Child Health Data Quality Report

Population Health, Information Services Division, NHS National Services Scotland

30 June, 2020

This report is based on data extracted quarterly from CHSP-PS. It shows summary measures of data quality and completeness, and assesses what percentage of applicable reviews have a valid value recorded for each measure. The definitions of each measure can be found at the end of the report.

Report rendered for: Lothian 2020 Q1

Data extracted on: 11 May, 2020

Colour Key

< 80.00% 80.00% - 95.00% > 95.00%

First Visit Review

Area	Number of Reviews	Feeding	Always Excl. Breastfed	Age Stopped	LAC	Smoking	Ethnicity & Language
East Lothian	222	100.00%	100.00%	100.00%	97.75%	97.75%	96.40%
Midlothian	224	100.00%	100.00%	100.00%	96.88%	98.66%	94.64%
City of Edinburgh	1086	99.36%	99.35%	93.24%	97.24%	97.88%	91.62%
West Lothian	373	100.00%	99.21%	91.94%	99.46%	99.46%	98.12%
Lothian Scotland	$1905 \\ 11351$	99.63% 99.59%	99.46% 99.66%	94.95% 96.85%	97.69% 97.52%	98.27% 98.58%	$93.81\% \\ 93.91\%$

6 - 8 Week Review

Area	Number of Reviews	Feeding	Always Excl. Breastfed	Age Stopped	Medical Checks	Sleeping
East Lothian	171	100.00%	100.00%	95.45%	80.70%	95.91%
Midlothian	196	98.98%	99.28%	97.87%	95.92%	96.94%
City of Edinburgh	919	98.91%	98.98%	96.50%	88.25%	97.06%
West Lothian	350	99.71%	100.00%	98.10%	87.43%	98.57%
Lothian Scotland	$\begin{array}{c} 1636\\ 8921 \end{array}$	99.21% 98.79%	$99.30\% \\ 99.48\%$	$97.05\%\ 98.19\%$	88.20% 85.20%	$97.25\%\ 97.63\%$

Area	Dev. Domains	LAC	Smoking	Ethnicity & Language	Length, Weight & OFC	Childsmile	HPI
East Lothian Midlothian	95.91% 89.29%	98.25% 98.98%	95.32% 97.45%	96.49% 98.47%	90.06% 91.84%	$0.00\% \\ 0.00\%$	$99.42\% \\ 100.00\%$
City of Edinburgh	90.64%	94.45%	90.32%	93.14%	89.45%	1.63%	99.46%
West Lothian	96.86%	99.43%	99.43%	99.14%	97.14%	0.57%	100.00%
Lothian Scotland	92.36% 92.89%	96.45% 95.70%	93.64% 94.48%	95.42% 94.71%	91.44% 91.66%	1.04% 2.13%	99.63% 98.73%

13 - 15 Month Review

Area	Number of Reviews	Milk Feeding	Age Stopped	Age Weaning	Dev. Domains	ASQ Scores
East Lothian	222	99.10%	100.00%	97.75%	94.14%	76.58%
Midlothian	240	93.75%	100.00%	95.83%	92.92%	97.08%
City of	1106	91.14%	96.27%	79.02%	86.17%	83.82%
Edinburgh						
West Lothian	435	95.63%	100.00%	95.86%	96.78%	93.10%
Lothian	2003	93.31%	98.07%	86.77%	90.16%	86.62%
Scotland	10803	93.12%	96.96%	85.50%	91.18%	69.01%

Area	LAC	Smoking	Ethnicity & Language	Tooth Brushing	Length & Weight	HPI
East Lothian	98.65%	96.85%	97.75%	95.95%	74.32%	100.00%
Midlothian	95.83%	98.33%	95.00%	96.67%	73.75%	100.00%
City of Edinburgh	95.48%	93.04%	93.04%	92.50%	69.80%	99.91%
West Lothian	99.54%	98.62%	99.31%	98.39%	80.92%	100.00%
Lothian Scotland	$96.75\%\ 95.94\%$	95.31% 96.40%	$95.16\%\ 95.45\%$	$94.66\%\ 91.31\%$	73.19% 77.07%	$99.95\% \\ 99.81\%$

207 241	78.26%96.68%			Language	Lootn Brushing	Height α Weight	1 1 1 1
241	96.68%	99.03%	96.14%	97.58%	97.58%	69.08%	100.00%
		99.17%	97.10%	97.51%	96.27%	67.22%	100.00%
City of 1081 83.72% Edinburgh	82.42%	93.34%	89.82%	90.56%	90.93%	50.88%	99.72%
West Lothian 493 91.89%	89.66%	99.19%	97.57%	98.78%	97.36%	65.92%	100.00%
Lothian 2022 87.83%	85.46%	96.04%	93.22%	94.11%	93.82%	58.36%	99.85%
Scotland 11488 89.55%	69.57%	97.03%	96.33%	96.20%	91.62%	63.86%	99.88%

4 - 5 Year Review

Health Board	Number of Reviews	Dev. Domains	ASQ Scores	LAC	Smoking	Ethnicity & Language	Tooth Brushing	Height <i>&</i> Weight	IdH
East Lothian	209	87.08%	71.77%	96.17%	90.91%	85.17%	92.34%	63.64%	100.00%
Midlothian	181	91.16%	93.37%	96.69%	95.58%	83.43%	95.03%	57.46%	100.00%
City of Edinburgh	1130	70.18%	64.07%	88.67%	79.65%	73.89%	80.35%	44.42%	99.65%
West Lothian	424	85.38%	80.42%	99.53%	96.93%	86.56%	95.75%	71.93%	99.53%
Lothian	1944	77.26%	71.19%	92.59%	86.11%	78.76%	86.37%	53.70%	89.69%
$\mathbf{Scotland}$	9713	84.29%	58.14%	95.92%	94.66%	85.87%	89.73%	65.87%	99.81%

Comparison to Previous Quarters

First Visit Review

Health Board Level

Year & Quarter	Number of Reviews	Feeding	Always Excl. Breastfed	Age Stopped	LAC	Smoking	Ethnicity & Language
2019 Q2	2058	99.71%	99.43%	94.12%	97.33%	98.83%	94.46%
2019 Q3	2231	99.64%	99.94%	96.43%	97.53%	98.52%	95.92%
2019 Q4	2009	99.60%	99.94%	93.72%	97.61%	98.66%	93.63%
2020 Q1	1905	99.63%	99.46%	94.95%	97.69%	98.27%	93.81%

Local Authority	Year & Quarter	Number of Reviews	Feeding	Always Excl. Breastfed	Age Stopped	LAC	Smoking	Ethnicity & Language
East Lothian	2019 Q2	246	99.19%	100.00%	96.43%	96.34%	97.97%	96.75%
East Lothian	2019 Q3	269	99.63%	100.00%	96.15%	97.77%	97.40%	98.14%
East Lothian	2019 Q4	221	100.00%	100.00%	92.31%	95.93%	98.64%	95.02%
East Lothian	$2020 \ Q1$	222	100.00%	100.00%	100.00%	97.75%	97.75%	96.40%
Midlothian	2019 Q2	259	100.00%	99.40%	90.00%	94.59%	98.07%	96.14%
Midlothian	2019 Q3	287	100.00%	100.00%	95.83%	94.43%	98.26%	97.21%
Midlothian	2019 Q4	238	100.00%	100.00%	96.97%	95.38%	98.74%	97.90%
Midlothian	$2020 \ Q1$	224	100.00%	100.00%	100.00%	96.88%	98.66%	94.64%
City of Edinburgh	2019 Q2	1145	99.65%	99.19%	91.18%	97.29%	99.04%	91.62%
City of Edinburgh	2019 Q3	1185	99.41%	99.90%	97.50%	97.47%	98.23%	93.92%
City of Edinburgh	2019 Q4	1145	99.39%	99.90%	93.85%	97.64%	98.17%	90.48%
City of Edinburgh	2020 Q1	1086	99.36%	99.35%	93.24%	97.24%	97.88%	91.62%
West Lothian	2019 Q2	408	100.00%	100.00%	98.15%	99.75%	99.26%	100.00%
West Lothian	2019 Q3	490	100.00%	100.00%	95.71%	99.39%	100.00%	98.78%
West Lothian	2019 Q4	405	99.75%	100.00%	92.86%	99.75%	100.00%	99.26%
West Lothian	$2020 \ Q1$	373	100.00%	99.21%	91.94%	99.46%	99.46%	98.12%

6 - 8 Week Review

Year & Quarter	Number of Reviews	Feeding	Always Excl. Breastfed	Age Stopped	Medical Checks	Sleeping
2019 Q2	1961	99.03%	99.27%	97.58%	92.66%	96.79%
$2019 \mathrm{Q3}$	2080	98.85%	98.88%	99.52%	93.51%	96.92%
2019 Q4	1999	99.00%	99.87%	98.03%	93.30%	98.10%
$2020 \ \mathbf{Q1}$	1636	99.21%	99.30%	97.05%	88.20%	97.25%

Health Board Level

Year & Quarter	Dev. Domains	LAC	Smoking	Ethnicity & Language	Height, Weight & OFC	Childsmile	HPI
2019 Q2	93.37%	96.12%	93.37%	95.36%	94.24%	0.51%	99.75%
2019 Q3	92.79%	96.83%	95.91%	96.25%	94.66%	0.72%	99.90%
2019 Q4	92.25%	96.95%	94.80%	95.80%	95.65%	1.75%	99.75%
$2020 \ Q1$	92.36%	96.45%	93.64%	95.42%	91.44%	1.04%	99.63%

Local Authority	Year & Quarter	Number of Reviews	Feeding	Always Excl. Breastfed	Age Stopped	Medical Checks	Sleeping
East Lothian	2019 Q2	227	99.12%	100.00%	100.00%	88.11%	96.48%
East Lothian	2019 Q3	253	98.81%	99.45%	100.00%	88.54%	98.81%
East Lothian	$2019 \mathrm{Q4}$	231	100.00%	100.00%	100.00%	95.67%	99.57%
East Lothian	$2020 \ Q1$	171	100.00%	100.00%	95.45%	80.70%	95.91%
Midlothian	2019 Q2	254	99.61%	100.00%	96.08%	98.82%	99.21%
Midlothian	2019 Q3	276	99.28%	100.00%	98.39%	97.83%	99.28%
Midlothian	$2019 \mathrm{Q4}$	248	100.00%	100.00%	98.41%	96.37%	99.19%
Midlothian	$2020~\mathrm{Q1}$	196	98.98%	99.28%	97.87%	95.92%	96.94%
City of Edinburgh	2019 Q2	1100	98.55%	98.82%	97.14%	91.09%	96.09%
City of Edinburgh	2019 Q3	1112	98.29%	98.22%	99.41%	92.90%	95.86%
City of Edinburgh	2019 Q4	1087	98.16%	99.78%	97.63%	90.62%	97.70%
City of Edinburgh	2020 Q1	919	98.91%	98.98%	96.50%	88.25%	97.06%
West Lothian	2019 Q2	380	100.00%	100.00%	97.85%	95.79%	97.37%
West Lothian	2019 Q3	439	100.00%	100.00%	100.00%	95.22%	97.04%
West Lothian	$2019 \mathrm{Q4}$	433	100.00%	100.00%	97.56%	97.00%	97.69%
West Lothian	2020 Q1	350	99.71%	100.00%	98.10%	87.43%	98.57%

13 - 15 Month Review

Year & Quarter	Number of Reviews	Milk Feeding	Age Stopped	Age Weaning	Dev. Domains	ASQ Scores
2019 Q2 2019 Q3 2019 Q4 2020 Q1	1929 2105 1991 2003	$\begin{array}{c} 92.90\% \\ 93.68\% \\ 93.67\% \\ 93.31\% \end{array}$	$\begin{array}{c} 99.36\% \\ 99.47\% \\ 99.31\% \\ 98.07\% \end{array}$	88.34% 84.42% 88.00% 86.77%	89.58% 90.12% 92.37% 90.16%	85.64% 88.98% 88.10% 86.62%
Year & Quarter	LAC	Smoking	Ethnicity &	Tooth Brushing	Height & Weight	HPI

Health Board Level

Year & Quarter	LAC	$\mathbf{Smoking}$	${f Ethnicity} \&$	Tooth Brushing	Height & Weight	HPI
Quarter			« Language	Drusning	weight	
			Language			
2019 Q2	95.33%	93.88%	94.09%	93.26%	77.55%	99.90%
2019 Q3	97.15%	95.68%	94.87%	94.68%	81.00%	99.90%
2019 Q4	96.43%	95.88%	94.83%	95.63%	78.91%	99.60%
2020 Q1	96.75%	95.31%	95.16%	94.66%	73.19%	99.95%

Local Authority	Year & Quarter	Number of Reviews	Milk Feeding	Age Stopped	Age Weaning	Dev. Domains	ASQ Scores
East Lothian	2019 Q2	265	98.87%	100.00%	98.11%	91.70%	86.04%
East Lothian	2019 Q3	235	97.02%	100.00%	88.51%	86.81%	76.60%
East Lothian	$2019 \mathrm{Q4}$	257	98.83%	100.00%	97.28%	93.77%	80.93%
East Lothian	$2020 \ Q1$	222	99.10%	100.00%	97.75%	94.14%	76.58%
Midlothian	2019 Q2	225	99.11%	100.00%	97.78%	91.56%	89.33%
Midlothian	2019 Q3	253	98.42%	100.00%	95.65%	93.68%	87.75%
Midlothian	$2019 \mathrm{Q4}$	225	95.56%	100.00%	95.11%	92.00%	91.56%
Midlothian	$2020 \ Q1$	240	93.75%	100.00%	95.83%	92.92%	97.08%
City of Edinburgh	2019 Q2	1080	88.89%	99.00%	81.67%	87.59%	82.69%
City of Edinburgh	2019 Q3	1174	90.63%	99.21%	76.49%	88.84%	89.78%
City of Edinburgh	2019 Q4	1067	90.63%	98.58%	80.13%	90.82%	86.41%
City of Edinburgh	2020 Q1	1106	91.14%	96.27%	79.02%	86.17%	83.82%
West Lothian	2019 Q2	359	96.66%	99.43%	95.26%	92.76%	91.92%
West Lothian	2019 Q 3	443	97.29%	99.41%	96.84%	93.23%	94.13%
West Lothian	2019 Q4	442	97.06%	100.00%	97.96%	95.48%	94.57%
West Lothian	2020 Q1	435	95.63%	100.00%	95.86%	96.78%	93.10%

27 - 30 Month Review

Health Board Level

Year & Quarter	Number of Reviews	Dev. Domains	ASQ Scores	LAC	Smoking	Ethnicity & Language	Tooth Brushing	Height & Weight	HPI
2019 Q2	2020	88.27%	87.23%	94.95%	93.96%	94.55%	94.31%	61.19%	99.65%
2019 Q3	1931	89.28%	89.18%	95.75%	94.92%	94.46%	94.36%	62.82%	99.95%
2019 Q4	2070	90.58%	90.24%	96.86%	95.89%	95.22%	95.80%	64.59%	99.90%
$2020 \ Q1$	2022	87.83%	85.46%	96.04%	93.22%	94.11%	93.82%	58.36%	99.85%

Local Authority	Year & Quarter	Number of Reviews	Dev. Domains	ASQ Scores	LAC	Smoking	Ethnicity & Language	Tooth Brushing	Height & Weight	HPI
East Lothian	2019 Q2	266	90.98%	87.22%	95.49%	96.99%	95.49%	96.62%	69.55%	99.62%
East Lothian	2019 Q3	234	94.02%	88.46%	97.01%	95.73%	94.87%	95.30%	72.65%	100.00%
East Lothian	2019 Q4	256	90.62%	90.23%	97.66%	97.66%	96.09%	97.66%	78.12%	100.00%
East Lothian	2020 Q1	207	91.79%	78.26%	99.03%	96.14%	97.58%	97.58%	69.08%	100.00%
Midlothian	2019 Q2	269	89.22%	88.48%	96.28%	97.40%	95.91%	96.65%	70.26%	99.63%
Midlothian	2019 Q3	227	91.19%	91.19%	97.80%	98.68%	94.71%	98.24%	76.65%	100.00%
Midlothian	2019 Q4	238	94.96%	93.28%	98.74%	97.48%	95.80%	97.06%	77.31%	99.58%
Midlothian	2020 Q1	241	94.61%	96.68%	99.17%	97.10%	97.51%	96.27%	67.22%	100.00%
City of Edinburgh	2019 Q2	1080	84.72%	85.00%	92.59%	90.28%	92.50%	91.39%	52.87%	99.54%
City of Edinburgh	2019 Q3	1083	87.53%	87.72%	93.63%	92.34%	93.07%	91.78%	53.92%	99.91%
City of Edinburgh	2019 Q4	1078	88.87%	88.22%	94.90%	93.60%	93.23%	93.60%	54.45%	99.91%
City of Edinburgh	2020 Q1	1081	83.72%	82.42%	93.34%	89.82%	90.56%	90.93%	50.88%	99.72%
West Lothian	2019 Q2	405	95.31%	92.35%	100.00%	99.51%	98.52%	99.01%	71.85%	100.00%
West Lothian	2019 Q3	387	90.18%	92.51%	99.74%	99.48%	97.93%	98.71%	73.64%	100.00%
West Lothian	2019 Q4	498	92.17%	93.17%	99.80%	99.20%	98.80%	99.00%	73.49%	100.00%
West Lothian	2020 Q1	493	91.89%	89.66%	99.19%	97.57%	98.78%	97.36%	65.92%	100.00%

4 - 5 Year Review

Health Board Level

Year & Quarter	Number of Reviews	Dev. Domains	ASQ Scores	LAC	Smoking	Ethnicity & Language	Tooth Brushing	Height & Weight	HPI
2019 Q2	1321	82.89%	77.21%	89.10%	89.78%	86.75%	89.17%	66.46%	100.00%
2019 Q3	1667	86.20%	82.96%	93.88%	91.96%	80.02%	91.24%	66.11%	99.88%
2019 Q4	1850	86.32%	81.62%	94.00%	90.76%	81.14%	91.08%	64.59%	99.95%
$2020 \ Q1$	1944	77.26%	71.19%	92.59%	86.11%	78.76%	86.37%	53.70%	99.69%

Local Authority	Year & Quarter	Number of Reviews	Dev. Domains	ASQ Scores	LAC	Smoking	Ethnicity & Language	Tooth Brushing	Height & Weight	HPI
East Lothian	2019 Q2	186	83.33%	74.73%	89.25%	88.17%	87.63%	86.02%	69.89%	100.00%
East Lothian	2019 Q3	216	80.09%	75.46%	95.37%	93.06%	87.50%	90.74%	73.15%	100.00%
East Lothian	2019 Q4	272	87.87%	81.25%	96.69%	93.01%	80.51%	93.38%	73.90%	100.00%
East Lothian	2020 Q1	209	87.08%	71.77%	96.17%	90.91%	85.17%	92.34%	63.64%	100.00%
Midlothian	2019 Q2	194	88.66%	82.47%	92.78%	95.36%	91.75%	94.33%	82.99%	100.00%
Midlothian	2019 Q3	180	91.11%	85.00%	91.67%	95.00%	81.11%	95.00%	82.78%	100.00%
Midlothian	2019 Q4	158	92.41%	91.77%	98.73%	98.73%	82.91%	98.73%	86.71%	100.00%
Midlothian	2020 Q1	181	91.16%	93.37%	96.69%	95.58%	83.43%	95.03%	57.46%	100.00%
City of Edinburgh	2019 Q2	673	76.97%	72.07%	84.55%	84.99%	82.32%	85.14%	52.01%	100.00%
City of Edinburgh	2019 Q3	912	82.89%	80.37%	91.56%	87.94%	75.55%	87.83%	53.18%	99.78%
City of Edinburgh	2019 Q4	1090	82.29%	77.61%	90.92%	86.61%	77.52%	87.34%	52.94%	99.91%
City of Edinburgh	2020 Q1	1130	70.18%	64.07%	88.67%	79.65%	73.89%	80.35%	44.42%	99.65%
West Lothian	2019 Q2	268	93.28%	88.06%	97.76%	98.88%	93.66%	97.76%	88.43%	100.00%
West Lothian	2019 Q3	359	95.82%	93.04%	100.00%	100.00%	86.35%	98.33%	86.35%	100.00%
West Lothian	2019 Q4	330	95.45%	90.30%	99.70%	98.79%	92.73%	97.88%	84.85%	100.00%
West Lothian	$2020 \ Q1$	424	85.38%	80.42%	99.53%	96.93%	86.56%	95.75%	71.93%	99.53%

Data Quality Definitions

In the context of child health review records, data quality assesses the percentage of these which contain complete and valid data. For the data in a record for a certain category to be considered complete and valid a set of criteria must be met. The criteria in question for each review and category within these are outlined below.

General

Looked After Children (LAC)

A value of 0 - 6 recorded for **Current LAC Status**

Smoking

A value of Y or N recorded for both **Primary carer current smoker** and **Child exposed to 2nd hand smoke**

Ethnicity & Language

A value of 1A, 1B, 1C, 1K, 1L, 1Z, 2A, 3F, 3G, 3H, 3J, 3Z, 4D, 4Y, 5C, 5D, 5Y, 6A, 6Z, or 98 recorded for **Ethnicity**, a value of Y or N recorded for **Is English 1st language at home?**, and a value of Y or N recorded for **Bilingual/multilingual**

Feeding

A value of Y or N recorded for Ever breast fed and a value of B, F, M, or O recorded for Current feeding

Always Exclusively Breastfed

A value of Y or N recorded for **Always exclusively breast fed** for those with a Y recorded for **Ever breast fed**

Tooth Brushing

A value of Y or N recorded for **Toothbrushing twice daily**

Development Domains

A value of N, C, or P recorded for **Speech, Language & Communication**, **Gross Motor**, **Fine Motor**, **Problem Solving**, **Personal/Social**, **Emotional/Behavioural**, **Vision**, and **Hearing**

Ages and Stages Questionnaire (ASQ) Scores

A value between 0 and 60 recorded for Speech, Language & Communication, Gross Motor, Fine Motor, Problem Solving, and Personal/Social

Health Plan Indicator (HPI)

A value of A or C recorded for **Health Plan Indicator (HPI)**

Review Specific

First Visit

Age Stopped

A value of 1 - 7 recorded for **Days** or a value of 1 - 5 recorded for **Weeks** in **Child's age when breast feeding stopped**, for those with a Y recorded for **Ever breast fed** and a valid value other than B or M recorded for **Current feeding**. This value cannot be larger than the child's age at review.

6 - 8 Week Review

Age Stopped

A value of 1 - 35 is found in the column in which **Days** in **Child's age when breast feeding stopped** is added to **Weeks** converted to days (multiplied by 7), for those with a Y recorded for **Ever breast fed** and a valid value other than B or M recorded for **Current feeding**. This value cannot be larger than the child's age at review.

Medical Checks

A value of N, A, or D recorded for **Heart**, **Hips R** and **L**, **Genitalia**, **Femoral Pulses R** and **L**, and **Eyes: (red reflex) R** and **L**. A value of N, A, or D recorded for **Testes R** and **L** if **Gender** is recorded as Male

Sleeping

A value of Y or N recorded for either **Prone**, **Supine**, or **Side** in **Sleeping**

Development Domains

A value of N, C, or P recorded for Gross Motor, Hearing, Speech, Language & Communication, Vision, and Personal/Social in Development

Length, Weight & Occipito-frontal Circumference (OFC)

A value of 9.71 - 100.79 recorded for Length, a value of 2.5 - 7.5 recorded for Weight, and a value of 17.30 - 57.98 recorded for OFC

Childsmile

A value of R or W recorded for **Childsmile** in Future Actions

13 - 15 Month Review

Milk Feeding

A value of Y or N recorded for **Ever breast fed** and a value of B, F, M, C, or O recorded for **Current feeding**

Age Stopped

A value of 1 - 84 is found in the column in which **Days** in **Child's age when breast feeding stopped** is added to **Weeks** converted to days (multiplied by 7), for those with a Y recorded for **Ever breast fed** and a valid value other than B or M recorded for **Current feeding**

Age Weaning

A value of 1 - 10 recorded for Child's age when weaning foods introduced: Months

Length & Weight

A value of 60 - 100 recorded for Length and a value of 5 - 25 recorded for Weight

27 - 30 Month Review

Height & Weight

A value of 70 - 120 recorded for Length/height and a value of 10 - 25 recorded for Weight

4 - 5 Year Review

Height & Weight

A value of 80 - 120 recorded for Length/height and a value of 10 - 30 recorded for Weight