

**Federal Ministry of Health
MCH-EPI
Information and Research**

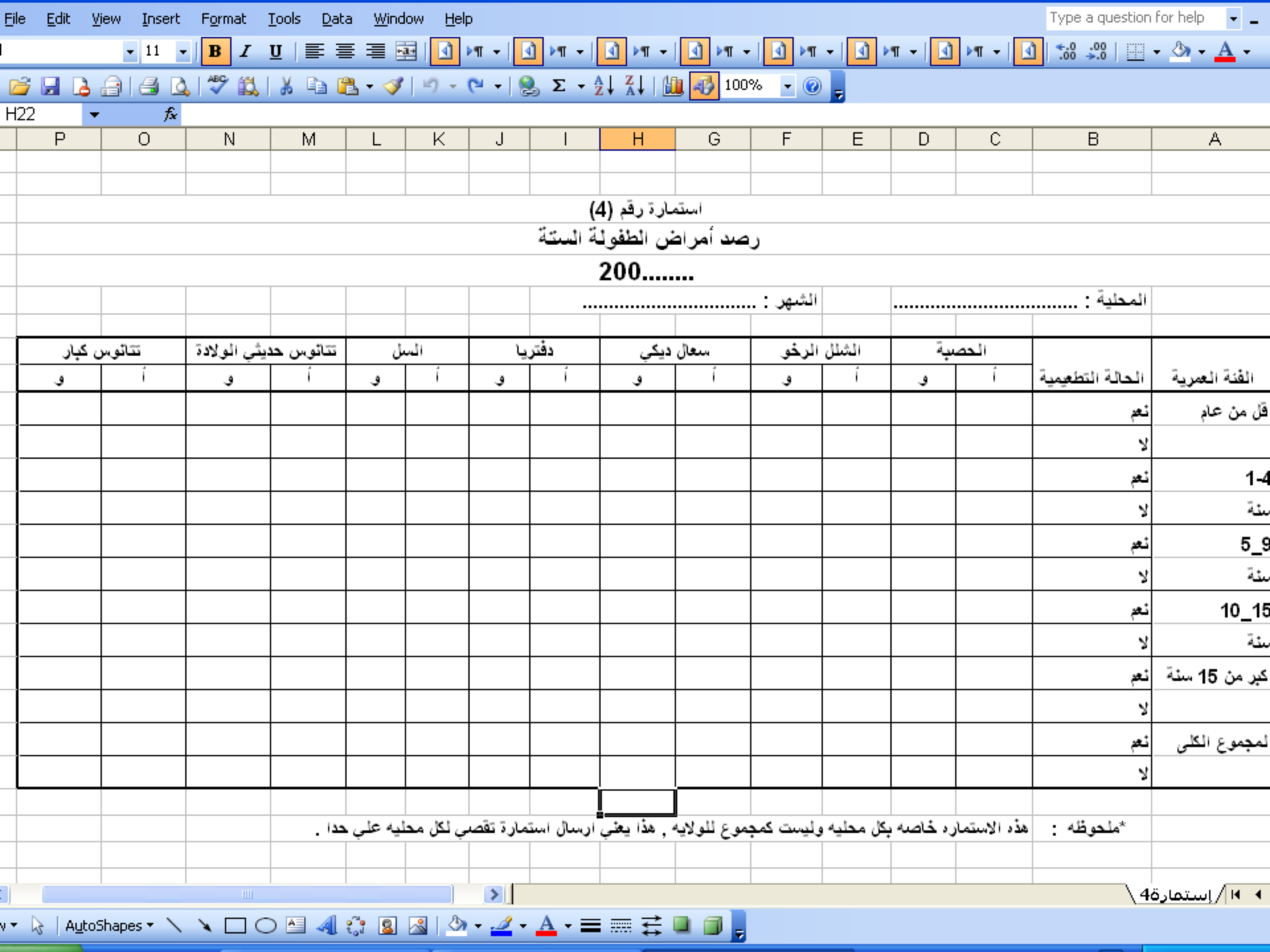
*EPI Diseases Surveillance report
NT, Pertussis and Diphtheria
January-March, 2009*

Outline...

- 👍 Introduction
- 👍 Flow of data
- 👍 Data analysis March, 2009
- 👍 Analysis of reported NT cases in Gezira state
- 👍 Problems
- 👍 Way Forward

Introduction

- 👍 Surveillance of the mentioned diseases is passive, with Monthly report.
- 👍 Data collected are: Locality, age group, Vaccination status and out come.



استمارة رقم (4)
رصد أمراض الطفولة الستة
200.....

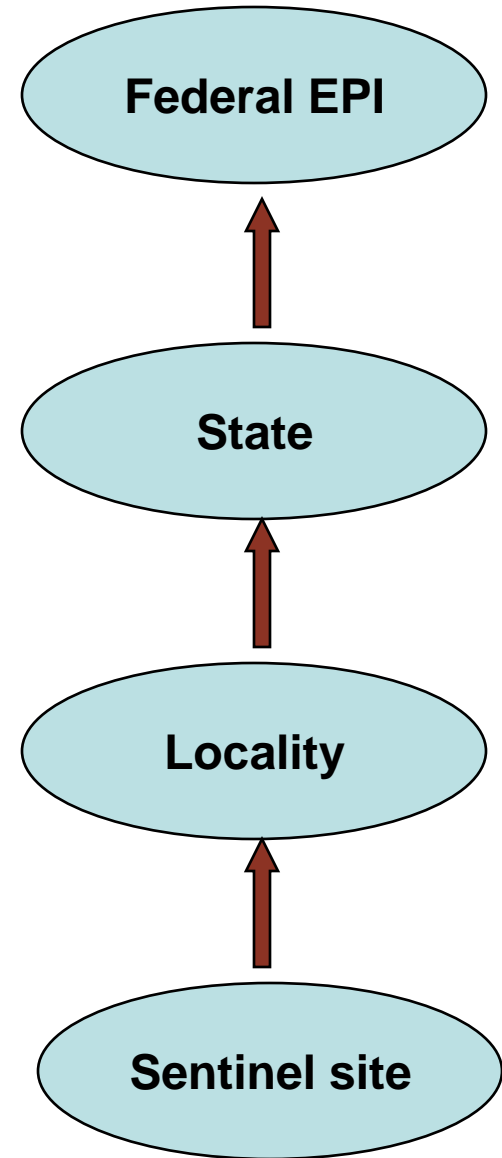
المحلية : الشهر :

الفئة العمرية	الحالة التطعيمية	الحصبة		الشلل الرخو		سعال ديكي		دفتريا		السل		تتائوس حديشي الولادة		تتائوس كبار	
		و	أ	و	أ	و	أ	و	أ	و	أ	و	أ	و	أ
قل من عام	نعم														
	لا														
1-4 سنة	نعم														
	لا														
5_9 سنة	نعم														
	لا														
10_15 سنة	نعم														
	لا														
كبر من 15 سنة	نعم														
	لا														
لمجموع الكلّي	نعم														
	لا														

*ملحوظة : هذه الاستمارة خاصة بكل محليه وليست كمجموع للولايه , هذا يعني ارسال استمارة تقصي لكل محليه على حدا .

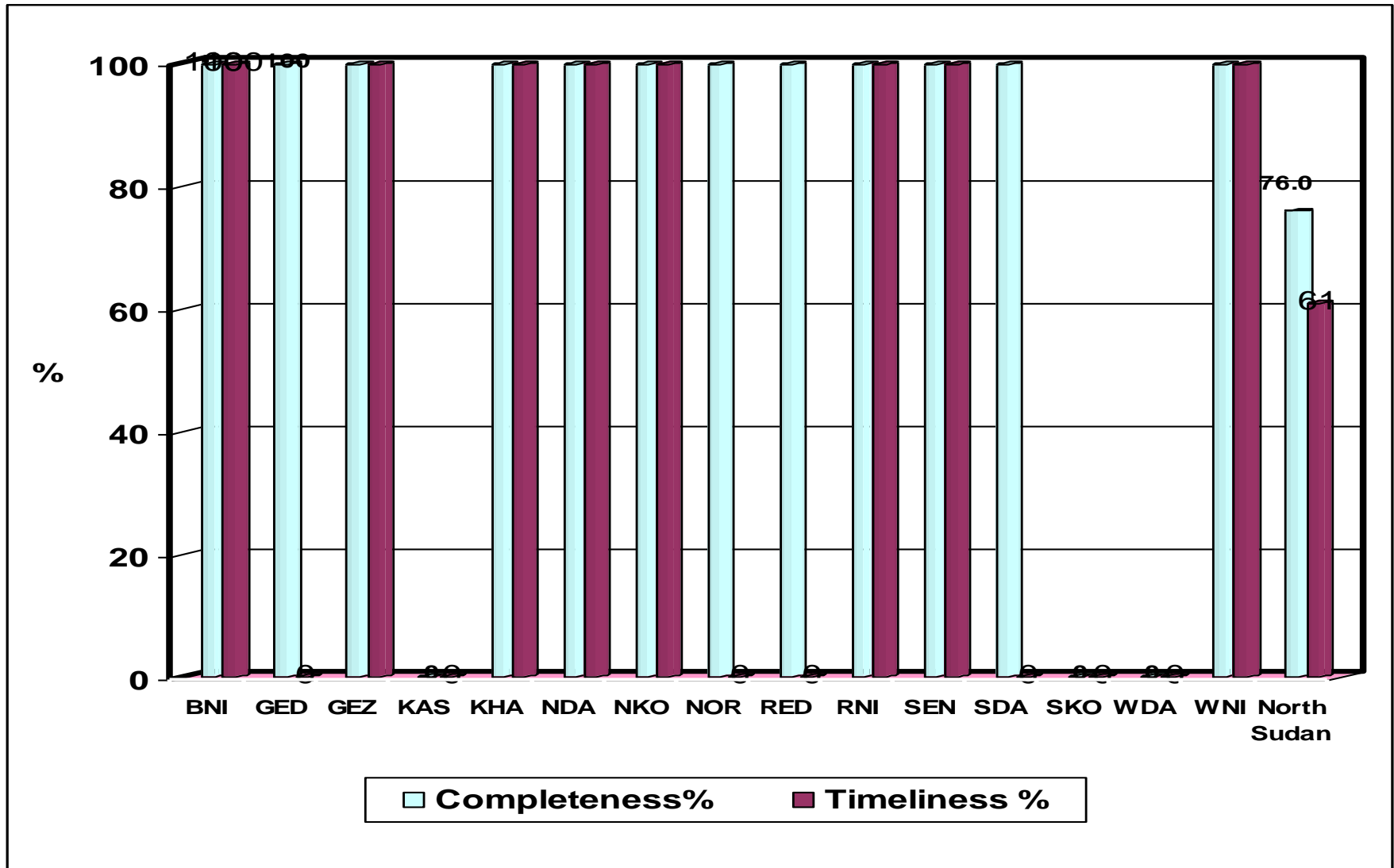
Flow of data...

- ☹ Reports should be received at federal EPI before or in the 10th of next month.
- ☹ Sentinel Sites are different, in some states it is epidemiology site, in some it is statistics site and in others it is EPI vaccination post.



March, 2009 Report

Fig (1) Completeness and Timeliness of localities reports by states March, 2009.



***Fig (2): Completeness and Timeliness of reports
North Sudan Jan-Mar, 2008-2009.***

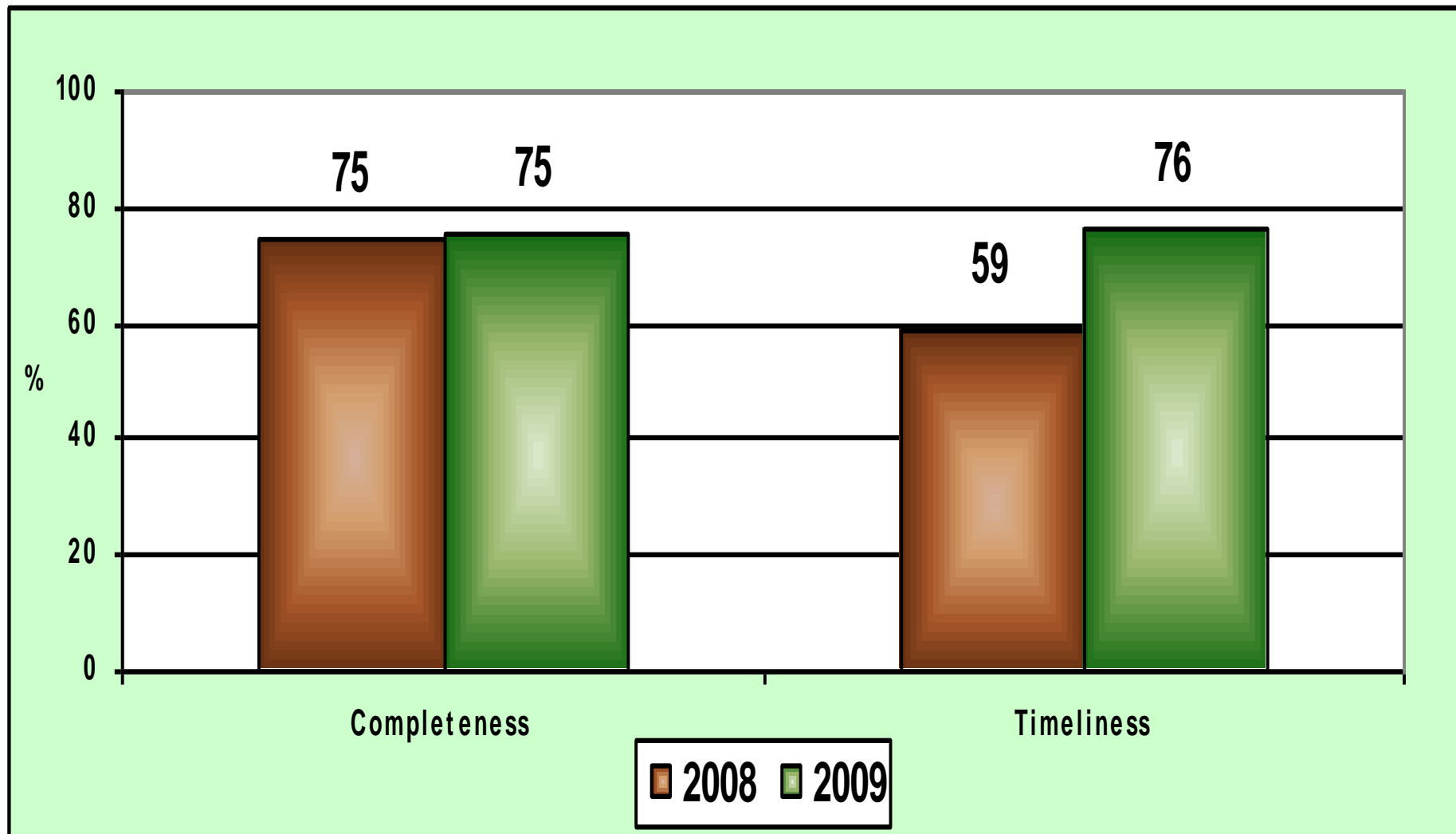
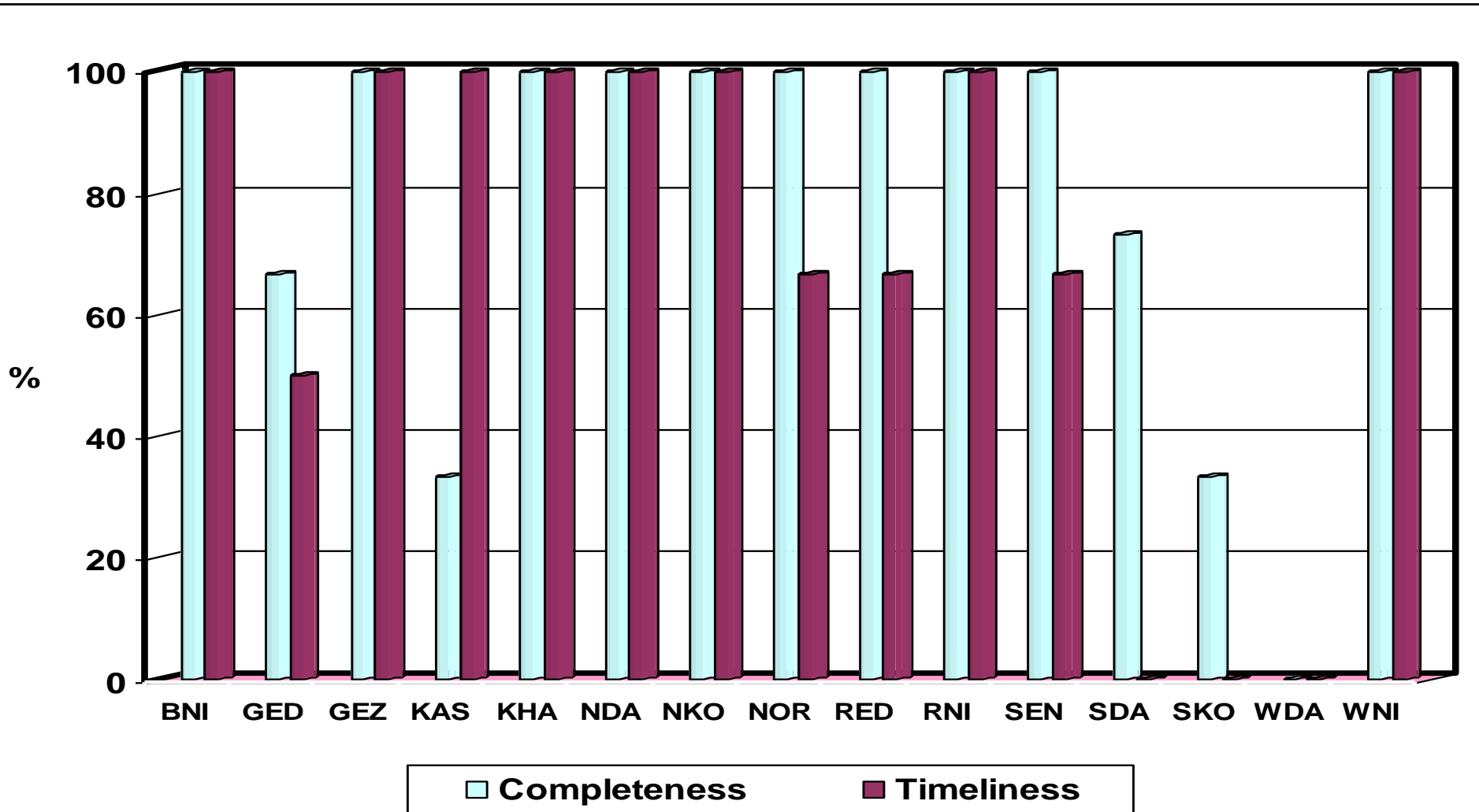


Fig (3) Completeness and Timeliness of localities reports by states Jan-Mar, 2009.



*Analysis of reported cases
Jan-Mar, 2009*

Table(1) Reported cases and deaths of other EPI diseases Mar, 2009

Disease	Cases	Deaths
Diphtheria	0	0
Pertussis	1	0
NT	12	4

*Table (2): Reported cases and deaths of EPI diseases
Jan-Mar, 2008-2009*

Disease	Cases		Deaths		CFR	
	2008	2009	2008	2009	2008	2009
Diphtheria	15	0	0	0	0	0
Pertussis	12	1	0	0	0	0
NT	32	38	9	10	28.1%	26.3%

Table (3.1): Reported cases and deaths of EPI diseases Jan-Mar, 2009 Comparison between EPI and Epidemiology

Disease	EPI Surveillance		Epidemiology department	
	Cases	Deaths	Cases	Deaths
Pertussis	1	0	34	0
Diphtheria	0	0	0	0

Table (3.2): NT reported cases and deaths from weekly (AFP & epidemiology) and monthly reports*

Disease	AFP Weekly reports	Epidemiology Weekly reports	Monthly reports
cases	52	41	38
Deaths	11	4	10

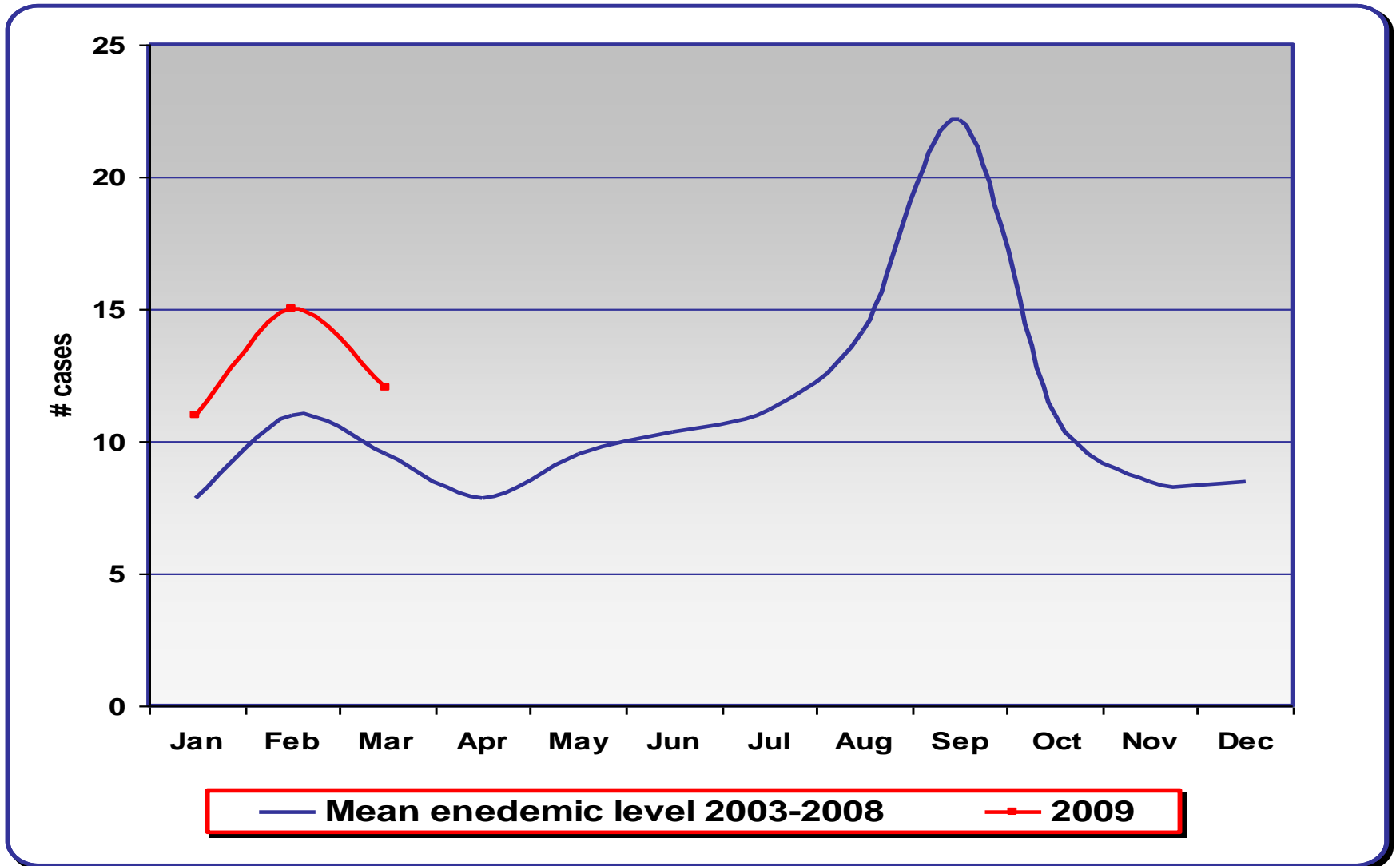
*Up to week 12, 2009

Neonatal Tetanus

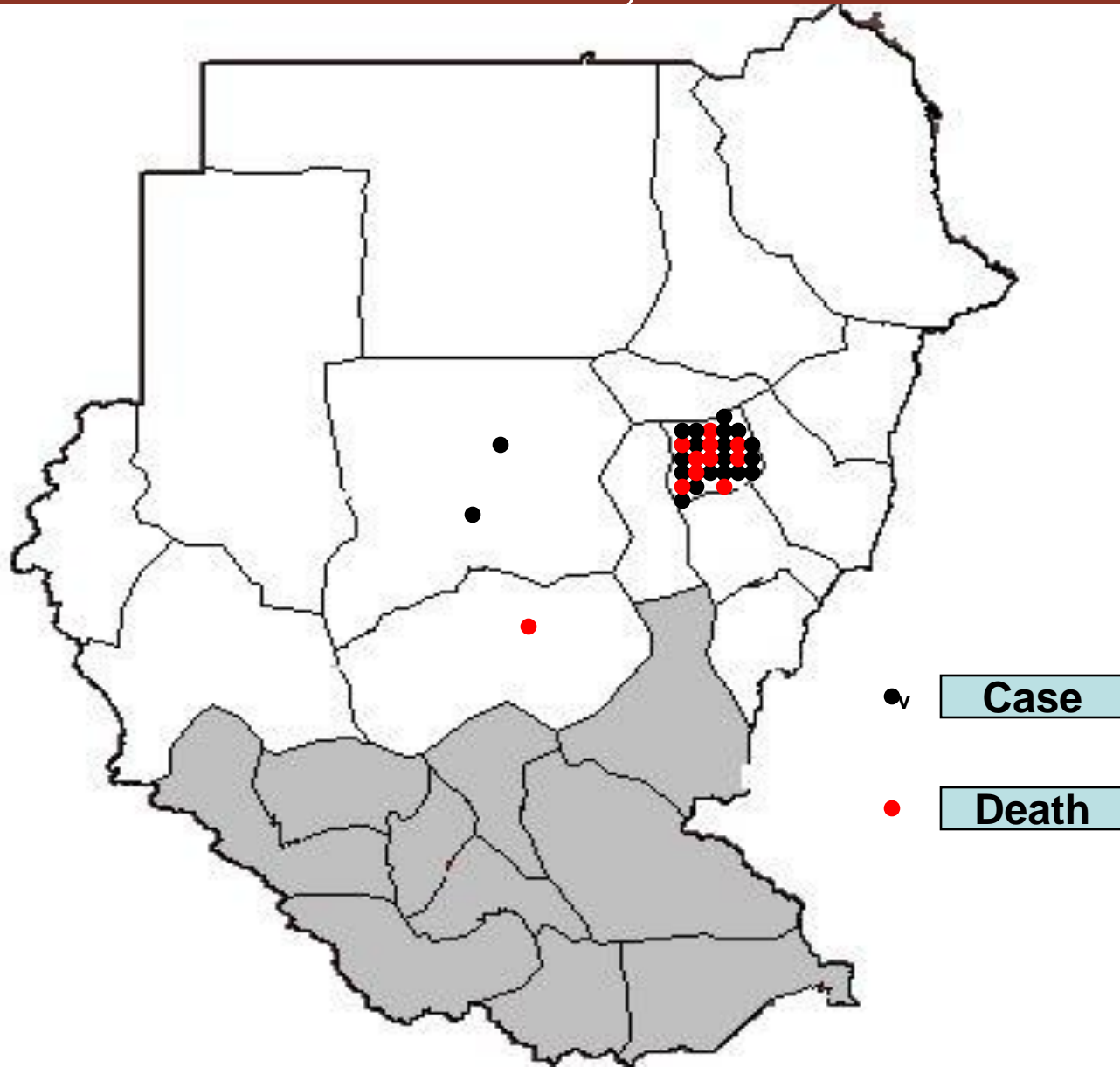
*Table (4): Monthly and weekly reported NT cases by state
Jan-Mar, 2009*

States	Monthly cases	Monthly Death	Weekly cases	Weekly Deaths
BNI	0	0	0	0
GED	0	0	0	0
GEZ	35	9	36	9
KAS	0	0	1	0
KHA	0	0	3	0
NDA	0	0	1	0
NKO	2	0	6	0
NOR	0	0	0	0
RED	0	0	0	0
RNI	0	0	1	1
SEN	0	0	0	0
SDA	1	1	0	0
SKO	0	0	0	0
WDA	No report received yet	No report received yet	2	0
WNI	0	0	2	1
Total	38	10	52	11

Fig.(4) Reported NT cases,2008 compared to the mean endemic curve of North Sudan



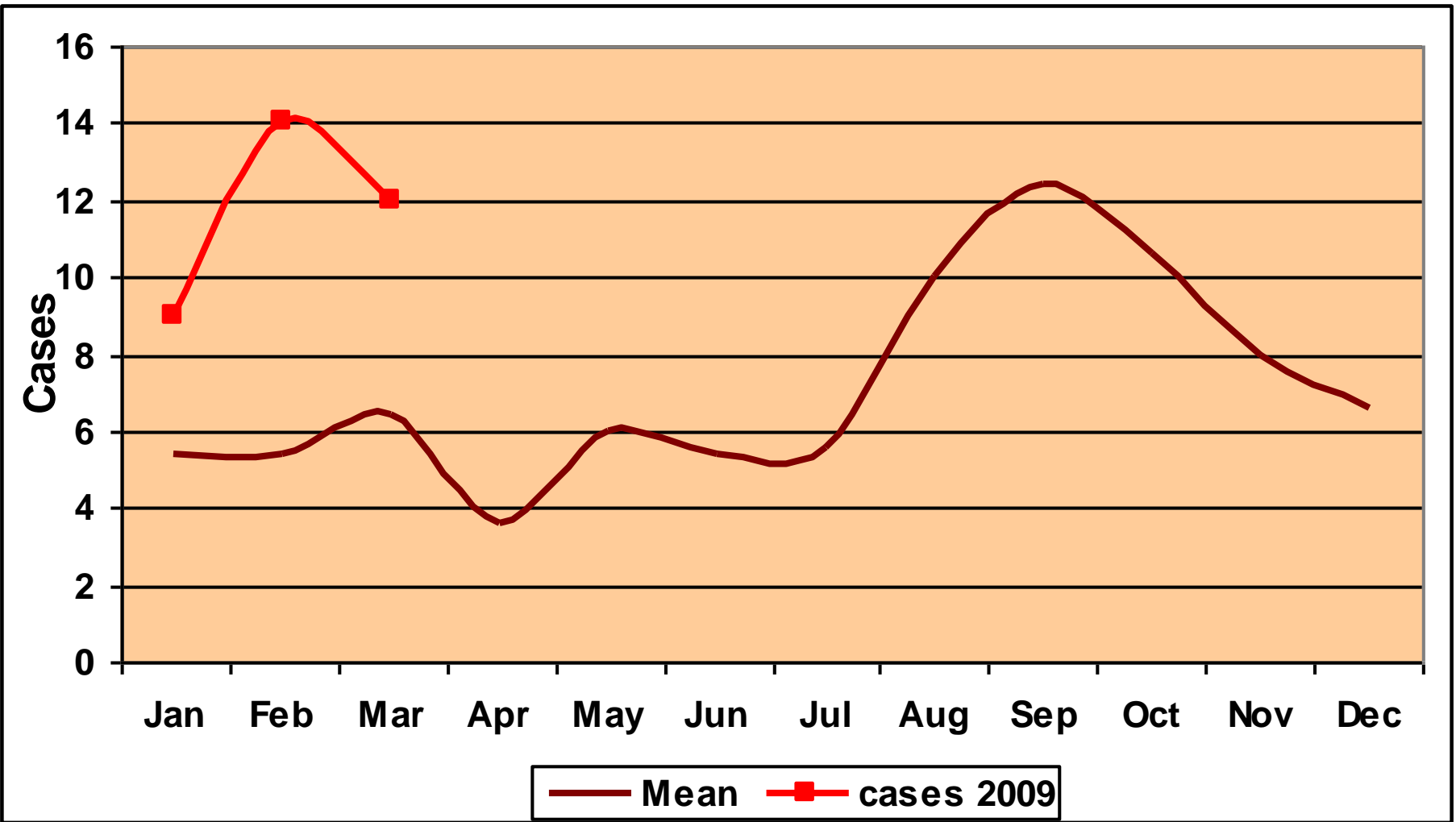
Map.(1) Distribution of reported NT cases and deaths by states Jan-Mar, 2009



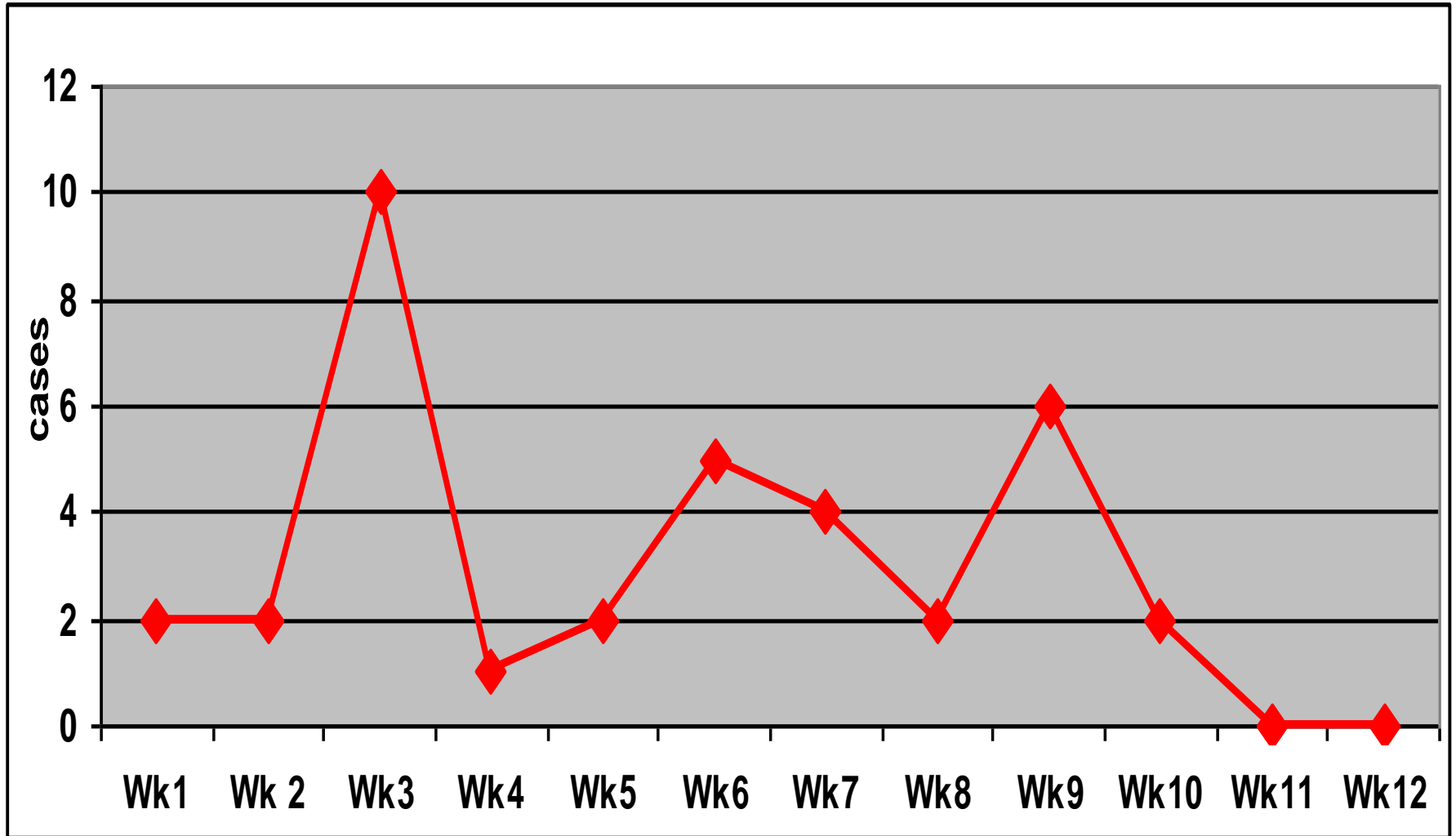
Table(5) CFR by locality for reported NT cases ,Jan-Mar, 2009

Locality	Life Births	cases	Deaths	CFR	Incidence by 1000 LB
Madani	18,452	3	1	33.3 %	0.16
South Gezira	28,517	6	0	0	0.21
East Gezira	22,478	1	0	0	0.04
Alhasahesa	30,194	8	1	12.5%	0.26
Kamleen	16755	3	2	66.7%	0.18
Um Elqura	10,065	1	0	0	0.10
Almanagil	41,266	13	5	38.5%	0.32
Tlus	9214	1	1	100%	0.11
Um Rawaba	27,475	2	0	0	0.07
North Sudan	1,320,785	38	10	26.3%	0.03

Fig (5): Reported NT cases, 2009 compared to the mean endemic curve Gezira state



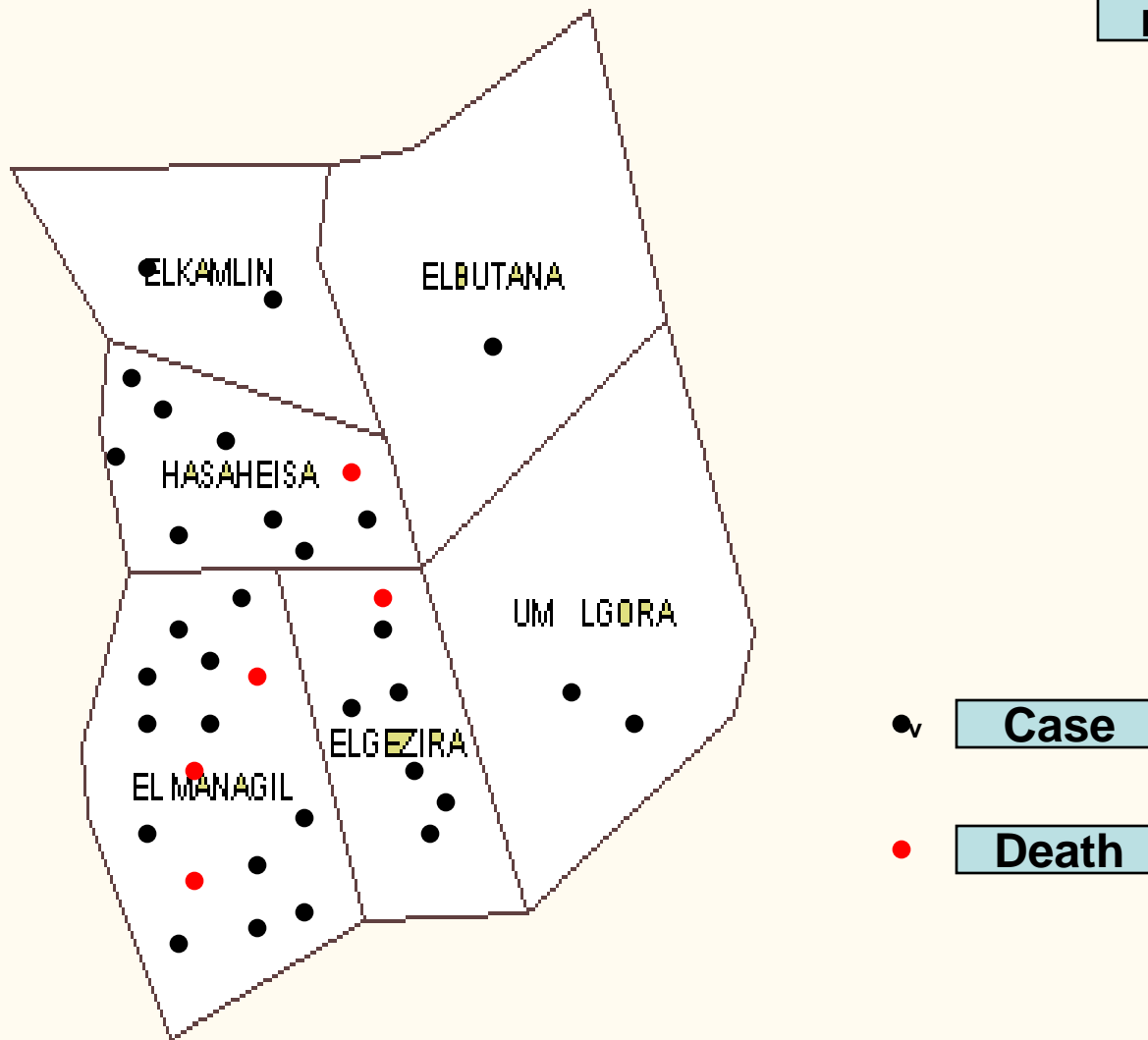
*Fig.(6) Distribution of Reported NT cases by weeks, Gezira state , 2009 (n=36)**



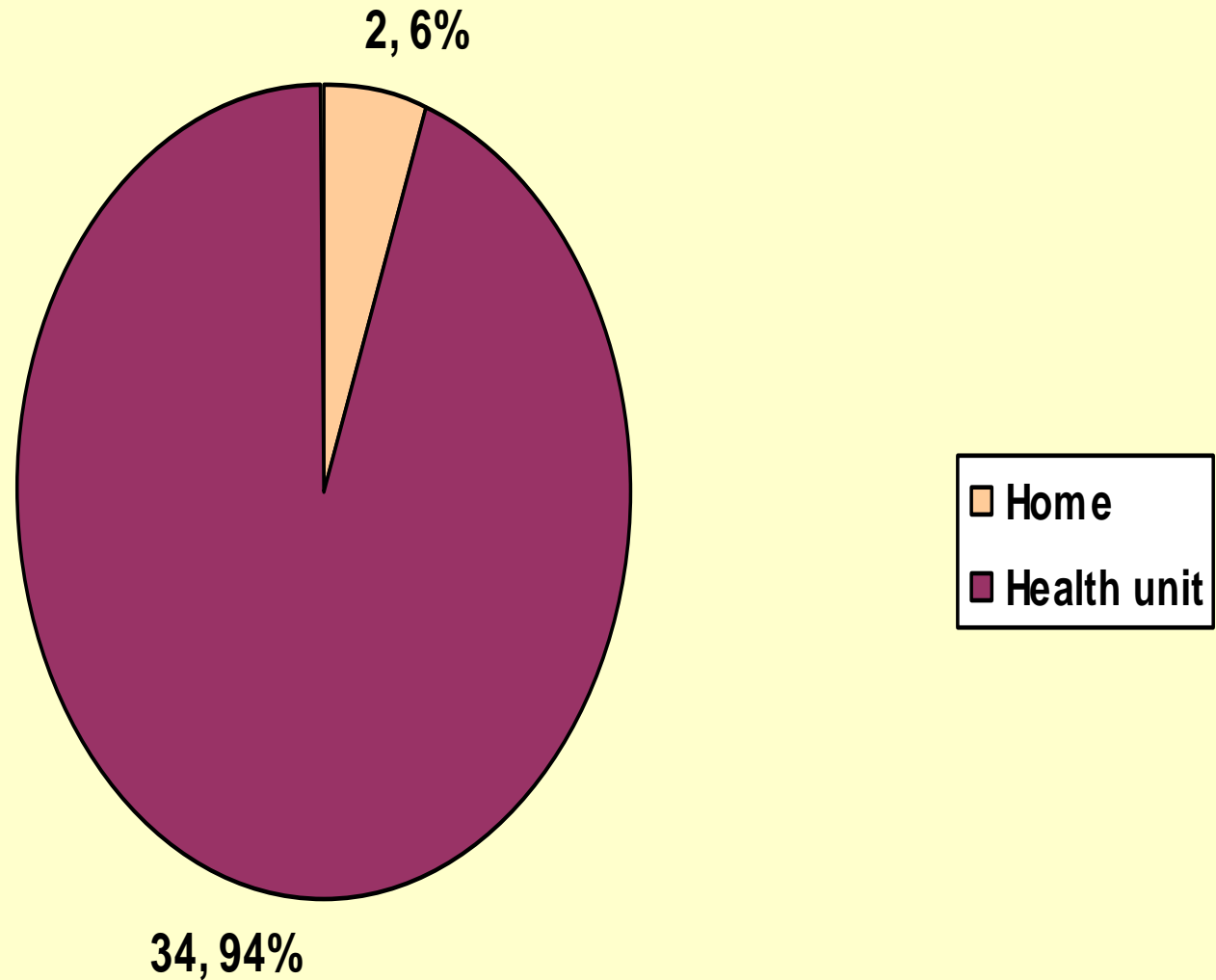
* Source case investigation forms

Map (2) Distribution of Gezira reported NT cases and deaths by localities Jan-Mar, 2009

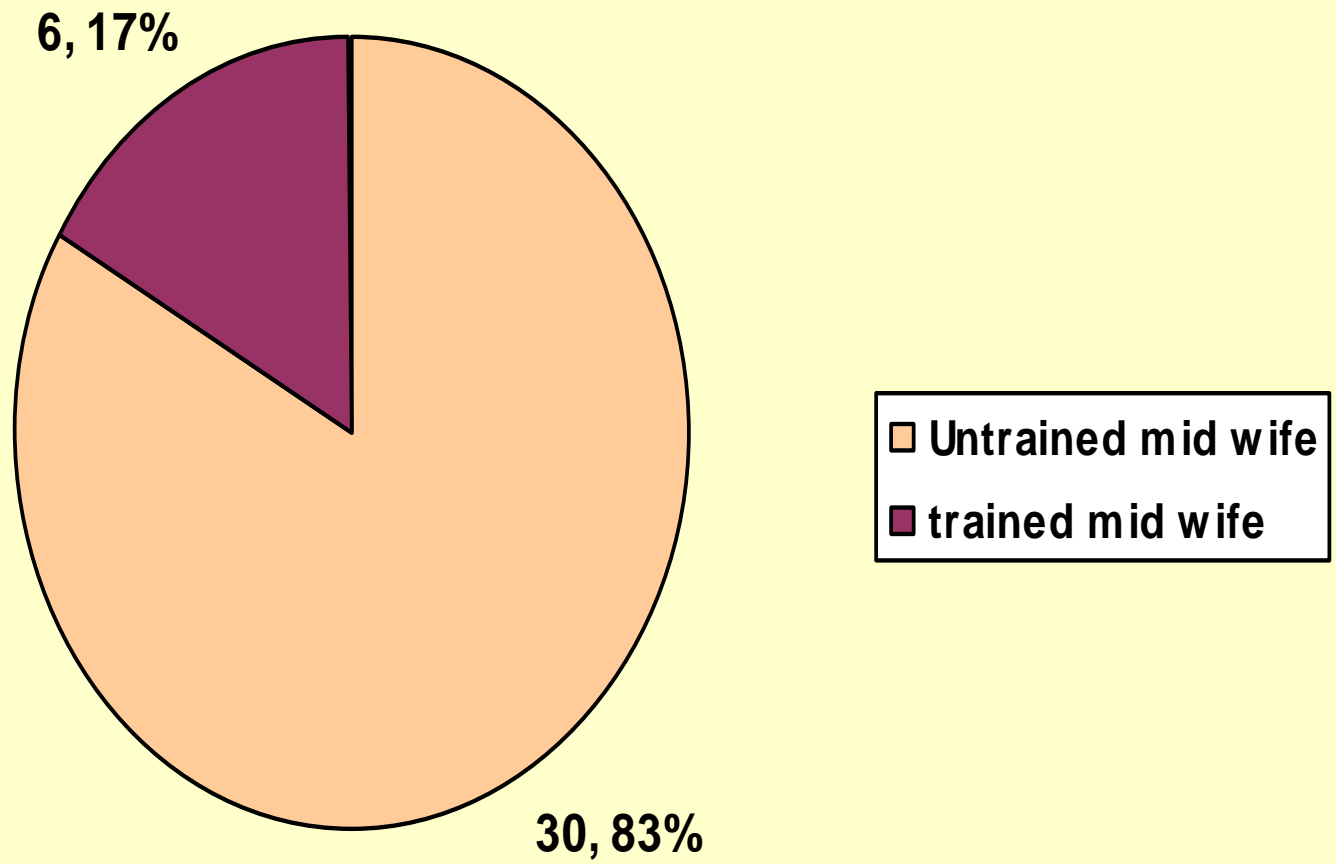
Cases = 36
Deaths = 5



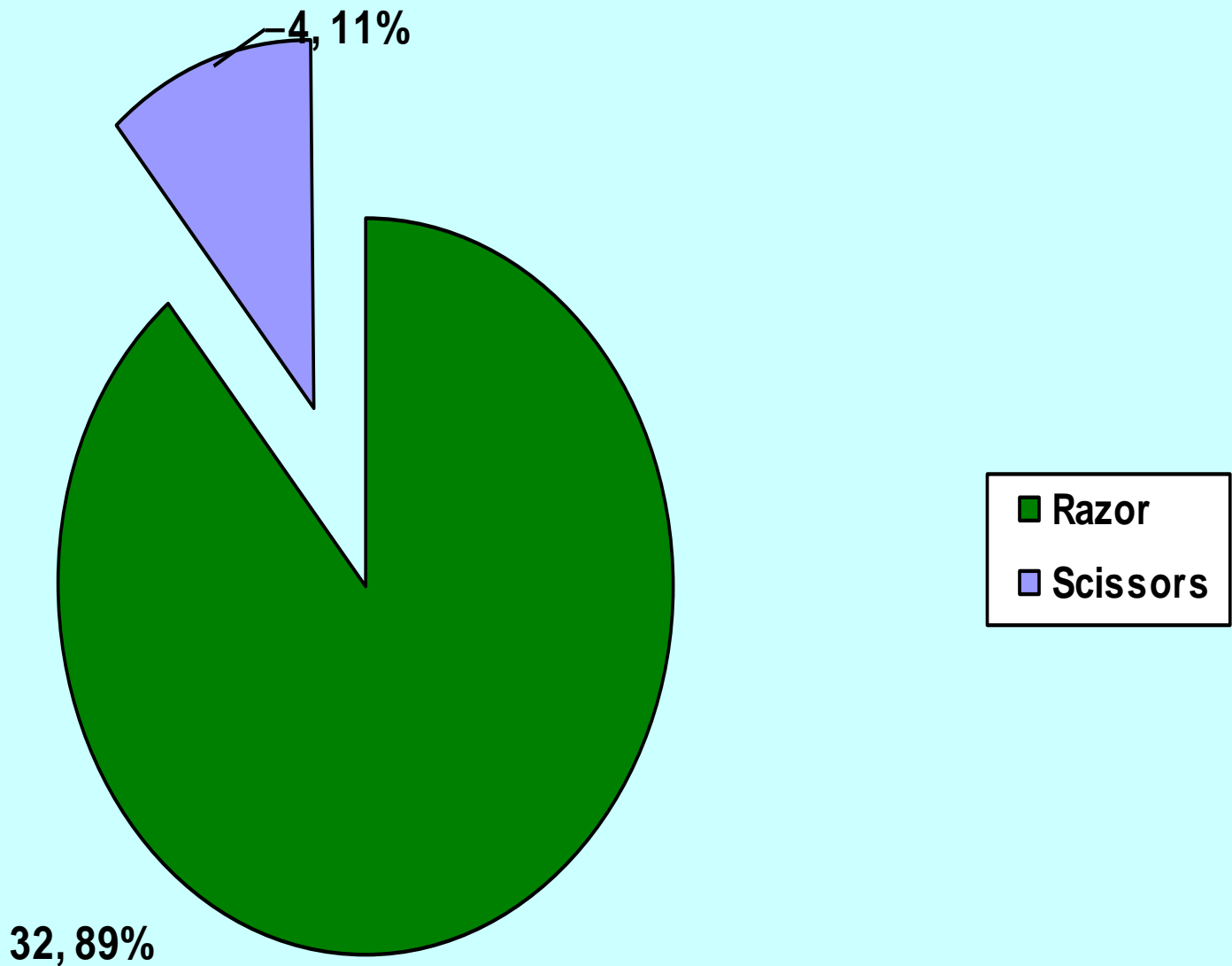
*Fig.(7) Place of delivery of reported NT cases
Gezira state, n=36*



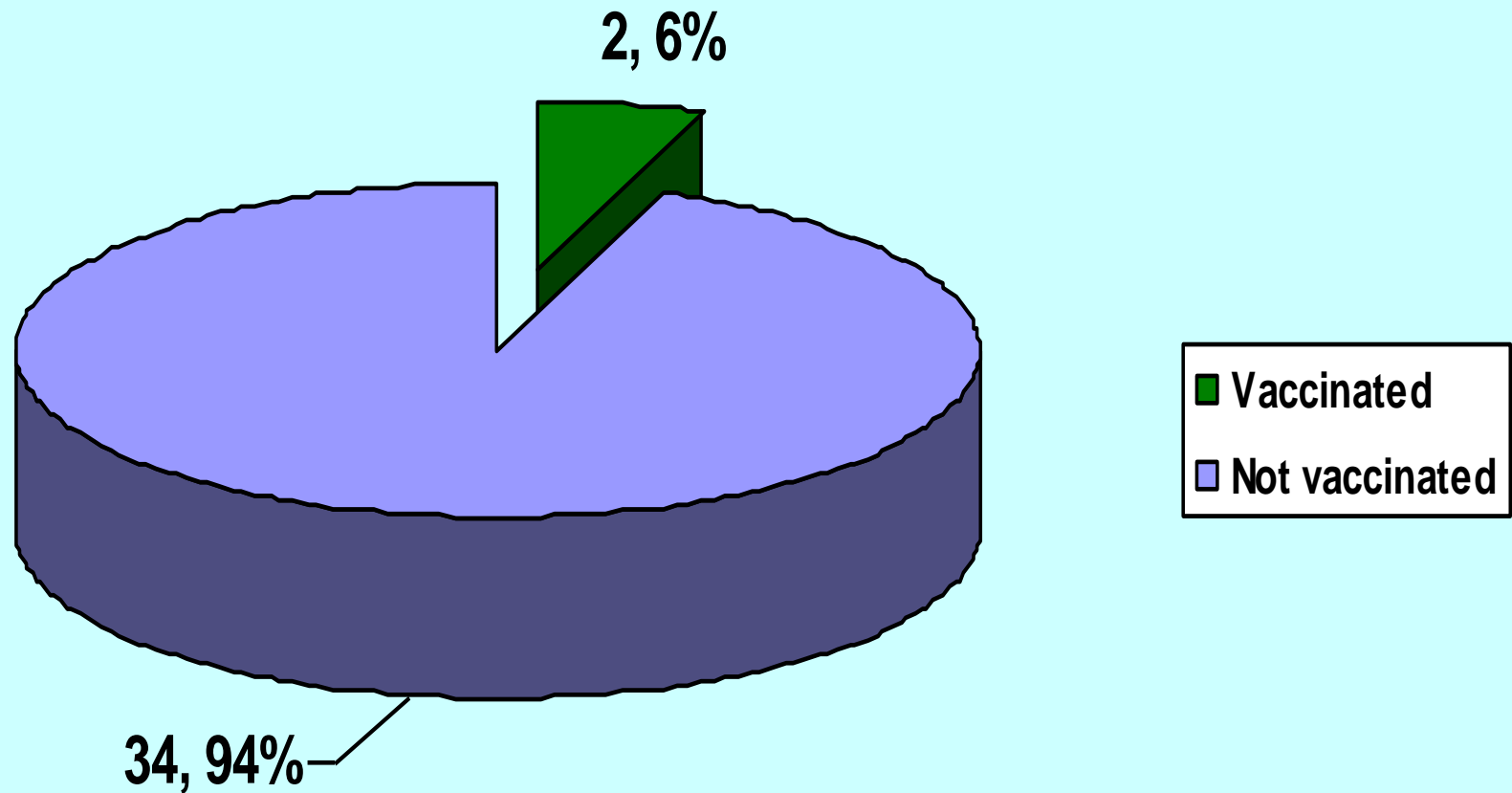
*Fig.(8) Training of the Midwives that delivered the cases
Gezira state, n=36*



*Fig.(9) Instrument used for cutting the cord
Gezira state, n=36*



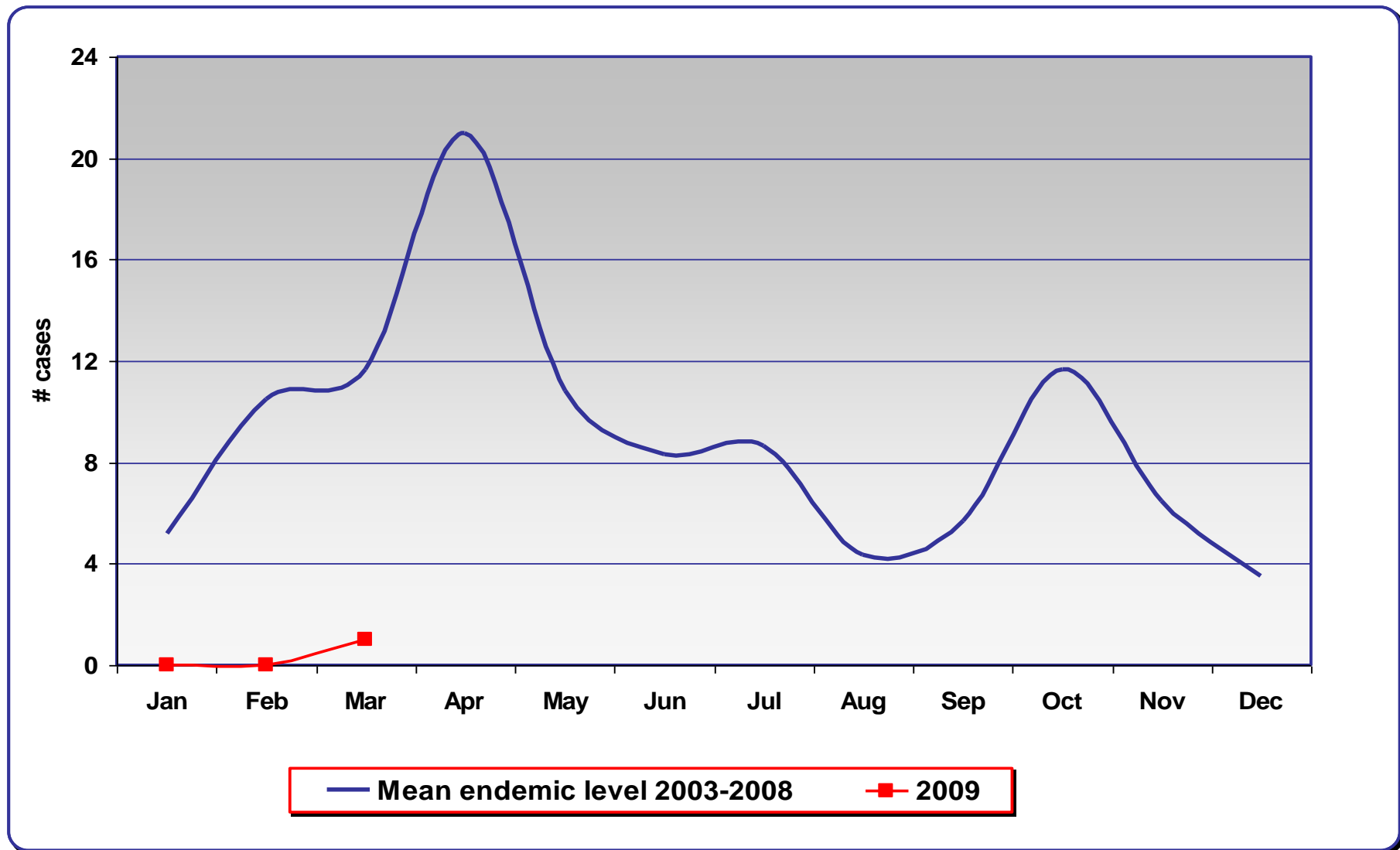
*Fig.(10) TT vaccination of the Mothers, of reported NT cases
Gezira state, n=28*



NT cases in Gezira statecon

- 👍 Cases were from different villages (no clustering)
- 👍 All cases are ≤ 3 Wks(1-19 days).
- 👍 Reported final Diagnosis for all cases is Neonatal Tetanus and was done by doctors
- 👍 No one of the mothers received TT vaccination during the last 3 months of pregnancy
- 👍 In all cases the area is covered by routine TT immunization

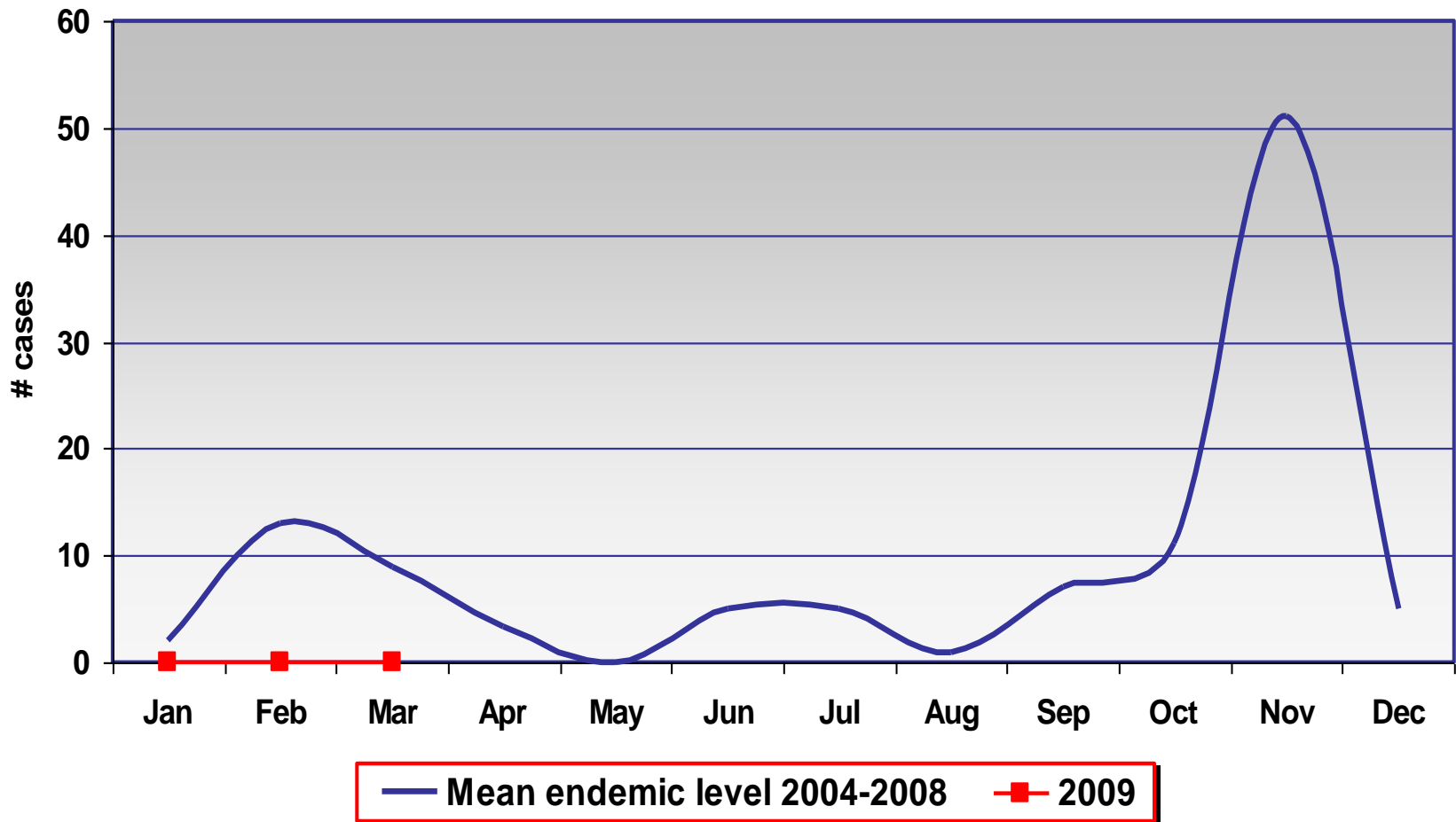
Fig.(11) Reported Pertussis cases,2009 compared to the mean endemic curve of North Sudan



Map.(3) Distribution of reported Pertussis cases and deaths by states Jan-Mar, 2009



Fig.(12) Reported Diphtheria cases,2009 compared to the mean endemic curve of North Sudan



Problems...

- 👍 No written field guide lines.
- 👍 Delayed reporting to Federal EPI.
- 👍 Different data sources at locality level.

Steps forward...

- 👍 Finalization and distribution of field guidelines.
- 👍 Training of Vaccinators
- 👍 Sensitization of medical staff in sentinel sites

Thanks so much