

Text S5. Quality assurance for Kato-Katz

A team of four laboratory technicians was trained at the parasitology laboratory of the International Centre for Diarrhoeal Disease Research, Bangladesh (icddr,b) for STH enumeration by Kato-Katz. 10% of Kato-Katz slides were counted by two technicians, and 5% were counted by a senior parasitologist for quality assurance. We assessed interrater agreement between two individual technicians as well as between a given technician and the senior parasitologist by calculating the kappa statistic for slides categorized as positive [1].

The kappa statistic for interrater agreement between two laboratory technicians was 1.00 for *A. lumbricoides* and 0.99 for hookworm and *T. trichiura*. The average kappa statistic for agreement between the laboratory technician that performed the original count and the experienced parasitologist was 0.92 for *A. lumbricoides*, 0.20 for hookworm, and 0.86 for *T. trichiura*. For hookworm, the kappa statistic decreased with the number of days since the slide had been prepared and the original count had been conducted at the field laboratory; the kappa statistic was 1.00 for samples where the experienced parasitologist counted the slides on the day of the original count, 0.33 for samples counted one day later, and 0.11 for samples counted 2-4 days later.

Technician 1 vs. 2

<i>A. lumbricoides</i>	Not detected by technician 2	Detected by technician 2	Total
Not detected by technician 1	850	2	852
Detected by technician 1	1	939	940
Total	851	941	1792

Kappa = 0.997

Hookworm	Not detected by technician 2	Detected by technician 2	Total
Not detected by technician 1	1652	0	1652
Detected by technician 1	2	138	140
Total	1654	138	1792

Kappa = 0.992

<i>T. trichiura</i>	Not detected by technician 2	Detected by technician 2	Total
Not detected by technician 1	1645	1	1646
Detected by technician 1	1	147	148
Total	1646	148	1794

Kappa = 0.993

Technician vs. senior parasitologist

<i>A. lumbricoides</i>	Not detected by senior	Detected by senior	Total
Not detected by technician	405	5	410
Detected by technician	25	291	316
Total	430	296	726

Kappa = 0.915

Hookworm	Not detected by senior	Detected by senior	Total
Not detected by technician	689	0	689
Detected by technician	30	4	34
Total	719	4	723

Kappa = 0.203

<i>T. trichiura</i>	Not detected by senior	Detected by senior	Total
Not detected by technician	664	2	666
Detected by technician	12	46	58
Total	676	48	724

Kappa = 0.858

1. McHugh ML. Interrater reliability: the kappa statistic. *Biochemia medica* : *Biochemia medica*. 2012;22: 276–282.