

Supplemental Table 4. Andilaye Trial indicators used to assess WASH behavior

Indicators	Overall		Intervention		Control		PR (95% CI) ^a	PD (95% CI) ^b
	N	%	N	%	N	%		
Sanitation								
Household latrine coverage								
Households with at least one latrine	1472	61.6	743	61.2	729	62.0	0.99 (0.82, 1.21)	0.00 (-0.12, 0.12)
Households with improved latrine	1467	32.5	741	34.6	726	30.3	1.13 (0.81, 1.59)	0.04 (-0.07, 0.15)
Households with latrine with smooth and cleanable slab/floor	1471	14.8	743	16.3	728	13.3	1.19 (0.70, 2.03)	0.03 (-0.05, 0.11)
Households with fully constructed latrine	1471	30.9	742	33.0	729	28.7	1.15 (0.86, 1.54)	0.04 (-0.46, 0.13)
Percent of household latrines that were fully constructed	906	50.1	454	53.4	452	46.2	1.18 (1.01, 1.38)	0.08 (0.01, 0.16)
Household latrine characteristics								
Stagnant water present over the floor / latrine slab	906	17.0	455	16.3	451	17.7	0.92 (0.66, 1.28)	-0.01 (-0.07, 0.04)
Pan, slab, or floor was discolored (e.g., yellow, green)	904	59.7	454	58.4	450	61.1	0.97 (0.88, 1.08)	-0.02 (-0.08, 0.04)
Presence of flies in latrine	906	83.2	455	81.8	451	84.7	0.97 (0.89, 1.06)	-0.02 (-0.95, 0.05)
Presence of drop hole cover in the latrine	906	14.1	455	18.2	451	10.0	1.77 (1.19, 2.63)	0.08 (0.02, 0.14)
Among those with a drop hole, a cover was situated over drop hole	130	67.7	85	70.6	45	62.2	1.09 (0.88, 1.36)	0.06 (-0.08, 0.20)
Presence of cleaning agents for washing latrine	906	5.7	455	8.4	451	3.1	2.46 (0.76, 7.96)	0.04 (-0.02, 0.11)
Presence of feces on floor / slab or other place in the latrine	906	50.6	455	50.1	451	51.0	1.02 (0.90, 1.15)	0.01 (-0.05, 0.07)
Evidence latrine is used for storage or other non-sanitation-related purpose	906	7.6	455	7.7	451	7.5	0.93 (0.49, 1.75)	-0.01 (-0.05, 0.04)
Presence of well-worn path to latrine	906	95.1	455	95.4	451	94.9	1.01 (0.97, 1.05)	0.00 (-0.03, 0.04)
Presence of fresh feces on / in the pit or pan	906	73.3	455	73.6	451	73.0	1.01 (0.90, 1.12)	0.00 (-0.07, 0.08)
Pit is full or close to being full	905	12.2	454	11.7	451	12.6	0.92 (0.57, 1.49)	-0.01 (-0.68, 0.05)
Presence of anal cleansing item inside or near latrine	906	40.3	455	39.1	451	41.5	0.93 (0.77, 1.12)	-0.03 (-1.02, 0.04)
Presence of odor from stool or urine in the latrine	906	84.0	455	81.8	451	86.3	0.96 (0.87, 1.04)	-0.04 (-0.11, 0.04)
Presence of leaves, spider webs, rubbish, other dirt in latrine	906	20.3	455	18.5	451	22.2	0.85 (0.60, 1.12)	-0.03 (-0.11, 0.04)
Wet latrine floor	906	43.8	455	40.7	451	47.0	0.85 (0.68, 1.07)	-0.07 (-0.16, 0.03)
Presence of water available near or inside latrine for hand washing	906	12.3	455	18.0	451	6.4	2.28 (1.08, 4.81)	0.09 (-0.01, 0.18)
Presence of cleansing agent near or inside latrine for hand washing	905	2.8	454	5.3	451	0.2	21.67 (2.17, 215.98)	0.07 (-0.04, 0.18)
Water available inside or near latrine for flushing or self-cleansing	906	4.5	455	6.6	451	2.4	2.35 (1.05, 5.28)	0.04 (-0.01, 0.08)
Household latrine facility operation and maintenance								
Latrine cleaned during the last seven days	904	23.2	454	25.6	450	20.9	1.02 (0.65, 1.60)	0.00 (-0.95, 1.03)
Household has added or improved anything on this latrine since its original construction	899	16.5	453	17.2	446	15.7	1.08 (0.71, 1.65)	0.01 (-0.06, 0.08)
Have ever fixed anything that became broken, damaged, or worn out on this latrine since its original construction	900	23.1	453	23.4	447	22.8	1.02 (0.76, 1.37)	0.00 (-0.06, 0.07)
Is your latrine facility working (operating) correctly now?	907	93.4	455	94.1	452	92.7	1.02 (0.98, 1.05)	0.01 (-0.02, 0.05)
Facility observed to require obvious repair	906	75.3	455	70.1	451	80.5	0.88 (0.78, 0.99)	-0.10 (-0.19, -0.01)
The latrine was observed to be serviceable	906	78.8	455	80.0	451	77.6	1.05 (0.93, 1.18)	0.04 (-0.05, 0.13)
Cleaning agents for washing latrine were observed inside or near the latrine	906	5.7	455	8.4	451	3.1	2.46 (0.76, 7.96)	0.04 (-0.03, 0.11)

Presence of feces on floor, slab, or other place in the latrine aside from the pit	906	50.1	455	50.1	451	51.0	1.02 (0.90, 1.15)	0.01 (-0.05, 0.07)
Latrine utilization	N	mean (SE)	N	mean (SE)	N	mean (SE)	-	difference (95% CI)^e
Given you have a latrine, number of households that used this household latrine in last 7 days	905	1.63 (0.09)	454	1.54 (0.09)	451	1.72 (0.14)	-	-0.11 (-0.42, 0.19)
Given household has a latrine, number of people who used this latrine from another household during last 7 days, not including your household members	902	0.91 (0.14)	454	0.70 (0.16)	448	1.11 (0.22)	-	-0.40 (-0.85, 0.05)
	N	%	N	%	N	%	PR (95% CI)^a	PD (95% CI)^b
Given you have a latrine, household members have used this latrine for 3 or more days during the last 7 days	905	90.8	455	92.1	450	89.6	1.04 (0.99, 1.10)	0.04 (-0.13, 0.09)
Respondent defecated in any latrine during last 2 days	1469	45.5	740	45.8	729	45.3	1.01 (0.79, 1.29)	0.00 (-0.11, 0.12)
Respondent always exclusively used a latrine for defecation during last 7 days	1472	46.4	743	53.2	729	54.1	0.99 (0.79, 1.24)	-0.00 (-0.12, 0.12)
Respondent's primary place of defecation changes over the course of the year	1470	27.3	742	28.8	728	25.7	1.16 (0.90, 1.50)	0.04 (-0.03, 0.11)
Head of household defecated in any latrine during last 2 days	900	57.7	486	57.6	414	57.7	1.01 (0.83, 1.23)	0.01 (-0.11, 0.12)
Head of household always exclusively used a latrine for defecation during last 7 days	1002	34.8	529	36.5	473	33.0	1.07 (0.79, 1.47)	0.03 (-0.09, 0.15)
Head of household's primary place of defecation changes over the course of the year	1205	25.9	624	25.5	581	26.3	0.96 (0.71, 1.30)	-0.01 (-0.09, 0.07)
Ages 4-17 defecated in any latrine during last 2 days	2991	52.1	1538	52.7	1453	51.2	1.01 (0.83, 1.20)	0.00 (-0.10, 0.11)
Ages 4-17 always exclusively used a latrine for defecation during last 7 days	2842	38.9	1447	42.6	1385	35.0	1.15 (0.89, 1.50)	0.06 (-0.05, 0.16)
Ages 4-17 primary place of defecation changes over the course of the year	3532	23.5	1778	24.5	1754	22.4	1.08 (0.83, 1.41)	0.02 (-0.05, 0.08)
Safely disposed of child feces	777	38.9	401	36.7	376	41.2	0.96 (0.69, 1.32)	-0.02 (-0.15, 0.11)
Open defecation practices								
Respondent's primary place of defecation was OD during last 2 days	1472	39.5	743	40.2	729	38.8	1.05 (0.76, 1.45)	0.02 (-0.11, 0.15)
Respondent openly defecated during last 2 days	1472	44.9	743	45.2	729	44.9	1.03 (0.78, 1.36)	0.01 (-0.11, 0.14)
Respondent openly defecated in or near surface water	660	10.9	335	10.2	325	11.7	0.93 (0.50, 1.72)	-0.01 (-0.08, 0.06)
Respondent urinated in/or near surface water	1466	7.2	739	6.5	727	8.0	0.82 (0.46, 1.48)	-0.01 (-0.06, 0.03)
Head of household's primary place of defecation was OD during last 2 days	1146	40.3	600	39.7	546	41.0	0.95 (0.68, 1.31)	-0.02 (-0.15, 0.11)
Head of household openly defecated during last 2 days	992	64.7	527	62.6	465	67.1	0.98 (0.80, 1.21)	-0.01 (-0.14, 0.12)
Head of household openly defecated in or near surface water during last 2 days	371	12.4	199	11.6	172	13.3	1.07 (0.48, 2.40)	0.01 (-0.09, 0.10)
Head of household urinated in/near surface water	704	7.7	387	6.7	317	8.8	0.82 (0.35, 1.94)	-0.01 (-0.08, 0.05)
Ages 4-17 primary place of defecation was OD during last 2 days	3494	44.3	1757	42.9	1737	45.7	0.97 (0.72, 1.29)	-0.01 (-0.14, 0.11)
Ages 4-17 openly defecated during last 2 days	2921	58.8	1489	55.2	1432	62.6	0.95 (0.77, 1.16)	-0.03 (-0.15, 0.09)
Ages 4-17 openly defecated in or near surface water during last 2 days	1326	18.4	629	14.5	697	22.0	0.73 (0.39, 1.37)	-0.05 (-0.17, 0.06)

Ages 4-17 urinated in/near surface water	2480	11.7	1273	9.0	1207	14.5	0.66 (0.35, 1.24)	-0.05 (-0.12, 0.03)
Evidence of open defecation (i.e., human feces) in/near household compound	1472	45.2	743	43.5	729	47.1	0.95 (0.78, 1.15)	-0.03 (-0.11, 0.06)
Personal hygiene								
Washing station coverage								
Reported HH hand or facewashing station(s)	1472	98.0	743	98.3	729	97.7	1.01 (0.99, 1.02)	0.01 (-0.01, 0.02)
Observed HH hand or facewashing station(s) with water	1472	19.9	743	19.5	729	20.3	0.96 (0.72, 1.26)	-0.01 (-0.06, 0.05)
Observed HH hand or facewashing station(s) with soap (%)	1472	2.2	743	2.6	729	1.9	1.34 (0.44, 4.13)	0.01 (-0.02, 0.04)
Handwashing practices								
Yesterday, the index child's hands were washed	1428	98.5	724	99.0	704	97.9	1.01 (1.00, 1.02)	0.01 (0.00, 0.02)
The last time the index child's hands were washed, soap/ash/or soapy water used	1398	44.8	714	46.5	684	43.0	1.08 (0.89, 1.30)	0.03 (-0.05, 0.12)
The last time the index child defecated, he/she cleaned hands with water and soap, soapy water, or ash	1410	41.8	713	43.9	697	39.6	1.12 (0.92, 1.35)	0.05 (-0.04, 0.13)
Yesterday, the respondent washed his/her hands with water	1469	98.0	742	98.3	727	97.8	1.01 (0.99, 1.02)	0.01 (-0.01, 0.02)
The last time the respondent washed he/she used soap/ash/soapy water	1468	44.0	740	46.0	728	42.0	1.09 (0.91, 1.31)	0.04 (-0.04, 0.12)
The last time the respondent defecated, he/she cleaned hands with water and soap	1463	49.0	738	51.9	725	46.1	1.13 (0.94, 1.35)	0.06 (-0.03, 0.15)
The last time the respondent prepared food, he/she cleaned hands with water and soap before beginning food preparations	1403	51.0	700	53.6	703	48.5	1.11 (0.95, 1.29)	0.05 (-0.03, 0.13)
Hand cleanliness								
Respondent's finger nails clean on left hand	1472	73.6	743	74.6	729	72.7	1.03 (0.96, 1.11)	0.02 (-0.03, 0.08)
Respondent's finger nail clean on right hand	1472	73.4	743	73.6	729	73.1	1.01 (0.94, 1.09)	0.01 (-0.04, 0.65)
Respondent's finger pads clean on left hand	1472	62.1	743	63.3	729	60.9	1.05 (0.95, 1.15)	0.03 (-0.03, 0.09)
Respondent's Finger pads clean on right hand	1472	62.2	743	62.7	729	61.7	1.03 (0.93, 1.13)	0.02 (-0.04, 0.08)
Respondent's palm clean on left hand	1472	57.5	743	59.0	729	56.1	1.05 (0.94, 1.18)	0.03 (-0.04, 0.09)
Respondent's palm clean on right hand	1472	57.9	743	59.1	729	56.6	1.05 (0.94, 1.17)	0.03 (-0.04, 0.09)
Index child's finger nails clean on left hand	1024	84.1	502	83.3	522	84.9	0.96 (0.91, 1.02)	-0.03 (-0.08, 0.14)
Index child's finger nail clean on right hand	1024	83.9	502	83.1	522	84.7	0.96 (0.90, 1.02)	-0.03 (-0.08, 0.02)
Index child's finger pads clean on left hand	1024	80.6	502	79.9	522	81.2	0.98 (0.91, 1.05)	-0.02 (-0.07, 0.03)
Index child's finger pads clean on right hand	1024	80.4	502	79.7	522	81.0	0.98 (0.91, 1.05)	-0.02 (-0.07, 0.03)
Index child's palm clean on left hand	1024	78.9	502	78.9	522	78.9	0.99 (0.93, 1.05)	-0.01 (-0.06, 0.04)
Index child's palm clean on right hand	1024	78.6	502	78.5	522	78.7	0.98 (0.92, 1.05)	-0.01 (-0.06, 0.04)
Facewashing practices								
Yesterday, the index child's face was cleaned	1433	98.1	723	97.9	710	98.3	0.99 (0.98, 1.01)	-0.01 (-0.02, 0.01)
Yesterday, after index child's face was washed it was it wiped dry with a cloth	1325	37.1	665	38.1	660	36.2	1.04 (0.90, 1.21)	0.02 (-0.04, 0.07)
Yesterday, the respondent cleaned his/her face	1470	98.0	742	97.6	728	98.4	0.99 (0.97, 1.01)	-0.01 (-0.03, 0.01)
Yesterday, the respondent wiped his/her face dry with a cloth such as a towel or apron	1393	39.1	702	40.9	691	37.3	1.09 (0.09, 1.27)	0.03 (-0.03, 0.10)
Face cleanliness								

Ocular discharge is present (all children ages 1-9 years)	1696	28.7	822	26.9	874	30.4	0.88 (0.68, 1.15)	-0.04 (-0.11, 0.04)
Wet nasal discharge is present (all children ages 1-9 years)	1696	38.2	822	37.0	874	39.4	0.94 (0.78, 1.13)	-0.02 (-0.09, 0.05)
Dry nasal discharge is present (all children ages 1-9 years)	1696	44.0	822	42.7	874	45.2	0.97 (0.81, 1.16)	-0.02 (-0.10, 0.06)
Dirt/dust/other debris is present (all children ages 1-9 years)	1696	50.0	822	50.5	874	49.5	1.03 (0.89, 1.20)	0.02 (-0.06, 0.09)
Ocular discharge is present (index child)	1024	29.8	502	27.5	522	32.0	0.88 (0.68, 1.15)	-0.04 (-0.11, 0.04)
Wet nasal discharge is present (index child)	1024	39.8	502	37.7	522	42.0	0.94 (0.78, 1.13)	-0.02 (-0.09, 0.05)
Dry nasal discharge is present (index child)	1024	45.6	502	43.2	522	47.9	0.97 (0.81, 1.16)	-0.02 (-0.05, 0.06)
Dirt/dust/other debris is present (index child)	1024	53.0	502	52.2	522	52.9	1.03 (0.89, 1.20)	0.02 (-0.06, 0.09)
	N	mean (SE)	N	mean (SE)	N	mean (SE)		difference (95% CI)^e
Number of times a fly land on the index child's face during a 1 minute observation	1024	3.3 (0.21)	502	3.2 (0.33)	522	3.4 (0.26)	-	-0.15 (-0.90, 0.60)

Household environmental sanitation

Animal husbandry and hygiene practices	N	%	N	%	N	%	PR (95% CI)^a	PD (95% CI)^b
Respondent has animal herding or other animal husbandry responsibilities	1472	87.4	743	88.3	729	86.4	1.02 (0.96, 1.09)	0.02 (-0.04, 0.07)
Head of household has animal herding or other animal husbandry responsibilities	1243	91.4	639	92.5	604	90.2	1.05 (0.99, 1.11)	0.04 (-0.01, 0.09)
Observed animal feces present in the compound	1472	82.3	743	82.2	729	82.4	1.01 (0.92, 1.11)	0.01 (-0.07, 0.08)
Animal feces/waste not left out in open in compound	1472	53.8	743	56.4	729	51.2	1.10 (0.95, 1.28)	0.05 (-0.03, 0.13)
Solid waste management								
Solid waste was not observed to have been left out in the open	1472	31.1	743	34.6	729	27.6	1.26 (0.93, 1.69)	0.07 (-0.02, 0.17)
