Name	Abbreviation	Predict possibilities output	Parents (Pa)
Mosquito density	MD	MD_0: Low MD_1: Moderate MD_2: High	Outside house breeding container Inside house breeding container Diurnal temperature range
Outside house breeding container	OB	OB_0:Low OB_1:High	Neglect garbage Rain
Inside house breeding container	IB	IB_0:Low IB_1:High	Cleaning activity House type
Neglect garbage	NG	NG_0:Low NG_1:High	Cleaning activity Population density
Cleaning activity	CA	CA_0:Low CA_1:High	Awareness
Rain	R	R_1:Low R_1:Moderate R_2:High	Season
Diurnal temperature range	DTR	DTR_0:Low DTR_1:High	Season
House Density	HT	HT_0:Low HT_1:High	
Awareness	A	A_0:Low A_1:High	
Season	S	S_0:Summer S_1:Winter S_2:Rain	
Population density	PD	PD_0:Low PD_1:High	

Table 1: Value of each variables in Mosquito density Bayesian network model

Pattern			P(MD_0 | PA)	P(MD_1 | PA)	P(MD_2 | PA)
OB_0	IB_0	DTR_0	1	0	0
OB_0	IB_0	DTR_1	1	0	0
OB_0	IB_1	DTR_0	0	0.7	0.3
OB_0	IB_1	DTR_1	0.2	0.6	0.2
OB_1	IB_0	DTR_0	0	0.3	0.7
OB_1	IB_1	DTR_0	0	0	1
OB_1	IB_0	DTR_1	0	0.5	0.5
OB_1	IB_1	DTR_1	0	0	1

Table 2: Conditional probability distribution of mosquito density

Pattern		P(OB0 | PA)	P(OB1 | PA)
NB_0	R_0	1	0
NB_0	R_1	0.4	0.6
NB_0	R_2	0.2	0.7
NB_1	R_0	0.9	0.1
NB_1	R_1	0.2	0.8
NB_1	R_2	0	1

Table 3: Conditional probability distribution of density of outside house breeding spot

Pattern		P(IB0 | PA)	P(IB1| PA)
CA0	HT0	0.6	0.4
CA0	HT1	0	1
CA1	HT0	1	0
CA1	HT1	0.4	0.6

Table 4: Conditional probability distribution of density of inside house breeding container

Pattern		P(NG0 | PA)	P(NG1 | PA)
CA0	PD0	0.4	0.6
CA0	PD1	0	1
CA1	PD0	0.9	0.1
CA1	PD1	0.6	0.4

Table 5: Conditional probability distribution of neglect garbage

Pattern	P(CA0 | PA)	P(CA1 | PA)
A0	1	0
A1	0	1

Table 6: Conditional probability distribution of cleaning activity

Pattern	P(R0 | PA)	P(R1 | PA)	P(R2 | PA)
S0	1	0	0
S1	0.4	0.6	0
S2	0	0.2	0.8

Table 7: Conditional probability distribution of rain

Pattern	P(DTR0 | PA)	P(DTR1 | PA)
S0	0	1
S1	1	0
S2	0.9	0.1

Table 8: Conditional probability distribution of Diurnal temperature range

Name	Abbreviation	Predict possibilities output	Parents (Pa)
Actual report DF/DHF Cases	ARDC	ARDC0:Under report ARDC1:Moderate report ARDC2:Active report	Hospital Awareness Dengue rate
Dengue rate	DR	DR0:Low DR1:Moderate DR2:High	Infected Mosquitos Immune Dengue People
Density of infected Mosquitos	IM	IM0:Low IM0:Moderate IM1:High	Dengue Cases Dengue Case of nearby district Diurnal temperature range Mosquito density
Immune Dengue People	IP	IP0:Low IP1:Moderate IP2:High	Dengue Cases
Diurnal temperature range	DTR	DTR0:Low DTR1:High	Season
Dengue Cases	DC	DC0:Low DC1: Moderate DC2:High	
Dengue Case of nearby district	DCN	DCN0:Low DCN1: Moderate DCN2:High	
Mosquito density	MD	MD0: Low MD1: Moderate MD2: High	
Hospital Awareness	HA	HA0: Low HA1: High	
Population Density	PD	PD0: Low PD1: High	
Season	S	S0:Summer S1:Winter S2:Rain	
Awareness	A	A0:Low A1:High	

Pattern		P(ARDC 0 | PA)	P(ARDC 1 | PA)	P(ARDC2 | PA)
HA0	DR0	1	0	0
HA0	DR1	0.7	0.2	0.1
HA0	DR2	0.3	0.5	0.2
HA1	DR0	0.7	0.3	0
HA1	DR1	0.3	0.5	0.2
HA1	DR2	0	0.2	0.8

Table 9: Conditional probability distribution of Actual report DF/DHF Cases

Pattern		P(DR0 | PA)	P(DR 1 | PA)	P(DR 2 | PA)
IM0	IP x	1	0	0
IM1	IP 0	0	0.3	0.7
IM1	IP 1	0.1	0.4	0.5
IM1	IP 2	0.1	0.5	0.4
IM2	IP 0	0	0	1
IM2	IP 1	0	0.1	0.9
IM2	IP 2	0	0.3	0.7

Table 10: Conditional probability distribution of dengue incident rate (DF/DHF cases)

Pattern	P(IP0 | PA)	P(IP1 | PA)	P(IP2 | PA)
DC0	1	0	0
DC1	0	1	0
DC2	0	0	1

Table 11: Conditional probability distribution of immune dengue people

Pattern				P(IM0 | PA)	P(IM1 | PA)	P(IM2 | PA)
DC0	DCN 0	MD0	DTRx	1	0	0
DC0	DCN 0	MD1	DTRx	0.9	0.1	0
DC0	DCN 0	MD2	DTR0	0.7	0.3	0
DC0	DCN 0	MD2	DTR1	0.8	0.2	0
DC0	DCN 1	MD0	DTRx	1	0	0
DC0	DCN 1	MD1	DTR0	0.7	0.3	0
DC0	DCN 1	MD1	DTR1	0.8	0.2	0
DC0	DCN 1	MD2	DTR0	0.3	0.7	0
DC0	DCN 1	MD2	DTR1	0.4	0.6	0
DC0	DCN 2	MD0	DTRx	0.9	0.1	0
DC0	DCN 2	MD1	DTR0	0.2	0.8	0
DC0	DCN 2	MD1	DTR1	0.3	0.7	0
DC0	DCN 2	MD2	DTR0	0	0.8	0.2
DC0	DCN 2	MD1	DTR1	0.6	0.9	0.1
DC1	DCN 0	MD0	DTR0	0.8	0.2	0
DC1	DCN 0	MD0	DTR1	0.9	0.1	0
DC1	DCN 0	MD1	DTR0	0	0.9	0.1
DC1	DCN 0	MD1	DTR1	0.1	0.9	0
DC1	DCN 0	MD2	DTR0	0	0.3	0.7
DC1	DCN 0	MD2	DTR1	0	0.4	0.6
DC1	DCN 1	MD0	DTRx	0.7	0.3	0
DC1	DCN 1	MD1	DTR0	0	0.6	0.4
DC1	DCN 1	MD1	DTR1	0.2	0.5	0.3
DC1	DCN 1	MD2	DTR0	0	0.2	0.8
DC1	DCN 1	MD2	DTR1	0	0.3	0.7
DC1	DCN 2	MD0	DTRx	0.2	0.8	0
DC1	DCN 2	MD1	DTR0	0	0.4	0.6
DC1	DCN 2	MD1	DTR1	0	0.6	0.4
DC1	DCN 2	MD2	DTRx	0	0	1
DC2	DCN 0	MD0	DTR0	0.7	0.2	0.1
DC2	DCN 0	MD0	DTR1	0.8	0.2	0
DC2	DCN 0	MD1	DTR0	0	0.3	0.7
DC2	DCN 0	MD1	DTR1	0	0.4	0.6
DC2	DCN x	MD2	DTRx	0	0	1

Table 12: Conditional probability distribution of density of infected mosquitoes