

# DISSEMINATION WORKSHOP ON CHILD DEVELOPMENTAL MILESTONES ASSESSMENT AND STIMULATION TOOLS



cDMAT Focus Group Meeting (Feb 9–10, 2017): Participants from AHC, GIZ, HI, Cambodia Physical Therapy Association, Safe Haven Medical Outreach, Indigo, Health Care Volunteers International/NPH, Grace House, CCAMH, Transcultural Psychosocial Organization, and CABDICO

**giz Cambodian Developmental Milestone Assessment Tool (cDMAT 2019)**

Name: \_\_\_\_\_ Child enrolled in [pre-Jochou? No Yes Unknown] \_\_\_\_\_  
 Birthdate: \_\_\_\_/\_\_\_\_/20\_\_\_\_ Highest educational level of the principal caretaker: \_\_\_\_\_  
 Gender: \_\_\_\_ Female \_\_\_\_ Male \_\_\_\_ None \_\_\_\_ Primary \_\_\_\_ Secondary \_\_\_\_ Academic \_\_\_\_  
 Assessment date: \_\_\_\_/\_\_\_\_/20\_\_\_\_ Age at time of assessment: \_\_\_\_ month(s)

Pass/fail	Social/personal	Fine motor	Language/cognition	Gross motor
1	11 Look at face (0 m)	11 Look at face (0 m)	11 Respond to noise (0 m)	11 Equal movement (0 m)
2	12 Cry when appropriate (0 m)	12 Follow object to midline (0 m)	12 Make sounds (0 m)	12 Lift head (0 m)
3	13 Smile spontaneously (6 m)	13 Follow object passed midline (>90°)	13 Turn head to sounds (9 m)	13 Turn head side laying face down (9 m)
4	14 Smile responsively (6 m)	14 Grasp big object (9 m)	14 Laugh aloud (12 m)	14 Head up 45 degrees (9 m)
5	15 Brief interest in toy (9 m)	15 Play with own body (9 m)	15 Squeal (12 m)	15 Sit up steadily (22 sec) (12 m)
6	16 Observe object in each hand (9 m)	16 Follow object 180 degrees (12 m)	16 Turn head to voice (18 m)	16 Bear weight on legs (12 sec) (9 m)
7	17 Recognize its own hands (12 m)	17 Looks at small objects (18 m)	17 Babble (24 m)	17 No head lag when pulled to sit (9 m)
8	18 Explore environment (12 m)	18 Reach for red string (18 m)	18 Respond to his name (24 m)	18 Roll over (start front to back) (12 m)
9	19 React to play (18 m)	19 Rake lotus seed (1/3) (24 m)	19 Ma or pa (start non-specific) (30 m)	19 Chest up with arm support (12 m)
10	20 Seek object fallen on floor (18 m)	20 Put object in mouth (24 m)	20 Say play sound (30 m)	20 Standing holding on (>10 sec) (12 m)
11	21 Recognize stranger (18 m)	21 Transfer object between hands (24 m)	21 Mak/paa/bong (specific) (36 m)	21 Sit without support (>10 sec) (12 m)
12	22 Anxiously to separate (18 m)	22 Thumb-finger grasp (30 m)	22 One-step command (48 m)	22 Craw (3 moves) (12 m)
13	23 Play 'chab chab' (24 m)	23 Put block in cup (30 m)	23 Two-step command (48 m)	23 Getting to sit (12 m)
14	24 Hold and drink from cup (24 m)	24 Put block in cup (30 m)	24 Point to pictures of objects (2/2) (48 m)	24 Stand alone (2 sec) (18 m)
15	25 Greet with hand clasp (30 m)	25 Bang 2 objects together (36 m)	25 Say words (2/3) (48 m)	25 Take steps with holding (25 steps) (24 m)
16	26 Play 'voh... vak-ev' (30 m)	26 Princer grasp (36 m)	26 Speak half understandably (48 m)	26 Stand alone (20 sec) (30 m)
17	27 Indicate wants (36 m)	27 Tower 2 blocks (36 m)	27 Know use/action of objects (2/2) (48 m)	27 Walk alone (25 steps) (30 m)
18	28 Imitate activities (36 m)	28 Scribble with pencil (36 m)	28 Cooperative (48 m)	28 Throw object overhead (30 m)
19	29 Use spoon (36 m)	29 Lift lid of container (48 m)	29 Know use/action of objects (2/2) (48 m)	29 Balance on each foot (2 sec) (30 m)
20	30 Ask to use toilet (48 m)	30 Tower 4 blocks (48 m)	30 Name 1/6 colors (48 m)	30 Balance on each foot (23 sec) (30 m)
21	31 Point to 2 body parts (48 m)	31 Tower 6 blocks (48 m)	31 Know 4 animal sounds (48 m)	31 Hop on one foot (22 times) (30 m)
22	32 Comb hair with help (48 m)	32 Unscrew a jar (48 m)	32 Name 1/6 colors (48 m)	32 Straight heel-to-toe walk (4 steps) (30 m)
23	33 Put on simple clothes with help (48 m)	33 Take off easy clothes (48 m)	33 Count 1 to 5 (48 m)	
24	34 Parallel play without sharing (60 m)	34 Make string with 33 beads (60 m)		
25	35 Wash and dry hand (60 m)	35 Wiggle one thumb (60 m)		
26	36 Play well with others (sharing) (60 m)	36 Imitate vertical line (<90°) (60 m)		
27	37 Tell own name and gender (60 m)	37 Fold a paper (60 m)		
28	38 Name a friend (60 m)	38 Catch soft ball (60 m)		
29	39 Play kid games (team / wait turns) (60 m)	39 Play with untip (60 m)		
30	40 Serve own food (60 m)	40 Tie single knot (60 m)		
31	41 Put on T-shirt without help (60 m)	41 Copy circle (60 m)		
32	42 Dress without help (button) (60 m)	42 Copy square (60 m)		
33	43 Comb hair without help (60 m)			

**Comments / specific observations during the assessment**

**Instructions**

Step 1: Collect demographic information on the child and determine the child's age in months.

Step 2: Start assessing the child in the order of the 4 domains: social/personal, fine motor, language/cognition, and gross motor.

Step 3: The milestone from where to start in each domain at a specific age in months is indicated in (0 m) behind specific milestones.

Step 4: Check 'PASS' if the child passes the skill by demonstration or caregiver report. Check 'NAK' if the child fails the skill.

Step 5: Check 'NA' when the skill is not assessed (eg. child is unable to perform and the caregiver does not know whether s/he can do it).

Step 6: REMEMBER to apply the 4 consecutive Pass rule at the start. In case not, also assess previous milestones till the rule is met.

Step 7: The 4 consecutive failed rule allows to stop the assessment for more advanced skills as they are expected to fail all.

Step 8: Compare the performance of the child with the PASS column which indicates the age in months when usually all Khmer children are able to do.

**Community based-DMAT (CB-DMAT) Age 6 months–2 years**

**AHC giz**

Age	By age [age], your child can:	yes	no	Referral
6 months	<ul style="list-style-type: none"> <li>Look at face?</li> <li>Follow object passed midline?</li> <li>Turn head to sounds?</li> <li>Head up 45 degrees?</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>	If one or more 'no', refer to specialist
9 months	<ul style="list-style-type: none"> <li>Explore environment?</li> <li>Flow object 180 degrees?</li> <li>Squeal?</li> <li>Chest up with arm support?</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>	If one or more 'no', refer to specialist
1 year	<ul style="list-style-type: none"> <li>Recognize stranger?</li> <li>Rake lotus seed (≥1/3 attempts)?</li> <li>Sit without support (≥10 sec)?</li> <li>Pull up to stand (≥2 sec)?</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>	If one or more 'no', refer to specialist
1.5 years	<ul style="list-style-type: none"> <li>Hold and drink from cup?</li> <li>Take objects in each hand?</li> <li>Babble?</li> <li>Walk alone (≥5 steps)?</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>	If one or more 'no', refer to specialist
2 years	<ul style="list-style-type: none"> <li>Play 'voh... vak-ev'?</li> <li>Transfer object between hands?</li> <li>Ma or pa (non-specific)?</li> <li>Stoop and recover?</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>	If one or more 'no', refer to specialist

**Community based-DMAT (CB-DMAT) Age 2.5 years–6 years**

**AHC giz**

Age	By age [age], your child can:	yes	no	Referral
2.5 years	<ul style="list-style-type: none"> <li>Use spoon</li> <li>Put block in cup</li> <li>Mak/paa/bong (specific)</li> <li>Run with good balance (≥2 m)</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>	If one or more 'no', refer to specialist
3 years	<ul style="list-style-type: none"> <li>Put on simple clothes with help?</li> <li>Bang 2 objects together?</li> <li>Say words (≥3)</li> <li>Walk backward (≥2 steps)</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>	If one or more 'no', refer to specialist
4 years	<ul style="list-style-type: none"> <li>Play well with others (sharing)?</li> <li>Unscrew a jar?</li> <li>Say words (≥6)?</li> <li>Kick ball forward?</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>	If one or more 'no', refer to specialist
5 years	<ul style="list-style-type: none"> <li>Wiggle one thumb?</li> <li>Speak understandably?</li> <li>Use pronouns correctly?</li> <li>Throw object overhead?</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>	If one or more 'no', refer to specialist
6 years	<ul style="list-style-type: none"> <li>Play kid games waiting turns?</li> <li>Catch soft ball?</li> <li>Count 1 to 5?</li> <li>Straight heel-to-toe walk (≥4 steps)?</li> </ul>	<input type="checkbox"/>	<input type="checkbox"/>	If one or more 'no', refer to specialist

## Cambodian Development Milestones Assessment Tool (cDMAT)

The cDMAT assesses the performance of Khmer children. The tool is culturally-sensitive and environmentally appropriate for Cambodian rural children. It consists of age-norms achievement for 129 milestones in four functional domains for children up to six years old.

The CB-DMAT is a community-based screening tool developed based on the cDMAT results. It contains 4 specific skills (one per domain) which nearly all Khmer children of a certain age are expected to be able to perform. The CB-DMAT takes less time to apply than the full cDMAT.

### HIGH RELEVANCE FOR CHILD DEVELOPMENT

Both the cDMAT and CB-DMAT can be used in local health, pre-school, rehabilitation, community and social welfare settings to:

- Assess functional achievements in children, gradually more advanced
- Compare the performance skills to other Khmer children of similar age
- Trigger referral to hospital for more professional assessment
- Allow for early intervention by paediatricians, rehabilitation staff, physiotherapists and caregivers, including parents

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