

Appendix C. Estimates of Sampling Errors

The sample of respondents selected in the Thailand Multiple Indicator Cluster Survey is only one of the samples that could have been selected from the same population, using the same design and size. Each of these samples would yield results that differ somewhat from the results of the actual sample selected. Sampling errors are a measure of the variability between all possible samples. The extent of variability is not known exactly, but can be estimated statistically from the survey results.

The following sampling error measures are presented in this appendix for each of the selected indicators:

- Standard error (*se*): Sampling errors are usually measured in terms of standard errors for particular indicators (means, proportions etc). Standard error is the square root of the variance. The Taylor linearization method is used for the estimation of standard errors.
- Coefficient of variation (se/r) is the ratio of the standard error to the value of the indicator
- Design effect (*deff*) is the ratio of the actual variance of an indicator, under the sampling method used in the survey, to the variance calculated under the assumption of simple random sampling. The square root of the design effect (*deff*) is used to show the efficiency of the sample design. A *deff* value of 1.0 indicates that the sample design is as efficient as a simple random sample, while a *deff* value above 1.0 indicates the increase in the standard error due to the use of a more complex sample design.
- Confidence limits are calculated to show the interval within which the true value for the population can be reasonably assumed to fall. For any given statistic calculated from the survey, the value of that statistics will fall within a range of plus or minus two times the standard error ($p + 2.se$ or $p - 2.se$) of the statistic in 95 percent of all possible samples of identical size and design.

For the calculation of sampling errors from MICS data, SPSS Version 14 Complex Samples module has been used. The results are shown in the tables that follow. In addition to the sampling error measures described above, the tables also include weighted and unweighted counts of denominators for each indicator.

Sampling errors are calculated for indicators of primary interest, for the national total, for the regions, and for urban and rural areas. Three of the selected indicators are based on households, 8 are based on household members, 13 are based on women, and 15 are based on children under 5. All indicators presented here are in the form of proportions. Table SE.1 shows the list of indicators for which sampling errors are calculated, including the base population (denominator) for each indicator. Tables SE.2 to SE.9 show the calculated sampling errors.

Table SE.1: Indicators selected for sampling error calculations

List of indicators selected for sampling error calculations, and base populations (denominators) for each indicator, Thailand, 2005-2006

MICS Indicator		Base Population
HOUSEHOLDS		
41	Iodized salt consumption	All households
HOUSEHOLD MEMBERS		
11	Use of improved drinking water sources	All household members
12	Use of improved sanitation facilities	All household members
55	Net primary school attendance rate	Children of primary school age
56	Net secondary school attendance rate	Children of secondary school age
59	Primary completion rate	Children of primary school completion age
71	Child labour	Children aged 5-14 years
75	Prevalence of orphans	Children aged under 18
76	Prevalence of vulnerable children	Children aged under 18
WOMEN		
4	Skilled attendant at delivery	Women aged 15-49 years with a live birth in the last 2 years
20	Antenatal care	Women aged 15-49 years with a live birth in the last 2 years
21	Contraceptive prevalence	Women aged 15-49 currently married/in union
60	Adult literacy	Women aged 15-24 years
67	Marriage before age 18	Women aged 20-49 years
82	Comprehensive knowledge about HIV prevention among young people	Women aged 15-24 years
86	Attitude towards people with HIV/AIDS	Women aged 15-49 years
88	Women who have been tested for HIV	Women aged 15-49 years
89	Knowledge of mother- to-child transmission of HIV	Women aged 15-49 years
UNDER-5s		
6	Underweight prevalence	Children under age 5
25	Tuberculosis immunization coverage	Children aged 12-23 months
26	Polio immunization coverage	Children aged 12-23 months
27	Immunization coverage for DPT	Children aged 12-23 months
28	Measles immunization coverage	Children aged 12-23 months
31	Fully immunized children	Children aged 12-23 months
-	Acute respiratory infection in last two weeks	Children under age 5
22	Antibiotic treatment of suspected pneumonia	Children under age 5 with suspected pneumonia in the last 2 weeks
-	Diarrhoea in last two weeks	Children under age 5
35	Received ORT or increased fluids and continued feeding	Children under age 5 with diarrhoea in the last 2 weeks
46	Support for learning	Children under age 5
62	Birth registration	Children under age 5

Table SE.2: Sampling errors: Total sampleStandard errors, coefficients of variation, design effects (*deff*), square root of design effects (*deft*) and confidence intervals for selected indicators, Thailand, 2005-2006

	Table	Value (<i>r</i>)	Standard error (<i>se</i>)	Coefficient of variation (<i>se/r</i>)	Design effect (<i>deff</i>)	Square root of design effect (<i>deft</i>)	Weighted count	Unweighted count	Confidence limits	
									<i>r</i> - 2 <i>se</i>	<i>r</i> + 2 <i>se</i>
HOUSEHOLDS										
Iodized salt consumption	NU.5	0.000	0.000	.	.	.	1,776,109	4,123	0.000	0.000
HOUSEHOLD MEMBERS										
Use of improved drinking water sources	EN.1	0.940	0.006	0.006	75.462	8.687	65,064,070	137,006	0.929	0.952
Use of improved sanitation facilities	EN.5	0.992	0.001	0.001	21.510	4.638	65,064,070	137,006	0.990	0.994
Net primary school attendance rate	ED.3	0.979	0.002	0.002	2.170	1.473	6,187,476	14,476	0.975	0.982
Net secondary school attendance rate	ED.4	0.798	0.006	0.008	3.065	1.751	6,478,643	13,108	0.786	0.810
Primary completion rate	ED.6	0.868	0.009	0.010	1.779	1.334	1,035,743	2,506	0.850	0.886
Child labour	CP.2	0.083	0.003	0.035	2.630	1.622	9,990,624	23,389	0.077	0.089
Prevalence of orphans	HA.10	0.047	0.002	0.041	3.335	1.826	18,174,805	38,954	0.043	0.051
Prevalence of vulnerable children	HA.11	0.028	0.002	0.073	5.827	2.414	18,174,805	38,954	0.024	0.032
WOMEN										
Skilled attendant at delivery	RH.5	0.973	0.005	0.005	2.605	1.614	1,848,778	3,365	0.963	0.982
Antenatal care	RH.3	0.978	0.003	0.003	1.699	1.304	1,848,778	3,365	0.971	0.985
Contraceptive prevalence	RH.1	0.716	0.006	0.009	5.142	2.268	13,544,028	26,984	0.704	0.728
Adult literacy	ED.8	0.964	0.003	0.004	2.921	1.709	5,140,712	8,784	0.957	0.970
Marriage before age 18	CP.5	0.196	0.009	0.048	2.206	1.485	2,598,520	3,996	0.178	0.215
Comprehensive knowledge about HIV prevention among young people	HA.3	0.419	0.007	0.016	6.960	2.638	18,542,128	36,960	0.405	0.432
Attitude towards people with HIV/AIDS	HA.5	0.207	0.006	0.027	7.111	2.667	18,222,198	36,253	0.196	0.218
Knowledge of mother- to-child transmission of HIV	HA.4	0.684	0.008	0.011	9.915	3.149	18,542,128	36,960	0.668	0.699
UNDER-5s										
Underweight prevalence	NU.1	0.093	0.005	0.049	2.237	1.496	4,632,212	8,993	0.084	0.102
Tuberculosis immunization coverage	CH.2	0.981	0.003	0.003	0.972	0.986	974,861	1,932	0.974	0.987
Polio immunization coverage	CH.2	0.936	0.007	0.007	1.574	1.255	974,861	1,932	0.922	0.950
Immunization coverage for DPT	CH.2	0.935	0.008	0.009	2.103	1.450	974,861	1,932	0.919	0.951
Measles immunization coverage	CH.2	0.961	0.006	0.006	2.010	1.418	974,861	1,932	0.949	0.974
Fully immunized children	CH.2	0.897	0.009	0.010	1.712	1.308	974,861	1,932	0.878	0.915
Acute respiratory infection in last two weeks	CH.6	0.045	0.004	0.082	2.990	1.729	4,837,680	9,409	0.038	0.053
Antibiotic treatment of suspected pneumonia	CH.7	0.648	0.016	0.025	0.432	0.657	219,589	379	0.616	0.681
Diarrhoea in last two weeks	CH.4	0.087	0.005	0.054	2.596	1.611	4,837,680	9,409	0.077	0.096
Received ORT or increased fluids and continued feeding	CH.5	0.464	0.019	0.042	1.145	1.070	419,746	767	0.426	0.503
Support for learning	CD.1	0.786	0.009	0.012	4.642	2.154	4,837,680	9,409	0.768	0.805

Table SE.3: Sampling errors: Urban areasStandard errors, coefficients of variation, design effects (*deff*), square root of design effects (*deft*) and confidence intervals for selected indicators, Thailand, 2005-2006

	Table	Value (<i>r</i>)	Standard error (<i>se</i>)	Coefficient of variation (<i>se/r</i>)	Design effect (<i>deff</i>)	Square root of design effect (<i>deft</i>)	Weighted count	Unweighted count	Confidence limits	
									<i>r</i> - 2 <i>se</i>	<i>r</i> + 2 <i>se</i>
HOUSEHOLDS										
Iodized salt consumption	NU.5	0.000	0.000	.	.	.	1,075,659	3,117	0.000	0.000
HOUSEHOLD MEMBERS										
Use of improved drinking water sources	EN.1	0.976	0.003	0.003	20.658	4.545	19,630,255	74,985	0.971	0.981
Use of improved sanitation facilities	EN.5	0.997	0.001	0.001	9.304	3.050	19,630,255	74,985	0.996	0.999
Net primary school attendance rate	ED.3	0.980	0.002	0.002	2.268	1.506	1,648,300	7,388	0.975	0.985
Net secondary school attendance rate	ED.4	0.803	0.011	0.013	5.209	2.282	1,744,691	7,001	0.782	0.825
Primary completion rate	ED.6	0.874	0.011	0.012	1.349	1.161	291,571	1,304	0.852	0.895
Child labour	CP.2	0.080	0.004	0.054	3.013	1.736	2,661,379	11,897	0.071	0.089
Prevalence of orphans	HA.10	0.046	0.002	0.054	2.820	1.679	4,903,749	19,833	0.041	0.051
Prevalence of vulnerable children	HA.11	0.023	0.002	0.100	4.610	2.147	4,903,749	19,833	0.018	0.027
WOMEN										
Skilled attendant at delivery	RH.5	0.994	0.002	0.002	1.604	1.267	485,353	1,745	0.990	0.999
Antenatal care	RH.3	0.978	0.006	0.006	2.620	1.619	485,353	1,745	0.967	0.990
Contraceptive prevalence	RH.1	0.680	0.008	0.012	4.538	2.130	3,950,995	14,727	0.664	0.697
Adult literacy	ED.8	0.975	0.004	0.004	2.621	1.619	1,551,888	5,041	0.968	0.982
Marriage before age 18	CP.5	0.122	0.008	0.068	1.577	1.256	835,861	2,417	0.105	0.139
Comprehensive knowledge about HIV prevention among young people	HA.3	0.416	0.010	0.023	8.337	2.887	6,042,565	21,265	0.396	0.435
Attitude towards people with HIV/AIDS	HA.5	0.199	0.006	0.031	4.971	2.229	5,983,396	20,963	0.187	0.212
Knowledge of mother- to-child transmission of HIV	HA.4	0.613	0.011	0.019	11.850	3.442	6,042,565	21,265	0.590	0.636
UNDER-5s										
Underweight prevalence	NU.1	0.056	0.005	0.087	1.976	1.406	1,282,847	4,387	0.046	0.066
Tuberculosis immunization coverage	CH.2	0.975	0.003	0.003	0.303	0.550	278,651	929	0.970	0.981
Polio immunization coverage	CH.2	0.901	0.017	0.018	2.864	1.692	278,651	929	0.868	0.934
Immunization coverage for DPT	CH.2	0.918	0.015	0.017	2.878	1.696	278,651	929	0.888	0.949
Measles immunization coverage	CH.2	0.962	0.010	0.011	2.771	1.665	278,651	929	0.941	0.983
Fully immunized children	CH.2	0.870	0.017	0.019	2.272	1.507	278,651	929	0.837	0.904
Acute respiratory infection in last two weeks	CH.6	0.031	0.004	0.114	1.951	1.397	1,368,046	4,624	0.024	0.039
Antibiotic treatment of suspected pneumonia	CH.7	0.681	0.015	0.023	0.170	0.412	42,929	156	0.651	0.712
Diarrhoea in last two weeks	CH.4	0.080	0.007	0.084	2.858	1.691	1,368,046	4,624	0.067	0.094
Received ORT or increased fluids and continued feeding	CH.5	0.421	0.023	0.056	0.828	0.910	109,545	366	0.374	0.468
Support for learning	CD.1	0.813	0.010	0.012	3.098	1.760	1,368,046	4,624	0.792	0.833

Table SE.4: Sampling errors: Rural areasStandard errors, coefficients of variation, design effects (*deff*), square root of design effects (*deft*) and confidence intervals for selected indicators, Thailand, 2005-2006

	Table	Value (<i>r</i>)	Standard error (<i>se</i>)	Coefficient of variation (<i>se/r</i>)	Design effect (<i>deff</i>)	Square root of design effect (<i>deft</i>)	Weighted count	Unweighted count	Confidence limits	
									<i>r</i> - 2 <i>se</i>	<i>r</i> + 2 <i>se</i>
HOUSEHOLDS										
Iodized salt consumption	NU.5	0.000	0.000	.	.	.	700,450	1,006	0.000	0.000
HOUSEHOLD MEMBERS										
Use of improved drinking water sources	EN.1	0.925	0.008	0.008	54.509	7.383	45,433,815	62,021	0.909	0.941
Use of improved sanitation facilities	EN.5	0.990	0.002	0.002	15.037	3.878	45,433,815	62,021	0.987	0.993
Net primary school attendance rate	ED.3	0.978	0.002	0.002	1.667	1.291	4,539,176	7,088	0.974	0.983
Net secondary school attendance rate	ED.4	0.796	0.007	0.009	2.049	1.431	4,733,952	6,107	0.781	0.810
Primary completion rate	ED.6	0.866	0.012	0.014	1.445	1.202	744,172	1,202	0.843	0.890
Child labour	CP.2	0.084	0.004	0.044	2.010	1.418	7,329,244	11,492	0.077	0.091
Prevalence of orphans	HA.10	0.048	0.003	0.053	2.670	1.634	13,271,056	19,121	0.043	0.053
Prevalence of vulnerable children	HA.11	0.029	0.003	0.089	4.541	2.131	13,271,056	19,121	0.024	0.034
WOMEN										
Skilled attendant at delivery	RH.5	0.965	0.006	0.006	1.705	1.306	1,363,425	1,620	0.953	0.977
Antenatal care	RH.3	0.978	0.004	0.004	1.193	1.092	1,363,425	1,620	0.970	0.986
Contraceptive prevalence	RH.1	0.731	0.008	0.011	4.144	2.036	9,593,032	12,257	0.714	0.747
Adult literacy	ED.8	0.959	0.005	0.005	2.014	1.419	3,588,825	3,743	0.949	0.968
Marriage before age 18	CP.5	0.231	0.013	0.057	1.565	1.251	1,762,659	1,579	0.205	0.258
Comprehensive knowledge about HIV prevention among young people	HA.3	0.420	0.009	0.021	5.067	2.251	12,499,563	15,695	0.403	0.438
Attitude towards people with HIV/AIDS	HA.5	0.211	0.008	0.037	5.715	2.391	12,238,801	15,290	0.195	0.227
Knowledge of mother- to-child transmission of HIV	HA.4	0.718	0.010	0.013	7.181	2.680	12,499,563	15,695	0.698	0.737
UNDER-5s										
Underweight prevalence	NU.1	0.107	0.006	0.056	1.725	1.313	3,349,365	4,606	0.095	0.119
Tuberculosis immunization coverage	CH.2	0.983	0.004	0.004	1.035	1.017	696,210	1,003	0.974	0.991
Polio immunization coverage	CH.2	0.950	0.007	0.007	1.036	1.018	696,210	1,003	0.935	0.964
Immunization coverage for DPT	CH.2	0.942	0.010	0.010	1.709	1.307	696,210	1,003	0.923	0.961
Measles immunization coverage	CH.2	0.961	0.008	0.008	1.562	1.250	696,210	1,003	0.946	0.976
Fully immunized children	CH.2	0.907	0.011	0.012	1.397	1.182	696,210	1,003	0.885	0.929
Acute respiratory infection in last two weeks	CH.6	0.051	0.005	0.098	2.479	1.575	3,469,634	4,785	0.041	0.061
Antibiotic treatment of suspected pneumonia	CH.7	0.640	0.020	0.031	0.378	0.615	176,660	223	0.601	0.680
Diarrhoea in last two weeks	CH.4	0.089	0.006	0.066	2.077	1.441	3,469,634	4,785	0.078	0.101
Received ORT or increased fluids and continued feeding	CH.5	0.479	0.024	0.051	0.960	0.980	310,201	401	0.430	0.528
Support for learning	CD.1	0.776	0.012	0.015	3.970	1.993	3,469,634	4,785	0.752	0.800

Table SE.5: Sampling errors: Cental Region (include Bangkok)

Standard errors, coefficients of variation, design effects (*deff*), square root of design effects (*deft*) and confidence intervals for selected indicators, Thailand, 2005-2006

		Value	Standard	Coefficient	Design	Square root			Confidence limits	
	Table	(<i>r</i>)	error	of variation	effect	of design	Weighted	Unweighted	<i>r</i> - 2 <i>se</i>	<i>r</i> + 2 <i>se</i>
		(<i>se</i>)	(<i>se/r</i>)	(<i>deff</i>)	effect	(<i>deft</i>)	count	count		
HOUSEHOLDS										
Iodized salt consumption	NU.5	0.000	0.000	.	.	.	1,175,817	2,408	0.000	0.000
HOUSEHOLD MEMBERS										
Use of improved drinking water sources	EN.1	0.981	0.003	0.003	18.576	4.310	22,559,762	51,882	0.976	0.986
Use of improved sanitation facilities	EN.5	0.998	0.000	0.000	4.999	2.236	22,559,762	51,882	0.997	0.999
Net primary school attendance rate	ED.3	0.978	0.003	0.003	2.221	1.490	1,789,811	4,818	0.972	0.984
Net secondary school attendance rate	ED.4	0.762	0.012	0.016	3.661	1.913	1,885,008	4,701	0.739	0.786
Primary completion rate	ED.6	0.845	0.014	0.017	1.283	1.132	297,438	820	0.817	0.874
Child labour	CP.2	0.074	0.005	0.069	2.959	1.720	2,887,362	7,817	0.064	0.085
Prevalence of orphans	HA.10	0.045	0.003	0.060	2.269	1.506	5,333,518	13,276	0.039	0.050
Prevalence of vulnerable children	HA.11	0.026	0.003	0.100	3.532	1.879	5,333,518	13,276	0.020	0.031
WOMEN										
Skilled attendant at delivery	RH.5	0.994	0.003	0.003	1.760	1.327	601,010	1,239	0.987	1.000
Antenatal care	RH.3	0.978	0.006	0.006	1.896	1.377	601,010	1,239	0.966	0.989
Contraceptive prevalence	RH.1	0.696	0.008	0.011	3.072	1.753	4,834,520	10,464	0.680	0.712
Adult literacy	ED.8	0.967	0.006	0.006	3.730	1.931	1,736,134	3,722	0.956	0.979
Marriage before age 18	CP.5	0.141	0.010	0.072	1.628	1.276	955,374	1,900	0.121	0.162
Comprehensive knowledge about HIV prevention among young people	HA.3	0.415	0.011	0.028	8.063	2.840	6,991,862	14,925	0.393	0.438
Attitude towards people with HIV/AIDS	HA.5	0.199	0.007	0.037	5.035	2.244	6,892,430	14,673	0.185	0.214
Knowledge of mother- to-child transmission of HIV	HA.4	0.621	0.013	0.021	10.468	3.235	6,991,862	14,925	0.596	0.647
UNDER-5s										
Underweight prevalence	NU.1	0.061	0.006	0.098	1.921	1.386	1,392,369	3,030	0.049	0.073
Tuberculosis immunization coverage	CH.2	0.976	0.003	0.003	0.213	0.461	314,450	663	0.971	0.982
Polio immunization coverage	CH.2	0.889	0.016	0.018	1.744	1.321	314,450	663	0.856	0.921
Immunization coverage for DPT	CH.2	0.907	0.014	0.016	1.600	1.265	314,450	663	0.879	0.936
Measles immunization coverage	CH.2	0.946	0.013	0.014	2.151	1.467	314,450	663	0.920	0.972
Fully immunized children	CH.2	0.839	0.017	0.020	1.419	1.191	314,450	663	0.805	0.873
Acute respiratory infection in last two weeks	CH.6	0.029	0.005	0.168	2.711	1.647	1,486,052	3,223	0.019	0.039
Antibiotic treatment of suspected pneumonia	CH.7	0.701	0.021	0.030	0.213	0.462	42,959	99	0.658	0.744
Diarrhoea in last two weeks	CH.4	0.080	0.007	0.088	2.167	1.472	1,486,052	3,223	0.066	0.094
Received ORT or increased fluids and continued feeding	CH.5	0.448	0.015	0.034	0.242	0.492	118,304	264	0.418	0.478
Support for learning	CD.1	0.780	0.013	0.016	3.033	1.742	1,486,052	3,223	0.754	0.805

Table SE.6: Sampling errors: Northern RegionStandard errors, coefficients of variation, design effects (*deff*), square root of design effects (*deft*) and confidence intervals for selected indicators, Thailand, 2005-2006

	Table	Value (<i>r</i>)	Standard error (<i>se</i>)	Coefficient of variation (<i>se/r</i>)	Design effect (<i>deff</i>)	Square root of design effect (<i>deft</i>)	Weighted count	Unweighted count	Confidence limits	
									<i>r</i> - 2 <i>se</i>	<i>r</i> + 2 <i>se</i>
HOUSEHOLDS										
Iodized salt consumption	NU.5	0.000	0.000	.	.	.	199,976	576	0.000	0.000
HOUSEHOLD MEMBERS										
Use of improved drinking water sources	EN.1	0.950	0.007	0.008	33.608	5.797	11,719,885	28,444	0.935	0.965
Use of improved sanitation facilities	EN.5	0.996	0.002	0.002	21.872	4.677	11,719,885	28,444	0.993	1.000
Net primary school attendance rate	ED.3	0.975	0.004	0.004	1.877	1.370	1,141,827	2,936	0.967	0.983
Net secondary school attendance rate	ED.4	0.824	0.012	0.015	2.804	1.674	1,168,467	2,611	0.799	0.849
Primary completion rate	ED.6	0.847	0.017	0.020	1.167	1.080	199,420	527	0.813	0.881
Child labour	CP.2	0.105	0.006	0.061	2.054	1.433	1,788,623	4,665	0.092	0.117
Prevalence of orphans	HA.10	0.065	0.005	0.085	3.726	1.930	3,154,606	7,546	0.054	0.075
Prevalence of vulnerable children	HA.11	0.031	0.003	0.101	2.490	1.578	3,154,606	7,546	0.025	0.038
WOMEN										
Skilled attendant at delivery	RH.5	0.946	0.019	0.020	3.932	1.983	261,631	556	0.907	0.984
Antenatal care	RH.3	0.982	0.005	0.005	0.680	0.824	261,631	556	0.973	0.991
Contraceptive prevalence	RH.1	0.758	0.009	0.012	2.572	1.604	2,459,312	5,615	0.740	0.777
Adult literacy	ED.8	0.952	0.010	0.010	3.377	1.838	893,799	1,553	0.932	0.972
Marriage before age 18	CP.5	0.232	0.025	0.106	2.154	1.468	433,713	634	0.183	0.281
Comprehensive knowledge about HIV prevention among young people	HA.3	0.444	0.014	0.032	5.965	2.442	3,229,399	7,353	0.415	0.472
Attitude towards people with HIV/AIDS	HA.5	0.274	0.017	0.063	10.904	3.302	3,163,301	7,202	0.240	0.309
Knowledge of mother- to-child transmission of HIV	HA.4	0.723	0.018	0.025	12.144	3.485	3,229,399	7,353	0.687	0.760
UNDER-5s										
Underweight prevalence	NU.1	0.071	0.007	0.105	1.372	1.171	751,874	1,645	0.056	0.086
Tuberculosis immunization coverage	CH.2	0.988	0.005	0.006	0.880	0.938	167,940	353	0.977	0.999
Polio immunization coverage	CH.2	0.968	0.008	0.008	0.691	0.832	167,940	353	0.953	0.984
Immunization coverage for DPT	CH.2	0.975	0.008	0.008	0.897	0.947	167,940	353	0.959	0.991
Measles immunization coverage	CH.2	0.977	0.009	0.009	1.294	1.138	167,940	353	0.959	0.995
Fully immunized children	CH.2	0.954	0.011	0.011	0.950	0.975	167,940	353	0.933	0.976
Acute respiratory infection in last two weeks	CH.6	0.065	0.012	0.179	3.727	1.931	761,416	1,664	0.042	0.089
Antibiotic treatment of suspected pneumonia	CH.7	0.547	0.022	0.040	0.144	0.379	49,740	77	0.504	0.591
Diarrhoea in last two weeks	CH.4	0.089	0.010	0.112	2.057	1.434	761,416	1,664	0.069	0.109
Received ORT or increased fluids and continued feeding	CH.5	0.446	0.026	0.057	0.378	0.614	67,911	143	0.394	0.497
Support for learning	CD.1	0.791	0.020	0.025	3.886	1.971	761,416	1,664	0.752	0.831

Table SE.8: Sampling errors: Northeastern Region

Standard errors, coefficients of variation, design effects (*deff*), square root of design effects (*deft*) and confidence intervals for selected indicators, Thailand, 2005-2006

		Value	Standard	Coefficient	Design	Square root	Weighted	Unweighted	Confidence limits	
	Table	(<i>r</i>)	error	of variation	effect	of design	count	count	<i>r</i> - 2 <i>se</i>	<i>r</i> + 2 <i>se</i>
		(<i>se</i>)	(<i>se/r</i>)	(<i>deff</i>)	effect (<i>deft</i>)					
HOUSEHOLDS										
Iodized salt consumption	NU.5	0.000	0.000	.	.	.	260,093	631	0.000	0.000
HOUSEHOLD MEMBERS										
Use of improved drinking water sources	EN.1	0.944	0.012	0.013	86.716	9.312	21,953,181	32,703	0.921	0.968
Use of improved sanitation facilities	EN.5	0.995	0.002	0.002	21.858	4.675	21,953,181	32,703	0.991	0.998
Net primary school attendance rate	ED.3	0.983	0.003	0.003	1.814	1.347	2,320,441	3,946	0.978	0.989
Net secondary school attendance rate	ED.4	0.845	0.010	0.012	2.490	1.578	2,455,096	3,348	0.826	0.865
Primary completion rate	ED.6	0.926	0.014	0.016	2.107	1.451	385,765	691	0.897	0.955
Child labour	CP.2	0.082	0.005	0.066	2.525	1.589	3,804,039	6,412	0.071	0.093
Prevalence of orphans	HA.10	0.043	0.004	0.082	3.128	1.769	6,873,360	10,405	0.036	0.050
Prevalence of vulnerable children	HA.11	0.029	0.004	0.153	7.255	2.694	6,873,360	10,405	0.020	0.038
WOMEN										
Skilled attendant at delivery	RH.5	0.986	0.006	0.006	2.308	1.519	657,569	782	0.974	0.999
Antenatal care	RH.3	0.989	0.005	0.005	1.520	1.233	657,569	782	0.980	0.998
Contraceptive prevalence	RH.1	0.758	0.011	0.015	4.319	2.078	4,504,627	6,314	0.736	0.781
Adult literacy	ED.8	0.980	0.005	0.005	2.660	1.631	1,738,850	1,870	0.969	0.991
Marriage before age 18	CP.5	0.233	0.021	0.088	1.768	1.330	824,474	752	0.192	0.274
Comprehensive knowledge about HIV prevention among young people	HA.3	0.426	0.012	0.027	4.633	2.152	5,883,420	8,313	0.403	0.450
Attitude towards people with HIV/AIDS	HA.5	0.192	0.012	0.061	7.298	2.702	5,790,700	8,208	0.168	0.215
Knowledge of mother- to-child transmission of HIV	HA.4	0.748	0.014	0.019	8.578	2.929	5,883,420	8,313	0.720	0.776
UNDER-5s										
Underweight prevalence	NU.1	0.115	0.010	0.084	2.163	1.471	1,736,991	2,383	0.096	0.134
Tuberculosis immunization coverage	CH.2	0.986	0.007	0.007	1.900	1.378	330,929	503	0.971	1.000
Polio immunization coverage	CH.2	0.960	0.011	0.011	1.572	1.254	330,929	503	0.938	0.982
Immunization coverage for DPT	CH.2	0.969	0.011	0.011	1.882	1.372	330,929	503	0.947	0.990
Measles immunization coverage	CH.2	0.967	0.012	0.012	2.147	1.465	330,929	503	0.944	0.990
Fully immunized children	CH.2	0.940	0.013	0.014	1.510	1.229	330,929	503	0.914	0.966
Acute respiratory infection in last two weeks	CH.6	0.056	0.007	0.130	2.504	1.582	1,799,842	2,470	0.042	0.071
Antibiotic treatment of suspected pneumonia	CH.7	0.693	0.030	0.044	0.585	0.765	101,248	137	0.632	0.753
Diarrhoea in last two weeks	CH.4	0.092	0.009	0.095	2.290	1.513	1,799,842	2,470	0.075	0.110
Received ORT or increased fluids and continued feeding	CH.5	0.508	0.042	0.084	1.490	1.221	166,024	207	0.423	0.593
Support for learning	CD.1	0.780	0.019	0.024	5.111	2.261	1,799,842	2,470	0.742	0.817

Table SE.9: Sampling errors: Southern RegionStandard errors, coefficients of variation, design effects (*deff*), square root of design effects (*deft*) and confidence intervals for selected indicators, Thailand, 2005-2006

	Table	Value (r)	Standard error (se)	Coefficient of variation (se/r)	Design effect (deff)	Square root of design effect (deft)	Weighted count	Unweighted count	Confidence limits	
									r - 2se	r + 2se
HOUSEHOLDS										
Iodized salt consumption	NU.5	0.000	0.000	.	.	.	140,223	508	0.000	0.000
HOUSEHOLD MEMBERS										
Use of improved drinking water sources	EN.1	0.815	0.021	0.026	70.169	8.377	8,831,242	23,977	0.773	0.857
Use of improved sanitation facilities	EN.5	0.966	0.006	0.006	24.244	4.924	8,831,242	23,977	0.954	0.978
Net primary school attendance rate	ED.3	0.975	0.005	0.006	3.372	1.836	935,397	2,776	0.964	0.986
Net secondary school attendance rate	ED.4	0.715	0.015	0.021	2.740	1.655	970,072	2,448	0.685	0.745
Primary completion rate	ED.6	0.795	0.034	0.042	3.268	1.808	153,120	468	0.728	0.863
Child labour	CP.2	0.075	0.006	0.075	2.043	1.429	1,510,601	4,495	0.064	0.087
Prevalence of orphans	HA.10	0.045	0.005	0.111	4.456	2.111	2,813,321	7,727	0.035	0.055
Prevalence of vulnerable children	HA.11	0.023	0.004	0.163	4.846	2.201	2,813,321	7,727	0.016	0.031
WOMEN										
Skilled attendant at delivery	RH.5	0.928	0.013	0.014	2.048	1.431	328,568	788	0.902	0.955
Antenatal care	RH.3	0.953	0.012	0.013	2.626	1.621	328,568	788	0.928	0.977
Contraceptive prevalence	RH.1	0.602	0.025	0.042	12.212	3.495	1,745,568	4,591	0.552	0.653
Adult literacy	ED.8	0.932	0.008	0.009	1.664	1.290	771,930	1,639	0.916	0.948
Marriage before age 18	CP.5	0.212	0.027	0.126	3.048	1.746	384,959	710	0.158	0.265
Comprehensive knowledge about HIV prevention among young people	HA.3	0.378	0.020	0.052	10.493	3.239	2,437,448	6,369	0.338	0.417
Attitude towards people with HIV/AIDS	HA.5	0.178	0.011	0.060	4.754	2.180	2,375,766	6,170	0.156	0.199
Knowledge of mother- to-child transmission of HIV	HA.4	0.654	0.015	0.023	6.377	2.525	2,437,448	6,369	0.624	0.684
UNDER-5s										
Underweight prevalence	NU.1	0.125	0.010	0.081	1.815	1.347	750,977	1,935	0.105	0.145
Tuberculosis immunization coverage	CH.2	0.971	0.008	0.008	0.961	0.981	161,542	413	0.955	0.988
Polio immunization coverage	CH.2	0.944	0.013	0.014	1.396	1.181	161,542	413	0.917	0.971
Immunization coverage for DPT	CH.2	0.880	0.028	0.032	3.123	1.767	161,542	413	0.823	0.936
Measles immunization coverage	CH.2	0.963	0.011	0.011	1.335	1.155	161,542	413	0.941	0.984
Fully immunized children	CH.2	0.860	0.028	0.033	2.777	1.667	161,542	413	0.803	0.917
Acute respiratory infection in last two weeks	CH.6	0.032	0.006	0.189	2.460	1.568	790,370	2,052	0.020	0.045
Antibiotic treatment of suspected pneumonia	CH.7	0.581	0.026	0.044	0.175	0.419	25,642	66	0.530	0.632
Diarrhoea in last two weeks	CH.4	0.085	0.012	0.144	3.972	1.993	790,370	2,052	0.061	0.110
Received ORT or increased fluids and continued feeding	CH.5	0.404	0.035	0.087	0.787	0.887	67,508	153	0.333	0.474
Support for learning	CD.1	0.810	0.017	0.021	3.703	1.924	790,370	2,052	0.777	0.844