



Expanded Programme on Immunisation- South Africa (EPI- SA): Progress, Priorities and Challenges

Presented by: Dr N J Ngcobo

EPI-SA: NDOH

EPI Curriculum Review & Update Workshop



Outline

- Background
- Vision, Goals & Achievements
 - Global
 - Local.
- EPI Schedule
- Attaining High Routine Coverage
 - RED strategy
 - Data Quality Audits
 - Community and School Health involvement
- Acute Flaccid Paralysis Surveillance & Polio Eradication.
- Way Forward with New Vaccines
- Challenges & Constraints

Immunisation

- The Most Effective Public Health Intervention Currently available. Other than the provision of safe water no other undertaking, Not even the development of antibiotics has had such an impact in lowering mortality. (Aventis Pasteur)
- Immunisation saves over 3 million lives a year. Measles vaccine alone prevents 1 million deaths a year.
- Immunisation is the Greatest Gift that a Health Worker can give to a child.
- EPI can contribute significantly to the achievement of the MDG of reducing Child Mortality by 2/3 in 2015.

Achievements of the Immunisation Program

- Small Pox eradication
- The world is about to witness another major Public Health breakthrough - Polio Eradication
- Measles Elimination in the – Americas and Control in other regions
- Integration of systems and extending delivery of services:
 - Vitamin A supplementation during campaigns
 - Insecticide treated bed nets during campaigns
 - AFP surveillance integrated with surveillance of other conditions: meningitis, TB, Malaria etc
- In strife torn countries, campaigns have necessitated cease fire periods to allow campaigns to be conducted
- Neonatal Tetanus has been eliminated from most countries.

Expanded Programme on Immunisation in South Africa

EPI - SA : Background

- The EPI-SA we have today, was established in 1995 following the 1994 National EPI Review.
- Prior to that, had the TBVC states, Homelands and SA, each with a slightly different program. No national coordination.
- The 1994 National EPI Review also recommended the establishment of the National Advisory Group on Immunisation (NAGI).
- The EPI Structure was formed: National EPI, with EPI & Cold Chain managers. A similar structure, which includes a surveillance officer at Provincial level is duplicated.

Expanded Programme on Immunisation in South Africa

EPI - SA : Vision

To reach and protect every child in South Africa with safe – high quality vaccines that are delivered to the recipient with the recent technology, whilst developing local skills and capacity.

EPI Goals: South Africa

- To reach a full immunisation coverage of 90% for children under 1yr in 90% of districts by 2009.
- To be declared free of wild poliovirus by end of 2005 (2006)
- To eliminate measles by 2009, regain the measles control status reached by 2003.
- To maintain the Neonatal Tetanus Elimination status (2002)
- To fully investigate 80% of Adverse Events Following Immunisation (AEFI)

The SA immunisation goals are ambitious, yet attainable.

EPI Achievements in SA

- Neonatal Tetanus has been eliminated – 2002
- October 2006 SA was declared to have interrupted wild poliovirus transmission by the ARCC
- Measles Control – Significant decline in cases
- Acute Flaccid Paralysis Surveillance – Certification Standard reached & maintained since 2003
- Routine OPV₃ /DPTHib₃ coverage is maintained rel. high
- Ongoing efforts to increase routine through RED Strategy & integrate with other Child Survival interventions :
IMCI,CCMTS and Nutrition

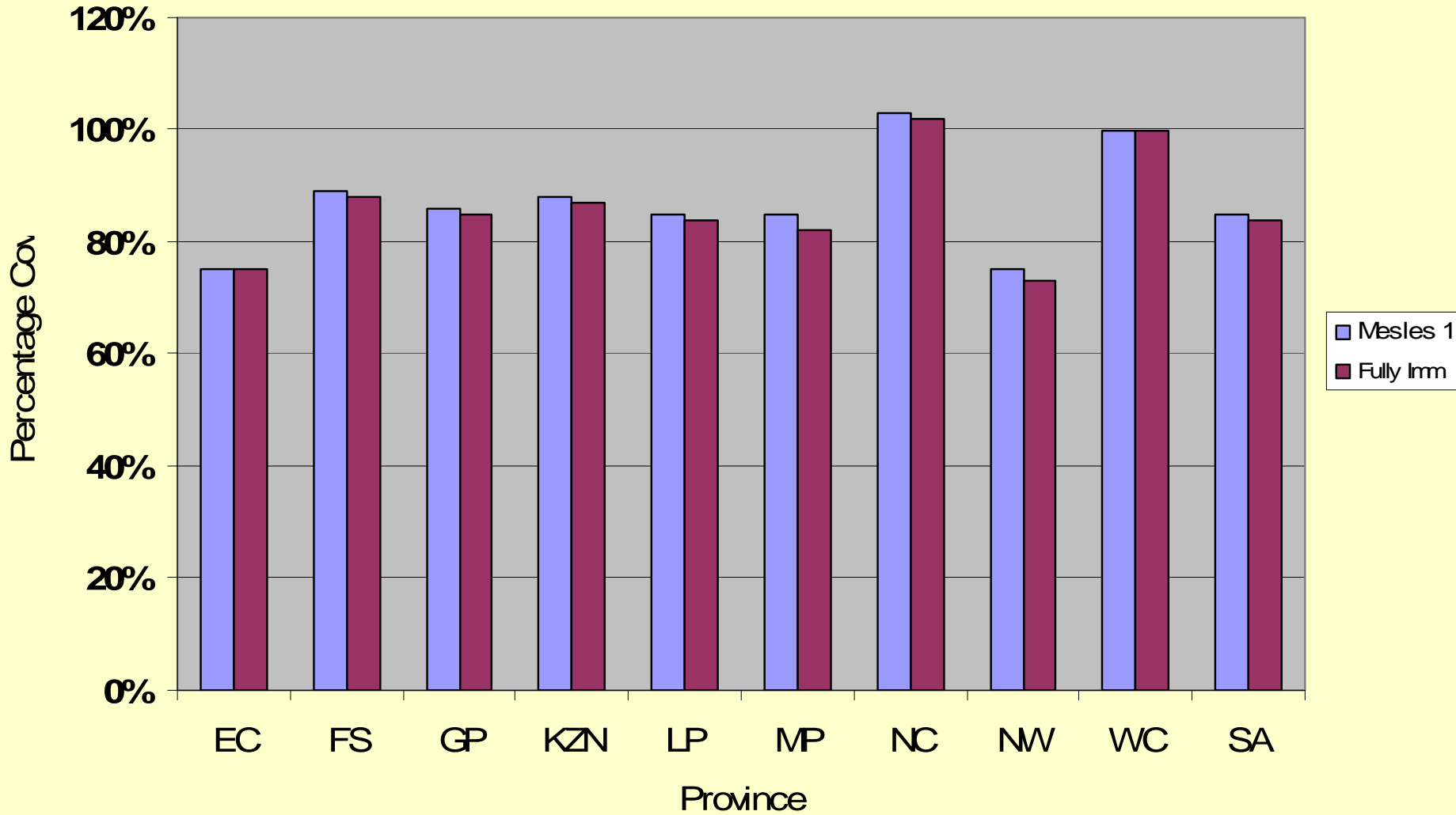
Routine EPI Schedule :
Achieve a 90% Fully Immunised Coverage for
children < 1 yr by 2009: RED Strategy
& DQS

.

EPI Schedule

Age	Antigen	Route
Birth	OPV & BCG	Orally & ID
6 weeks	OPV, DPT-Hib & Hep. B	Orally & IMI x 2 thigh
10 weeks	OPV, DPT-Hib & Hep. B	Orally & IMI x 2 thigh
14 weeks	OPV, DPT-Hib & Hep. B	Orally & IMI x 2 thigh
9 months	Measles	IMI thigh
18 months	OPV, Measles & DPT	Orally & IMI deltoid
5 years	OPV, DT	Orally & IMI deltoid

Measles 1 & Fully Immunised by Province: 2006



Reach Every District (RED) Strategy - To Reach Every Child (REC)

Developed by WHO, UNICEF & USAID. 5 components

- Re-establishing outreach services:
 - Regular and reliable outreach/mobile services
- Supportive Supervision
 - On site training with effective supervision
- Links between Community and Service
 - Regular meetings between the community & staff
- Planning and Management of resources.
 - Better management of human, equipment & financial resources.
- Monitoring for action, with proper use of:
 - Coverage Charts/ Charts of doses
 - Maps and catchment population for each facility

RED - Major Guiding Principles

- District Based and owned.
- It is delivered within the minimum package of essential interventions.
- The implementation is through integration of services: integrated with Nutrition, IMCI, TB, HIV/AIDS and Comprehensive Care & Treatment for the HIV infected.
- The Strategy demands full community involvement and ownership.
- Maximize the efficient use of available resources
 - Sharing & proper management of resources

RED Implementation

- Process started in 2005, initially 3 districts.
- All 9 provinces have been trained.
- Currently all provinces cascading to districts
- National to monitor quality of training and evaluate effectiveness use of tools at district level.
- Beginning to see good results in some districts.
- Challenge has been reliable & consistent denominator figures to allow monitoring of outcome.

Address Routine coverage: Data Quality Audits And Self Assessments

- **The Question Addressed:**
- Do the Immunisation Coverage figures reflect programme performance?
- Audits – external, Self Assessments – internal
- Data entries, total doses & quality are followed from facility level, through district up to the national level.
- Monthly summary figures in registries are checked against the daily/weekly doses & totals.
- Check for discrepancies amongst related indicators.
- Process started – findings are eye opening.



Address Routine coverage: Involvement of Schools & Communities

- President Award and Primary Schools are involved in raising Community Awareness
- Integration with Youth Services and through the Youth Indaba held in June. Youth will visit households
- School Health Services to be engaged in addressing routine coverage
- Community Health Workers used in defaulter tracing
- Revive the Facility (Clinic) Health Committees
- Involvement of Communities as part of RED Strategy implementation.

Surveillance

Targeted EPI Priority Conditions

- Acute Flaccid (AFP) Surveillance for Polio Eradication
- Measles
- Neonatal Tetanus
- Adverse Events Following Immunisation.

AFP - Surveillance

AFP: Case Definition

Any child below the age of 15 years who presents with a sudden onset of paralysis or weakness of any limb should be notified. Or a person of any age in whom polio is suspected or with AFP.

Even if you are certain of the diagnosis; Guillain Barre, Transverse Myelitis, TB Meningitis etc as long as the signs & symptoms are of Acute Flaccid Paralysis, please report & investigate.

AFP Surveillance : Indicators

- Detect 2 AFP cases per 100 000 children below 15 yrs
- Collect 2 stool specimens (8g), 24 hrs apart within 14 days of onset of paralysis
- Stool specimen to reach NICD (WHO accredited lab) within 3 days on ice, reverse cold chain
- Cases inadequately investigated need:

A 60 day Follow Up

Clinical notes with the results of all the investigations conducted

If not, such cases cannot be presented to PEC & they end up as **compatible**.

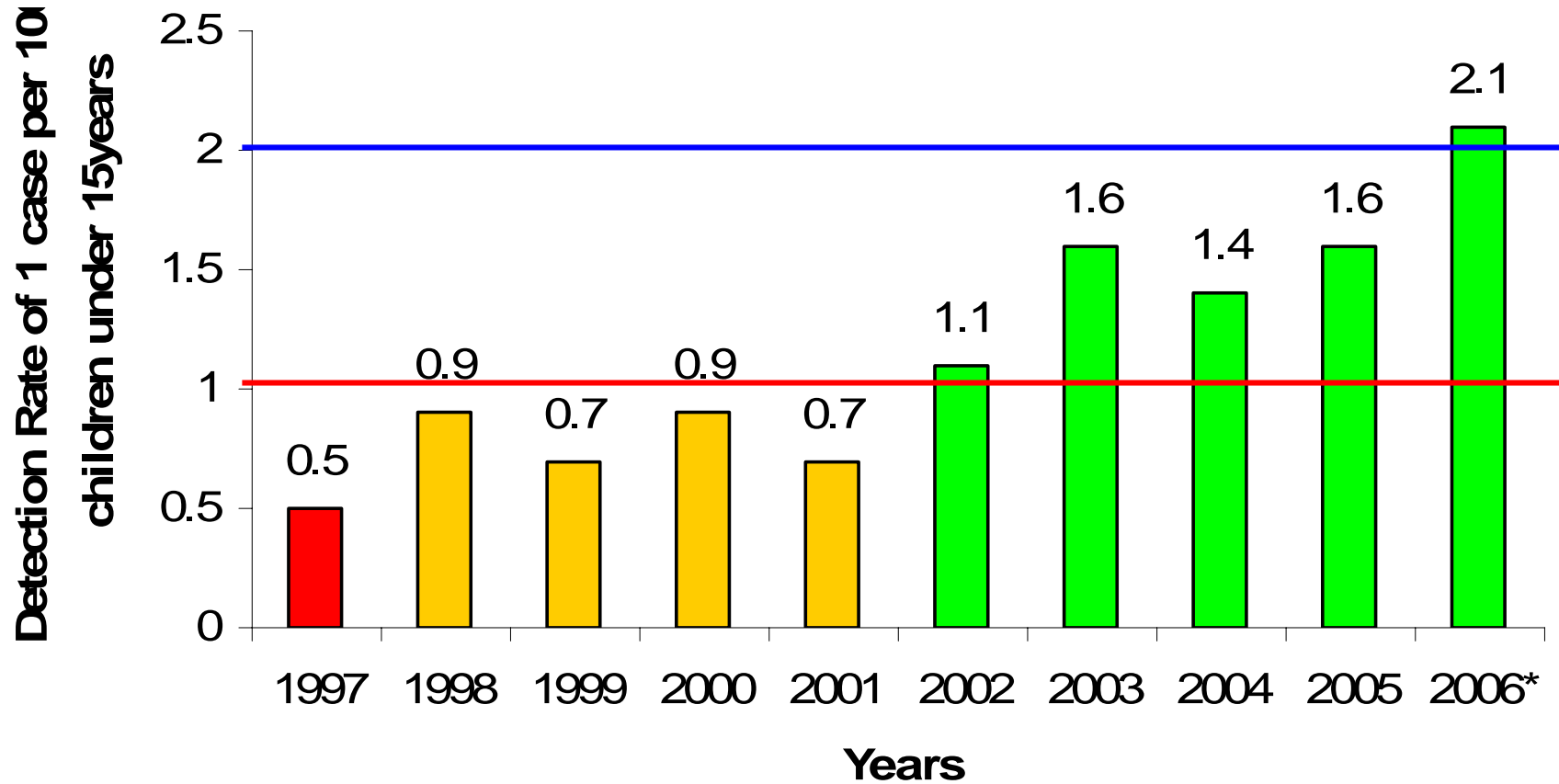
AFP Surveillance – Requirement for Polio Free Certification



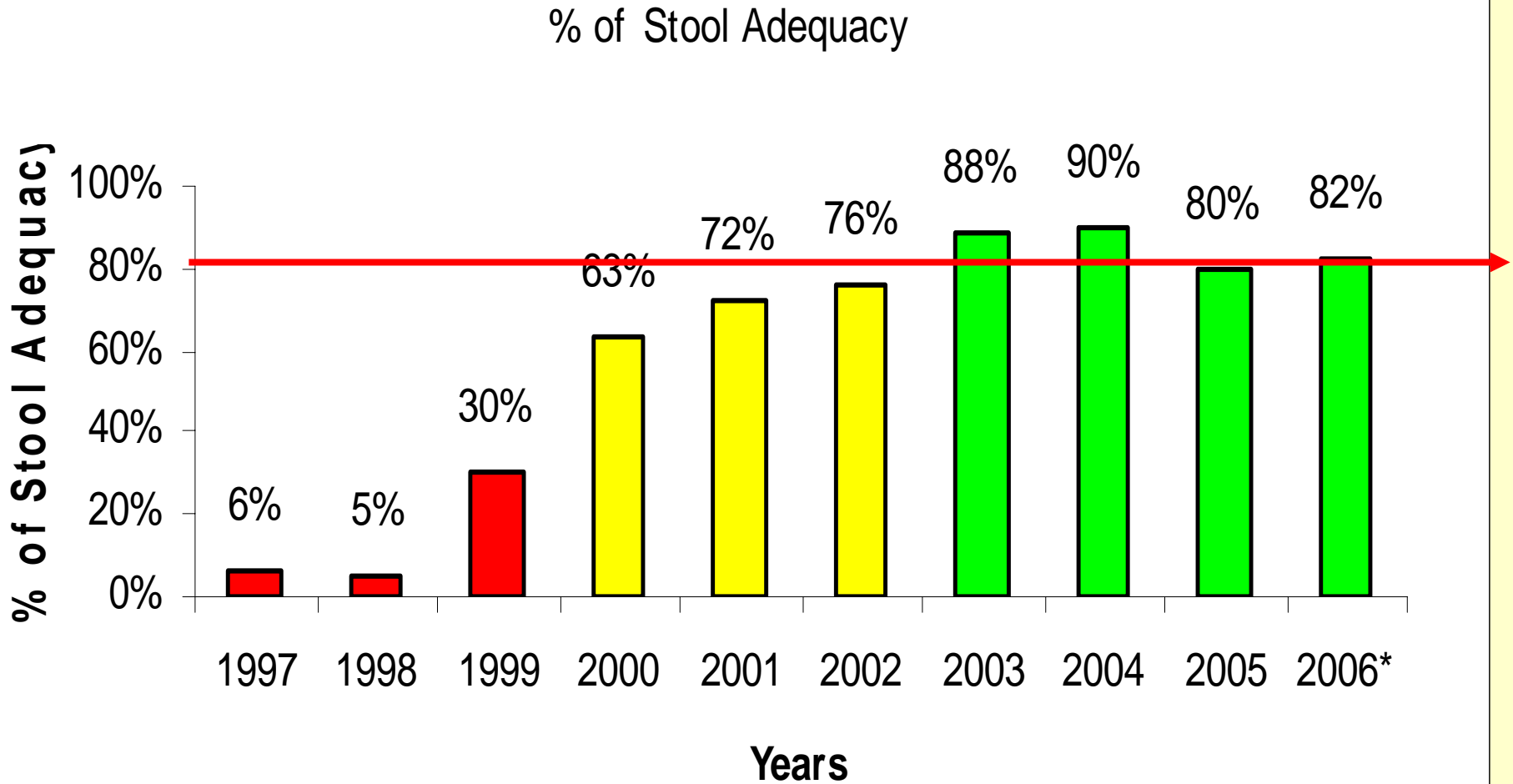
- To detect indigenous wpv cases.
- To detect importations and respond promptly, should they occur.
- To comply with the requirements for Polio Free Certification.
- Difficult to get this across to clinicians.

New: AFP Detection rate increased from 1 to 2 cases per 100 000 < 15yrs

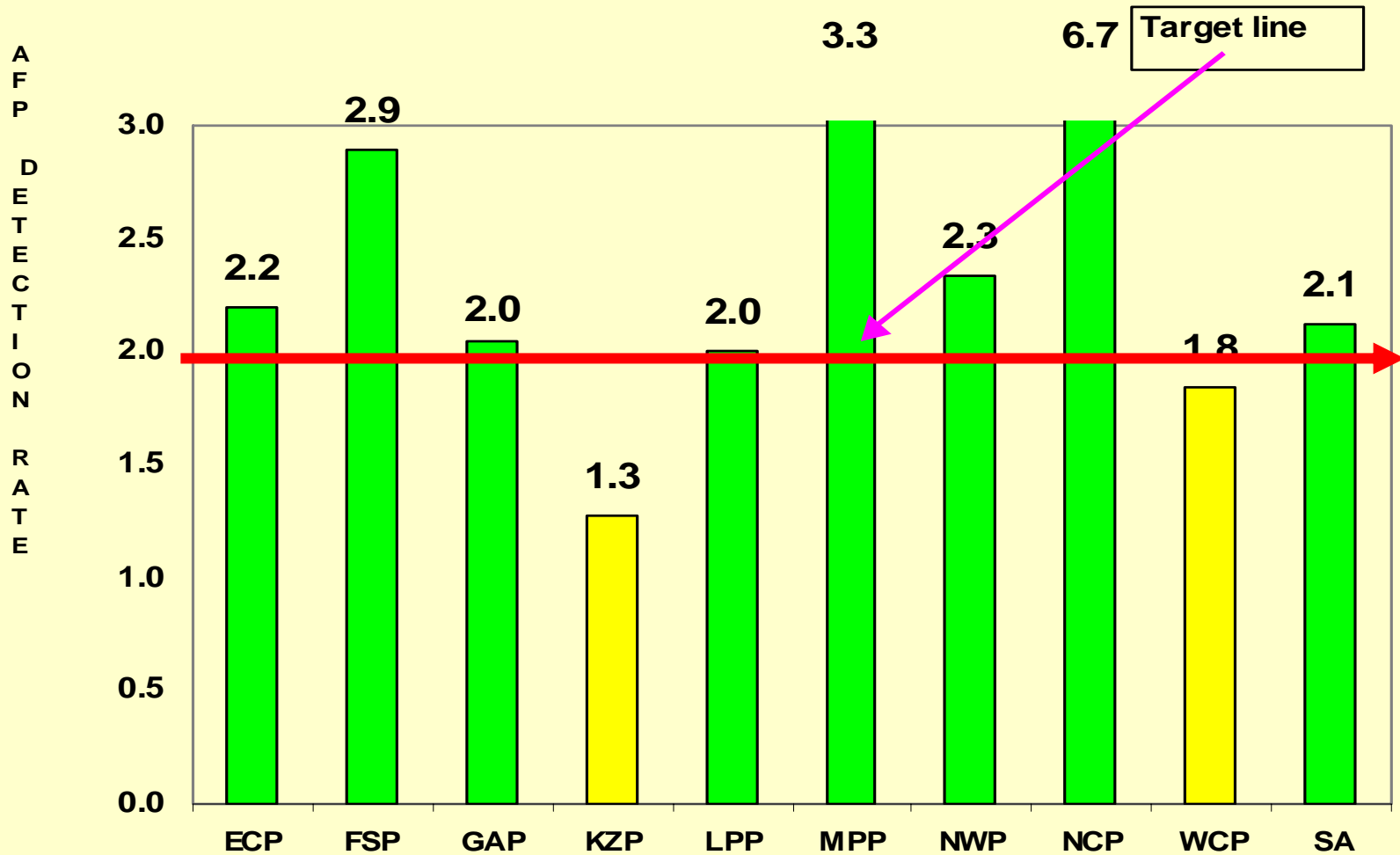
RSA: Non-Polio AFP Rate 1997-2006



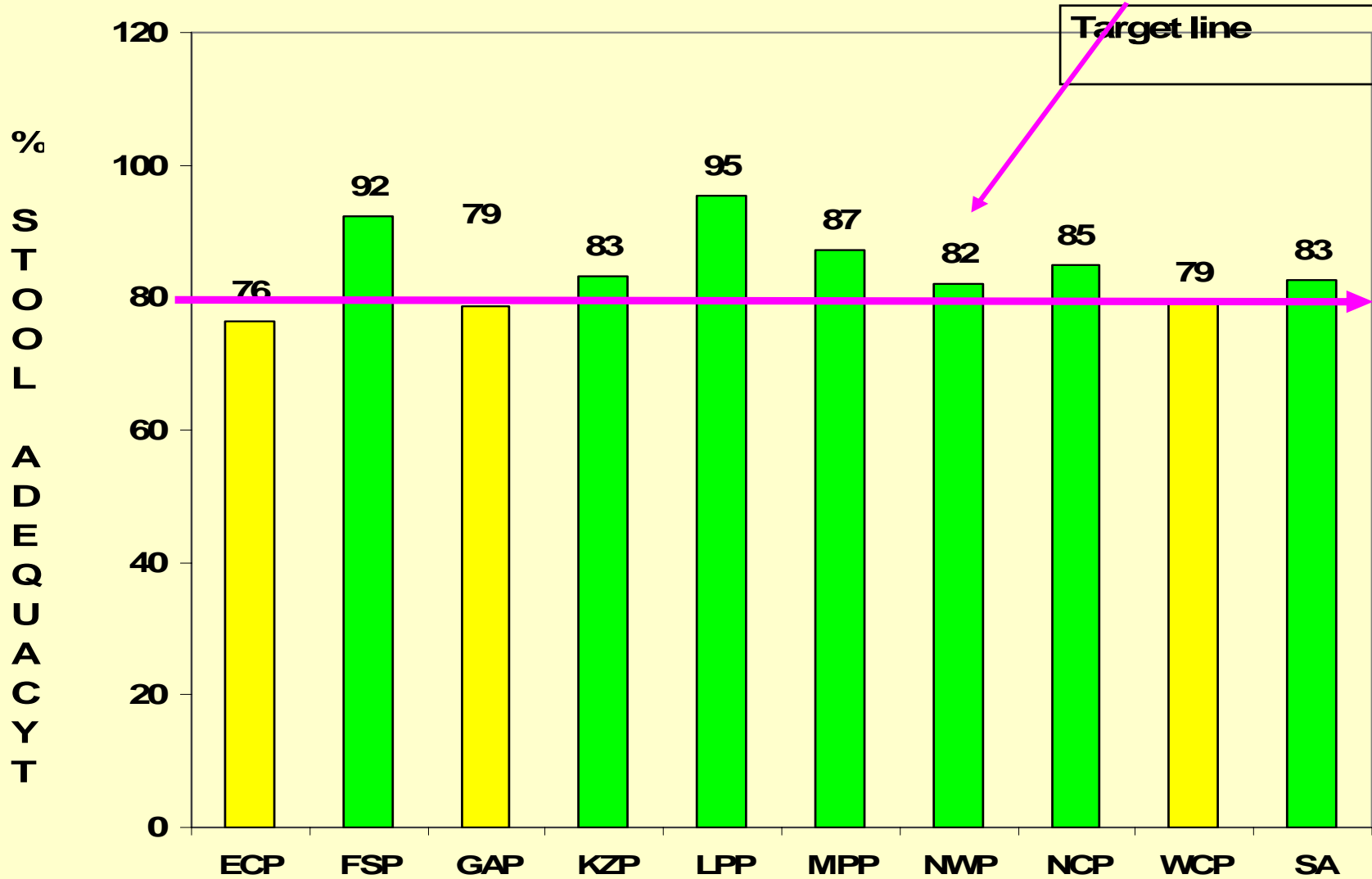
RSA: % of Stool Adequacy by year*



2006:Non Polio AFP rate



2006:% Stool Adequacy by Province



Measles Surveillance

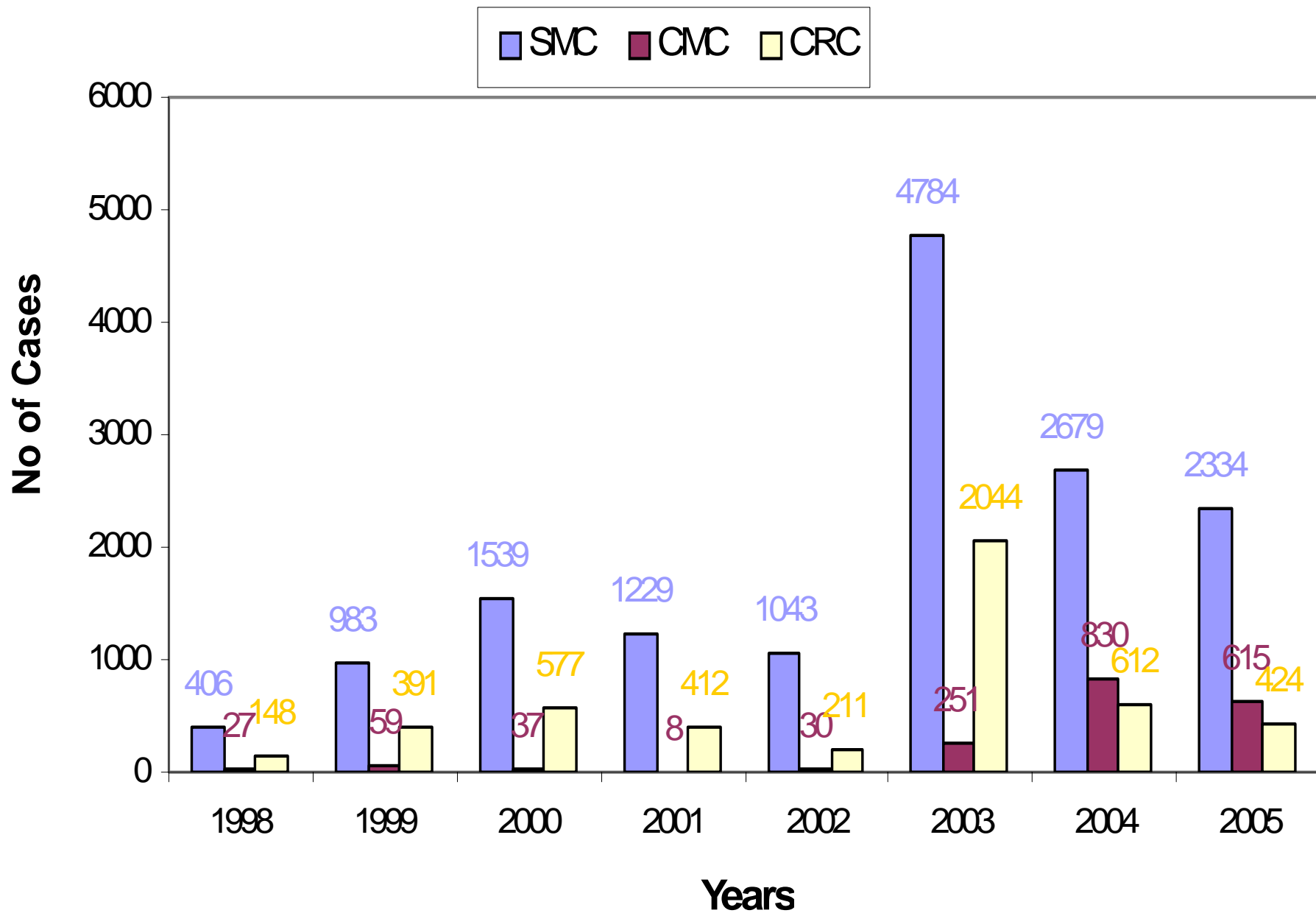


Case Definition of a Suspected Measles Case:

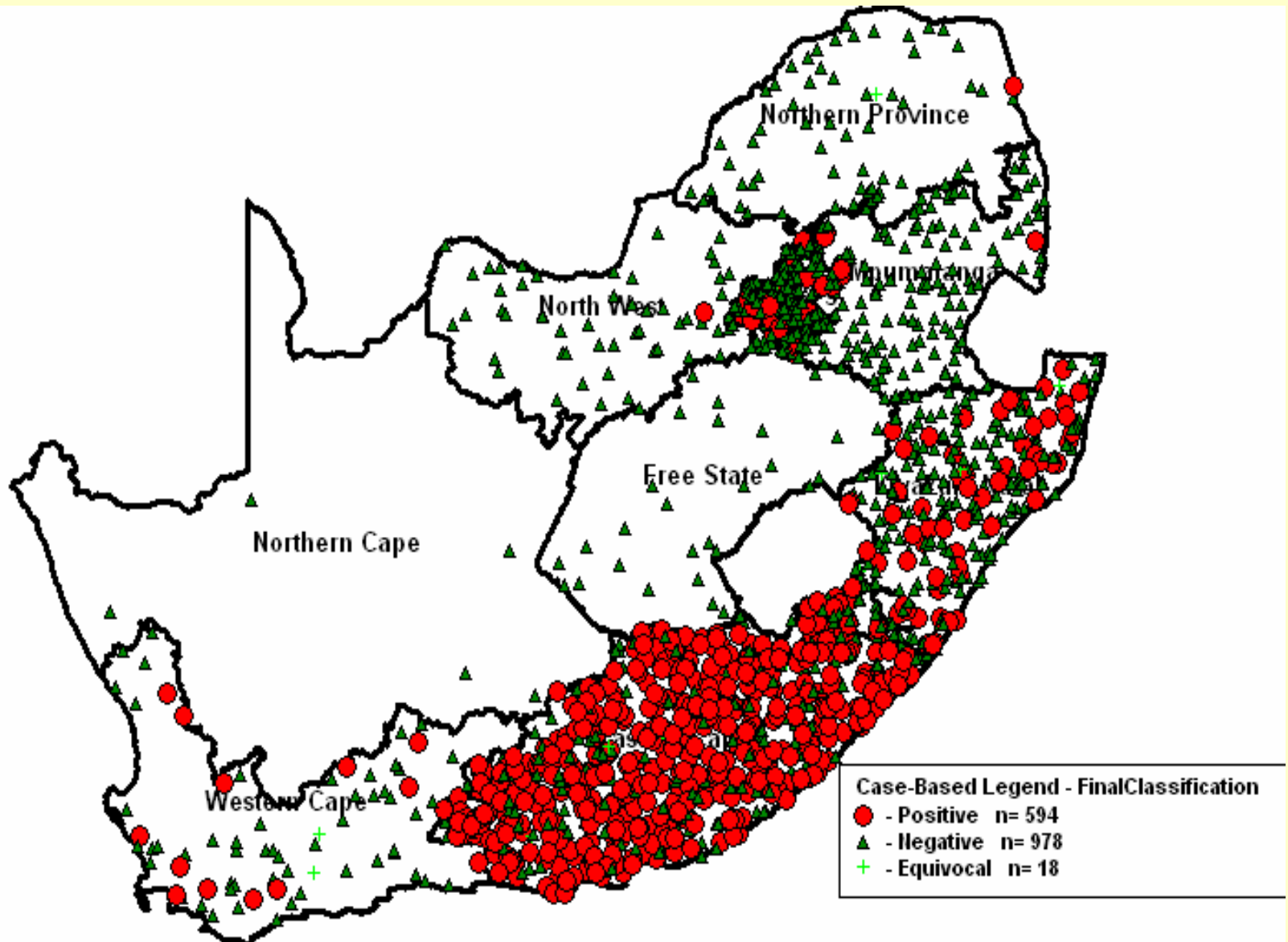
A person of any age who presents with Rash, Fever and any of the 3C's: Cough, Coryza and Conjunctivitis

Collect blood and urine samples. Complete CIF and send to NICD

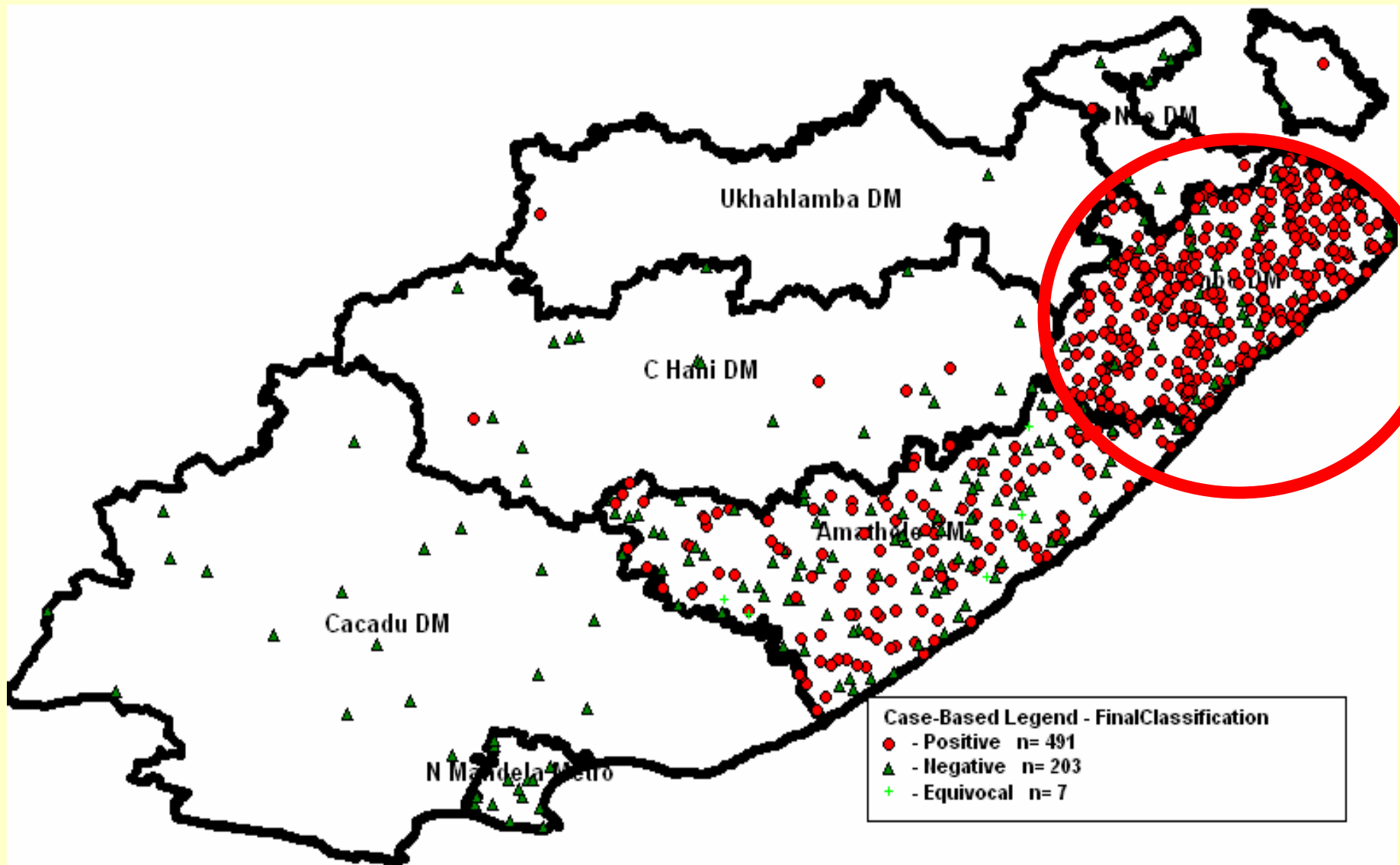
RSA Measles Surveillance



2005 RSA Measles Surveillance By Province



2005 ECP SMCs By Health District



Looking Ahead: New Vaccines & New Vaccine Delivering Technologies

- Planned to introduce Td at 7 years & at 12 yrs
- EPI – SA currently considering the possibility & feasibility of introducing pneumococcal and rotavirus vaccine
- Of consideration also is injectable polio vaccine (IPV) use as part of Post Polio Eradication – Immunisation Policy.
- Combination vaccines, pentavalent and later hexavalent being considered. Pentavalent – may include IPV and acellular pertussis (less side effects).
- All above need the basis of a strong routine vaccination program.

EPI- SA : Challenges

- Reach the set International & National indicators
- Reach the set Routine Coverage target: huge disparities at district level
- Prevent and promptly respond to Measles Outbreaks
- Maintain Surveillance Target
- Meaningful involvement of Academic institutions and clinicians : Routine & Surveillance
- Integration with other Child Survival Strategies
- Sustain achievements: Polio Certification & MNT Elimination

EPI- SA : Constraints

- No proper EPI structure at Provincial & District level
- No EPI ownership at District level
- Human Resources challenges: shortages, attrition & rotation
- Supervision : Not conducted, Quality – poor & elements not understood by the supervisors e.g. data indicators
- Poor integration of services
- Competition with other programs

EPI is Committed to the Protection of SA's Children from Vaccine Preventable Diseases.

Full implementation of the EPI as a Child Survival Strategy will bring us closer to achieving the MDG of reducing Child Mortality.

Thank You!