RADIOGRAPHIC ATLAS OF SKELETAL DEVELOPMENT OF THE HAND AND WRIST

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&
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MALE STANDARDS

FEMALE STANDARDS

MALE STANDARDS

1 year
2 years
3 years
4 years
5 years
6 years
7 years
8 years
9 years
10 years
11 years
12 years
13 years
14 years
15 years
16 years
17 years
18 years

FEMALE STANDARDS

1 year
2 years
3 years
4 years
5 years
6 years
7 years
8 years
9 years
10 years
11 years
12 years
13 years
14 years
15 years
16 years
17 years
18 years

Male: Newborn

Chron. Age	Std Dev.	2x Std. Dev
3 months	0.69	1.38
6 months	1.13	2.26
9 months	1.43	2.86
12 months	1.97	3.94
18 months	3.52	7.04

Male: 3 M

Chron. Age	Std Dev.	2x Std. Dev
3 months	0.69	1.38
6 months	1.13	2.26
9 months	1.43	2.86
12 months	1.97	3.94
18 months	3.52	7.04

Male: 6 M

Chron. Age	Std Dev.	2x Std. Dev
3 months	0.69	1.38
6 months	1.13	2.26
9 months	1.43	2.86
12 months	1.97	3.94
18 months	3.52	7.04

Male: 9 M

Chron. Age	Std Dev.	2x Std. Dev
6 months	1.13	2.26
9 months	1.43	2.86
12 months	1.97	3.94
18 months	3.52	7.04
2 years	3.92	7.84

Male: 1 Y

Chron. Age	Std Dev.	2x Std. Dev
6 months	1.13	2.26
9 months	1.43	2.86
12 months	1.97	3.94
18 months	3.52	7.04
2 years	3.92	7.84

Male: 1 Y, 3 M

Chron. Age	Std Dev.	2x Std. Dev
6 months	1.13	2.26
9 months	1.43	2.86
12 months	1.97	3.94
18 months	3.52	7.04
2 years	3.92	7.84

Male: 1 Y, 6 M

Chron. Age	Std Dev.	2x Std. Dev
9 months	1.43	2.86
12 months	1.97	3.94
18 months	3.52	7.04
2 years	3.92	7.84
2.5 years	4.52	9.04

Male: 2 Y

Chron. Age	Std Dev.	2x Std. Dev
12 months	1.97	3.94
18 months	3.52	7.04
2 years	3.92	7.84
2.5 years	4.52	9.04
3 years	5.08	10.16

Male: 2 Y, 8 M

Chron. Age	Std Dev.	2x Std. Dev
18 months	3.52	7.04
2 years	3.92	7.84
2.5 years	4.52	9.04
3 years	5.08	10.16
3.5 years	5.40	10.80

Male: 3 Y

Chron. Age	Std Dev.	2x Std. Dev
2 years	3.92	7.84
2.5 years	4.52	9.04
3 years	5.08	10.16
3.5 years	5.40	10.80
4 year	6.66	13.32

Male: 3 Y, 6 M

Chron. Age	Std Dev.	2x Std. Dev
2.5 years	4.52	9.04
3 years	5.08	10.16
3.5 years	5.40	10.80
4 year	6.66	13.32
4.5 years	8.36	16.72

Male: 4 Y

Chron. Age	Std Dev.	2x Std. Dev
3 years	5.08	10.16
3.5 years	5.40	10.80
4 year	6.66	13.32
4.5 years	8.36	16.72
5 years	8.79	17.58

Male: 4 Y, 6 M

Chron. Age	Std Dev.	2x Std. Dev
3.5 years	5.40	10.80
4 year	6.66	13.32
4.5 years	8.36	16.72
5 years	8.79	17.58
6 years	9.17	18.34

Male: 5 Y

Chron. Age	Std Dev.	2x Std. Dev
4 year	6.66	13.32
4.5 years	8.36	16.72
5 years	8.79	17.58
6 years	9.17	18.34
7 years	8.91	17.82

Male: 6 Y

Chron. Age	Std Dev.	2x Std. Dev
4.5 years	8.36	16.72
5 years	8.79	17.58
6 years	9.17	18.34
7 years	8.91	17.82
8 years	9.10	18.20

Male: 7 Y

Chron. Age	Std Dev.	2x Std. Dev
5 years	8.79	17.58
6 years	9.17	18.34
7 years	8.91	17.82
8 years	9.10	18.20
9 years	9.00	18.00

Male: 8 Y

Chron. Age	Std Dev.	2x Std. Dev
6 years	9.17	18.34
7 years	8.91	17.82
8 years	9.10	18.20
9 years	9.00	18.00
10 years	9.79	19.58

Male: 9 Y

Chron. Age	Std Dev.	2x Std. Dev
7 years	8.91	17.82
8 years	9.10	18.20
9 years	9.00	18.00
10 years	9.79	19.58
11 years	10.09	20.18

Male: 10 Y

Chron. Age	Std Dev.	2x Std. Dev
8 years	9.10	18.20
9 years	9.00	18.00
10 years	9.79	19.58
11 years	10.09	20.18
12 years	10.38	20.76

Male: 11 Y

Chron. Age	Std Dev.	2x Std. Dev
9 years	9.00	18.00
10 years	9.79	19.58
11 years	10.09	20.18
12 years	10.38	20.76
13 years	10.44	20.88

Male: 11 Y, 6 M

Chron. Age	Std Dev.	2x Std. Dev
9 years	9.00	18.00
10 years	9.79	19.58
11 years	10.09	20.18
12 years	10.38	20.76
13 years	10.44	20.88

Male: 12 Y, 6 M

Chron. Age	Std Dev.	2x Std. Dev
10 years	9.79	19.58
11 years	10.09	20.18
12 years	10.38	20.76
13 years	10.44	20.88
14 years	10.72	21.44

Male: 13 Y

Chron. Age	Std Dev.	2x Std. Dev
11 years	10.09	20.18
12 years	10.38	20.76
13 years	10.44	20.88
14 years	10.72	21.44
15 years	11.32	22.64

Male: 13 Y, 6 M

Chron. Age	Std Dev.	2x Std. Dev
11 years	10.09	20.18
12 years	10.38	20.76
13 years	10.44	20.88
14 years	10.72	21.44
15 years	11.32	22.64

Male: 14 Y

Chron. Age	Std Dev.	2x Std. Dev
12 years	10.38	20.76
13 years	10.44	20.88
14 years	10.72	21.44
15 years	11.32	22.64
16 years	12.86	25.72

Male: 15 Y

Chron. Age	Std Dev.	2x Std. Dev
13 years	10.44	20.88
14 years	10.72	21.44
15 years	11.32	22.64
16 years	12.86	25.72
17 years	13.05	26.10

Male: 15 Y, 6 M

Chron. Age	Std Dev.	2x Std. Dev
13 years	10.44	20.88
14 years	10.72	21.44
15 years	11.32	22.64
16 years	12.86	25.72
17 years	13.05	26.10

Male: 16 Y

Chron. Age	Std Dev.	2x Std. Dev
13 years	10.44	20.88
14 years	10.72	21.44
15 years	11.32	22.64
16 years	12.86	25.72
17 years	13.05	26.10

Male: 17 Y

Chron. Age	Std Dev.	2x Std. Dev
13 years	10.44	20.88
14 years	10.72	21.44
15 years	11.32	22.64
16 years	12.86	25.72
17 years	13.05	26.10

Male: 18 Y

Chron. Age	Std Dev.	2x Std. Dev
13 years	10.44	20.88
14 years	10.72	21.44
15 years	11.32	22.64
16 years	12.86	25.72
17 years	13.05	26.10

Male: 19 Y

Chron. Age	Std Dev.	2x Std. Dev
13 years	10.44	20.88
14 years	10.72	21.44
15 years	11.32	22.64
16 years	12.86	25.72
17 years	13.05	26.10

Female: Newborn

Chron. Age	Std Dev.	2x Std. Dev
3 months	0.72	1.44
6 months	1.16	2.32
9 months	1.36	2.72
12 months	1.77	3.54
18 months	3.49	6.98

Female: 3 Months

Chron. Age	Std Dev.	2x Std. Dev
3 months	0.72	1.44
6 months	1.16	2.32
9 months	1.36	2.72
12 months	1.77	3.54
18 months	3.49	6.98

Female: 6 months

Chron. Age	Std Dev.	2x Std. Dev
3 months	0.72	1.44
6 months	1.16	2.32
9 months	1.36	2.72
12 months	1.77	3.54
18 months	3.49	6.98

Female: 9 Months

Chron. Age	Std Dev.	2x Std. Dev
3 months	0.72	1.44
6 months	1.16	2.32
9 months	1.36	2.72
12 months	1.77	3.54
18 months	3.49	6.98

Female: 1 Year

Chron. Age	Std Dev.	2x Std. Dev
6 months	1.16	2.32
9 months	1.36	2.72
12 months	1.77	3.54
18 months	3.49	6.98
2 years	4.64	9.28

Female: 1 Year, 3 Months

Chron. Age	Std Dev.	2x Std. Dev
6 months	1.16	2.32
9 months	1.36	2.72
12 months	1.77	3.54
18 months	3.49	6.98
2 years	4.64	9.28

Female: 1 Year, 6 Months

Chron. Age	Std Dev.	2x Std. Dev
9 months	1.36	2.72
12 months	1.77	3.54
18 months	3.49	6.98
2 years	4.64	9.28
2.5 years	5.37	10.74

Female: 2 Years

Chron. Age	Std Dev.	2x Std. Dev
12 months	1.77	3.54
18 months	3.49	6.98
2 years	4.64	9.28
2.5 years	5.37	10.74
3 years	5.97	11.94

Female: 2 Years, 6 Months

Chron. Age	Std Dev.	2x Std. Dev
18 months	3.49	6.98
2 years	4.64	9.28
2.5 years	5.37	10.74
3 years	5.97	11.94
3.5 years	7.48	14.96

Female: 3 Years

Chron. Age	Std Dev.	2x Std. Dev
2 years	4.64	9.28
2.5 years	5.37	10.74
3 years	5.97	11.94
3.5 years	7.48	14.96
4 year	8.98	17.96

Female: 3 years, 6 Months

Chron. Age	Std Dev.	2x Std. Dev
2.5 years	5.37	10.74
3 years	5.97	11.94
3.5 years	7.48	14.96
4 year	8.98	17.96
4.5 years	10.73	21.46

Female: 4 Years, 2 Months

Chron. Age	Std Dev.	2x Std. Dev
3 years	5.97	11.94
3.5 years	7.48	14.96
4 year	8.98	17.96
4.5 years	10.73	21.46
5 years	11.65	23.30

Female: 5 Years

Chron. Age	Std Dev.	2x Std. Dev
4 year	8.98	17.96
4.5 years	10.73	21.46
5 years	11.65	23.30
6 years	10.23	20.46
7 years	9.64	19.28

Female: 5 Years, 9 Months

Chron. Age	Std Dev.	2x Std. Dev
4.5 years	10.73	21.46
5 years	11.65	23.30
6 years	10.23	20.46
7 years	9.64	19.28
8 years	10.23	20.46

Female: 6 Years, 10 Months

Chron. Age	Std Dev.	2x Std. Dev
5 years	11.65	23.30
6 years	10.23	20.46
7 years	9.64	19.28
8 years	10.23	20.46
9 years	10.74	21.48

Female: 7 Years, 10 Months

Chron. Age	Std Dev.	2x Std. Dev
6 years	10.23	20.46
7 years	9.64	19.28
8 years	10.23	20.46
9 years	10.74	21.48
10 years	11.73	23.46

Female: 8 Years, 10 Months

Chron. Age	Std Dev.	2x Std. Dev
7 years	9.64	19.28
8 years	10.23	20.46
9 years	10.74	21.48
10 years	11.73	23.46
11 years	11.94	23.88

Female: 10 Years

Chron. Age	Std Dev.	2x Std. Dev
8 years	10.23	20.46
9 years	10.74	21.48
10 years	11.73	23.46
11 years	11.94	23.88
12 years	10.24	20.48

Female: 11 Years

Chron. Age	Std Dev.	2x Std. Dev
9 years	10.74	21.48
10 years	11.73	23.46
11 years	11.94	23.88
12 years	10.24	20.48
13 years	10.67	21.34

Female: 12 years

Chron. Age	Std Dev.	2x Std. Dev
10 years	11.73	23.46
11 years	11.94	23.88
12 years	10.24	20.48
13 years	10.67	21.34
14 years	11.30	22.60

Female: 13 Years

Chron. Age	Std Dev.	2x Std. Dev
11 years	11.94	23.88
12 years	10.24	20.48
13 years	10.67	21.34
14 years	11.30	22.60
15 years	9.23	18.46

Female: 13 Years, 6 Months

Chron. Age	Std Dev.	2x Std. Dev
11 years	11.94	23.88
12 years	10.24	20.48
13 years	10.67	21.34
14 years	11.30	22.60
15 years	9.23	18.46

Female: 14 Years

Chron. Age	Std Dev.	2x Std. Dev
12 years	10.24	20.48
13 years	10.67	21.34
14 years	11.30	22.60
15 years	9.23	18.46
16 years	7.31	14.62

Female: 15 Years

Chron. Age	Std Dev.	2x Std. Dev
12 years	10.24	20.48
13 years	10.67	21.34
14 years	11.30	22.60
15 years	9.23	18.46
16 years	7.31	14.62

Female: 16 Years

Chron. Age	Std Dev.	2x Std. Dev
12 years	10.24	20.48
13 years	10.67	21.34
14 years	11.30	22.60
15 years	9.23	18.46
16 years	7.31	14.62

Female: 17 years

Chron. Age	Std Dev.	2x Std. Dev
12 years	10.24	20.48
13 years	10.67	21.34
14 years	11.30	22.60
15 years	9.23	18.46
16 years	7.31	14.62

Female: 18 years

Chron. Age	Std Dev.	2x Std. Dev
12 years	10.24	20.48
13 years	10.67	21.34
14 years	11.30	22.60
15 years	9.23	18.46
16 years	7.31	14.62