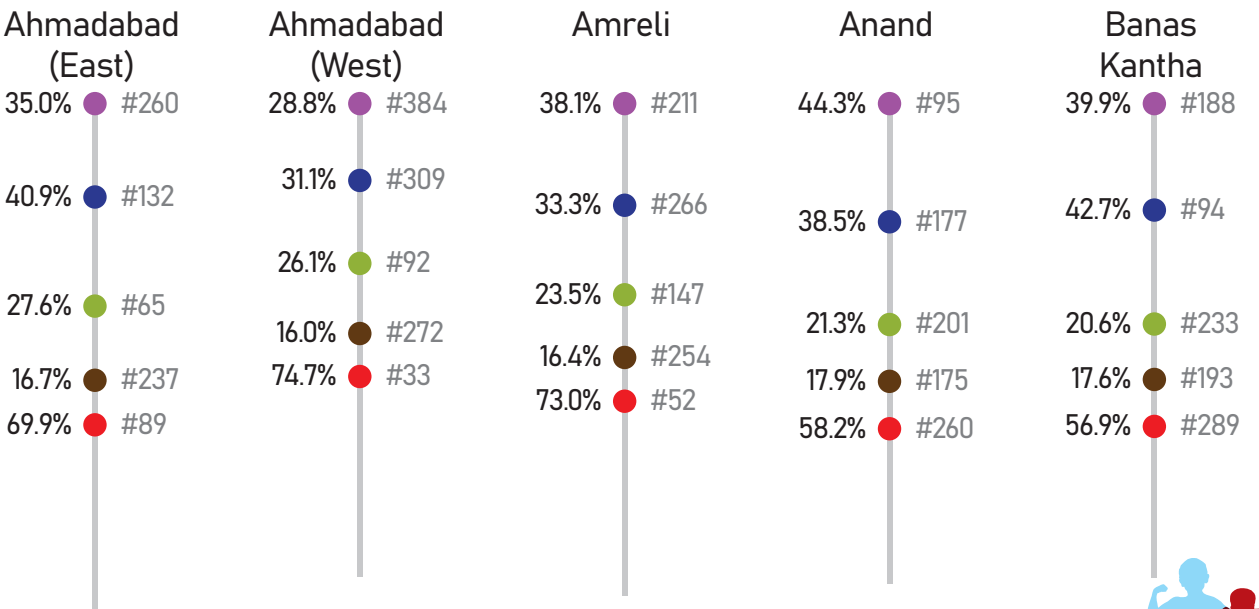
Daman & Diu

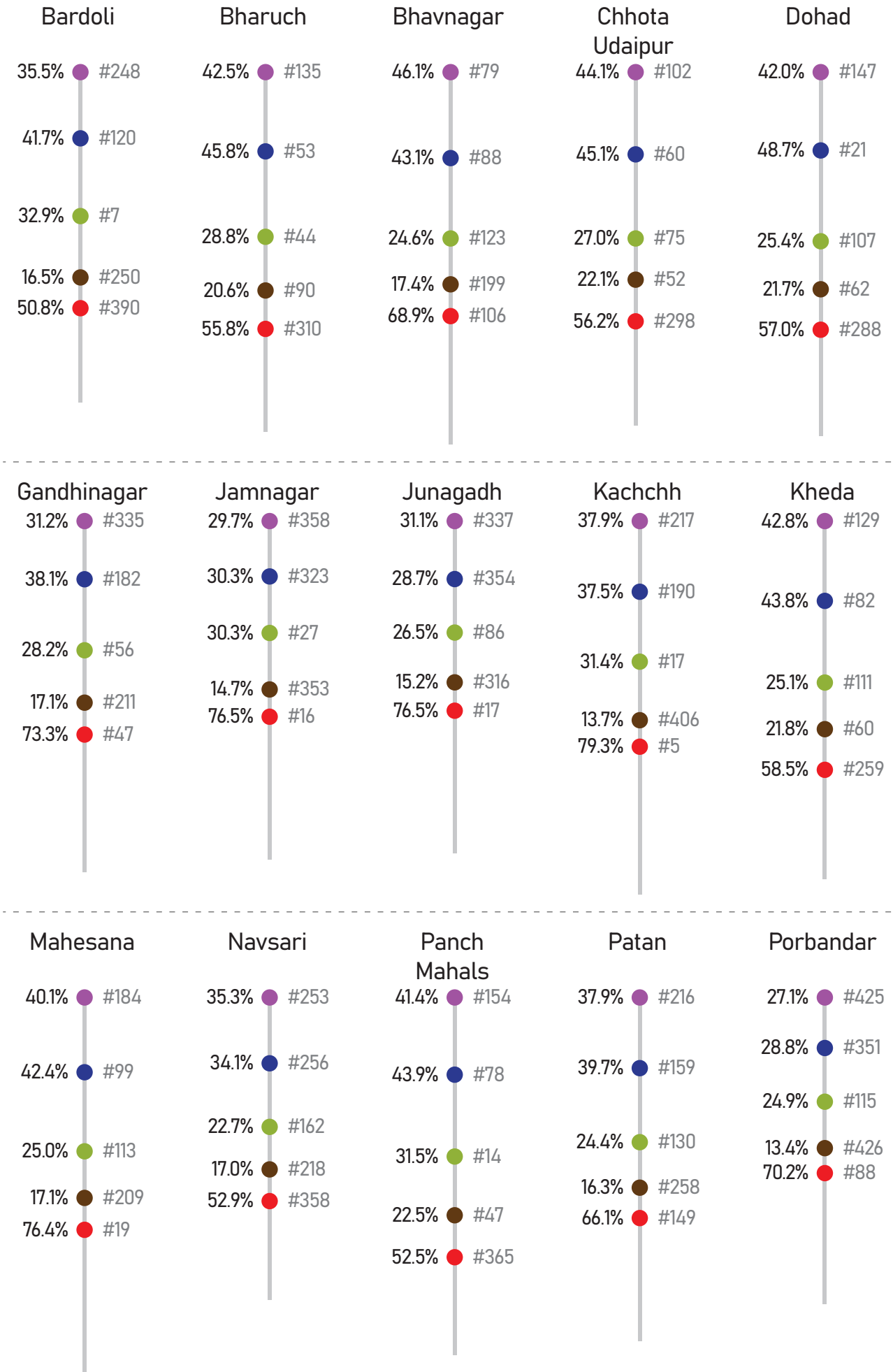


Goa



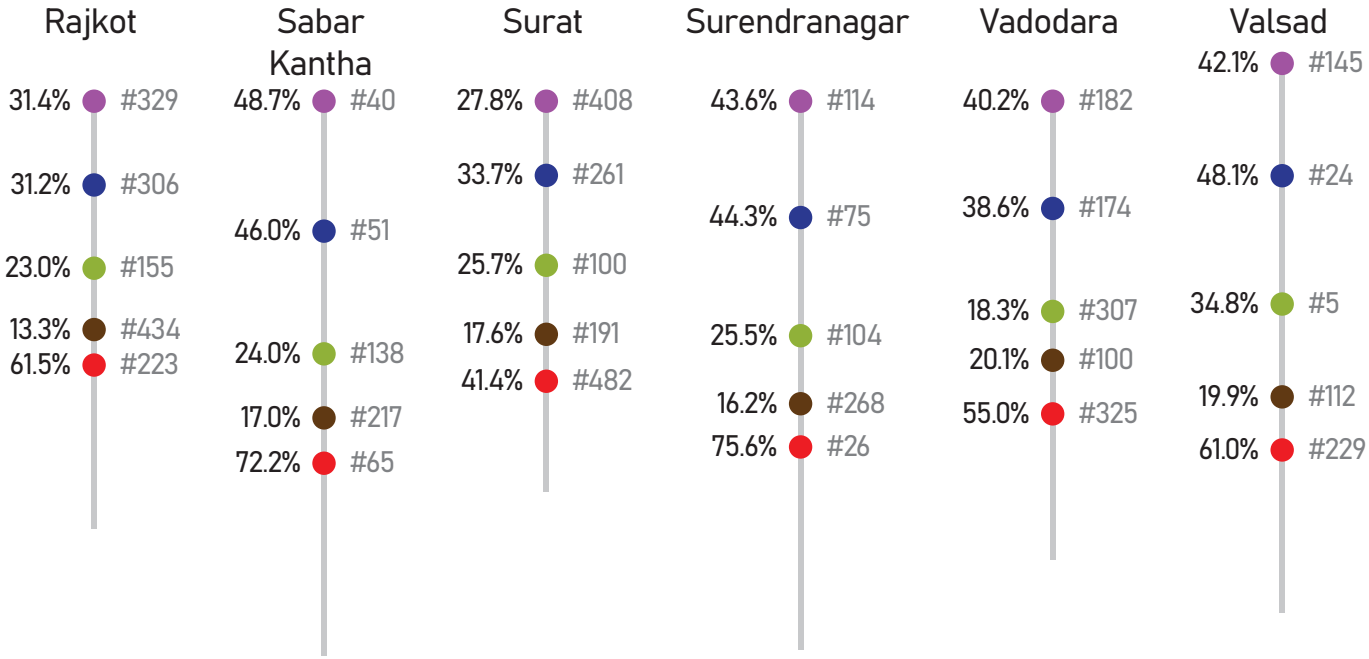
Gujarat



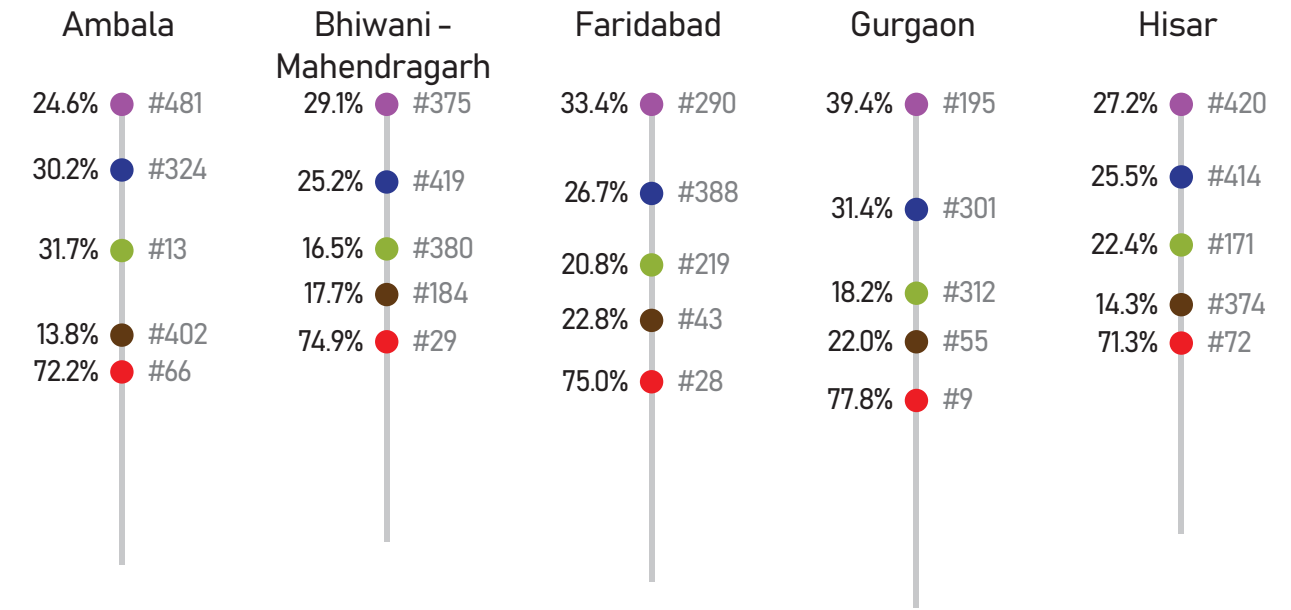


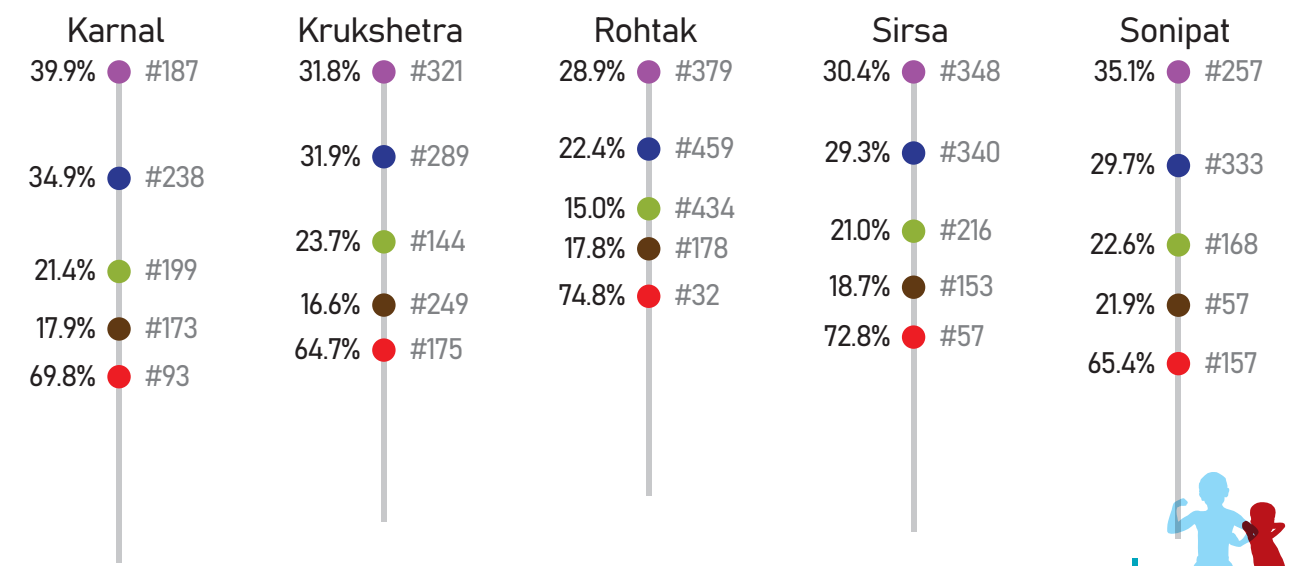
#Rank: National rank ordering by % (1 indicating highest prevalence and 543 indicating lowest prevalence)

Stunting Underweight Wasting Low Birth Weight Anaemia

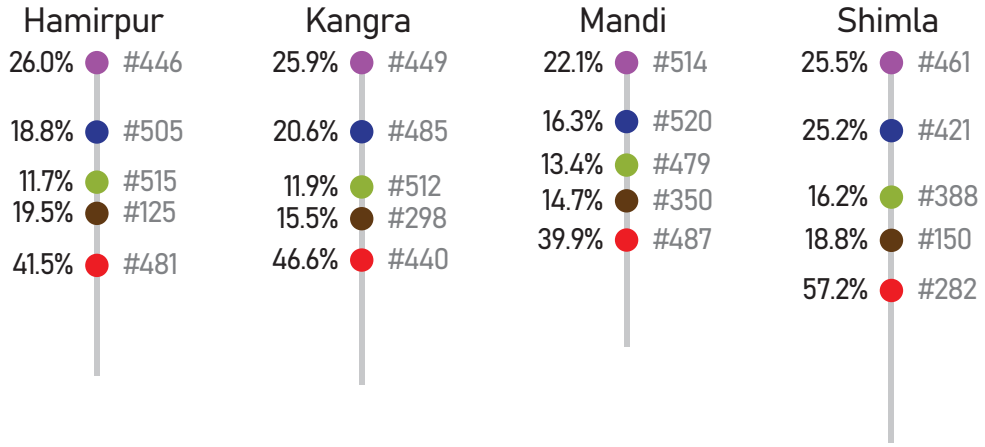

Rajkot
31.4% #329
31.2% #306
23.0% #155
13.3% #434
61.5% #223
Sabar Kantha
48.7% #40
46.0% #51
24.0% #138
17.0% #217
72.2% #65
Surat
27.8% #408
33.7% #261
25.7% #100
17.6% #191
41.4% #482
Surendranagar
43.6% #114
44.3% #75
25.5% #104
16.2% #268
75.6% #26
Vadodara
40.2% #182
38.6% #174
18.3% #307
20.1% #100
55.0% #325
Valsad
42.1% #145
48.1% #24
34.8% #5
19.9% #112
61.0% #229

Haryana

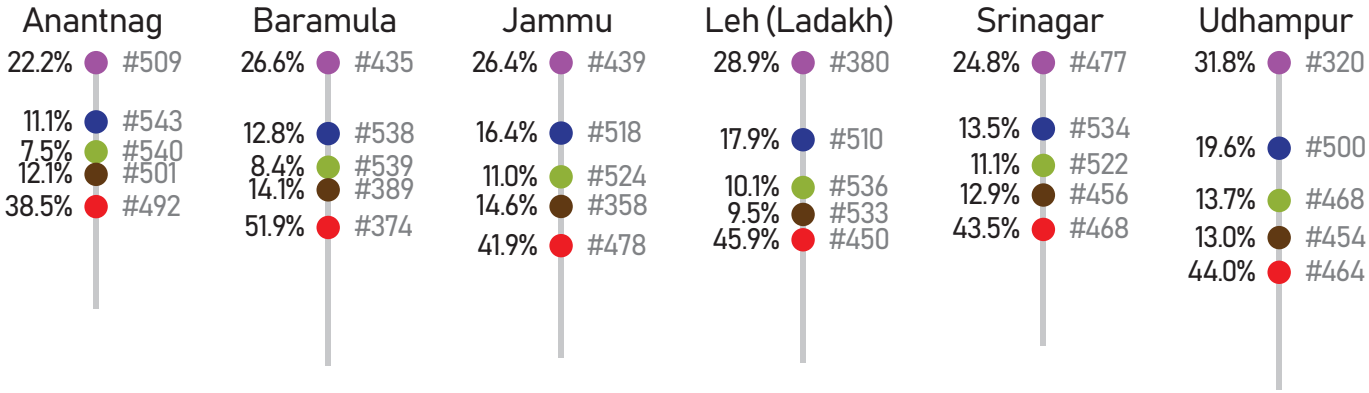

Ambala
24.6% #481
30.2% #324
31.7% #13
13.8% #402
72.2% #66
Bhiwani - Mahendragarh
29.1% #375
25.2% #419
16.5% #380
17.7% #184
74.9% #29
Faridabad
33.4% #290
26.7% #388
20.8% #219
22.8% #43
75.0% #28
Gurgaon
39.4% #195
31.4% #301
18.2% #312
22.0% #55
77.8% #9
Hisar
27.2% #420
25.5% #414
22.4% #171
14.3% #374
71.3% #72


Karnal
39.9% #187
34.9% #238
21.4% #199
17.9% #173
69.8% #93
Krukshetra
31.8% #321
31.9% #289
23.7% #144
16.6% #249
64.7% #175
Rohtak
28.9% #379
22.4% #459
15.0% #434
17.8% #178
74.8% #32
Sirsa
30.4% #348
29.3% #340
21.0% #216
18.7% #153
72.8% #57
Sonipat
35.1% #257
29.7% #333
22.6% #168
21.9% #57
65.4% #157

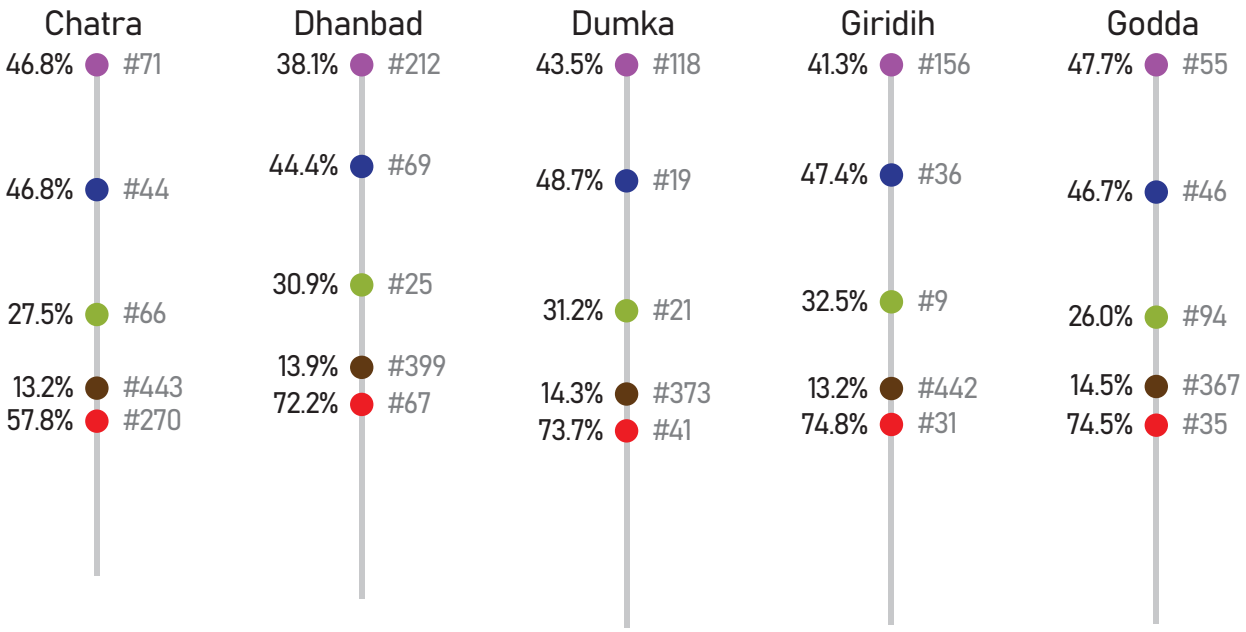
Himachal Pradesh



Jammu & Kashimr



Jharkhand



#Rank: National rank ordering by % (1 indicating highest prevalence and 543 indicating lowest prevalence)

Stunting Underweight Wasting Low Birth Weight Anaemia

Hazaribagh

40.2% #181
46.9% #49
28.6% #47
12.2% #498
70.8% #80

Jamshedpur

41.0% #162
50.7% #10
39.6% #1
11.9% #509
68.0% #121

Khunti

42.2% #139
51.8% #6
36.7% #3
13.2% #445
74.1% #38

Kodarma

45.6% #85
42.8% #91
21.5% #197
12.0% #504
73.2% #48

Lohardaga

43.7% #107
47.4% #35
28.4% #52
15.1% #321
70.4% #87

Palamu

45.3% #87
48.0% #25
27.2% #71
13.6% #409
63.7% #195

Rajmahal

49.7% #30
47.9% #28
25.4% #106
11.0% #519
73.8% #40

Ranchi

39.7% #191
44.0% #77
26.0% #95
14.2% #380
67.9% #123

Singhbhum

53.4% #10
60.9% #1
32.0% #11
12.4% #489
82.7% #2

Karnataka

Bagalkot

44.5% #94
41.8% #118
26.3% #90
12.7% #470
64.9% #168

Bangalore Central

28.4% #396
27.2% #376
24.6% #124
16.6% #242
57.9% #267

Bangalore North

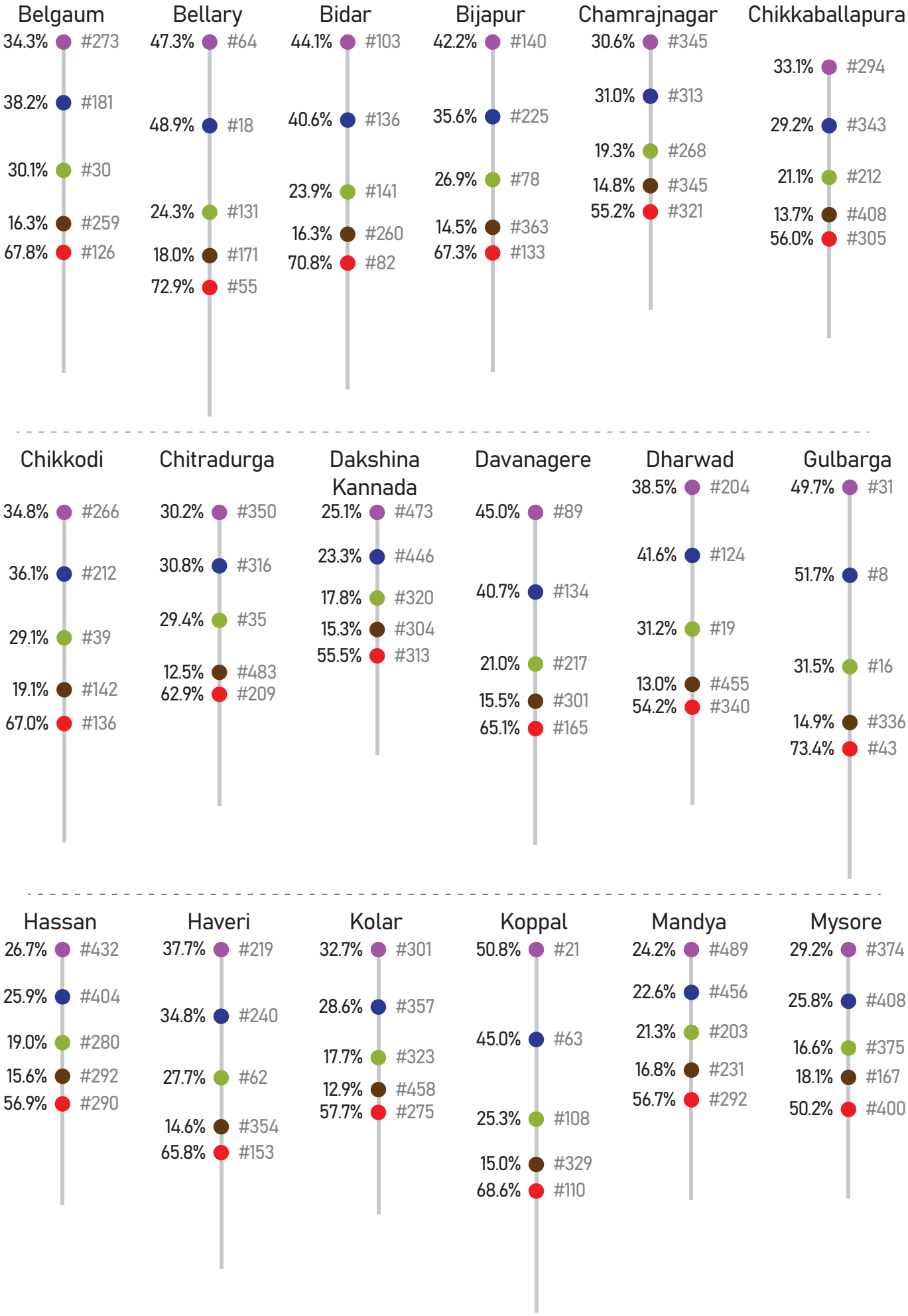
29.6% #364
25.7% #410
27.9% #61
16.6% #244
56.3% #297

Bangalore Rural

24.3% #484
23.7% #439
20.4% #238
14.2% #379
55.4% #316

Bangalore South

28.0% #404
26.1% #401
25.8% #98
16.1% #269
56.3% #296



#Rank: National rank ordering by % (1 indicating highest prevalence and 543 indicating lowest prevalence)

Stunting Underweight Wasting Low Birth Weight Anaemia

Raichur

44.2% #100
45.1% #61
32.8% #8
12.2% #493
73.3% #46

Shimoga

31.8% #322
28.4% #361
15.8% #400
17.8% #180
53.2% #356

Tumkur

28.2% #399
25.5% #413
24.5% #125
13.6% #416
55.9% #306

Udupi Chikmagalur

24.4% #483
25.2% #420
20.3% #240
19.5% #123
57.1% #285

Uttara Kannada

37.3% #226
31.3% #304
19.9% #253
15.9% #276
51.8% #376

Kerala

Alappuzha

15.4% #542
16.3% #519
15.7% #402
14.9% #333
26.1% #529

Alathur

19.7% #527
15.8% #522
11.8% #513
16.0% #273
38.0% #494

Attingal

19.0% #530
19.7% #496
13.4% #477
16.7% #236
23.0% #536

Chalakudy

17.3% #537
13.7% #532
13.3% #482
15.2% #312
32.9% #515

Ernakulam

15.8% #540
13.8% #531
14.5% #448
13.5% #418
28.0% #526

Idukki

16.1% #539
14.0% #529
19.8% #254
13.1% #453
30.3% #521

Kannur

22.9% #505
12.6% #540
11.7% #516
12.9% #457
42.3% #475

Kasaragod

18.7% #532
14.3% #527
10.8% #528
13.4% #430
37.8% #497

Kollam

15.0% #543
13.0% #536
16.3% #385
14.1% #387
17.8% #543

Kottayam

18.6% #533
12.3% #542
14.7% #444
12.2% #494
32.5% #516

Kozhikode

17.5% #536
17.5% #513
13.4% #478
12.5% #478
37.3% #500

Malappuram

24.5% #482
16.9% #515
18.7% #298
14.3% #375
50.4% #397

Mavelikkara

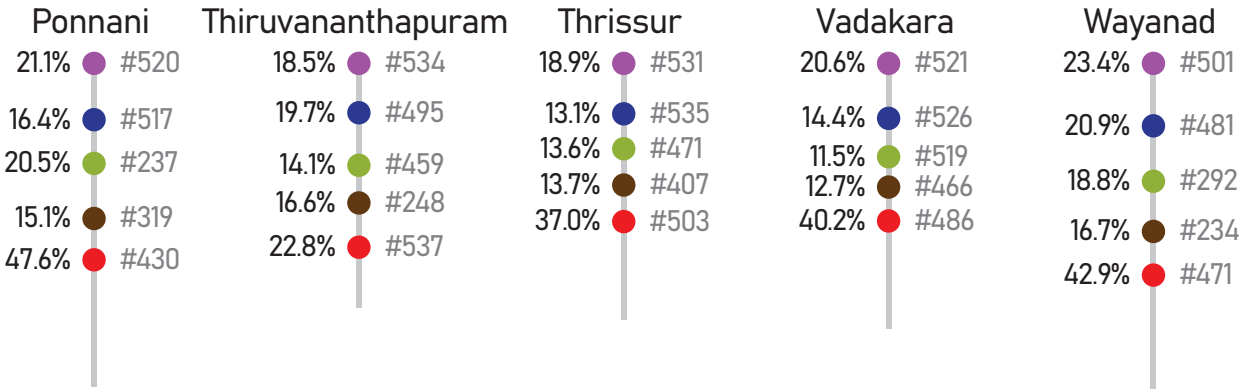
15.4% #541
15.5% #524
17.2% #350
14.6% #357
24.0% #533

Palakkad

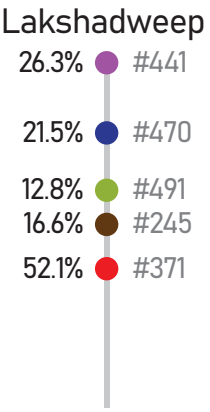
19.8% #526
17.7% #511
11.1% #521
19.0% #144
41.2% #483

Pathanamthitta

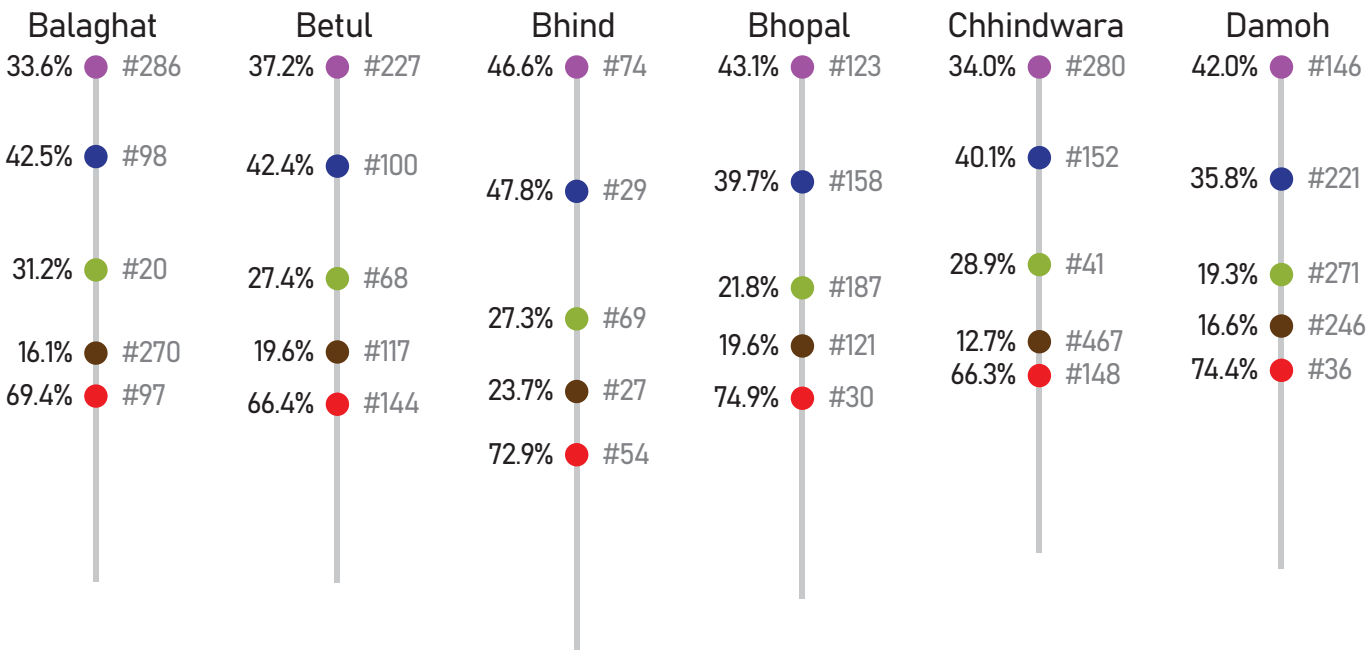
16.7% #538
13.0% #537
14.5% #450
17.3% #205
23.3% #535



Lakshadweep



Madhya Pradesh



#Rank: National rank ordering by % (1 indicating highest prevalence and 543 indicating lowest prevalence)

Stunting Underweight Wasting Low Birth Weight Anaemia

Dewas
42.6% #133
43.5% #84
25.7% #99
20.0% #102
72.1% #68

Dhar
43.1% #125
47.1% #43
29.2% #37
22.6% #46
77.2% #11

Guna
43.2% #122
47.5% #34
29.2% #38
21.2% #76
64.1% #189

Gwalior
43.0% #126
47.8% #30
27.4% #67
26.0% #9
68.1% #119

Hoshangabad
36.7% #232
38.0% #183
26.8% #79
17.7% #189
68.2% #118

Indore
37.6% #222
31.1% #310
19.2% #272
19.9% #109
73.5% #42

Jabalpur
35.9% #242
43.8% #79
30.3% #29
15.8% #279
60.5% #238

Khajuraho
41.9% #148
42.4% #101
23.6% #145
17.7% #188
67.7% #127

Khandwa
45.6% #86
43.8% #81
19.9% #251
19.1% #143
78.7% #7

Khargone
49.7% #29
50.3% #11
24.4% #128
17.4% #202
80.1% #4

Mandla
39.1% #197
45.3% #59
29.1% #40
16.3% #263
67.4% #130

Mandsaur
35.8% #245
36.1% #211
22.1% #181
35.5% #1
70.6% #84

Morena
47.5% #60
52.5% #4
28.5% #49
25.5% #12
71.4% #69

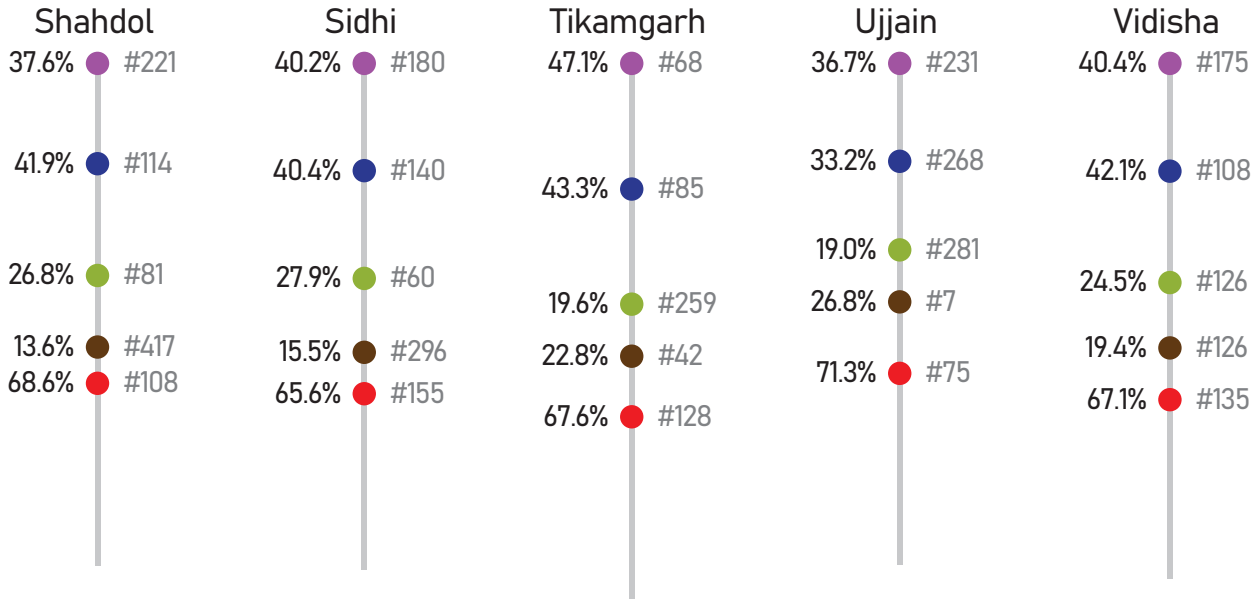
Rajgarh
41.3% #157
47.9% #27
30.9% #24
19.7% #116
65.6% #156

Ratlam
46.2% #78
47.2% #40
27.0% #76
30.5% #2
74.6% #34

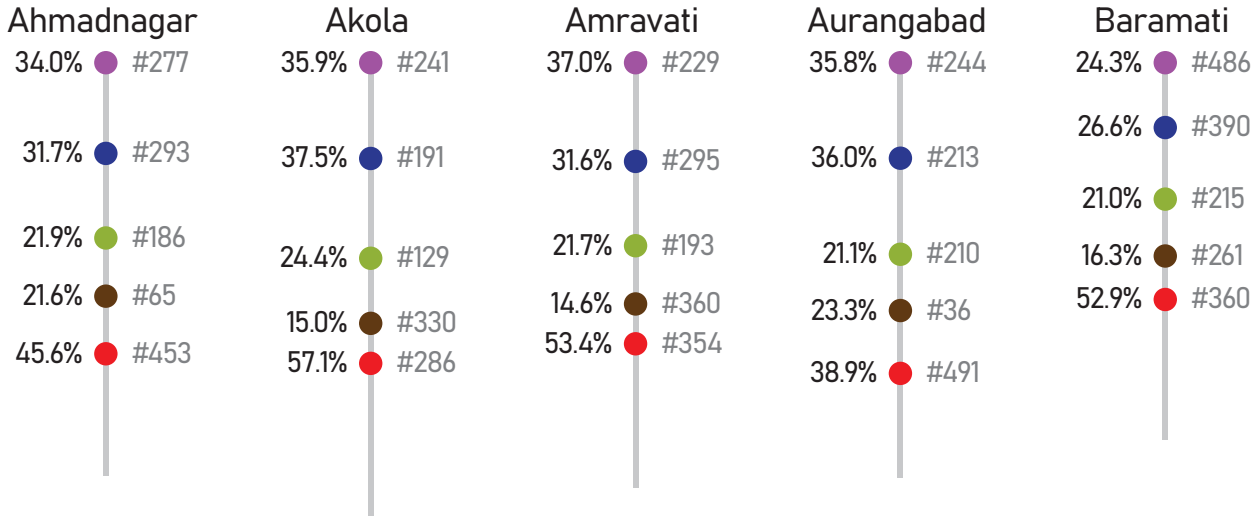
Rewa
40.6% #170
36.4% #208
18.0% #315
21.0% #83
55.0% #328

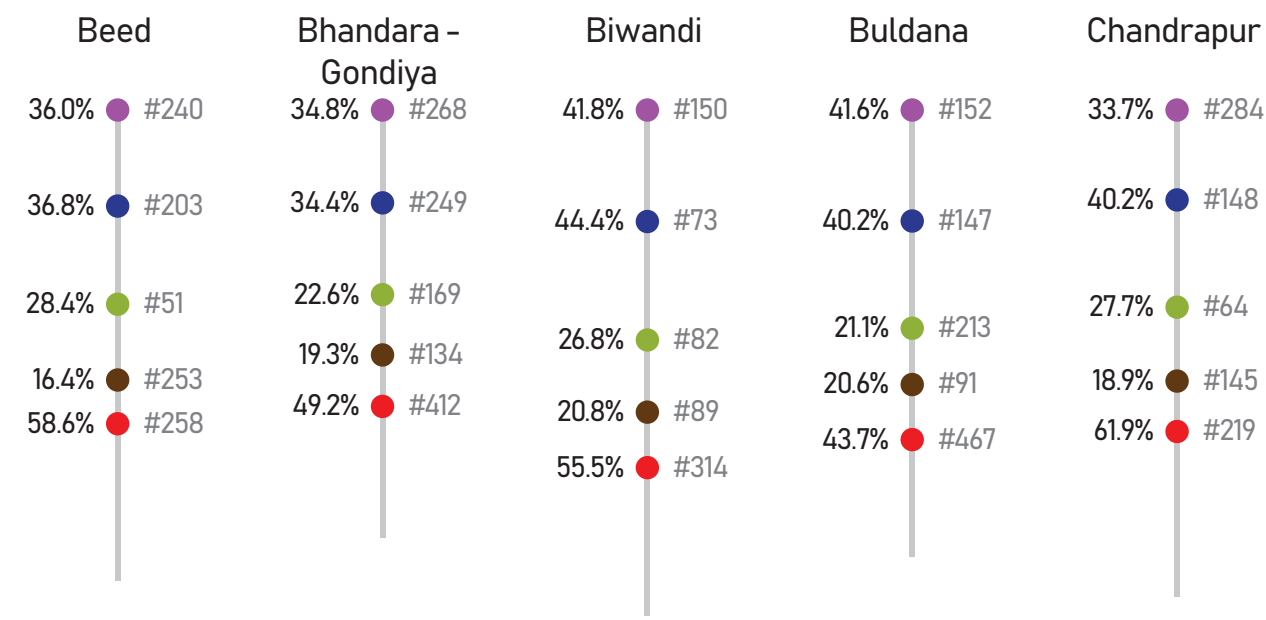
Sagar
40.5% #172
36.0% #215
19.1% #275
19.1% #141
69.6% #95

Satna
41.1% #161
39.3% #167
26.5% #87
17.7% #183
72.3% #63



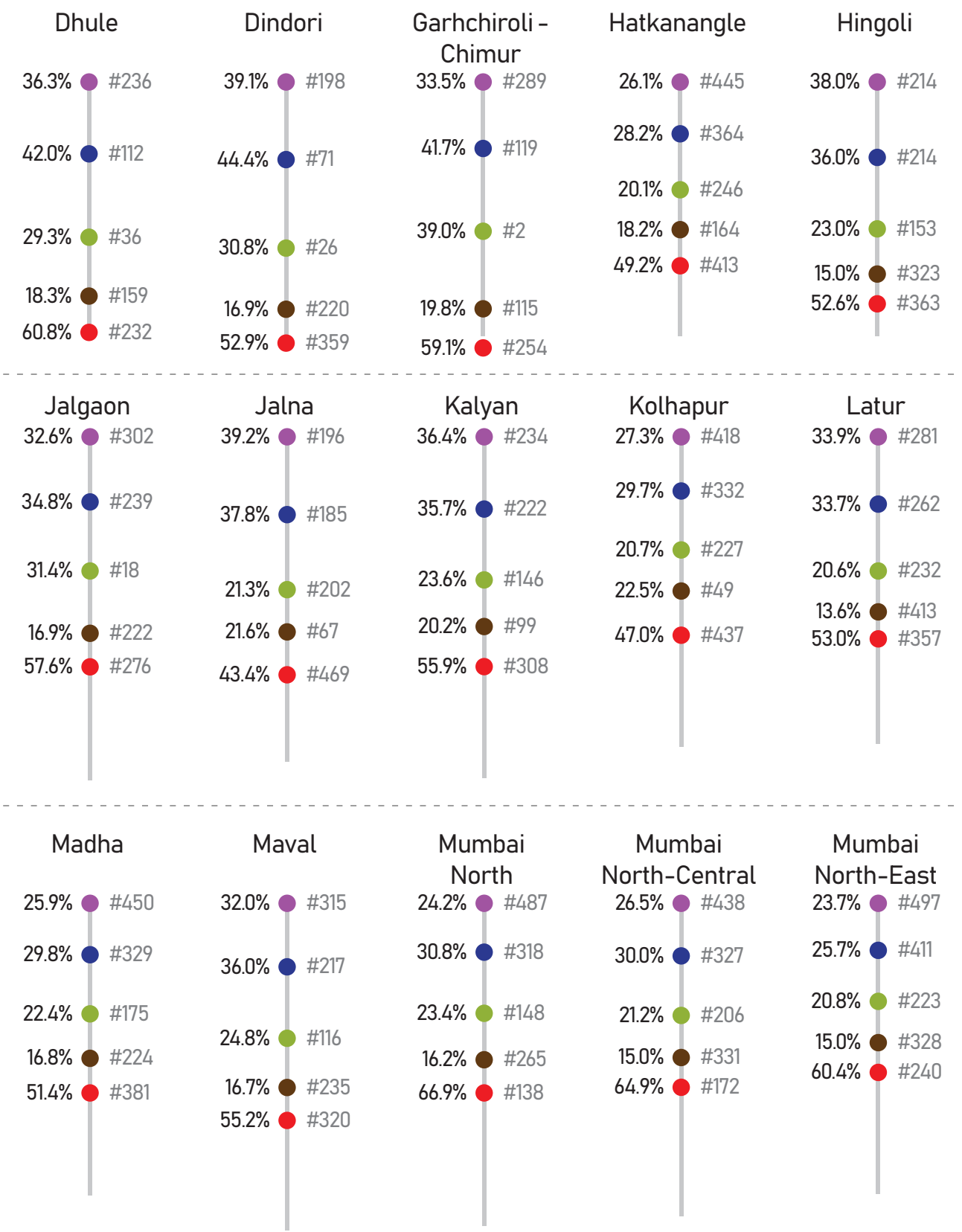
Maharashtra

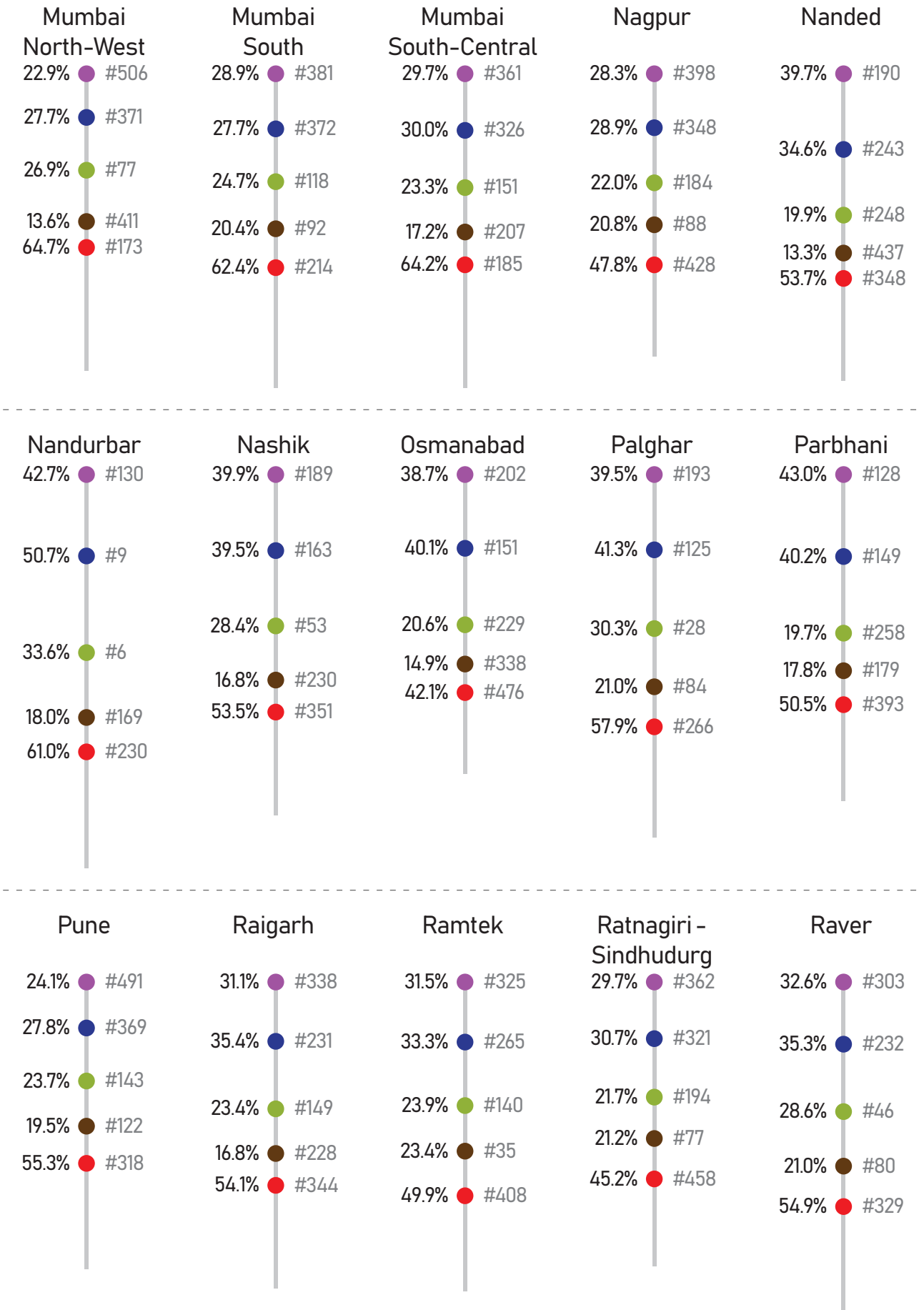




#Rank: National rank ordering by % (1 indicating highest prevalence and 543 indicating lowest prevalence)

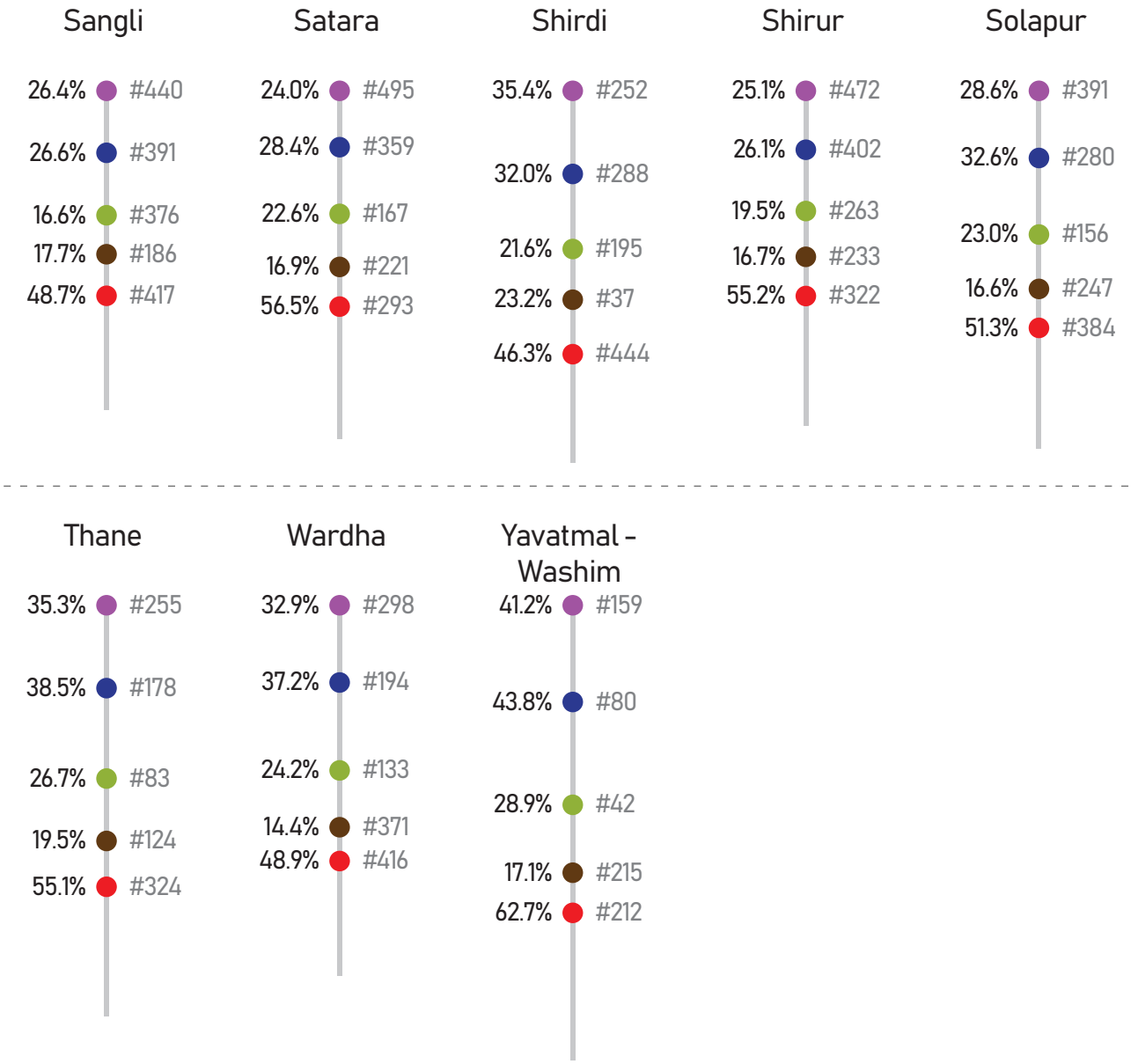
Stunting Underweight Wasting Low Birth Weight Anaemia


Dhule
36.3% #236
42.0% #112
29.3% #36
18.3% #159
60.8% #232
Dindori
39.1% #198
44.4% #71
30.8% #26
16.9% #220
52.9% #359
Garhchiroli - Chimur
33.5% #289
41.7% #119
39.0% #2
19.8% #115
59.1% #254
Hatkanangle
26.1% #445
28.2% #364
20.1% #246
18.2% #164
49.2% #413
Hingoli
38.0% #214
36.0% #214
23.0% #153
15.0% #323
52.6% #363
Jalgaon
32.6% #302
34.8% #239
31.4% #18
16.9% #222
57.6% #276
Jalna
39.2% #196
37.8% #185
21.3% #202
21.6% #67
43.4% #469
Kalyan
36.4% #234
35.7% #222
23.6% #146
20.2% #99
55.9% #308
Kolhapur
27.3% #418
29.7% #332
20.7% #227
22.5% #49
47.0% #437
Latur
33.9% #281
33.7% #262
20.6% #232
13.6% #413
53.0% #357
Madha
25.9% #450
29.8% #329
22.4% #175
16.8% #224
51.4% #381
Maval
32.0% #315
36.0% #217
24.8% #116
16.7% #235
55.2% #320
Mumbai North
24.2% #487
30.8% #318
23.4% #148
16.2% #265
66.9% #138
Mumbai North-Central
26.5% #438
30.0% #327
21.2% #206
15.0% #331
64.9% #172
Mumbai North-East
23.7% #497
25.7% #411
20.8% #223
15.0% #328
60.4% #240

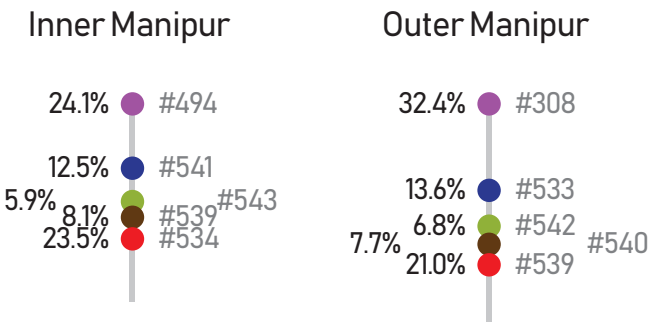


#Rank: National rank ordering by % (1 indicating highest prevalence and 543 indicating lowest prevalence)

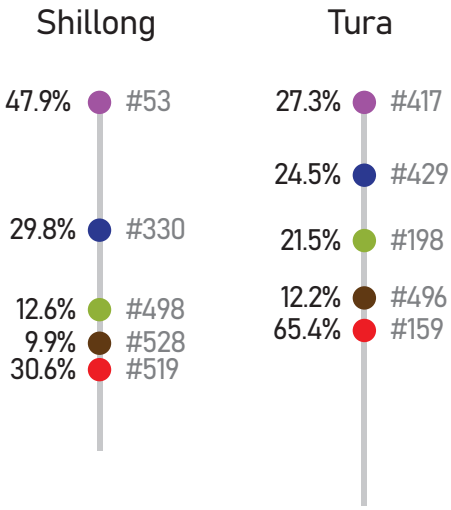
Stunting Underweight Wasting Low Birth Weight Anaemia


Sangli
26.4% #440
26.6% #391
16.6% #376
17.7% #186
48.7% #417
Satara
24.0% #495
28.4% #359
22.6% #167
16.9% #221
56.5% #293
Shirdi
35.4% #252
32.0% #288
21.6% #195
23.2% #37
46.3% #444
Shirur
25.1% #472
26.1% #402
19.5% #263
16.7% #233
55.2% #322
Solapur
28.6% #391
32.6% #280
23.0% #156
16.6% #247
51.3% #384
Thane
35.3% #255
38.5% #178
26.7% #83
19.5% #124
55.1% #324
Wardha
32.9% #298
37.2% #194
24.2% #133
14.4% #371
48.9% #416
Yavatmal - Washim
41.2% #159
43.8% #80
28.9% #42
17.1% #215
62.7% #212

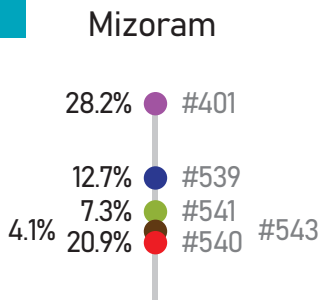
Manipur


Inner Manipur
24.1% #494
12.5% #541
5.9% #543
8.1% #539
23.5% #534
Outer Manipur
32.4% #308
13.6% #533
6.8% #542
7.7% #540
21.0% #539

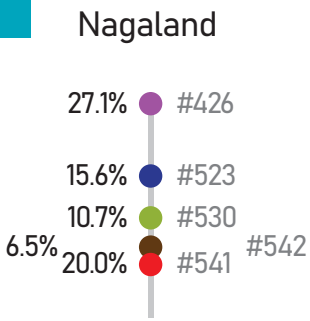
Meghalaya



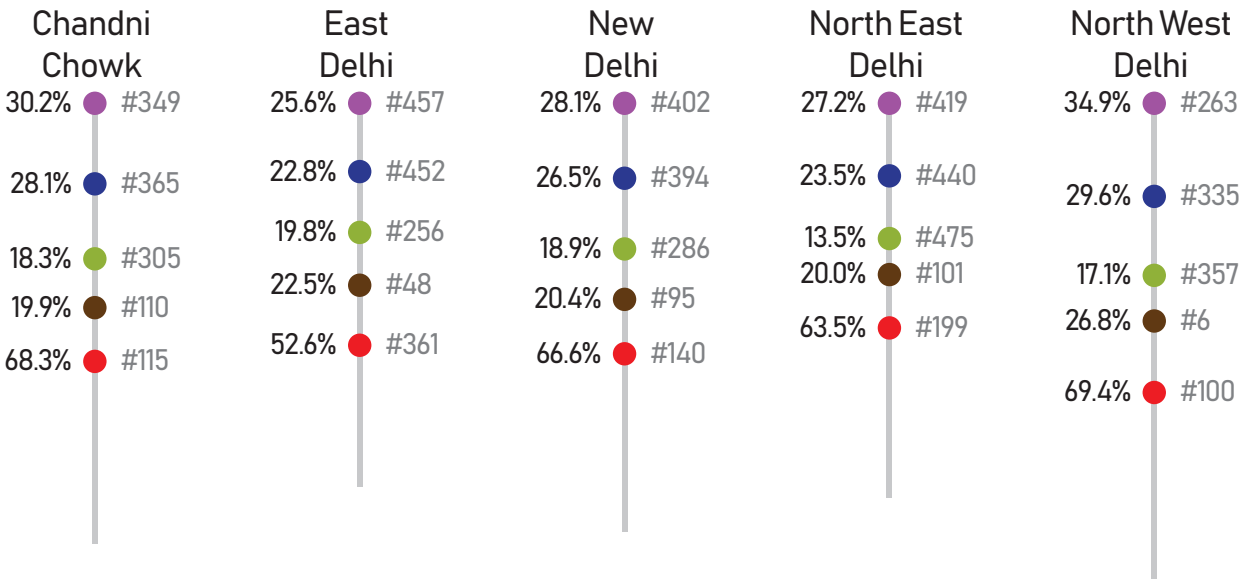
Mizoram



Nagaland



NCT of Delhi



#Rank: National rank ordering by % (1 indicating highest prevalence and 543 indicating lowest prevalence)

Stunting Underweight Wasting Low Birth Weight Anaemia

South Delhi

28.7% #388
26.9% #382
21.1% #209
17.8% #176
63.3% #202

West Delhi

29.4% #367
22.6% #455
15.4% #422
20.8% #87
67.5% #122

Puducherry

Puducherry

25.7% #453
20.6% #487
16.5% #381
15.1% #318
43.8% #466

Punjab

Amritsar

21.8% #516
13.9% #530
11.6% #518
12.2% #497
44.3% #463

Anandpur Sahib

21.5% #518
21.6% #468
13.4% #480
15.7% #280
70.5% #85

Bathinda

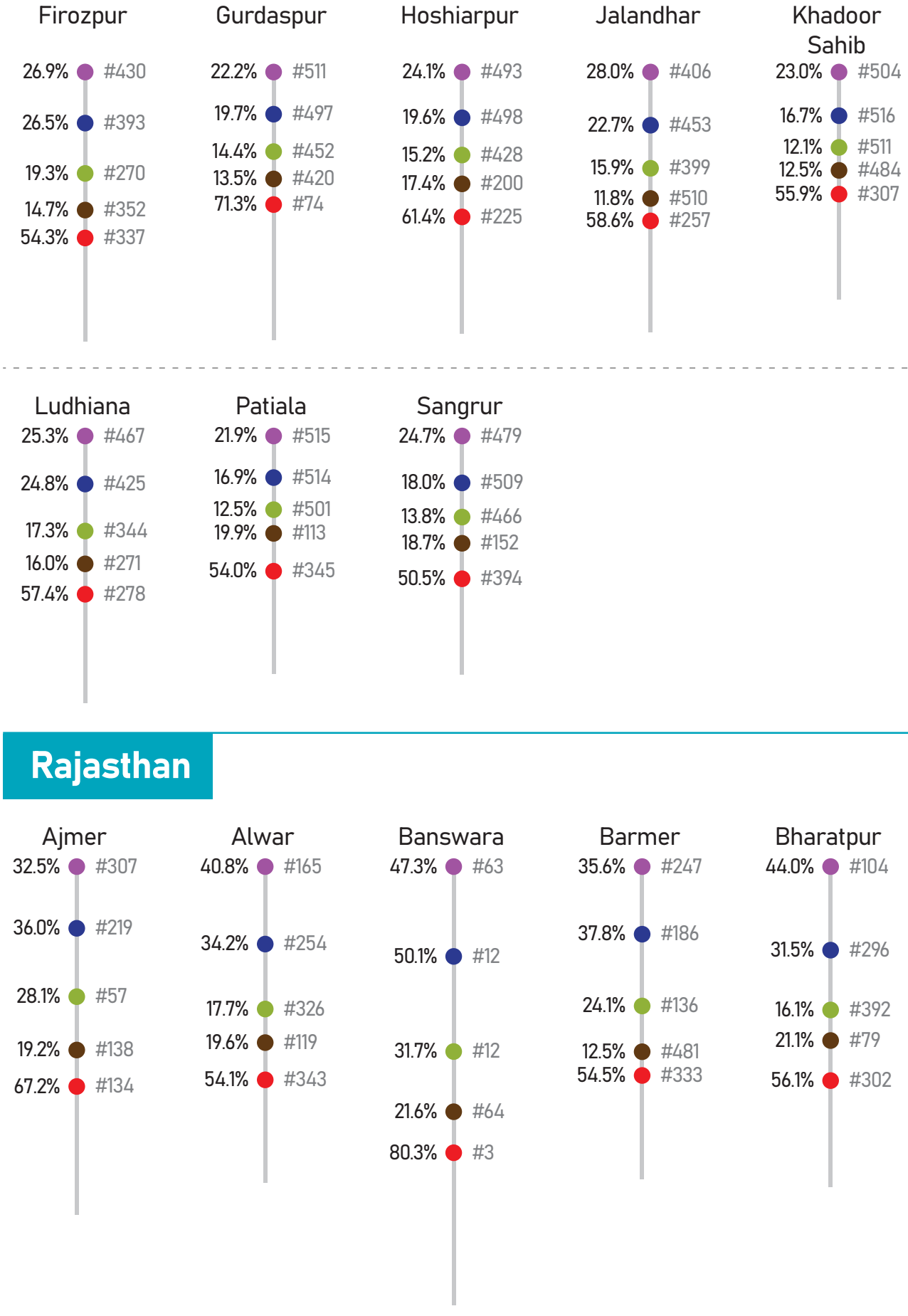
26.2% #442
20.6% #486
13.5% #472
16.7% #238
51.9% #375

Faridkot

28.9% #383
23.5% #441
16.8% #367
15.3% #309
54.7% #331

Fatehgarh Sahib

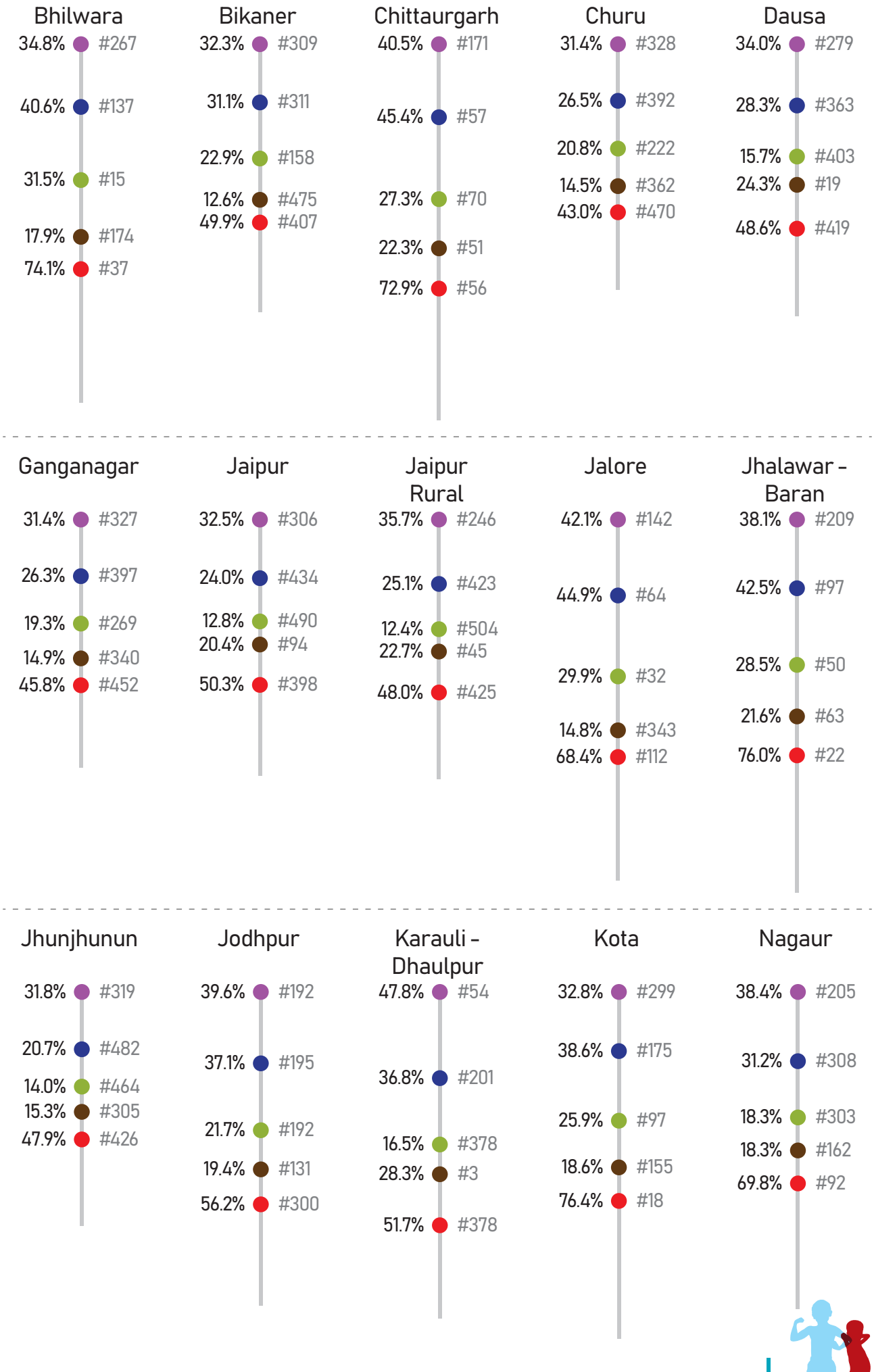
21.7% #517
19.8% #492
14.6% #445
19.3% #132
61.6% #222

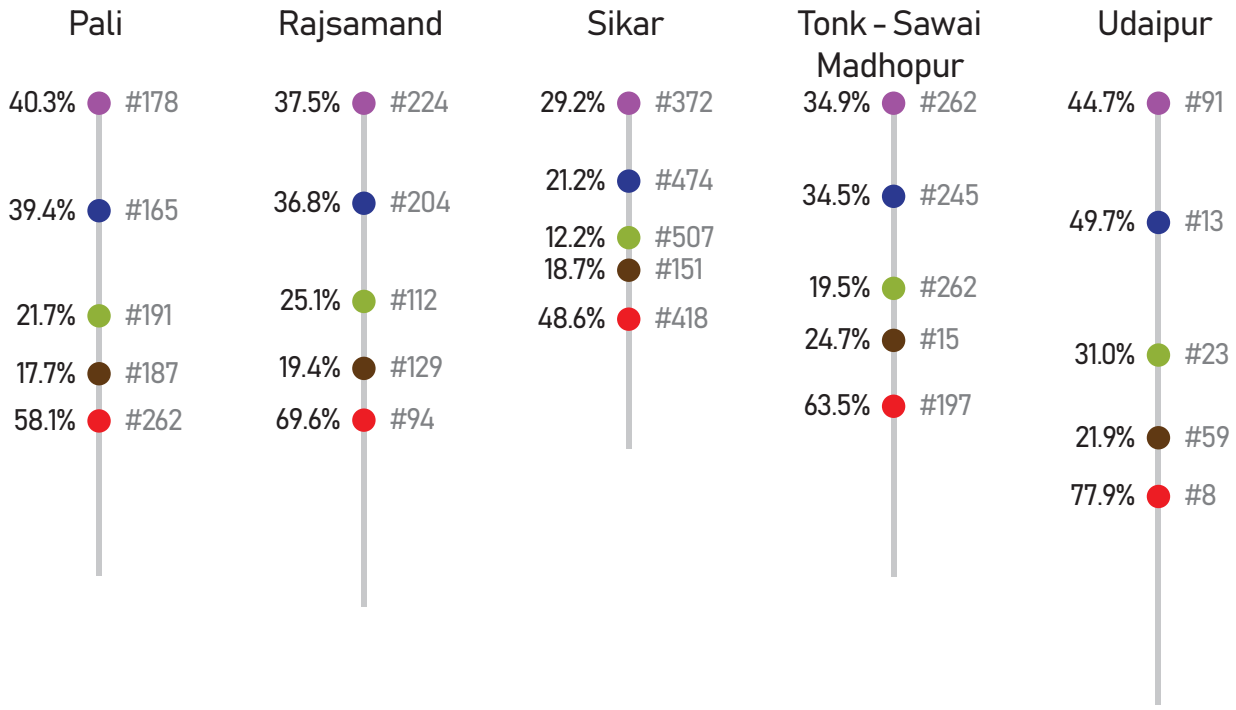


Rajasthan

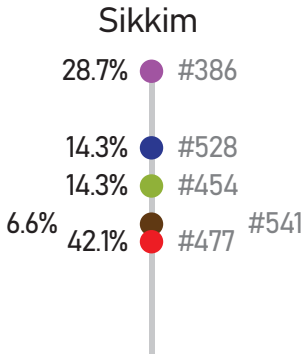
#Rank: National rank ordering by % (1 indicating highest prevalence and 543 indicating lowest prevalence)

Stunting Underweight Wasting Low Birth Weight Anaemia

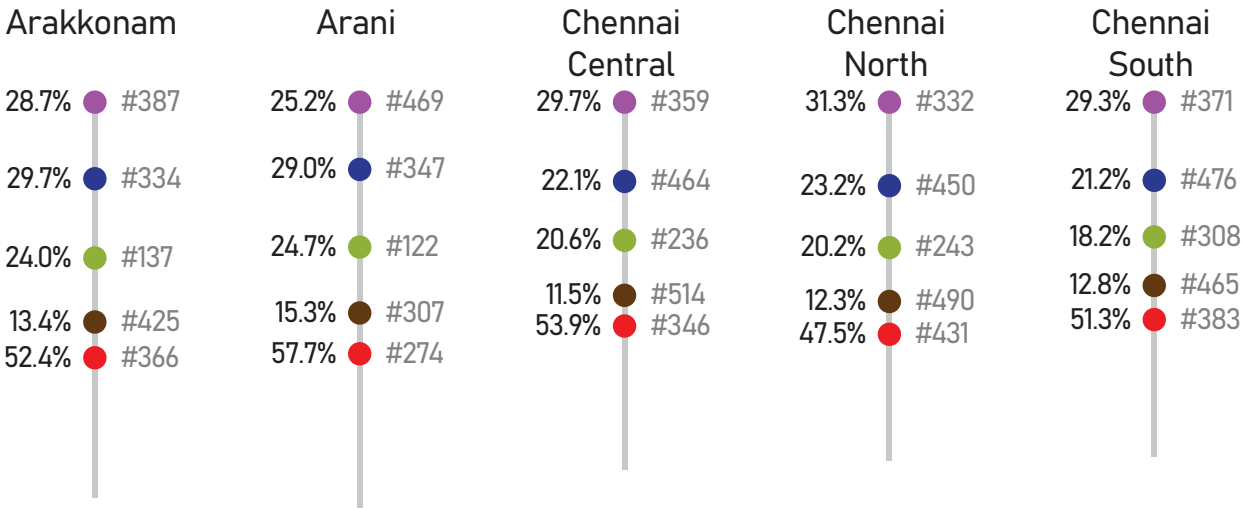

Bhilwara
34.8% #267
40.6% #137
31.5% #15
17.9% #174
74.1% #37
Bikaner
32.3% #309
31.1% #311
22.9% #158
12.6% #475
49.9% #407
Chittaurgarh
40.5% #171
45.4% #57
27.3% #70
22.3% #51
72.9% #56
Churu
31.4% #328
26.5% #392
20.8% #222
14.5% #362
43.0% #470
Dausa
34.0% #279
28.3% #363
15.7% #403
24.3% #19
48.6% #419
Ganganagar
31.4% #327
26.3% #397
19.3% #269
14.9% #340
45.8% #452
Jaipur
32.5% #306
24.0% #434
12.8% #490
20.4% #94
50.3% #398
Jaipur Rural
35.7% #246
25.1% #423
12.4% #504
22.7% #45
48.0% #425
Jalore
42.1% #142
44.9% #64
29.9% #32
14.8% #343
68.4% #112
Jhalawar - Baran
38.1% #209
42.5% #97
28.5% #50
21.6% #63
76.0% #22
Jhunjhunun
31.8% #319
20.7% #482
14.0% #464
15.3% #305
47.9% #426
Jodhpur
39.6% #192
37.1% #195
21.7% #192
19.4% #131
56.2% #300
Karauli - Dhaulpur
47.8% #54
36.8% #201
16.5% #378
28.3% #3
51.7% #378
Kota
32.8% #299
38.6% #175
25.9% #97
18.6% #155
76.4% #18
Nagaur
38.4% #205
31.2% #308
18.3% #303
18.3% #162
69.8% #92



Sikkim



Tamil Nadu



#Rank: National rank ordering by % (1 indicating highest prevalence and 543 indicating lowest prevalence)

Stunting Underweight Wasting Low Birth Weight Anaemia

Chidambaram
29.9% #354
25.5% #415
18.2% #311
18.6% #154
52.0% #373

Coimbatore
25.9% #448
23.9% #436
20.8% #220
14.8% #347
45.9% #451

Cuddalore
29.0% #378
25.6% #412
17.0% #362
17.2% #208
54.4% #334

Dharmapuri
24.7% #478
26.0% #403
28.6% #48
12.0% #502
57.8% #272

Dindigul
28.7% #389
26.8% #386
22.9% #157
13.5% #423
41.8% #479

Erode
28.1% #403
20.1% #491
16.7% #371
13.4% #427
54.2% #338

Kallakurichi
27.4% #415
24.9% #424
19.5% #261
14.6% #359
51.8% #377

Kancheepuram
25.3% #466
17.7% #512
15.0% #432
19.6% #120
47.4% #432

Kanniyakumari
19.3% #528
15.0% #525
10.8% #529
15.7% #284
38.3% #493

Karur
26.0% #447
26.3% #399
20.6% #234
13.4% #431
50.3% #399

Krishnagiri
23.2% #502
21.5% #469
18.9% #285
15.0% #322
54.6% #332

Madurai
22.2% #512
19.5% #502
14.0% #463
17.1% #210
50.6% #392

Mayiladuthurai
24.2% #490
22.6% #457
18.0% #313
15.3% #308
47.1% #436

Nagappattinam
25.5% #462
25.9% #406
19.8% #255
17.4% #204
48.2% #424

Namakkal
25.9% #451
19.8% #493
15.6% #407
15.9% #275
49.5% #410

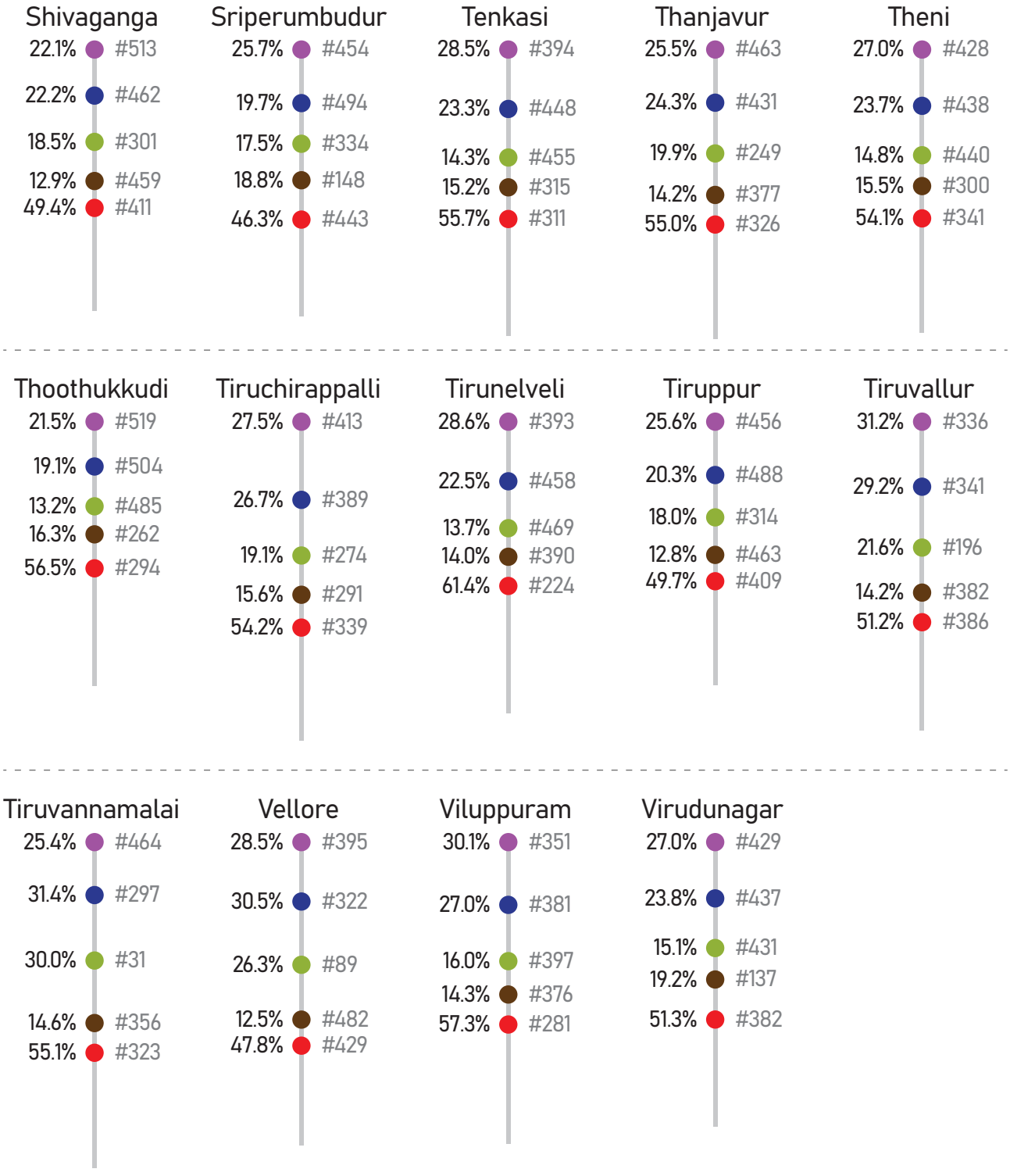
Nilgiris
29.4% #369
25.9% #405
24.3% #132
17.7% #185
39.8% #488

Perambalur
26.1% #444
23.9% #435
18.9% #284
16.5% #251
57.7% #273

Pollachi
25.0% #474
22.7% #454
21.2% #205
14.2% #384
46.0% #449

Ramanathapuram
23.7% #499
22.2% #463
16.7% #368
15.6% #288
48.4% #420

Salem
25.5% #460
21.4% #471
21.1% #207
12.0% #506
55.4% #315



#Rank: National rank ordering by % (1 indicating highest prevalence and 543 indicating lowest prevalence)

Stunting Underweight Wasting Low Birth Weight Anaemia

Telangana

Adilabad
34.8% #265
34.1% #257
20.8% #221
18.8% #147
66.5% #141

Bhongir
27.1% #423
29.8% #331
19.8% #257
14.8% #344
68.9% #104

Chevella
28.8% #385
28.5% #358
17.5% #331
16.7% #240
55.2% #319

Hyderabad
20.6% #522
23.3% #449
19.9% #250
12.2% #499
60.0% #247

Karimnagar
24.9% #476
25.4% #416
19.1% #278
15.7% #282
56.1% #303

Khammam
26.6% #436
22.0% #465
13.7% #470
11.9% #507
70.7% #83

Mahabubabad
26.1% #443
26.4% #396
15.2% #426
14.6% #355
67.3% #132

Mahbubnagar
32.1% #313
29.2% #342
17.1% #356
13.9% #400
64.6% #177

Malkajgiri
25.0% #475
24.5% #430
16.1% #395
14.2% #383
53.5% #353

Medak
31.6% #323
35.4% #229
20.3% #241
20.9% #86
68.2% #117

Nagarkurnool
34.6% #270
32.7% #276
17.7% #324
14.0% #394
64.1% #190

Nalgonda
28.3% #397
31.3% #302
21.2% #204
17.5% #194
69.2% #101

Nizamabad
31.9% #317
34.5% #246
20.1% #244
19.2% #136
66.4% #145

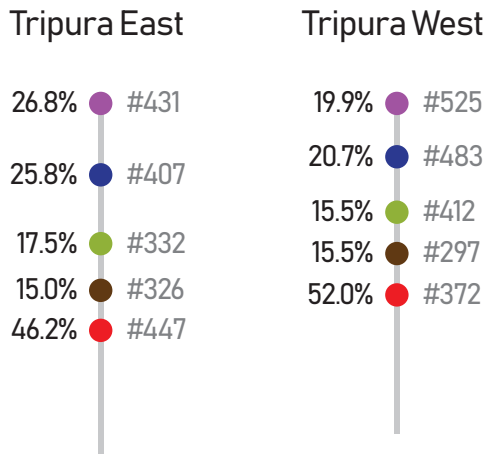
Peddapalle
27.2% #422
27.4% #374
19.0% #279
18.2% #165
60.7% #236

Secunderabad
19.3% #529
21.2% #475
17.2% #353
12.0% #503
64.1% #188

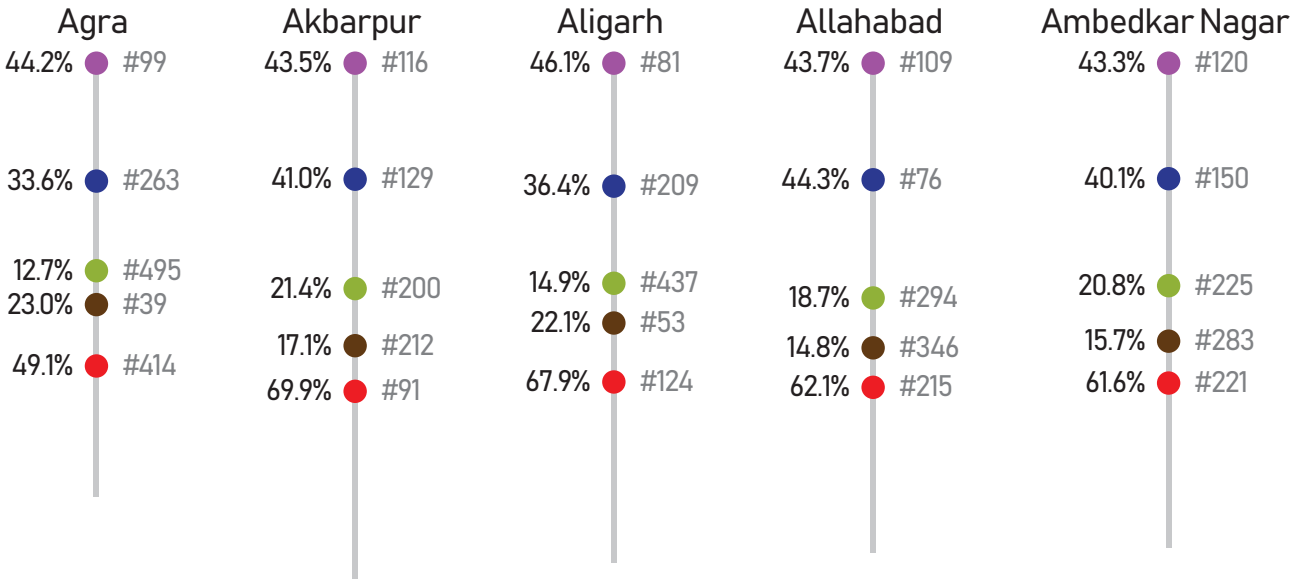
Warangal
25.8% #452
29.1% #345
16.9% #365
18.9% #146
63.9% #192

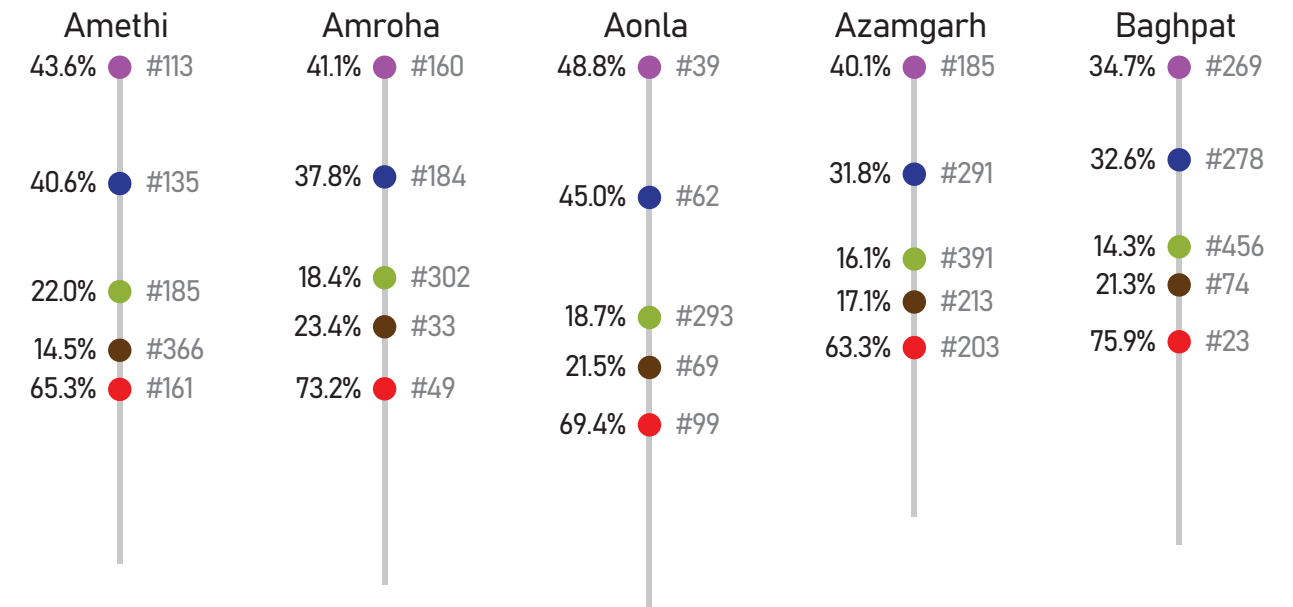
Zahirabad
33.8% #283
35.4% #228
20.6% #231
18.4% #156
69.1% #102

Tripura



Uttar Pradesh





#Rank: National rank ordering by % (1 indicating highest prevalence and 543 indicating lowest prevalence)

Stunting Underweight Wasting Low Birth Weight Anaemia

Bahraich

63.6% #1
42.2% #105
12.9% #489
25.2% #13
73.2% #50

Ballia

41.5% #153
31.9% #290
15.5% #415
14.1% #388
63.0% #208

Banda

48.0% #51
47.1% #41
25.6% #102
15.6% #289
68.4% #113

Bansgaon

40.8% #166
31.7% #292
14.9% #435
15.0% #324
68.4% #114

Barabanki

50.2% #25
39.4% #166
12.1% #510
22.7% #44
45.5% #454

Bareilly

43.7% #111
39.7% #157
17.4% #342
23.0% #38
74.0% #39

Basti

48.6% #45
33.8% #260
13.5% #474
15.9% #277
71.2% #77

Bijnor

38.6% #203
36.4% #207
18.8% #290
23.9% #24
75.3% #27

Budaun

54.0% #9
52.7% #3
18.9% #283
19.9% #111
64.0% #191

Bulandshahr

43.0% #127
33.2% #267
15.2% #429
19.4% #128
64.9% #171

Chandauli

44.2% #98
39.5% #164
19.4% #266
16.4% #255
64.3% #181

Deoria

43.8% #106
34.5% #244
13.9% #465
13.6% #410
67.6% #129

Dhaurahra

54.9% #7
42.6% #96
15.7% #404
23.6% #29
51.4% #380

Domriaganj

56.0% #6
42.1% #110
13.3% #483
17.7% #190
65.4% #158

Etah

50.2% #27
32.7% #275
11.2% #520
21.4% #70
40.4% #485

Etawah

47.3% #62
37.8% #187
17.6% #329
19.9% #108
59.9% #248

Faizabad

50.4% #22
44.8% #65
17.6% #328
15.1% #320
62.9% #210

Farrukhabad

48.1% #48
31.4% #300
9.1% #538
21.3% #72
41.6% #480

#Rank: National rank ordering by % (1 indicating highest prevalence and 543 indicating lowest prevalence)

Stunting Underweight Wasting Low Birth Weight Anaemia

Kanpur

43.5% #117
39.6% #162
20.7% #228
15.4% #303
72.7% #59

Kaushambi

47.2% #66
48.7% #20
26.5% #84
13.2% #444
64.6% #176

Kheri

52.1% #17
39.7% #160
17.7% #327
24.4% #18
50.4% #396

Kushi Nagar

46.4% #77
35.4% #230
14.2% #457
15.2% #317
60.7% #233

Lalganj

40.8% #167
34.1% #258
17.3% #348
15.0% #325
60.2% #242

Lucknow

40.3% #176
43.3% #86
29.9% #33
17.8% #177
72.8% #58

Machhlishahr

47.6% #58
49.2% #16
24.7% #121
15.7% #281
57.1% #287

Maharajganj

53.3% #11
37.4% #192
12.2% #506
16.6% #241
58.0% #263

Mainpuri

47.7% #56
33.0% #270
10.9% #527
20.0% #104
42.8% #472

Mathura

40.3% #179
27.1% #379
11.8% #514
18.8% #149
56.1% #304

Meerut

34.9% #261
33.1% #269
17.7% #325
22.4% #50
73.3% #44

Mirzapur

49.5% #33
46.4% #48
18.9% #282
13.4% #428
63.4% #200

Misrikh

49.2% #37
41.9% #113
17.5% #333
21.3% #73
55.6% #312

Mohanlalganj

41.0% #163
44.4% #72
28.7% #45
19.4% #127
72.7% #60

Moradabad

41.9% #149
39.2% #168
15.5% #414
24.9% #14
73.0% #53

Muzaffarnagar

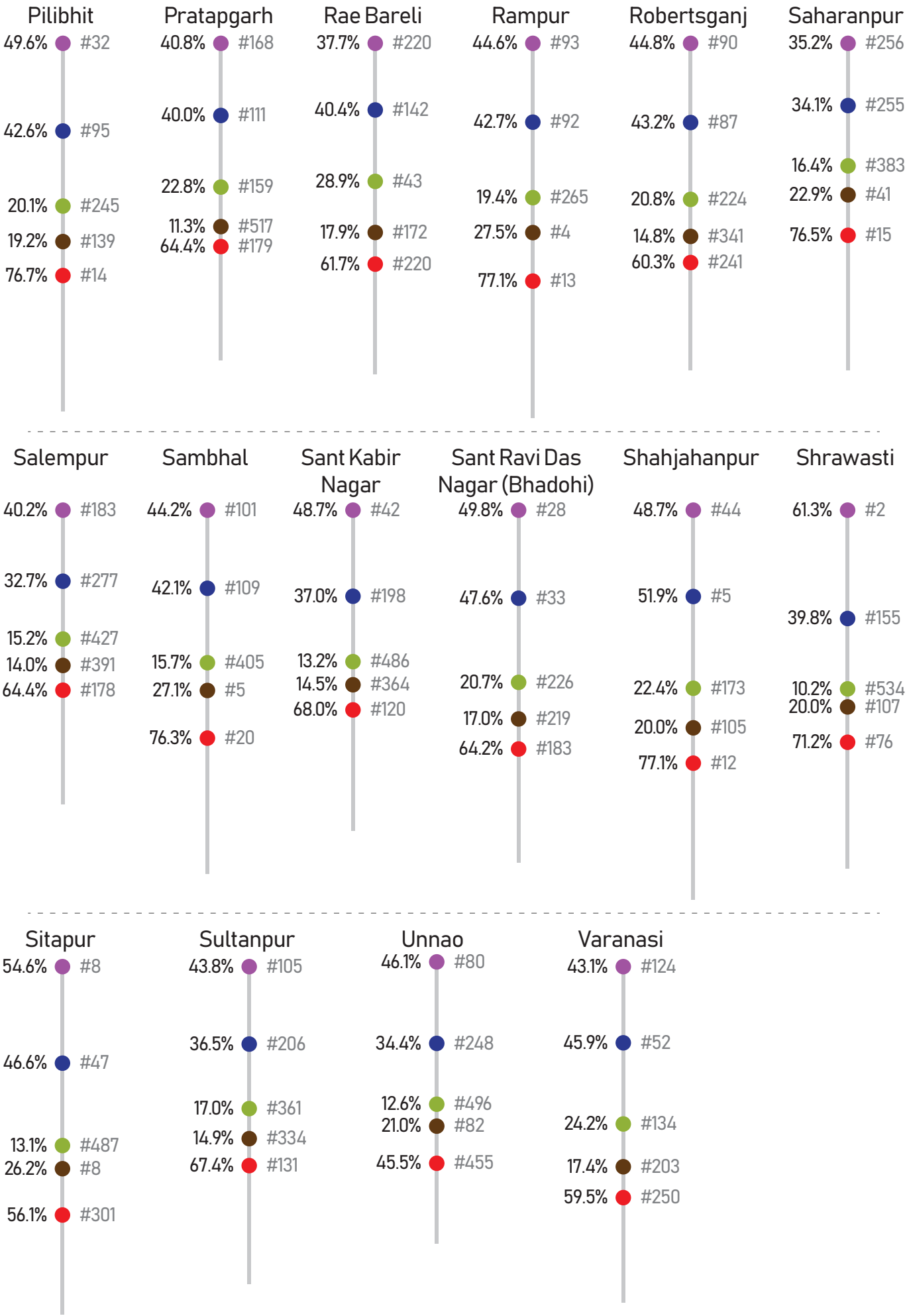
38.3% #207
35.5% #227
18.8% #288
24.5% #16
77.6% #10

Nagina

42.5% #136
40.5% #139
23.8% #142
24.1% #21
72.6% #61

Phulpur

43.3% #121
41.1% #128
18.7% #296
13.9% #397
60.5% #239



#Rank: National rank ordering by % (1 indicating highest prevalence and 543 indicating lowest prevalence)

Stunting Underweight Wasting Low Birth Weight Anaemia

Uttarakhand

Almora

28.9% #382
21.8% #467
19.1% #276
23.6% #30
37.9% #496

Garhwal

29.0% #377
25.3% #417
21.1% #211
19.6% #118
46.6% #441

Hardwar

34.8% #264
26.5% #395
17.2% #351
23.5% #31
65.3% #163

Nainital - Udhamsingh Nagar

33.1% #293
22.3% #461
11.0% #526
23.4% #32
60.1% #244

Tehri Garhwal

30.4% #347
36.0% #216
36.1% #4
21.2% #78
47.3% #435

West Bengal

Alipurduars

32.2% #310
27.7% #370
18.3% #306
16.3% #256
68.6% #107

Arambag

32.1% #312
31.4% #299
19.1% #277
20.3% #97
57.9% #268

Asansol

30.6% #346
32.9% #272
25.2% #109
18.3% #160
50.0% #405

Baharampur

38.4% #206
31.3% #305
14.8% #441
14.2% #378
43.8% #465

Balurghat

34.2% #275
27.9% #367
16.5% #379
13.2% #439
68.9% #105

Bangaon

24.7% #480
20.3% #489
12.8% #493
12.7% #469
49.1% #415

Bankura

33.7% #285
38.9% #172
24.7% #119
15.8% #278
48.3% #423

Barakpur

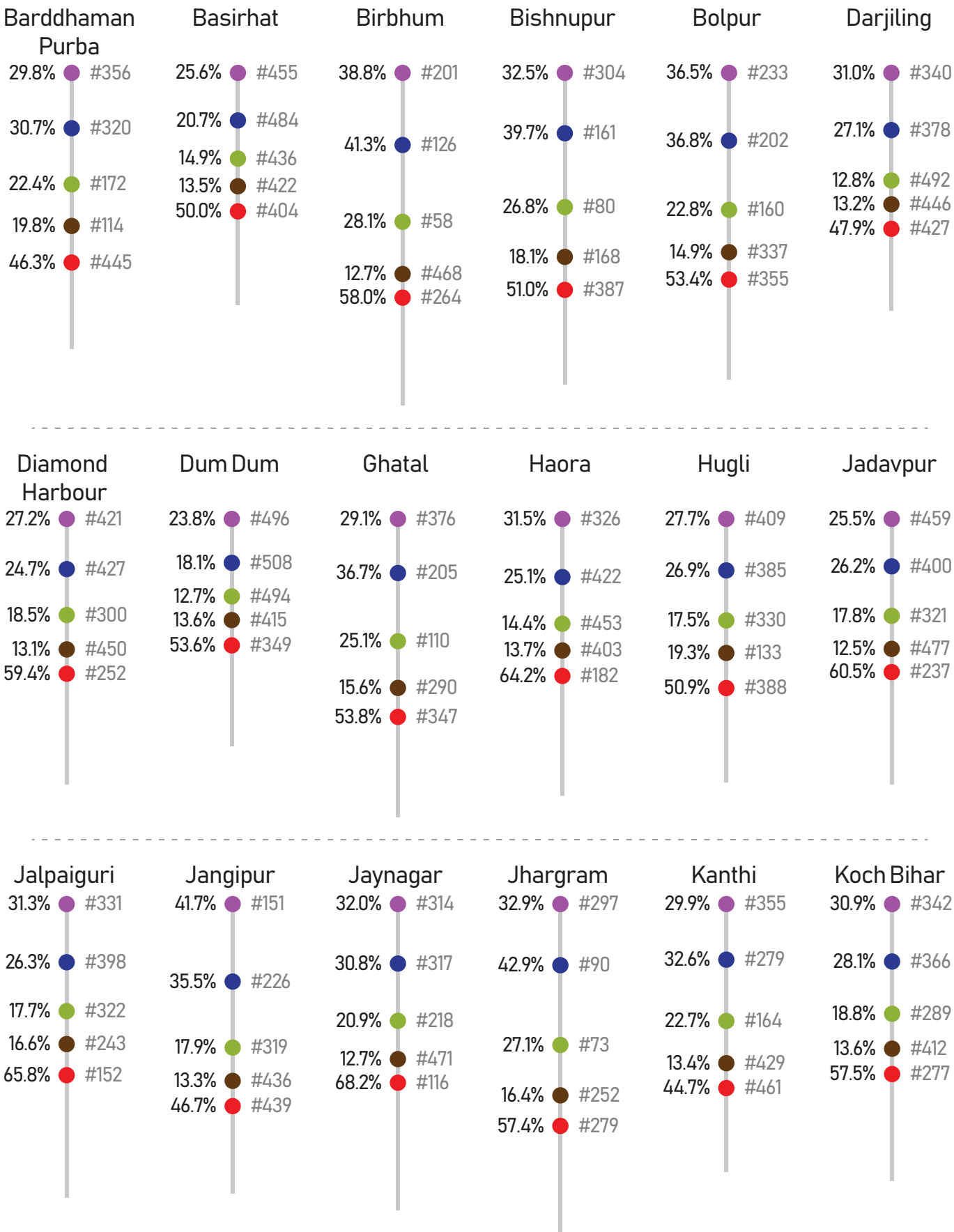
25.2% #468
19.6% #499
13.5% #476
12.2% #495
54.7% #330

Barasat

24.1% #492
21.1% #477
14.9% #438
15.5% #299
54.1% #342

Barddhaman - Durgapur

31.9% #316
31.7% #294
22.7% #163
22.1% #54
46.2% #446



#Rank: National rank ordering by % (1 indicating highest prevalence and 543 indicating lowest prevalence)

Stunting Underweight Wasting Low Birth Weight Anaemia

Kolkata Dakshin

28.2% #400
23.5% #443
18.7% #295
12.4% #486
55.9% #309

Kolkata Uttar

27.1% #424
23.0% #451
17.9% #318
13.1% #449
60.0% #246

Odisha

Aska

29.5% #366
23.4% #445
17.0% #360
17.8% #181
38.0% #495

Baleshwar

33.6% #287
34.3% #252
17.1% #358
20.9% #85
29.0% #524

Bargarh

34.2% #274
35.7% #223
23.3% #150
18.2% #163
66.3% #147

Berhampur

31.1% #339
29.2% #344
17.4% #340
14.7% #349
51.2% #385

Bhadrak

34.0% #278
28.8% #350
14.8% #439
20.3% #98
24.1% #532

Bhubaneswar

22.7% #507
19.2% #503
13.3% #481
14.5% #365
20.0% #542

Bolangir

42.1% #144
41.8% #116
22.7% #166
19.1% #140
69.9% #90

Cuttack

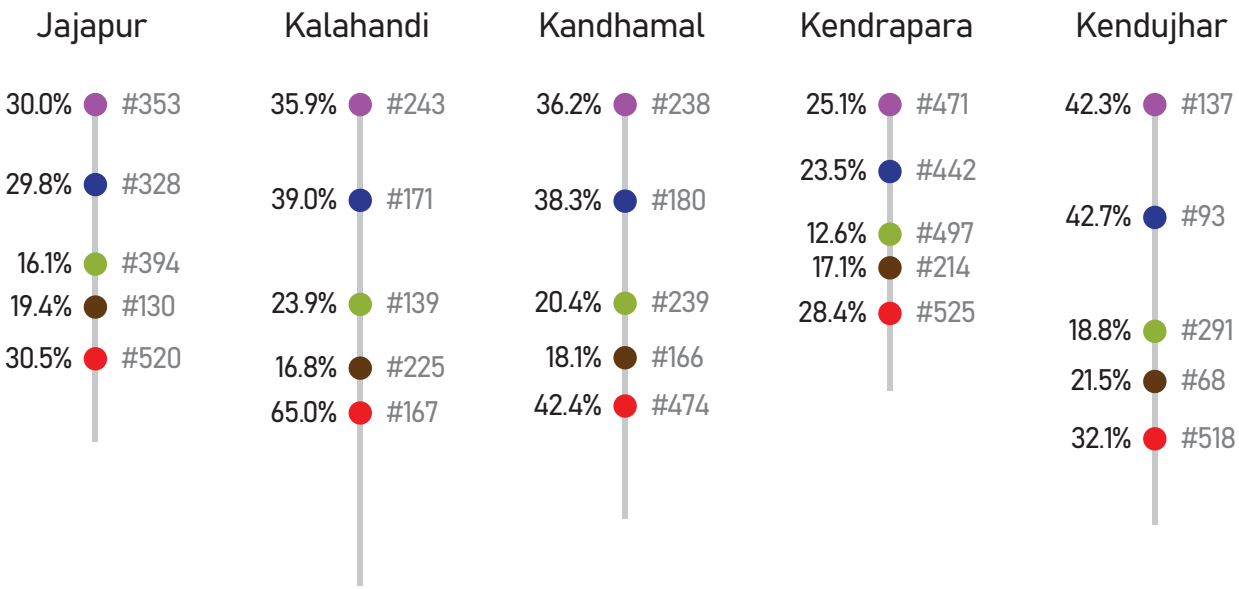
20.2% #523
20.9% #480
12.1% #509
14.9% #332
22.7% #538

Dhenkanal

27.3% #416
31.0% #314
19.5% #264
16.9% #223
39.3% #490

Jagatsinghpur

20.1% #524
18.5% #506
12.5% #500
17.6% #192
25.9% #530



#Rank: National rank ordering by % (1 indicating highest prevalence and 543 indicating lowest prevalence)

Stunting Underweight Wasting Low Birth Weight Anaemia

Summary of the findings

- **Wide inequalities in child malnutrition indicators were observed across Parliamentary Constituencies in India.**
  - The variation across Parliamentary Constituencies was the largest for anaemia, followed by underweight, stunting, wasting, and low birth weight.

- **There is a strong regional spatial pattern in child malnutrition indicators that transcends across states.**
  - Large patches of spatially contiguous Parliamentary Constituencies from the states of Uttar Pradesh, Rajasthan, Madhya Pradesh, Bihar, Jharkhand, and Gujarat were observed to have very high burden of almost all child malnutrition indicators.
  - At the same time, a co-occurrence of spatially contiguous high and low burden clusters of Parliamentary Constituencies was observed in the states of Gujarat and Andhra Pradesh for stunting, and in the states of Maharashtra, Karnataka, Rajasthan, and Odisha for underweight and low birth weight.

- **The observed spatial distribution of Parliamentary Constituencies in child malnutrition indicators offers a unique opportunity for:**
  - Parliamentarians to collaborate and form alliances to pool resources together and generate synergistic effects in achieving the common goals outlined in the National Nutrition Mission.
  - Local investigations to understand the relative importance of different determinants of child malnutrition given that two contiguous Parliamentary Constituencies sharing a similar level of child malnutrition may be driven by distinct causes.
  - Well-performing Parliamentary Constituencies within high burden states to serve as exemplary model cases from which contiguous Parliamentary Constituencies can learn from and adapt appropriate interventions.

Conclusion

There is an immediate need to routinely collect, report, and analyse data by Parliamentary Constituencies. Such an effort can integrate the policy and academic discourse around issues of population health, nutrition, and development with the actual political discourse. To ensure governance driven by data and evidence, there is an urgent need to establish infrastructure to provide a timely monitoring and surveillance of data on the key developmental indicators to the Parliamentarians. In this endeavour, meaningful collaborations should be explored between parliamentary offices and academic/research institutions.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