



Public Health Care in India: Infrastructure, Expenditure, Human Resource and Performance

**State Institute of Health and Family Welfare,
Jaipur**



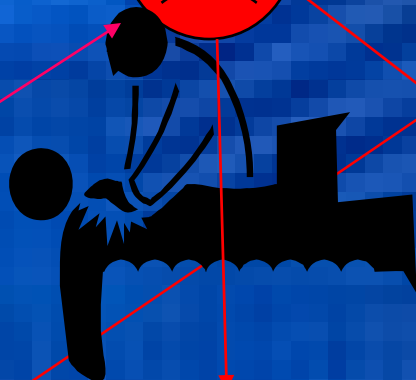
Infrastructure H R & Performance Issues



Health & Disease



Disease

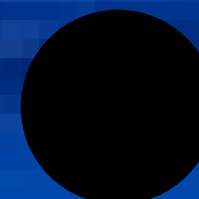


Health

Doctors,

Drugs, Diagnostics

Death



Disability

Constitutional commitment: Health: State subject



- Central List
 - International Health, Port Health
Research
 - Technical & Scientific Education
- State List
 - All other Health issues
- Concurrent list
 - Epidemics

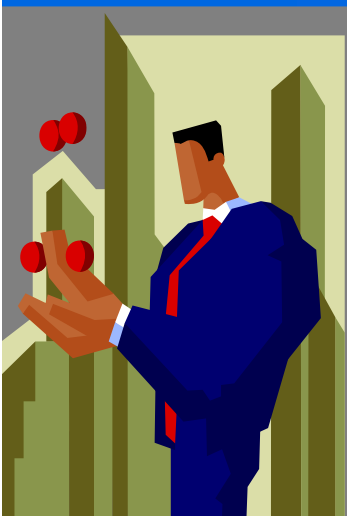


- Centralized planning ,Decentralized implementation
- Fiscal control of central Govt.
- Dictates States for Objectives & Priorities

Health –State subject ?



Five year Plan	Period	Major areas addressed
I	1951-55	Infrastructure
II	1956-61	Industry
III	1961-66	Panchayat & Green Revolution
IV	1969-74	Expenditure , Agriculture
V	1974-79	Agriculture
VI	1980-85	Health , Technology
VII	1985-89	Poverty, Agriculture & Justice
VIII	1992-97	Pop., Agriculture , Poverty
IX	1997-02	Employment, Basic facilities
X	2002-07	HRD, Industry, Technology
XI	2007-12	Education, Health, Empowerment



**Juggling
Priorities**



Pop. Policy Draft 1976

Small pox free-July 5,
1975 & ICDS started

MTP Act (1969) in force-1972

MTP Act-1969

Birth & Death Reg. Act-1969

Dept. of Family welfare -1966

NSEP-1962

NMCP to NMEPP-1958

CHEB-1956

BCG Vaccination-1951

NMCP & NFPP-1951

India joins WHO- 1948

1947

HSDC-1946



ICDS renamed Integrated Mother
and Child Development (IMCD) -1995

CSSM-1992

National Blood safety program- 1989

National Aids Control Program -1987

UIP-1985

NLCP-NLEP, 1983

NHP-1983

Alma Ata-Declaration (1977)-HFA-2000

NFWP-1977



NRHM-2005

National Health Policy- 2002

National Pop. Policy- 2000

RCH-1997

Family Planning Program made
target free -1996

Beijing conference-1995

Legislation on Transplantation of human
organs enacted 1995

ICPD-1994



Public Health Care in India

- Well developed administrative system
- Skills
- Reasonable Infrastructure

Something is wrong

- Poor health outcomes
- Design
- Misdirected efforts

1999 Plague epidemic-loss of \$ 1 billion (WHO)



Policies

- NHP-1983.....NHP-2002
- NPP-2000



NHP-1983

- Re-orientation of Medical education
- Re-structuring and Re-organizing the then existing health care services
- Population stabilization
- Re-orientation of existing health personnel
- Role of practitioners of ISM in Health care delivery
- Goals -
 - Achievement?
 - CDR & Life expectancy



NHP-2002

- Averages of health indices hide disparities
- large gap in facilities still persists
- shortfall in the number of SCs/PHCs/CHCs is of the order of 16 percent. (CHC-58%)
- 'Vertical' implementation structure -extremely expensive
- the rural health staff has become a vertical structure exclusively for the implementation of family welfare activities
- Low utilization- 20 % seeking OPD services, <45 percent seeking indoor treatment, go to public hospitals.



- Integrated disease control network
- Increase in postgraduate seats in Public Health & Family Medicine
- Decentralization-Role of LSG/ NGO
- Medical Grants commission
- Legislation for regulating clinical establishments/ medical institutions by 2003



“Ten Great Public Health Achievements of the 20th Century”

- Vaccination
- Motor-vehicle safety
- Safer workplaces
- Control of infectious diseases
- Decline in deaths from coronary heart disease and stroke
- Safer and healthier foods
- Healthier mothers and babies
- Family planning
- Fluoridation of drinking water
- Recognition of tobacco use as a health hazard

Source: Center for Disease Control, *Morbidity and Mortality Weekly Report*, 48(12) 241-243 (April 2, 1999)

But we have known this for 64 years



“If it were possible to evaluate the loss, which this country annually suffers through the avoidable waste of valuable human material and the lowering of human efficiency through malnutrition and preventable morbidity, we feel that the results would be so startling that the whole country would be aroused and would not rest until a radical change has been brought about.”



After 64 years of Health Services:

- Crude Death Rate ↓
- Crude birth rate ↓
- Life expectancy ↑
- S.pox & G. worm eradicated
- Leprosy eliminated
- IMR ↓
- Infrastructure – expanded



- NO Health Policy for 36 years
- Health left to Committees and Commissions
- Each Committee addressed to a single specific issue.
- Comprehension was missing
- Majority of recommendations of every committee were reiterations of Bhore Committee.
- Individual “Health” Programs developed in isolation based on situational exigency.
- Uni-purpose workers later baptized as Multi-purpose.
- Some Programs worked in complete isolation till 1980 (e.g. NTCP).
- Fragmented approach to Health

Goals to be achieved by 2000–2015



Eradicate Polio and Yaws	2005
Eliminate Leprosy	2005
Eliminate Kalazar	2010
Eliminate Lymphatic Filariasis	2015
Achieve Zero level growth of HIV/AIDS	2007
Reduce Mortality by 50% on account of TB, Malaria and Other Vector and Water Borne diseases	2010
Reduce Prevalence of Blindness to 0.5%	2010
Reduce IMR to 30/1000 And MMR to 100/Lakh	2010
Increase utilization of public health facilities from current Level of <20 to >75%	2010
Establish an integrated system of surveillance, National Health	2005



Health Care Infrastructure



Sub Center over FYP



Source: RHS-2010



PHC over FY



Source: RHS-2010

SIHFW: an ISO9001: 2008 certified institution



CHC over FYP

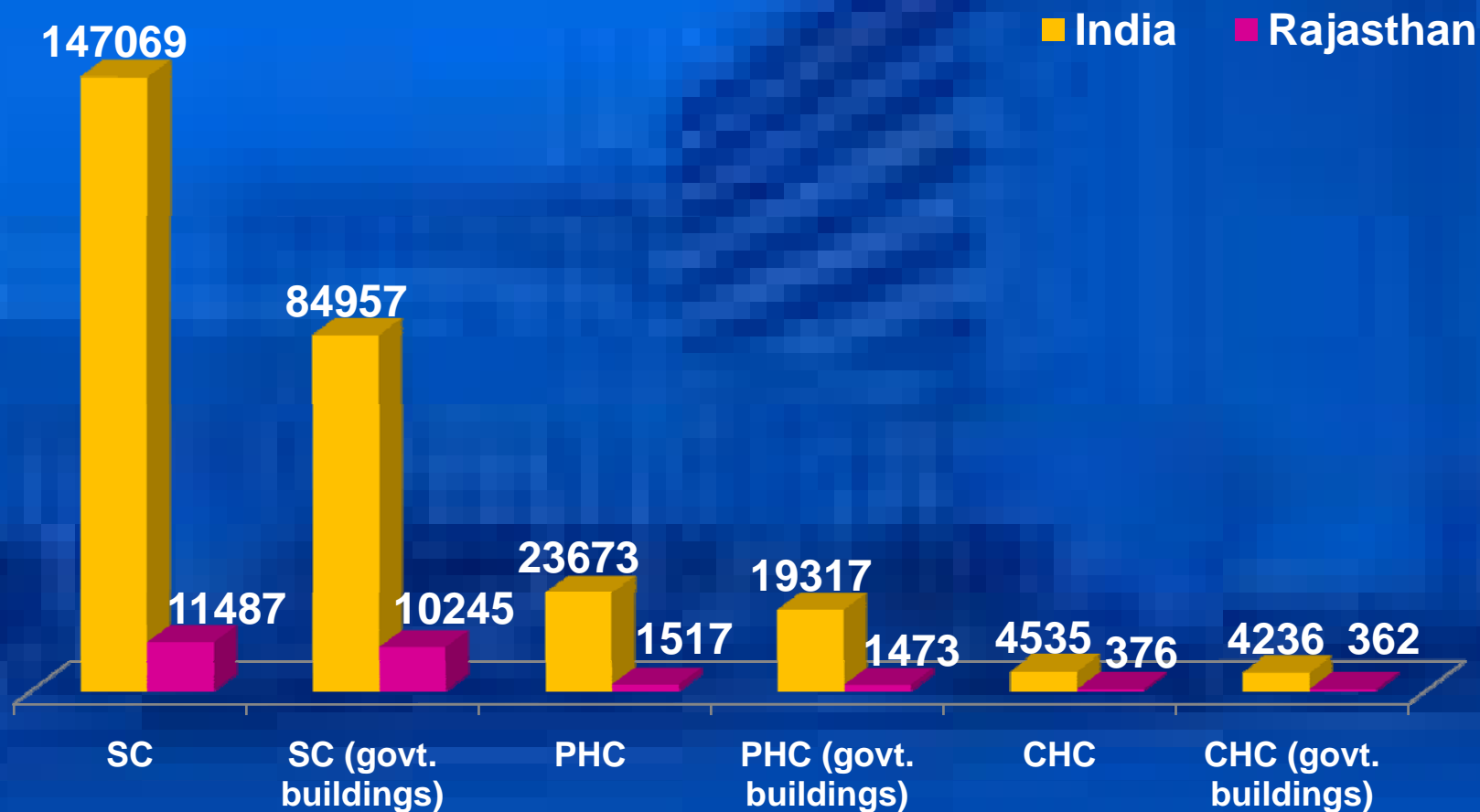


Source: RHS-2010

SIHFW: an ISO9001: 2008 certified institution



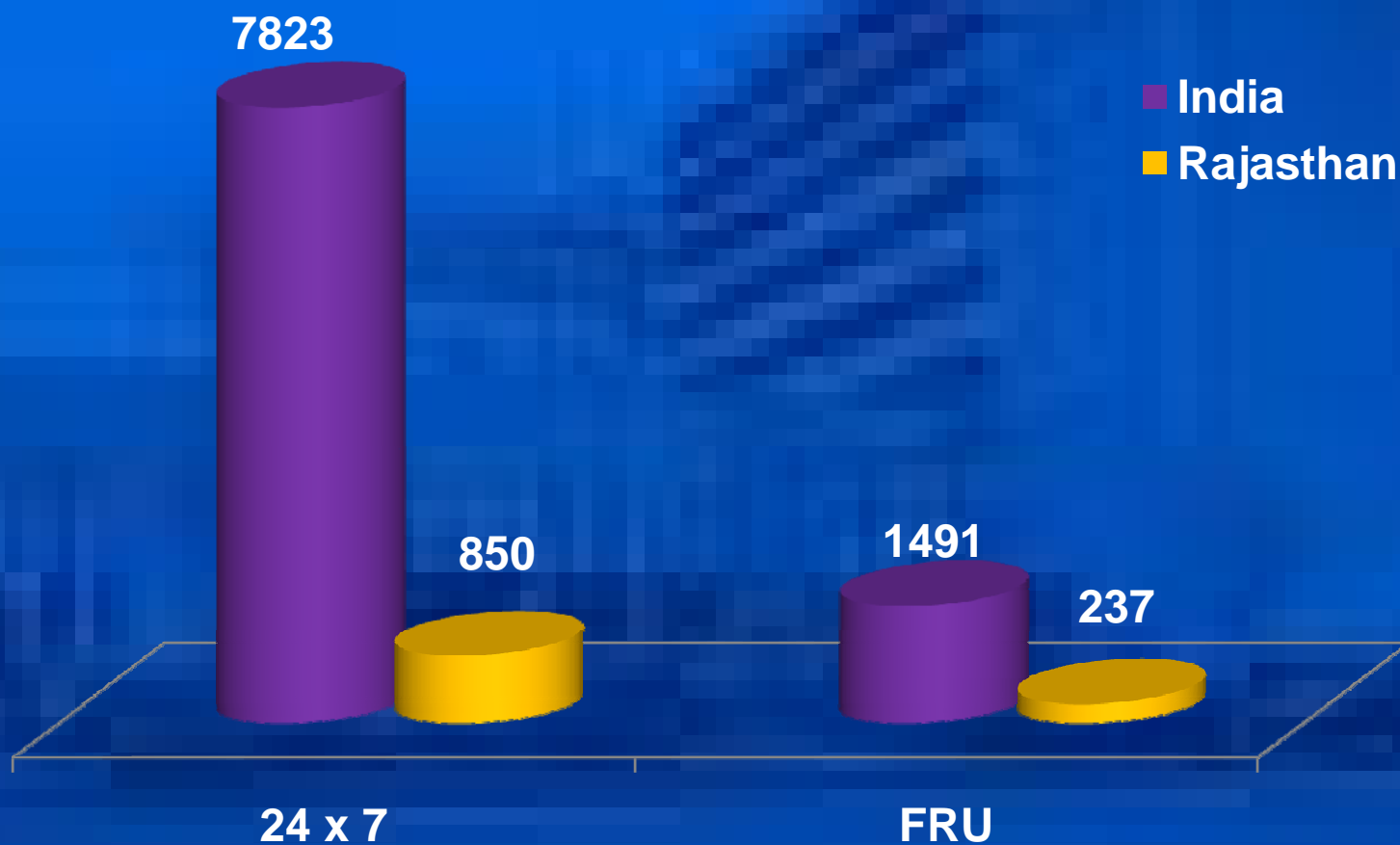
Health facilities in govt. buildings



Source: RHS 2010



Health facilities



Source: MoHFW; DM&HS (Raj.)

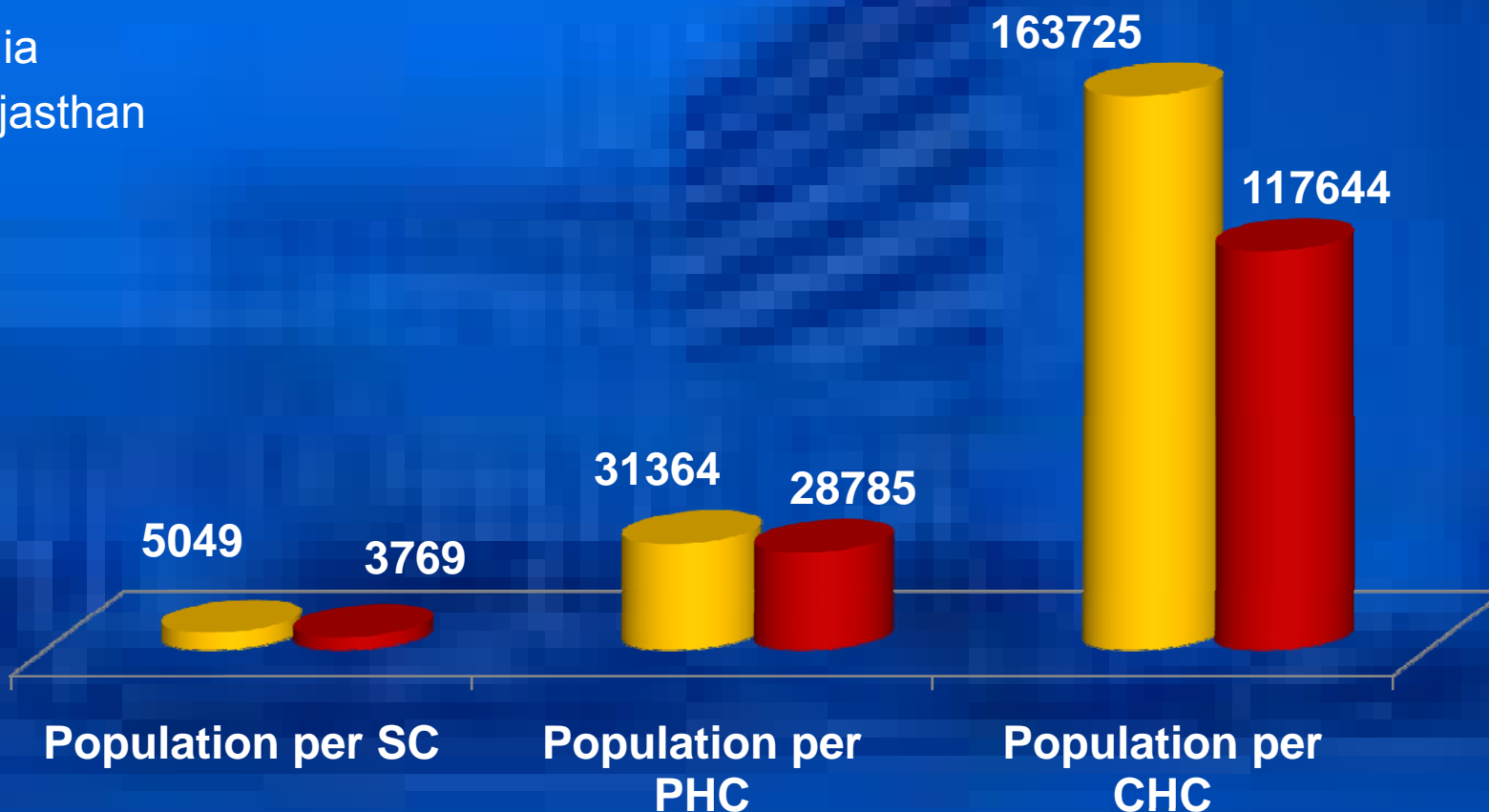
SIHFW: an ISO9001: 2008 certified institution



Population : Infrastructure

■ India

■ Rajasthan

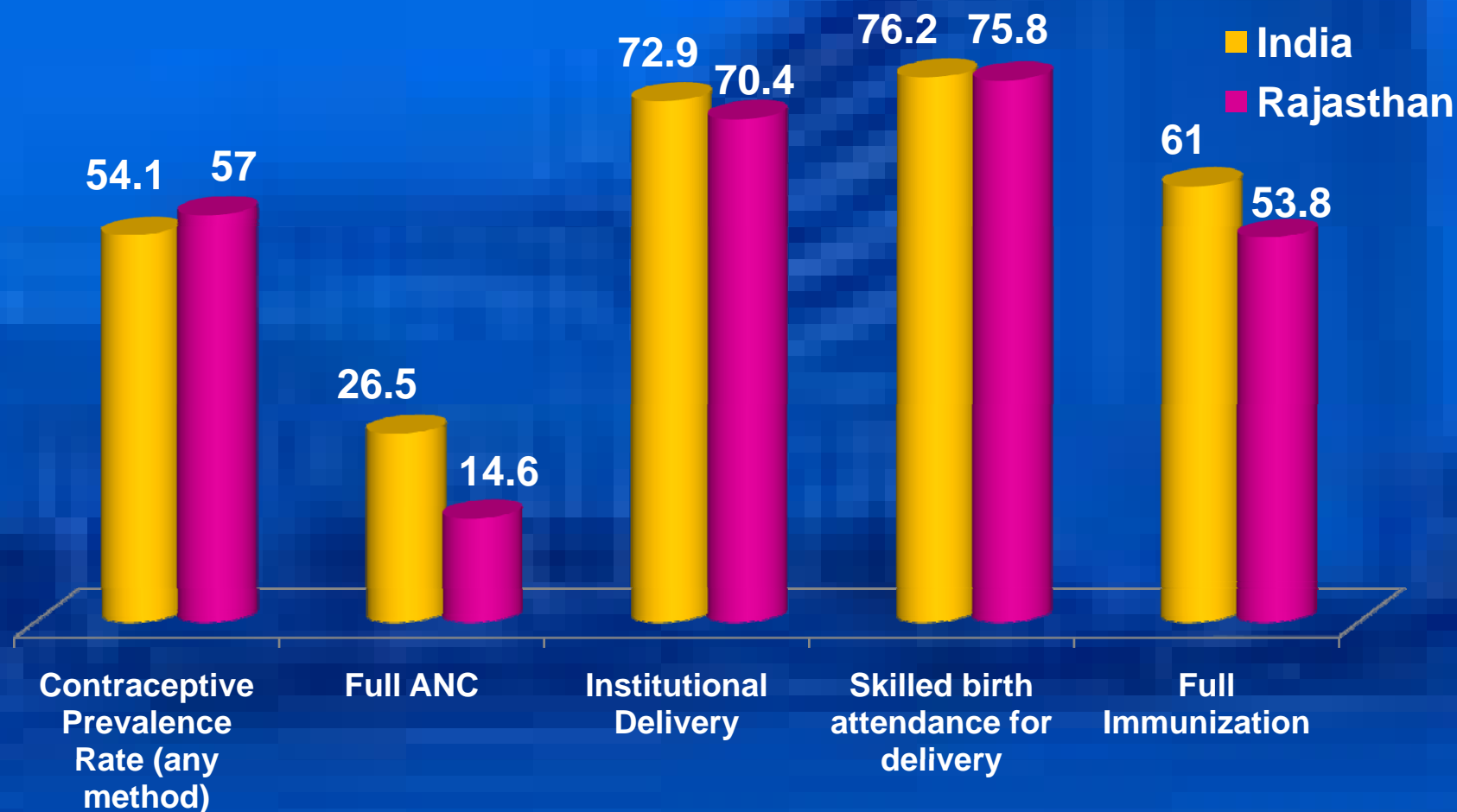


Source :RHS-2010

SIHFW: an ISO9001: 2008 certified institution



Healthcare Delivery Status

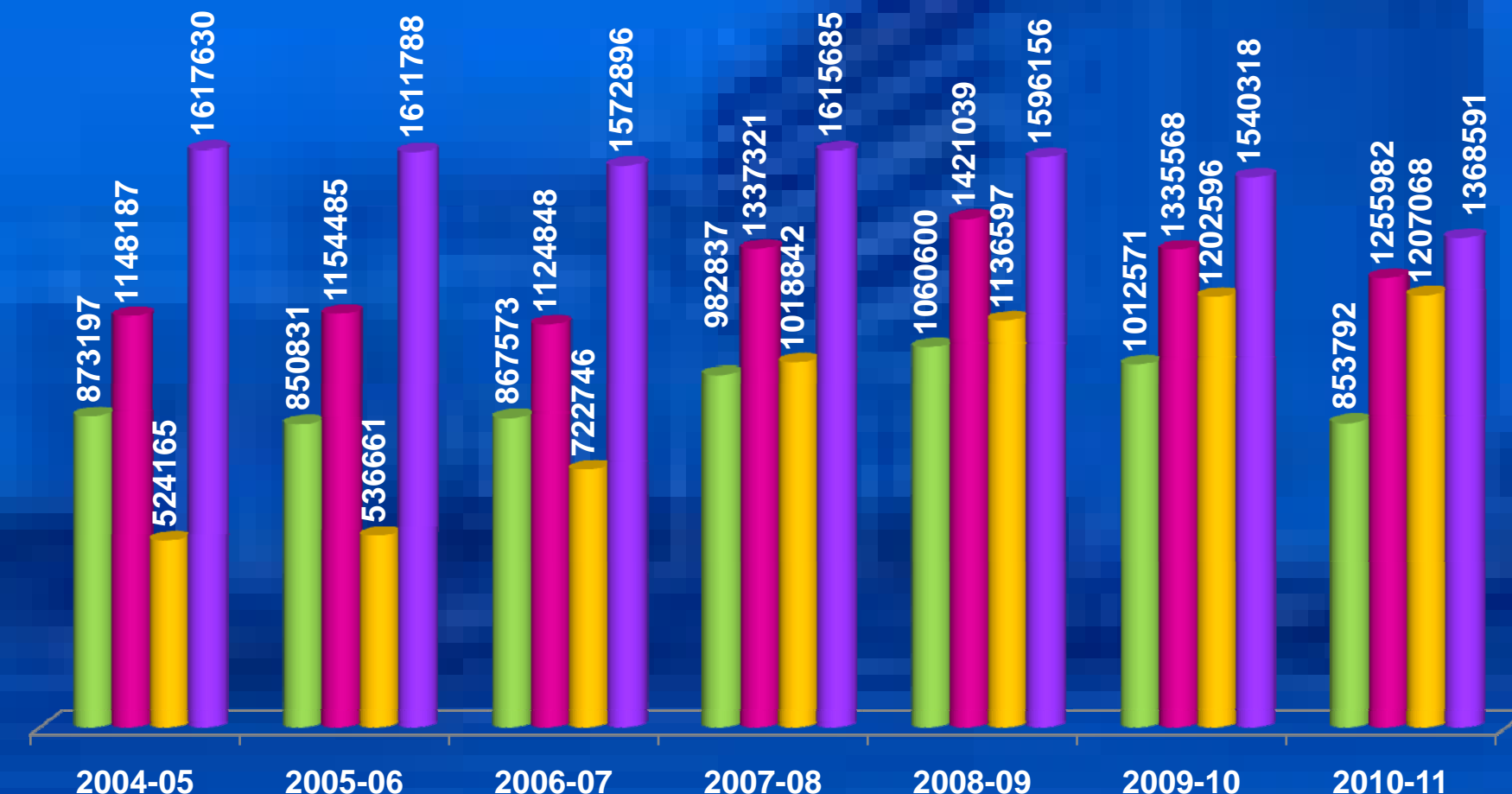


Source: DLHS 3; CES 2009



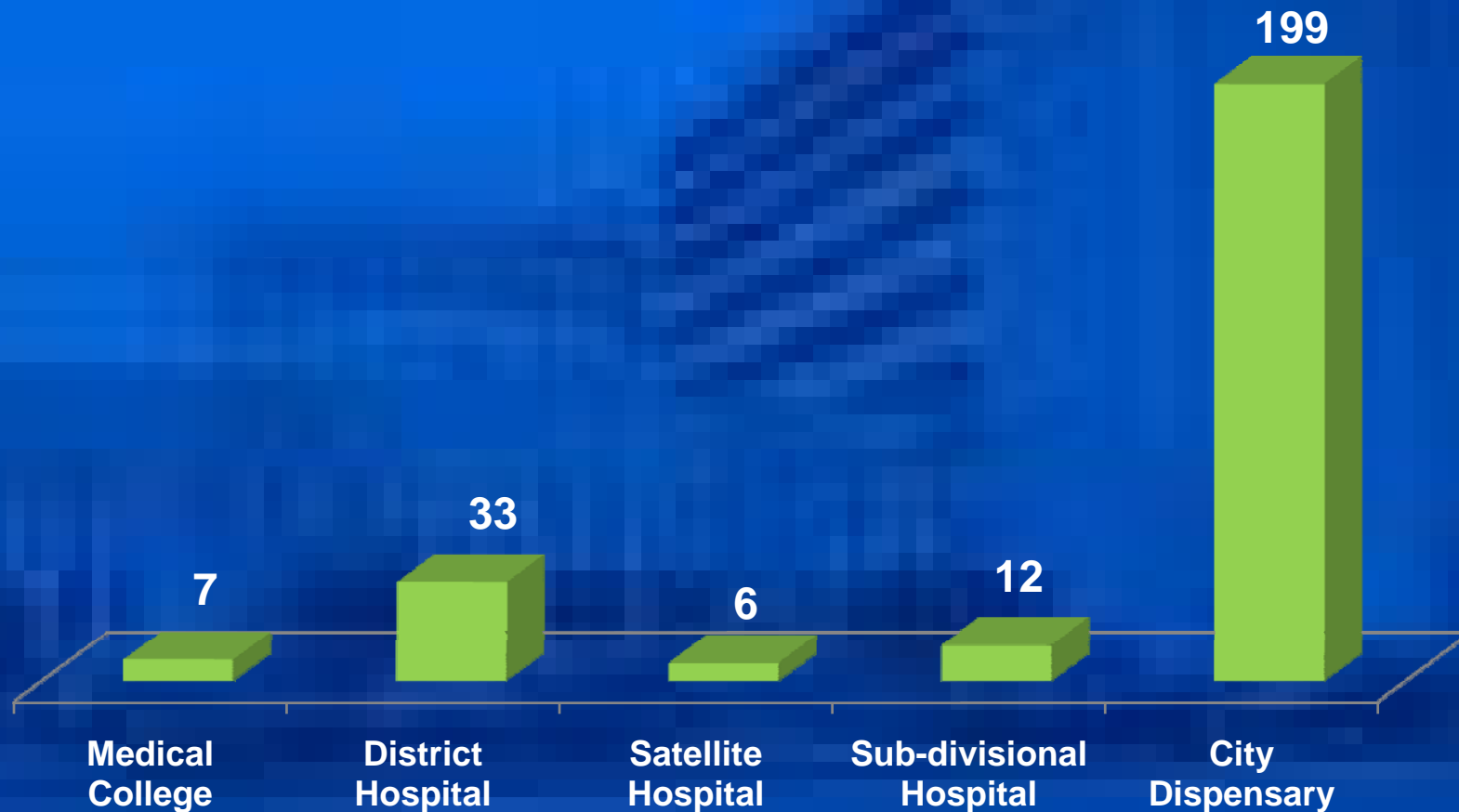
Healthcare Delivery Status

- ANC 12 week registration
- Institutional Delivery
- ANC 3 check ups
- Fully Immunized



Source: DM&HS, Rajasthan

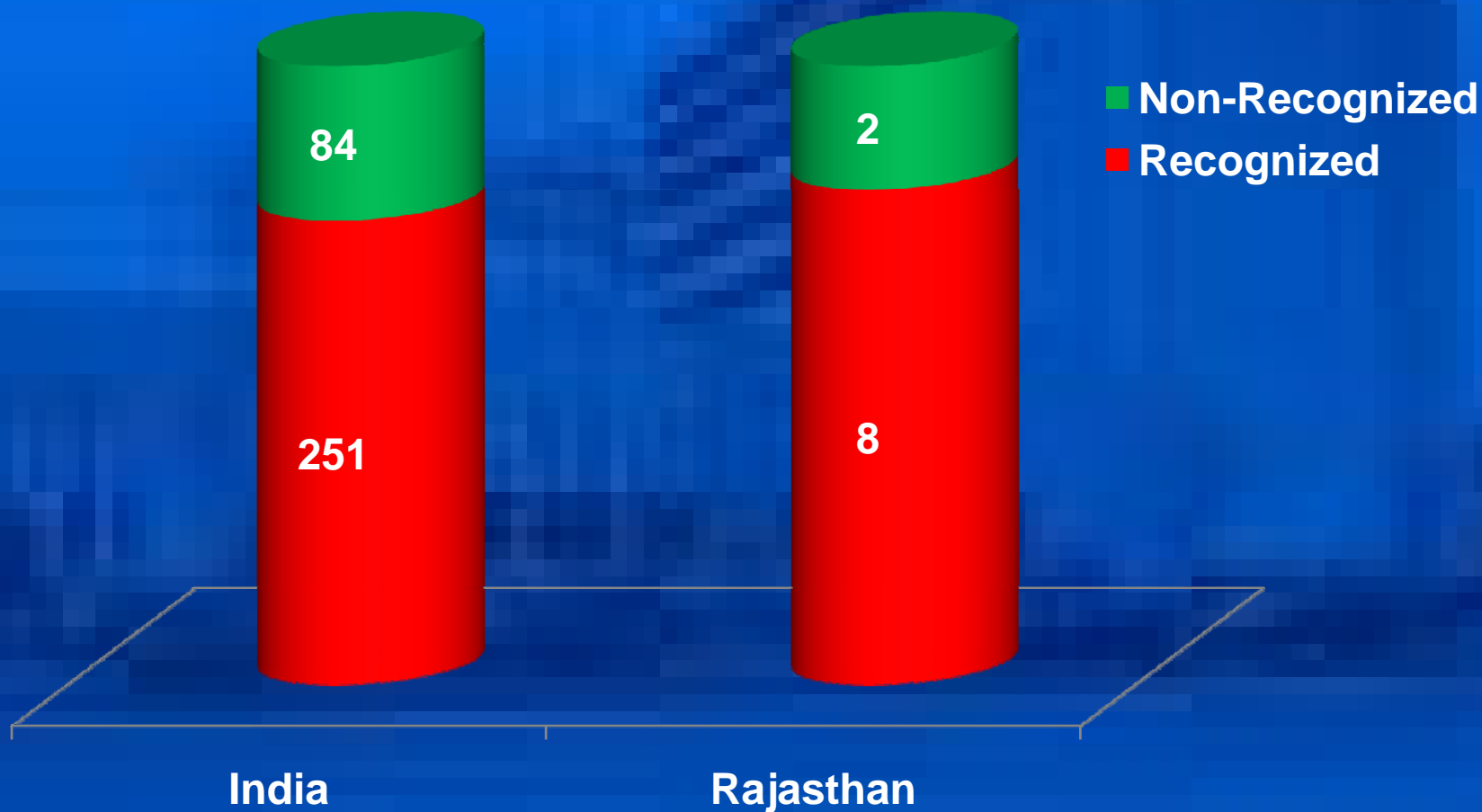
Health Care Infrastructure: Rajasthan



Source: www.nrhmrasthan.nic.in

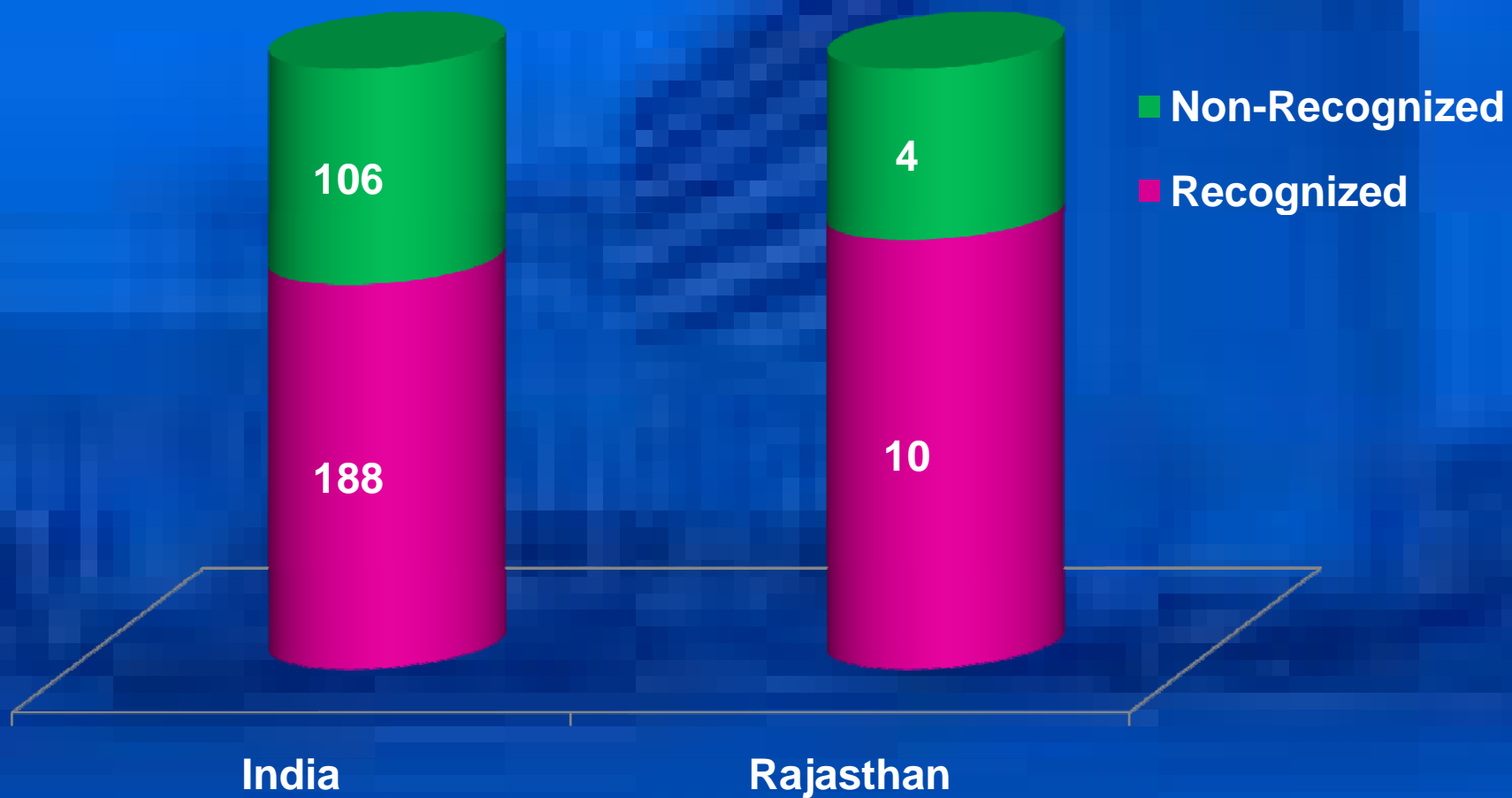


Medical Colleges

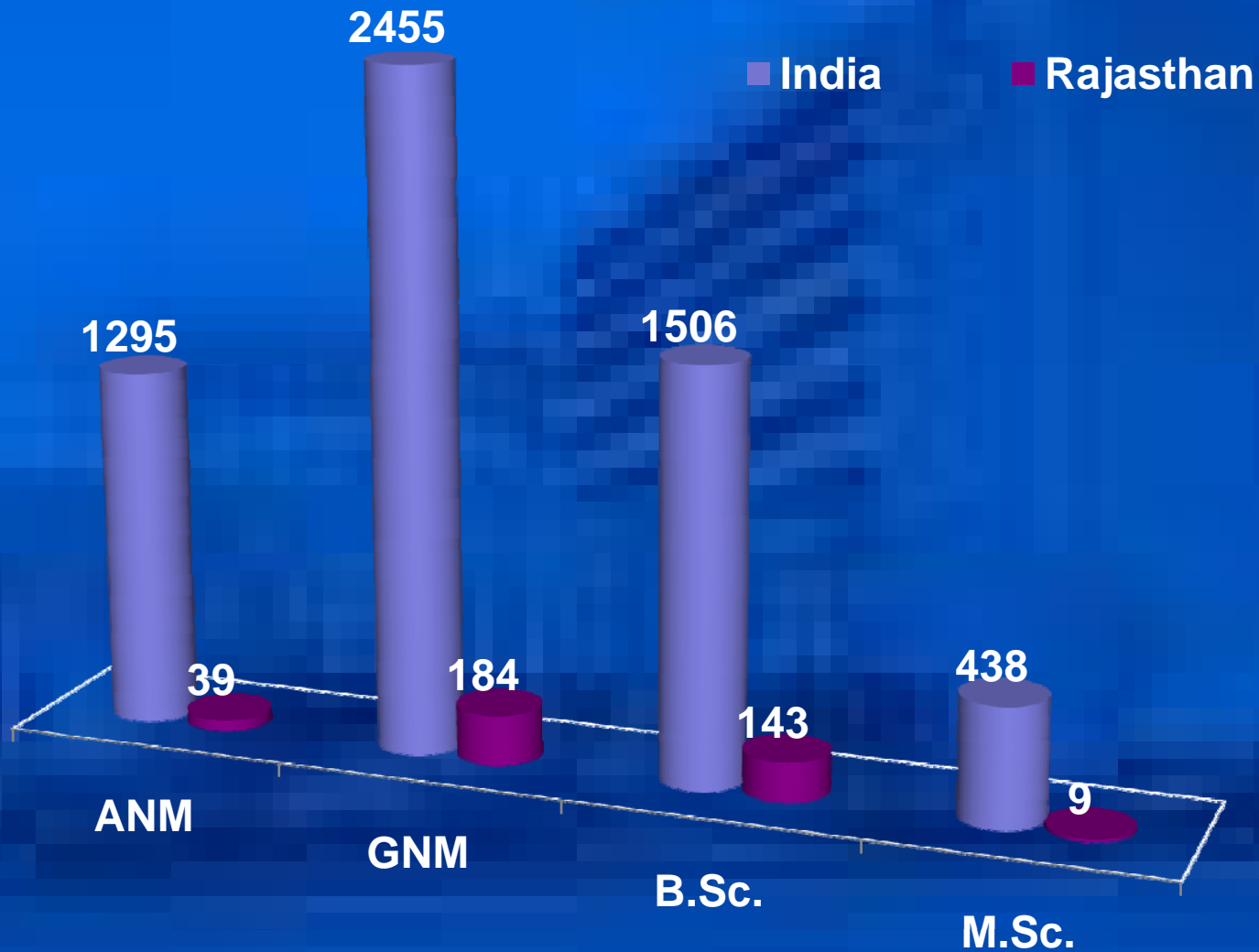




Dental Colleges



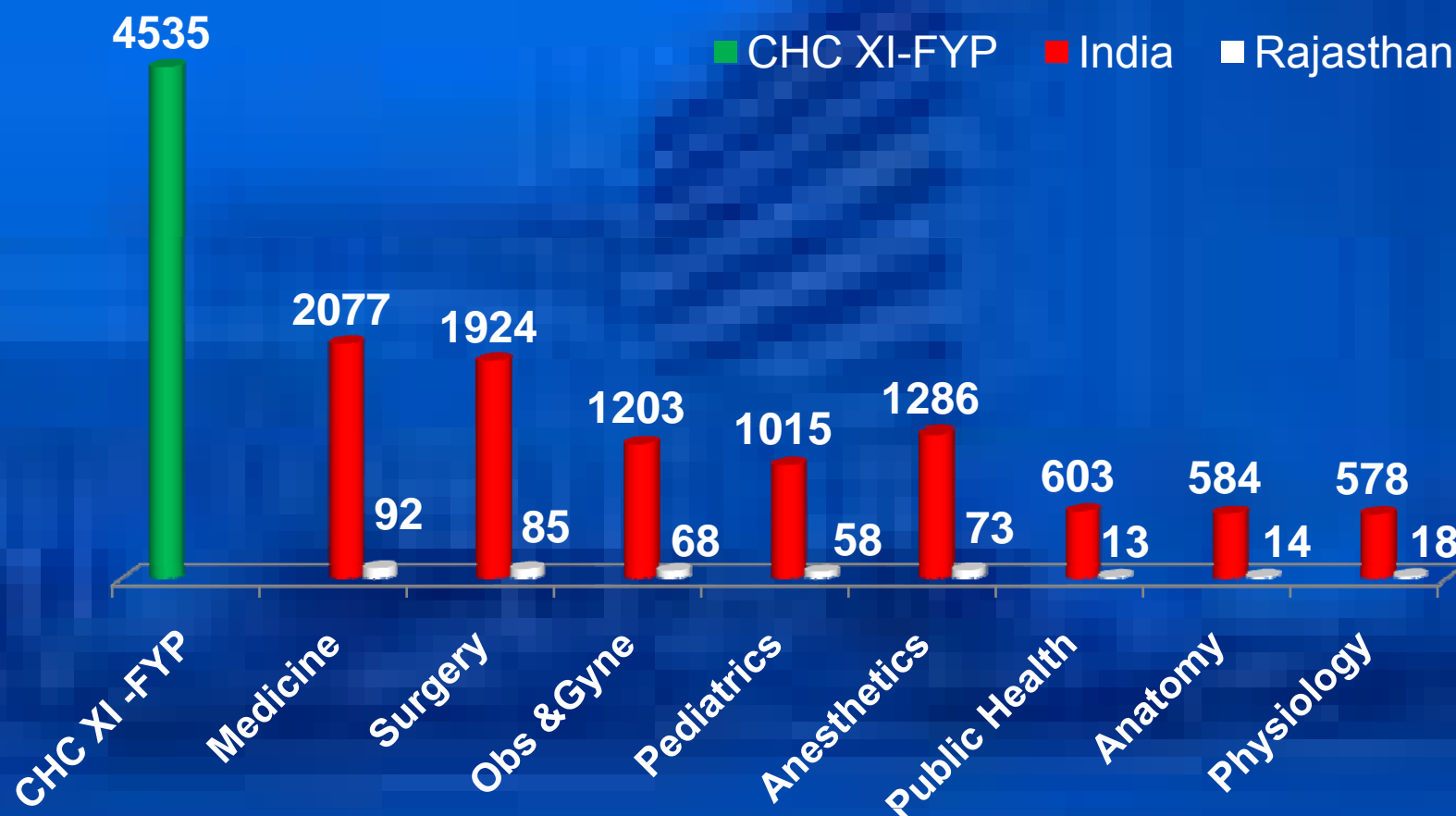
Nursing Schools



Source: www.indiannursingcouncil.org (Nov. 2011)



CHC- XI FYP vs. PG seats



Source: MCI, 2011

SIHFW: an ISO9001: 2008 certified institution



Total beds (India)



Source: CBHI -HII/NHP

SIHFW: an ISO9001: 2008 certified institution



Medical Education : Rajasthan

Population : Medical College	6675000
Undergraduate Intake	1300
Post Graduate seats	740
UG:PG Seats	1.76
No. of Specialties	35

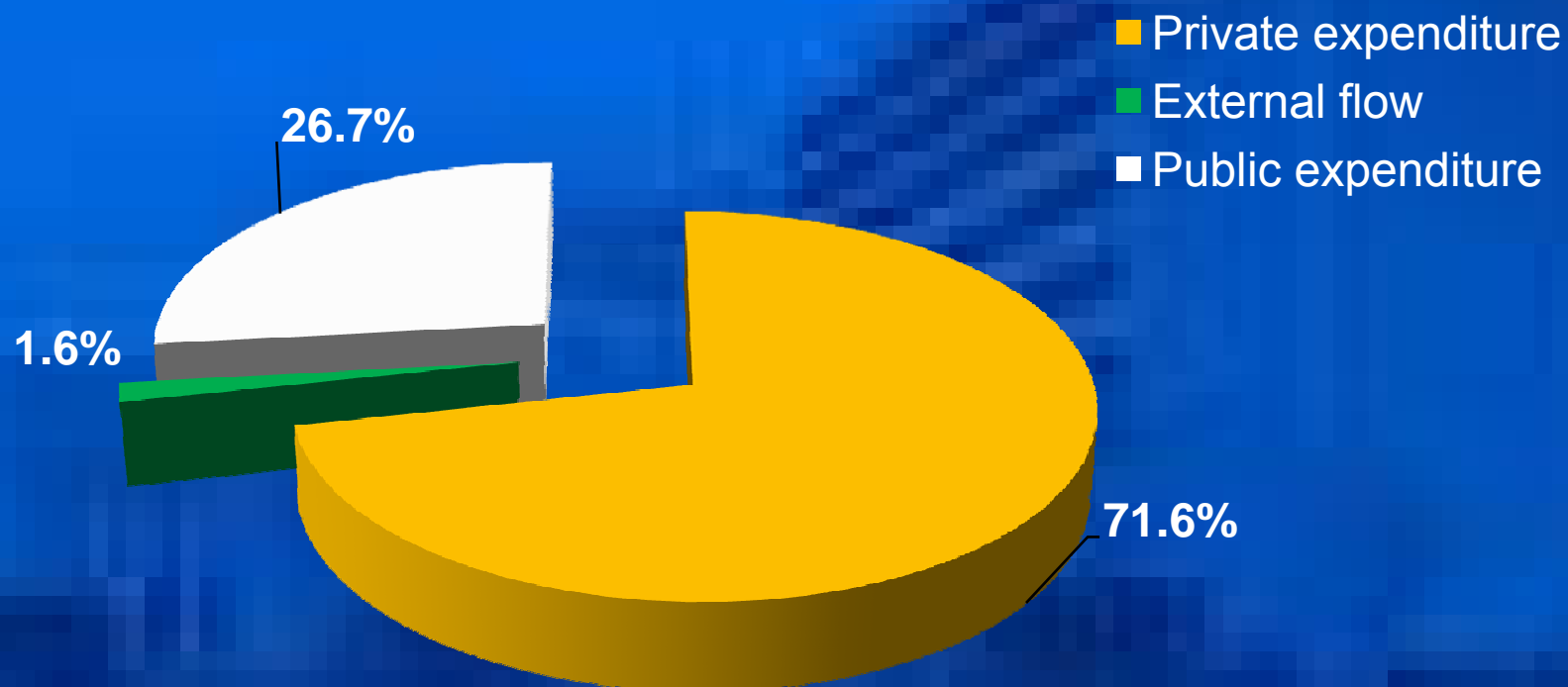
Source: CBHI, MCI



Health Expenditure

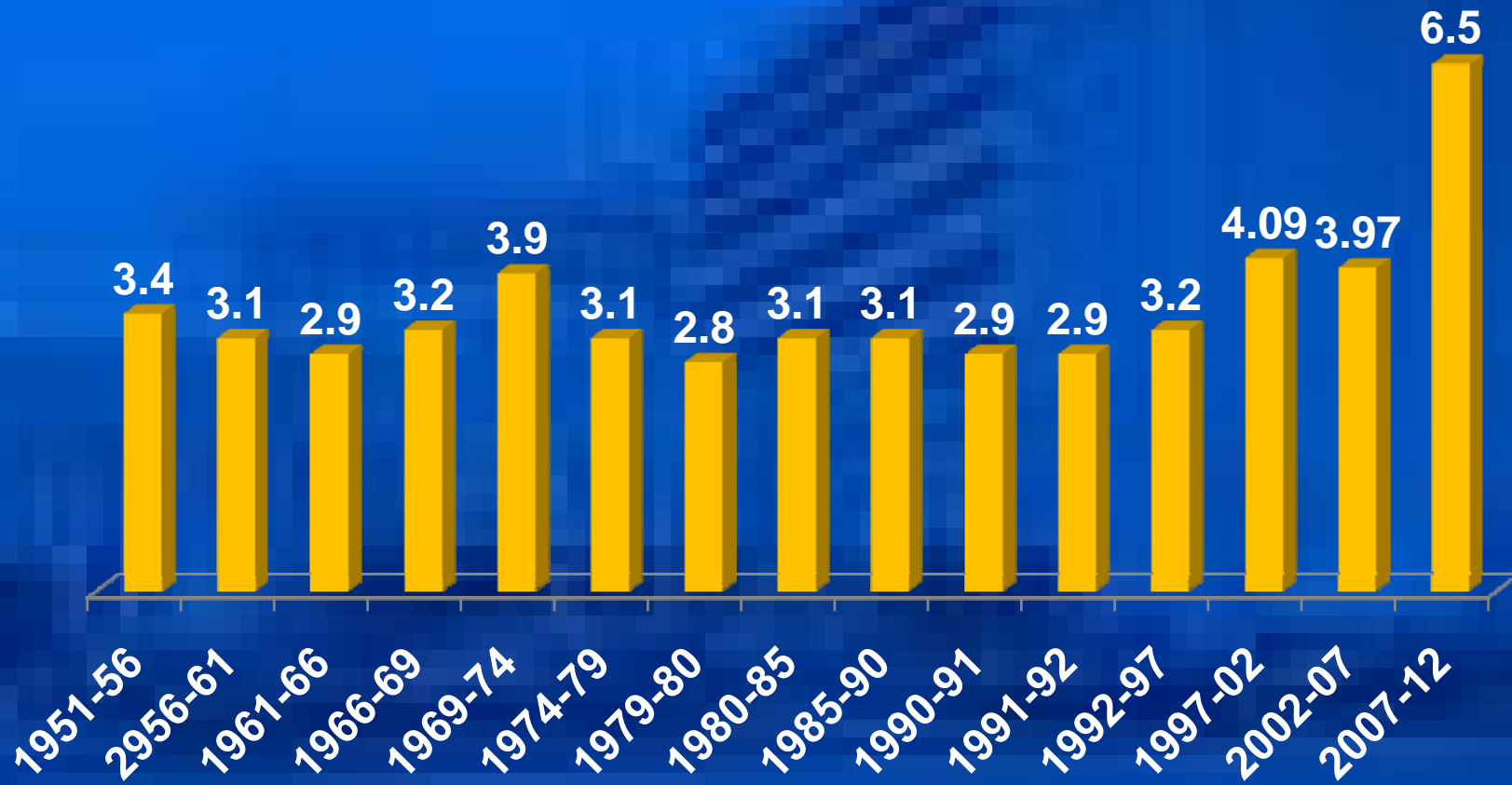


Share in health care spending



Source: NHP 2010

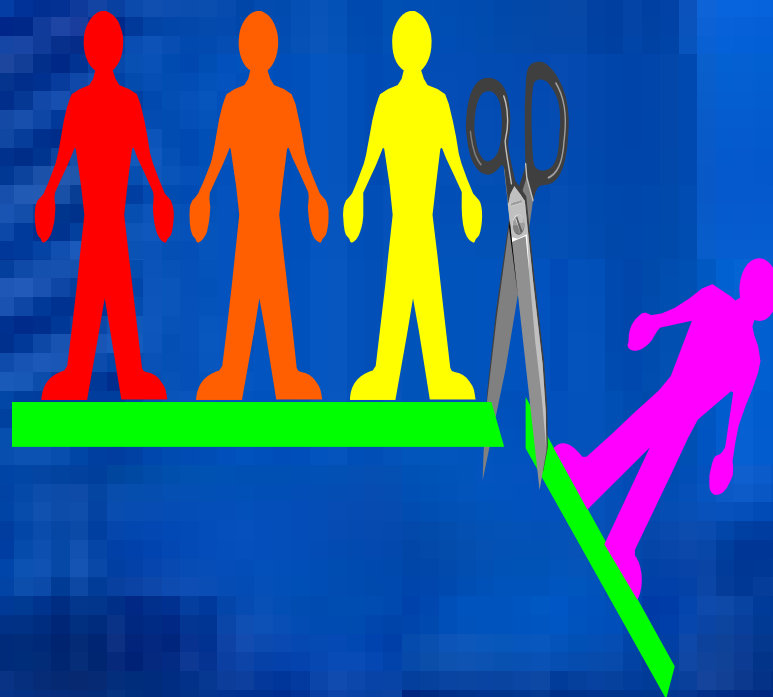
Health Expenditure as % of total Plan Outlay



Source: NHP 2010

Who really pays?

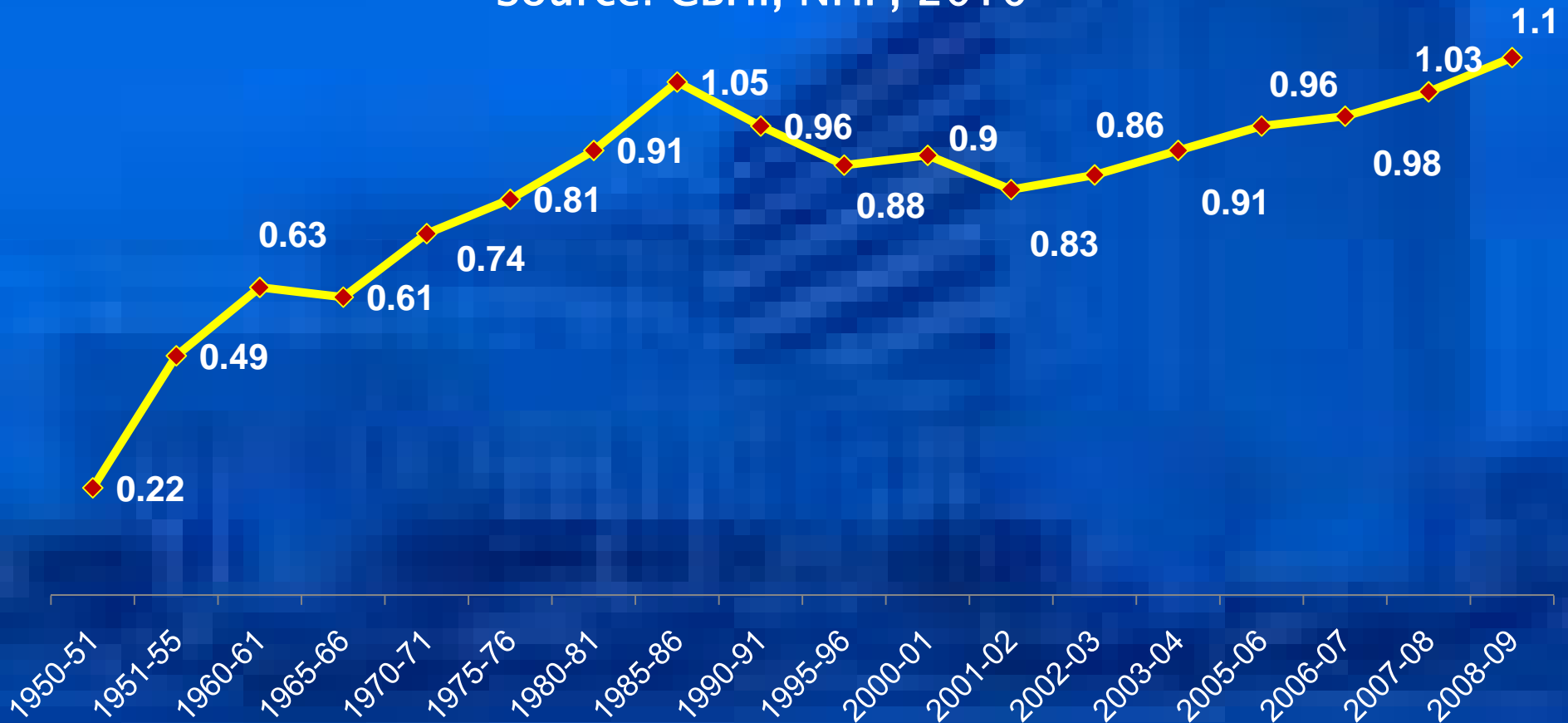
- Opportunity cost - if we choose to do one thing, the cost of doing that is the value which would have been obtained from the best alternative choice
- Who pays - the person who does not receive treatment



Total Govt. Expenditure on Health as % of GDP

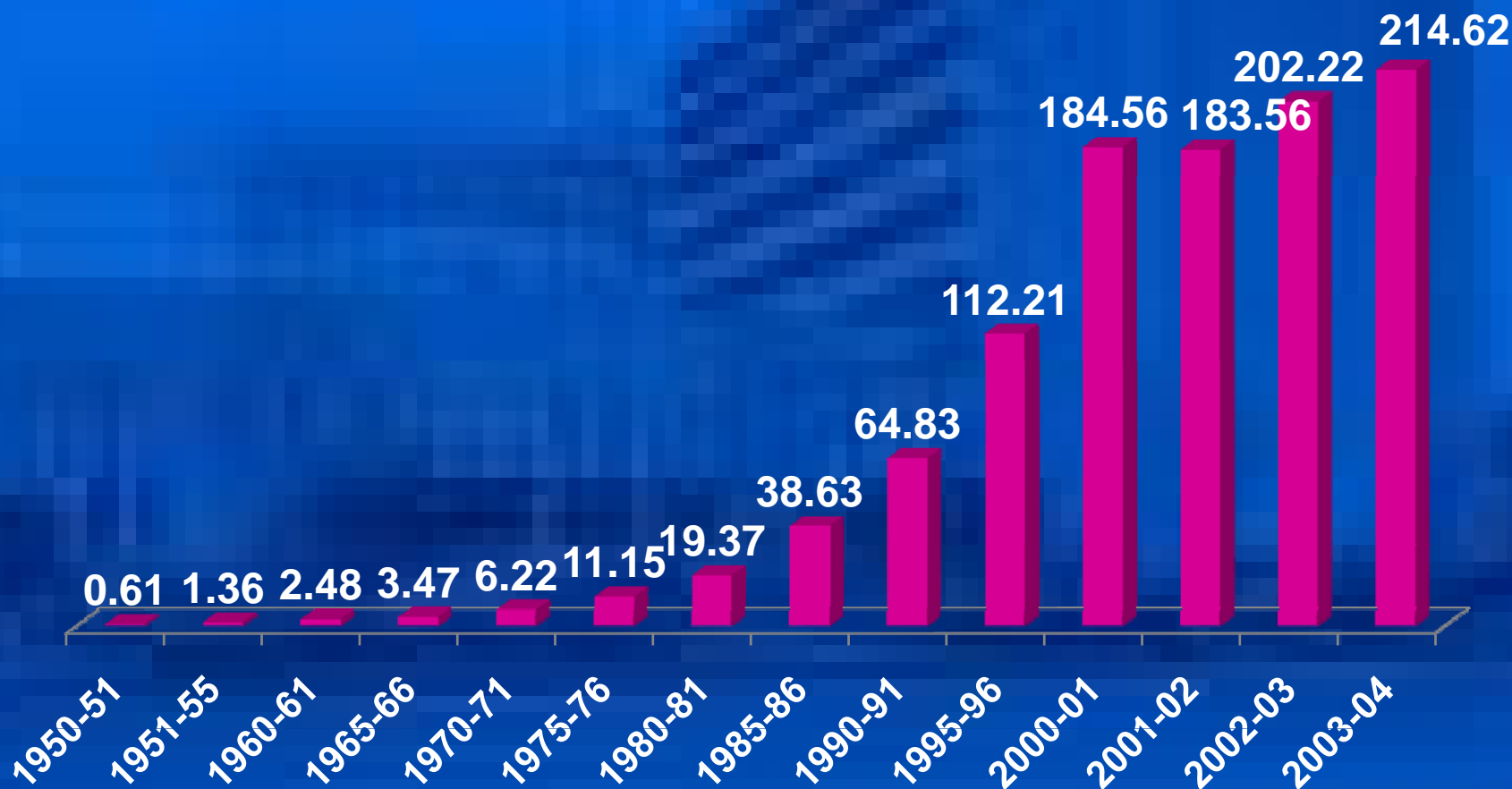


Source: CBHI, NHP, 2010



Planning Commission has decided to increase its spending on health to 2.5% of the GDP in the 12th Five Year Plan.

Per Capita Public Exp. on Health



Source: NHP 2010

SIHFW: an ISO9001: 2008 certified institution

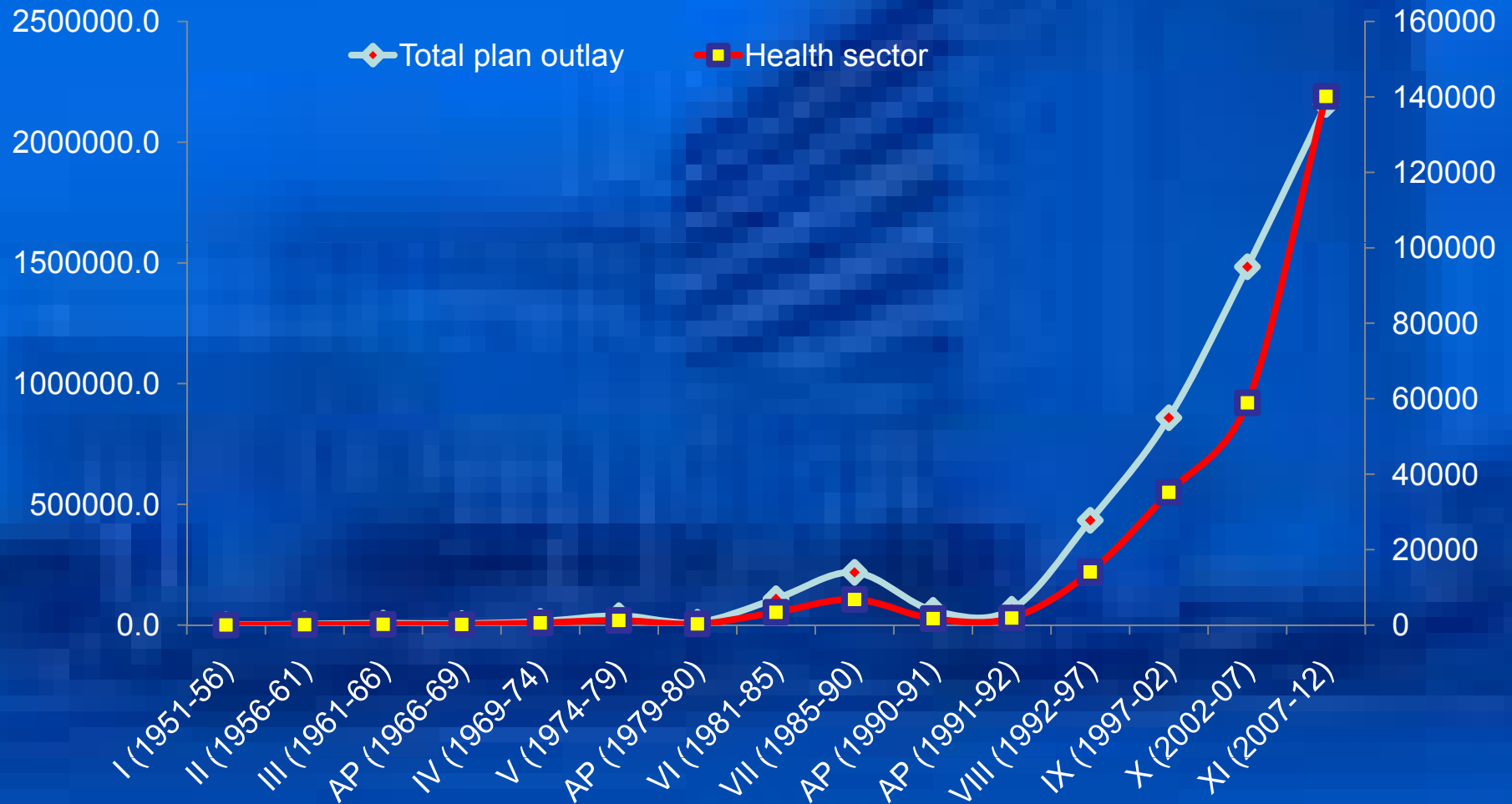
Status of Expenditure in FYPs

Source: CBHI, NHP, 2010



FYPs	Total Plan Investment	Health	Family Welfare
I	1960	65.2	0.1
II	4672	140.8	2.2
III	8576	225	24.9
IV	15778.8	335.5	284.4
V	39322	682	497.4
VI	97500	1821	1010
VII	180000	3392	3256.2
VIII	798000	7575.9	6500
IX	859200	10818	15120.2
X	1484131.3	31020.3	27125
XI	2156571	136147.0	

Total Outlay – Plan and Health (including AYUSH & FW)



Source: NHP 2010

Percentage of total budget allocated to health



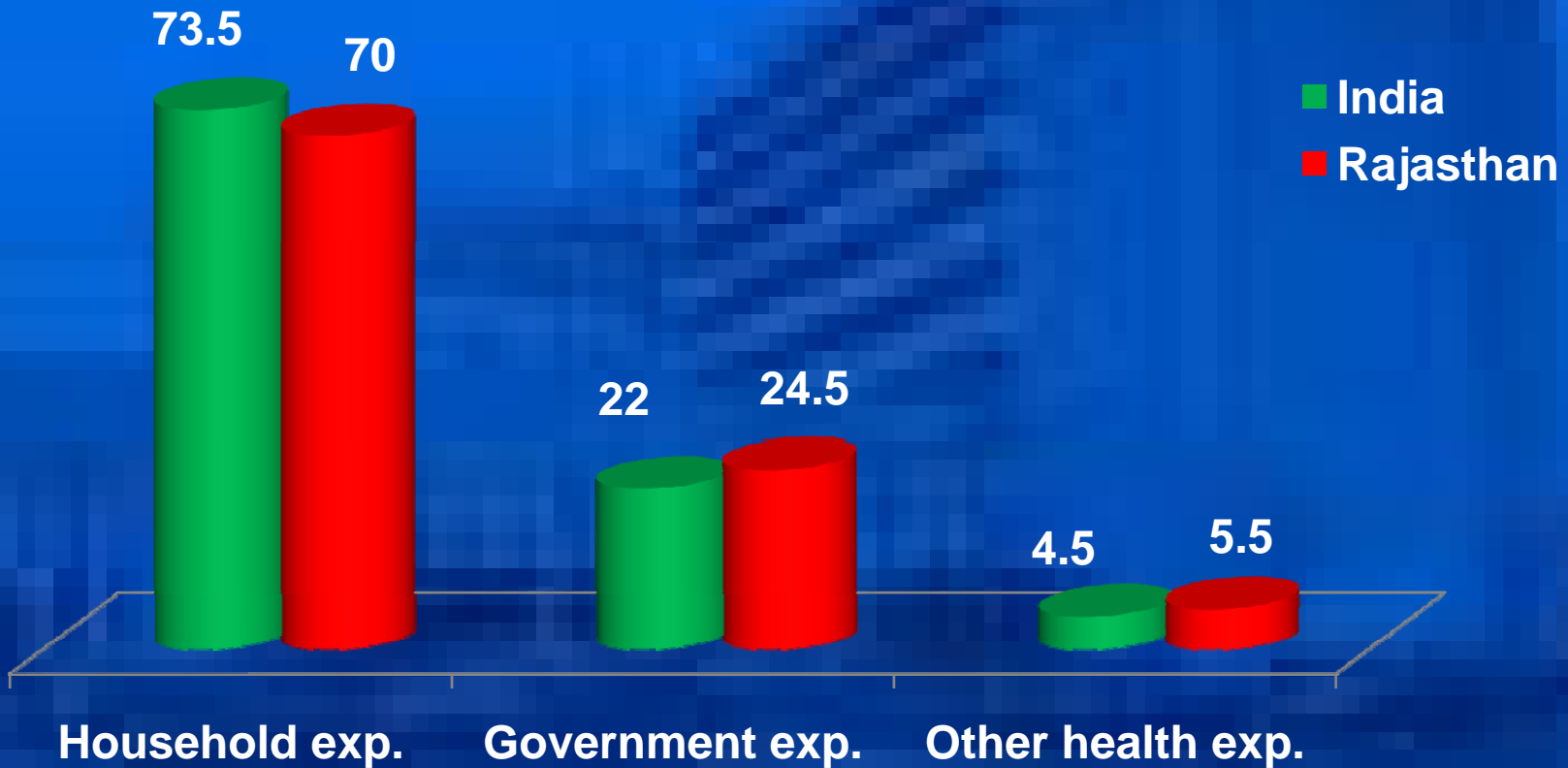
Source: NHP 2010

Budget outlay for Health – Rajasthan



Source: www.planning.rajasthan.gov.in

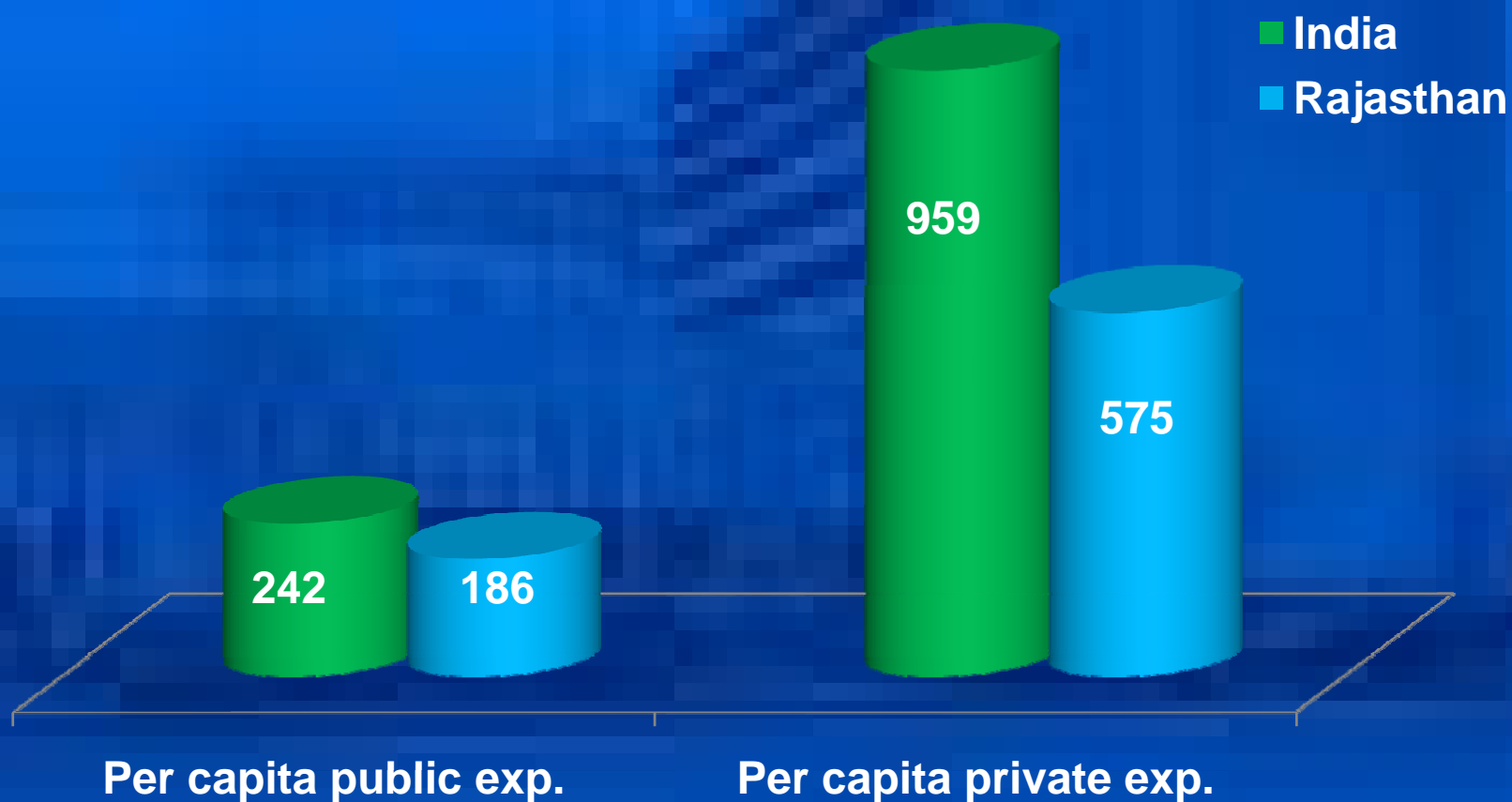
Health Care Spending (2004-05)



Source: NCMH 2005



Health care spending



Source: NHP 2010/ data in Rs.

SIHFW: an ISO9001: 2008 certified institution



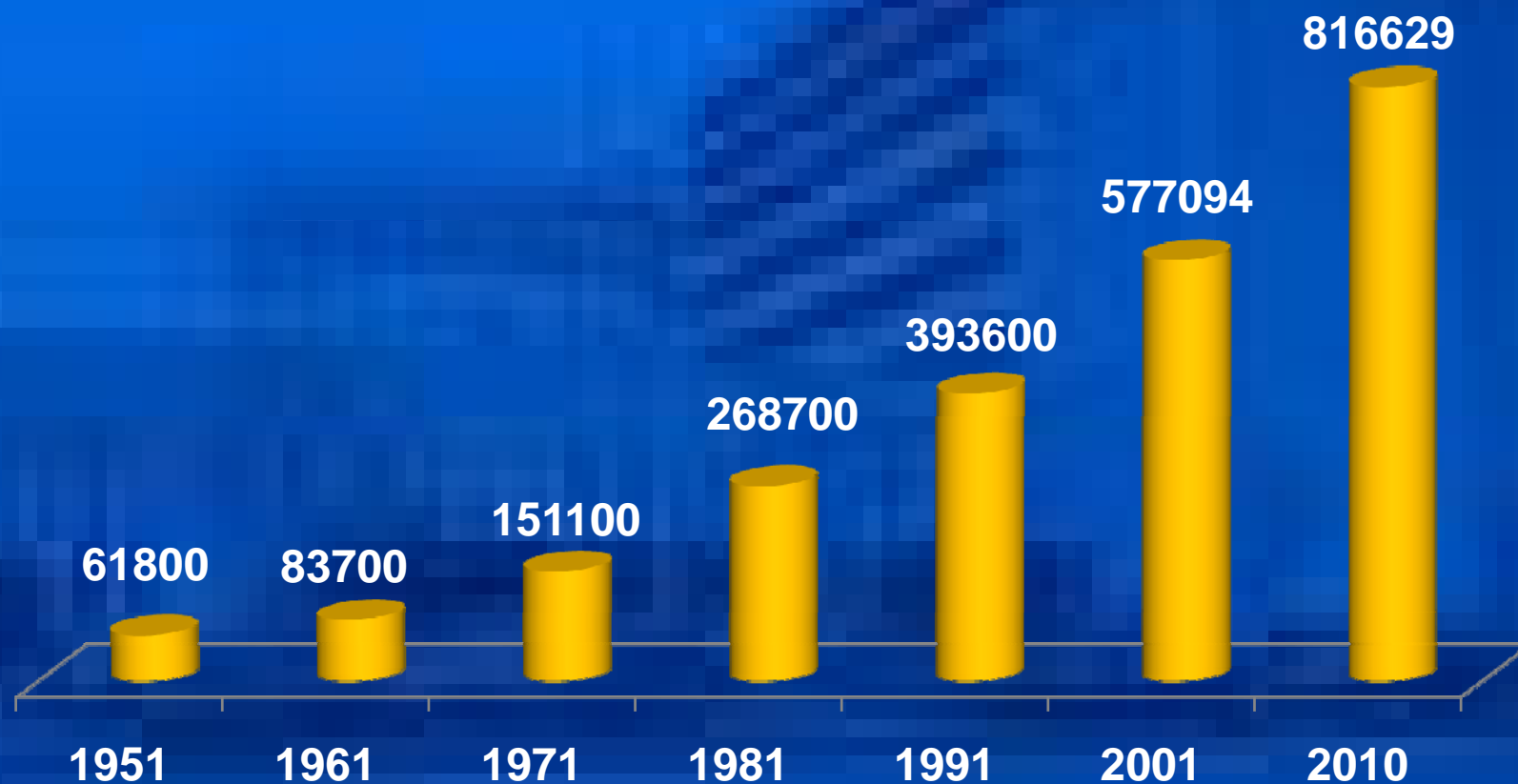
Human Resource in Health



People are resource
But
To maintain this resource
We need Resources



Doctors (Allopathic in India)

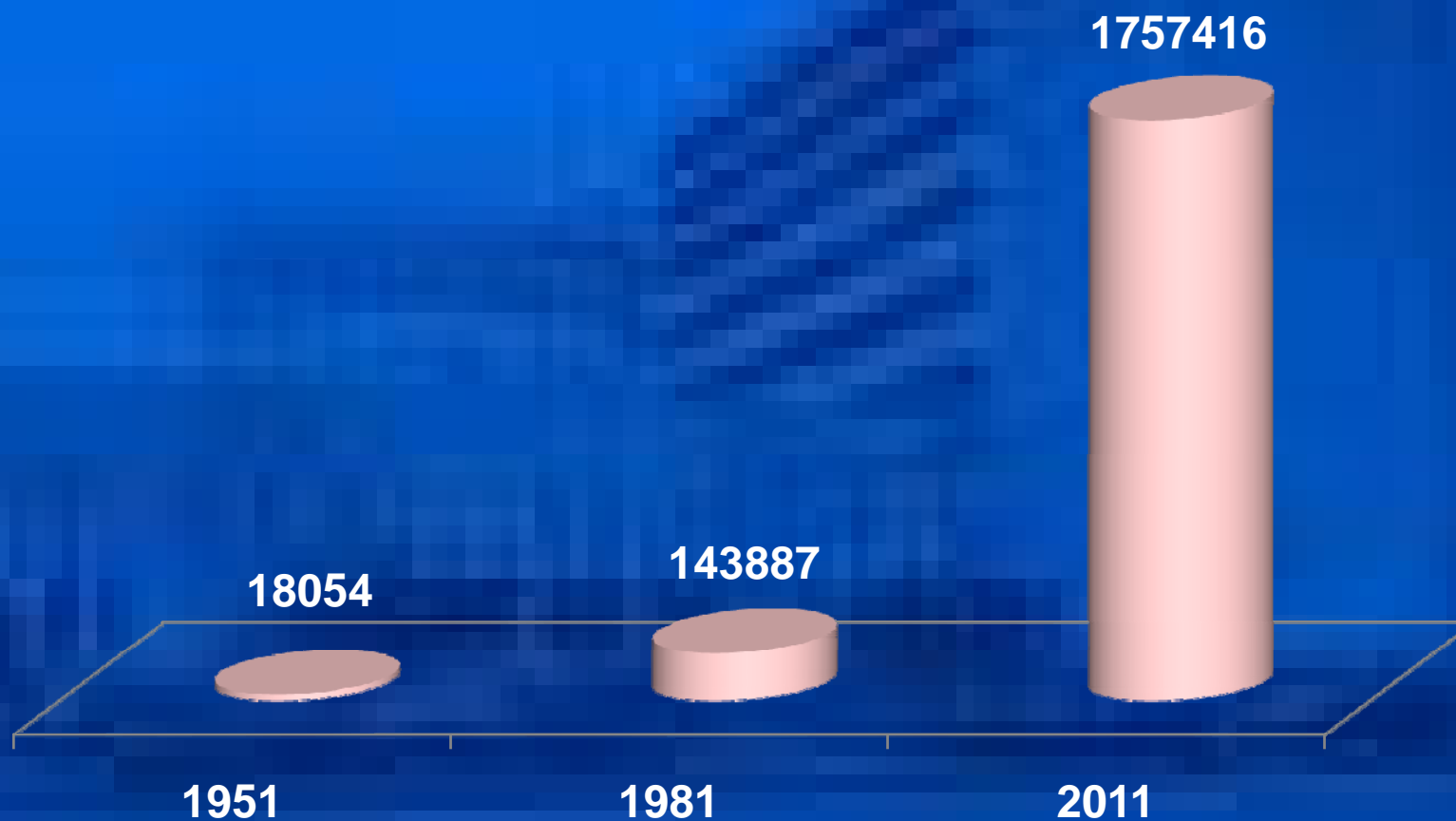


Source: CBHI-HII/NHP

SIHFW: an ISO9001: 2008 certified institution



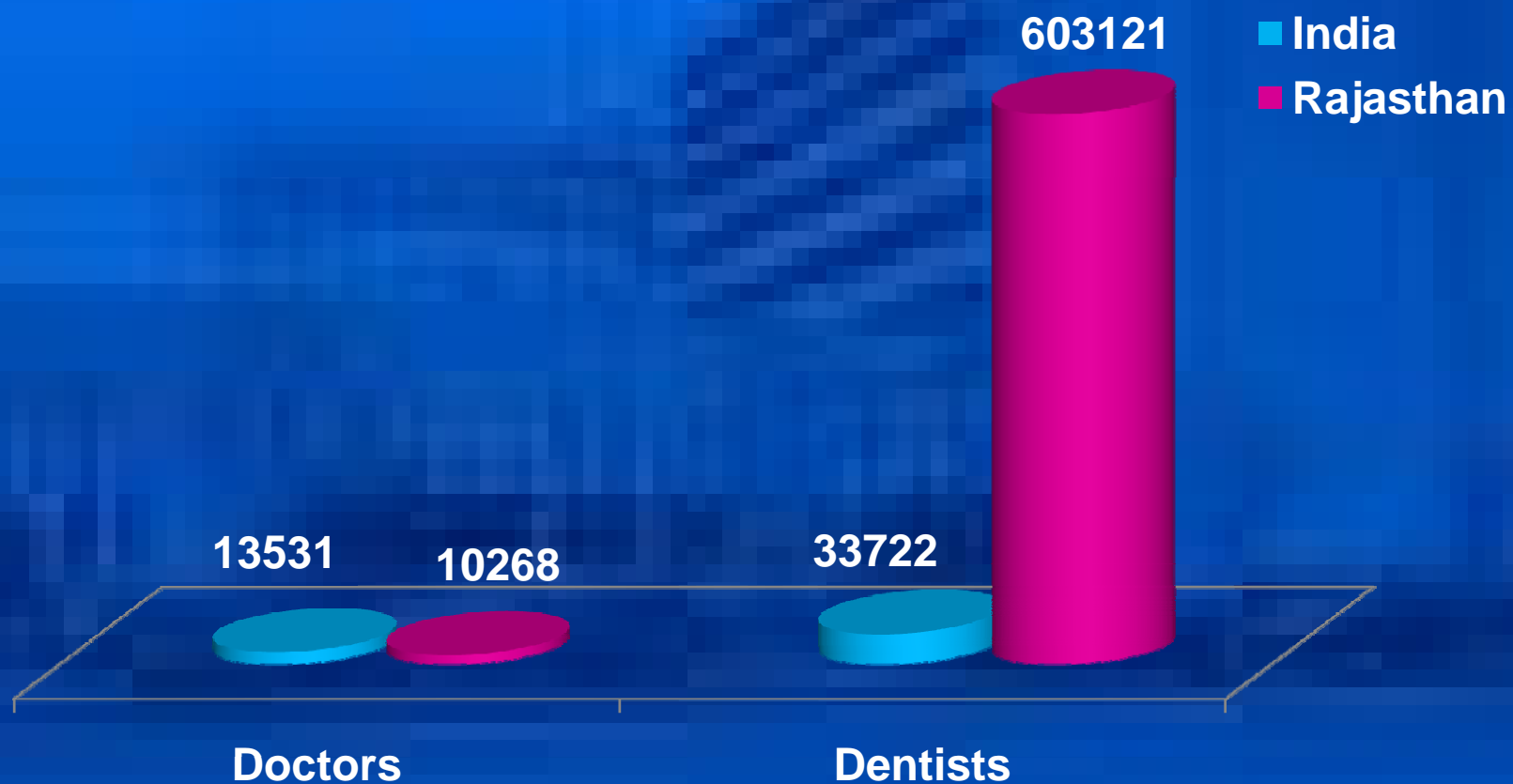
Nurses (India)



Source: Planning Commission of India/ Indian Nursing Council



Average Population Served

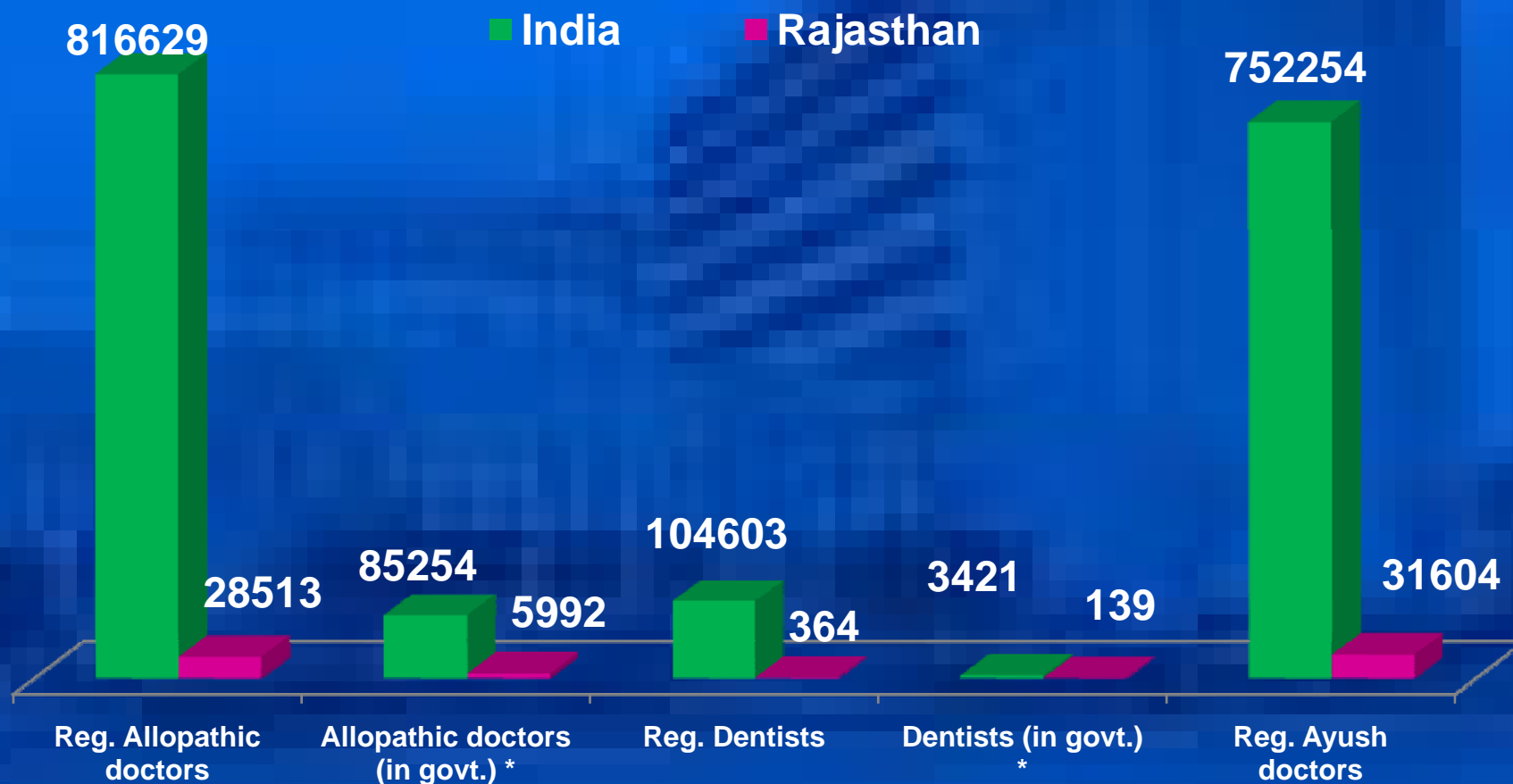


Source: NHP 2010

SIHFW: an ISO9001: 2008 certified institution



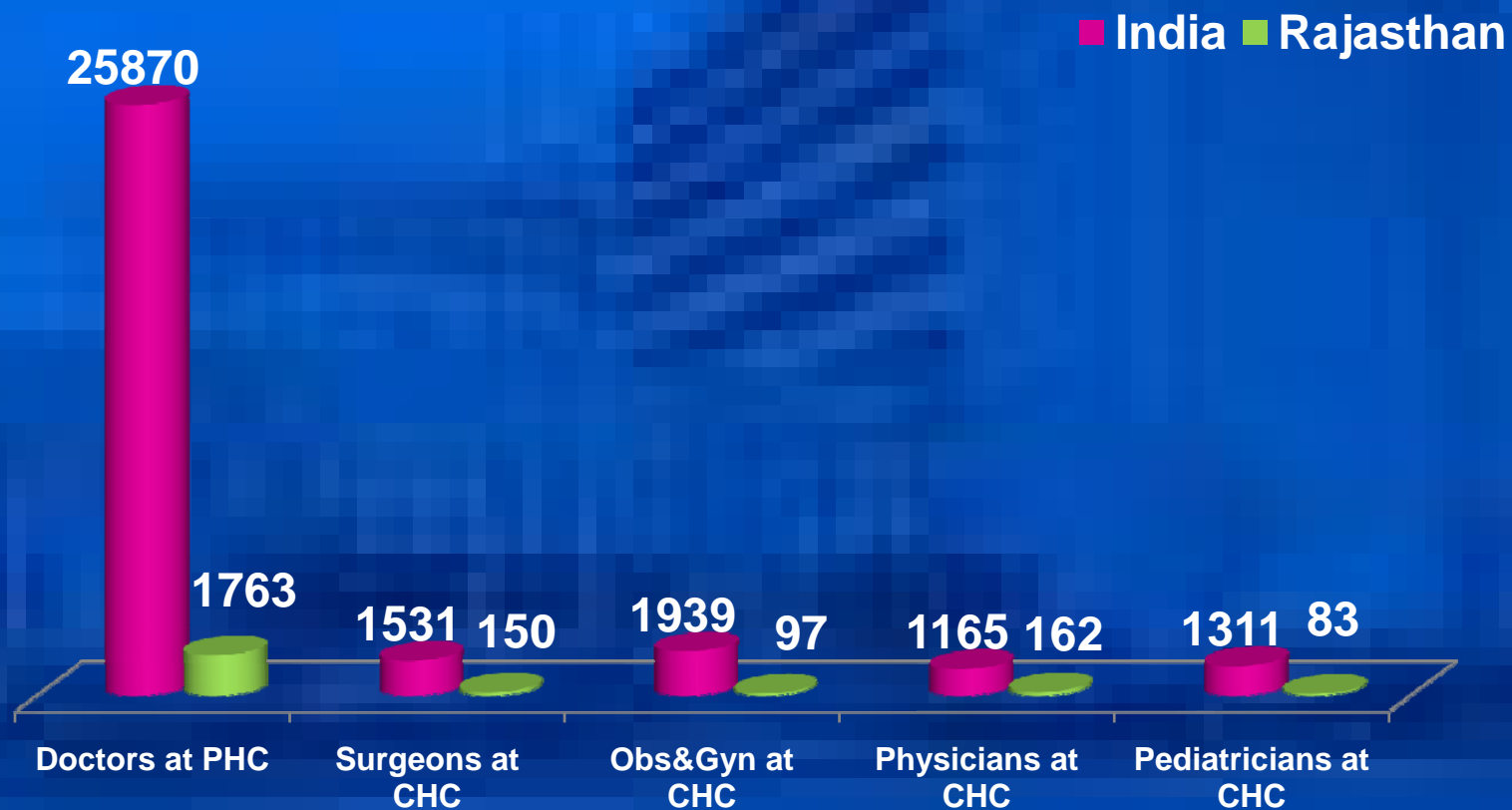
Manpower Status



Source: CBHI,NHP-2010/ * data for Rajasthan from DM&HS, Raj.



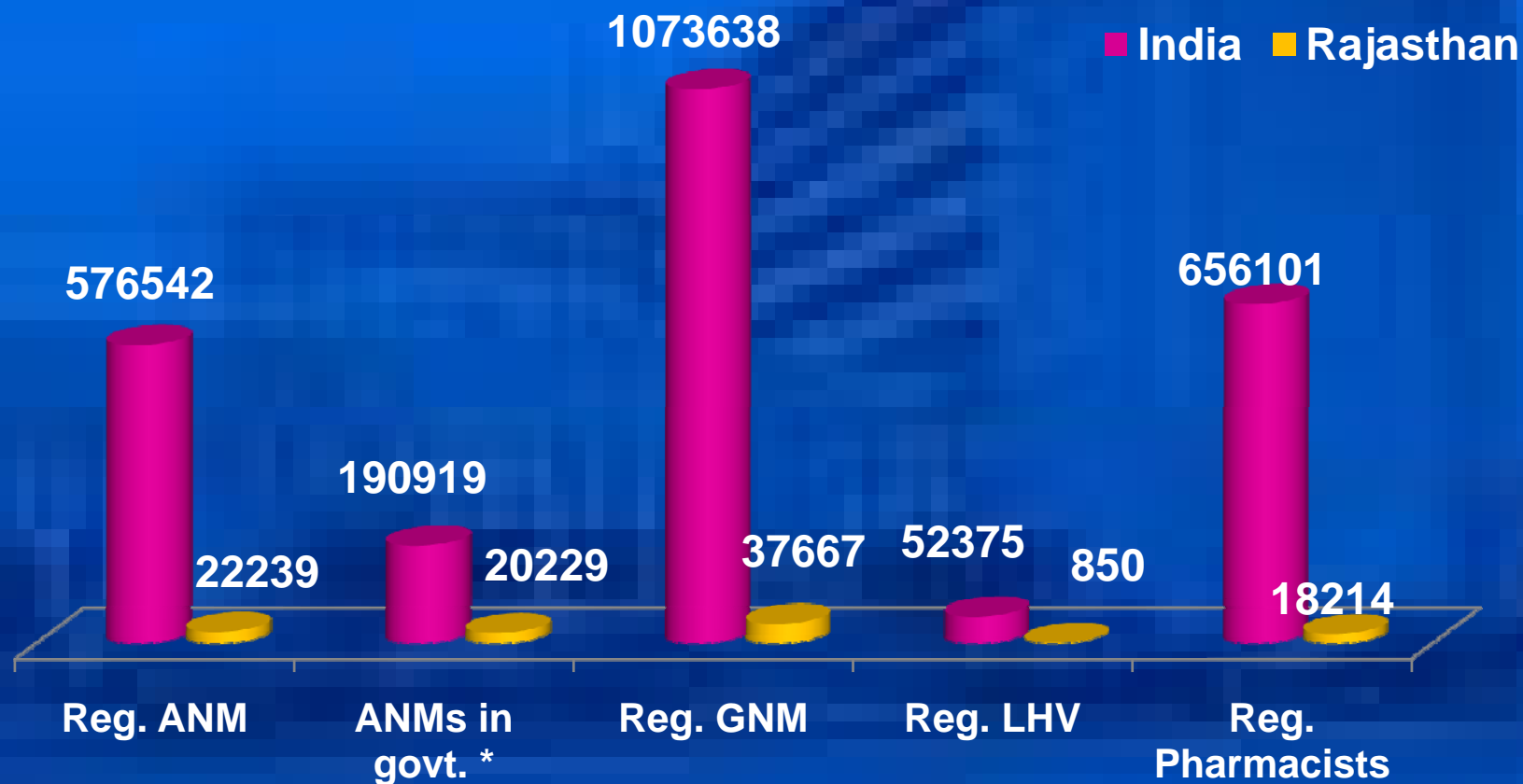
Manpower Status



Source: RHS 2010



Manpower Status



Source: NHP 2010/ * data for Rajasthan from DM&HS Raj.

Health workforce and infrastructure – India



	Density per 10,000 population
Physicians	6.0
Nursing and midwifery staff	13.0
Dentists	0.7
Pharmacists	5.2
Hospital beds	9

Source: World Health Report 2011



Health system's performance

Goals to be achieved by 2000–2015



Eradicate Polio and Yaws	2005
Eliminate Leprosy	2005
Eliminate Kalazar	2010
Eliminate Lymphatic Filariasis	2015
Achieve Zero level growth of HIV/AIDS	2007
Reduce Mortality by 50% on account of TB, Malaria and Other Vector and Water Borne diseases	2010
Reduce Prevalence of Blindness to 0.5%	2010
Reduce IMR to 30/1000 And MMR to 100/Lakh	2010
Increase utilization of public health facilities from current Level of <20 to >75%	2010
Establish an integrated system of surveillance, National Health	2005

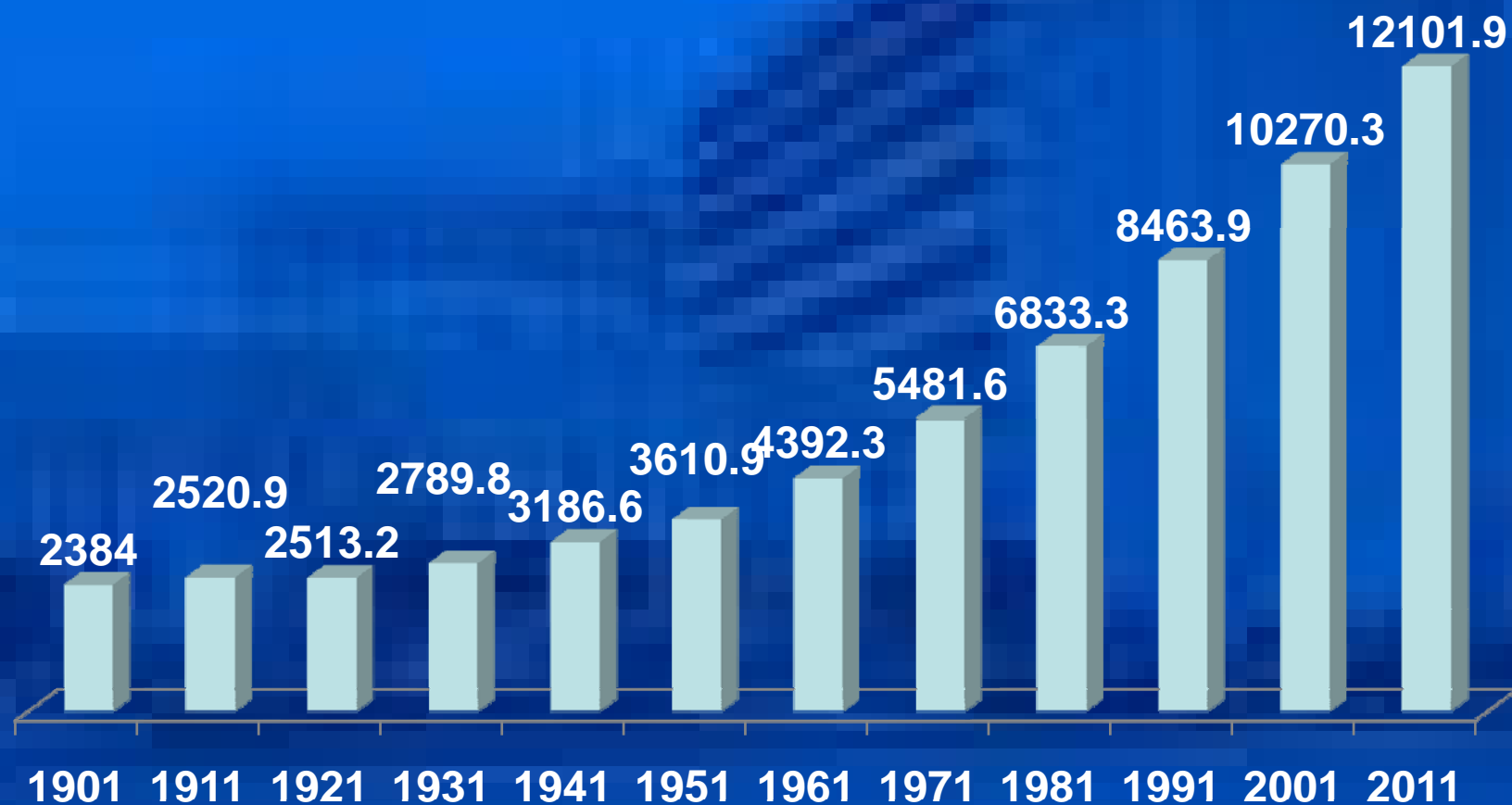


Population and Growth: India





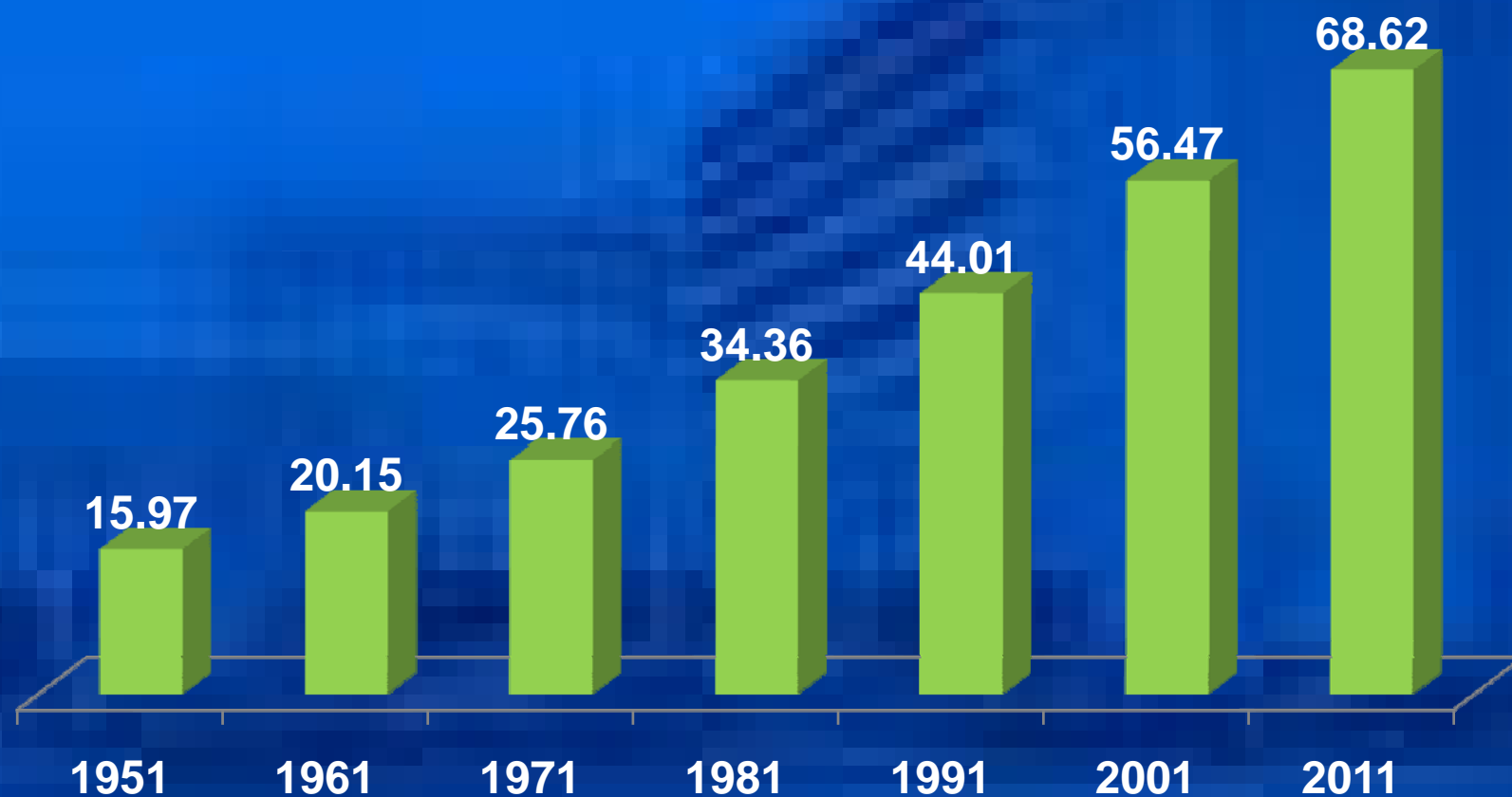
Population Growth- India



Source: Census of India/data in lakhs



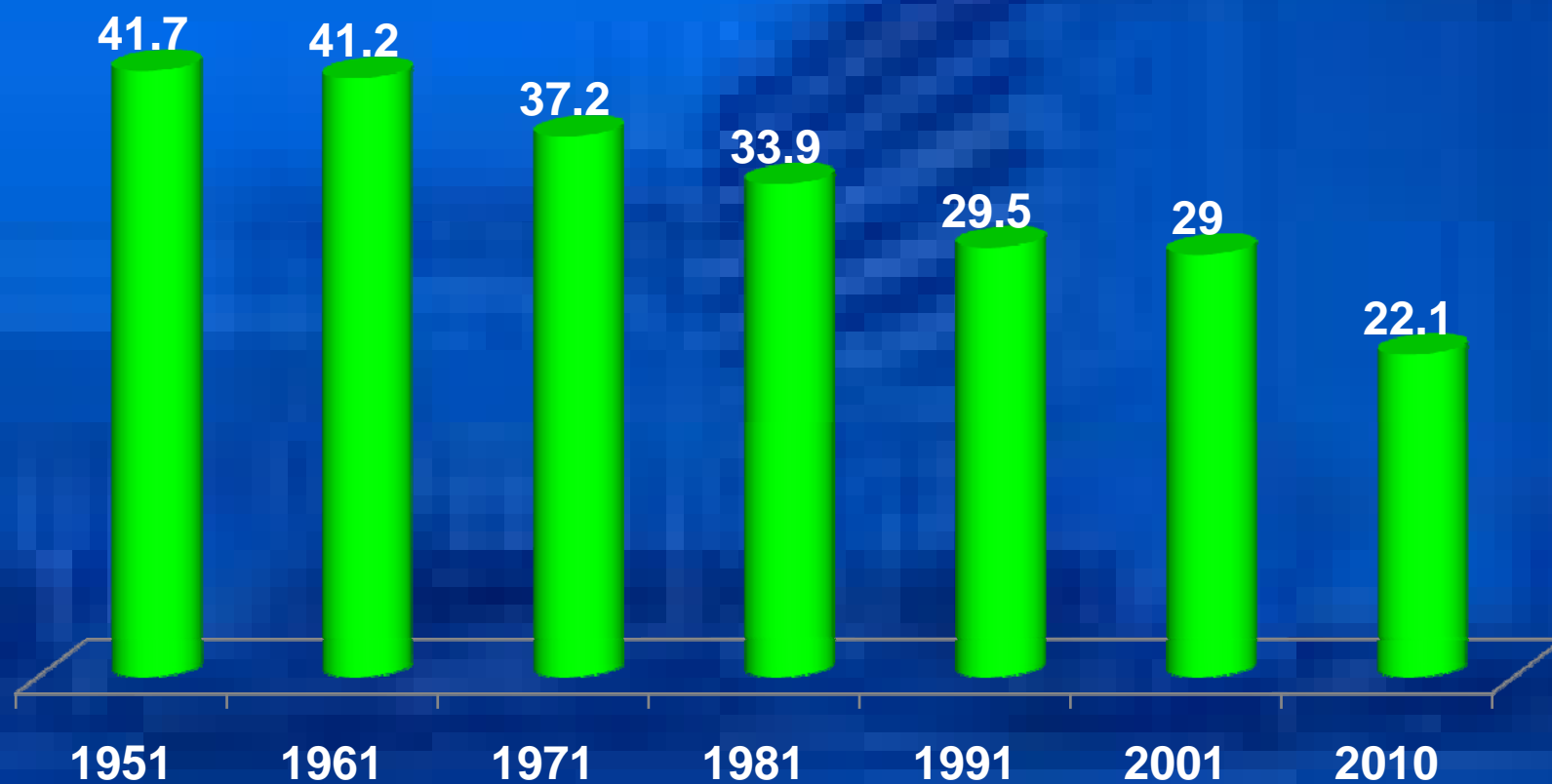
Population growth – Rajasthan



Source: Census; data in millions



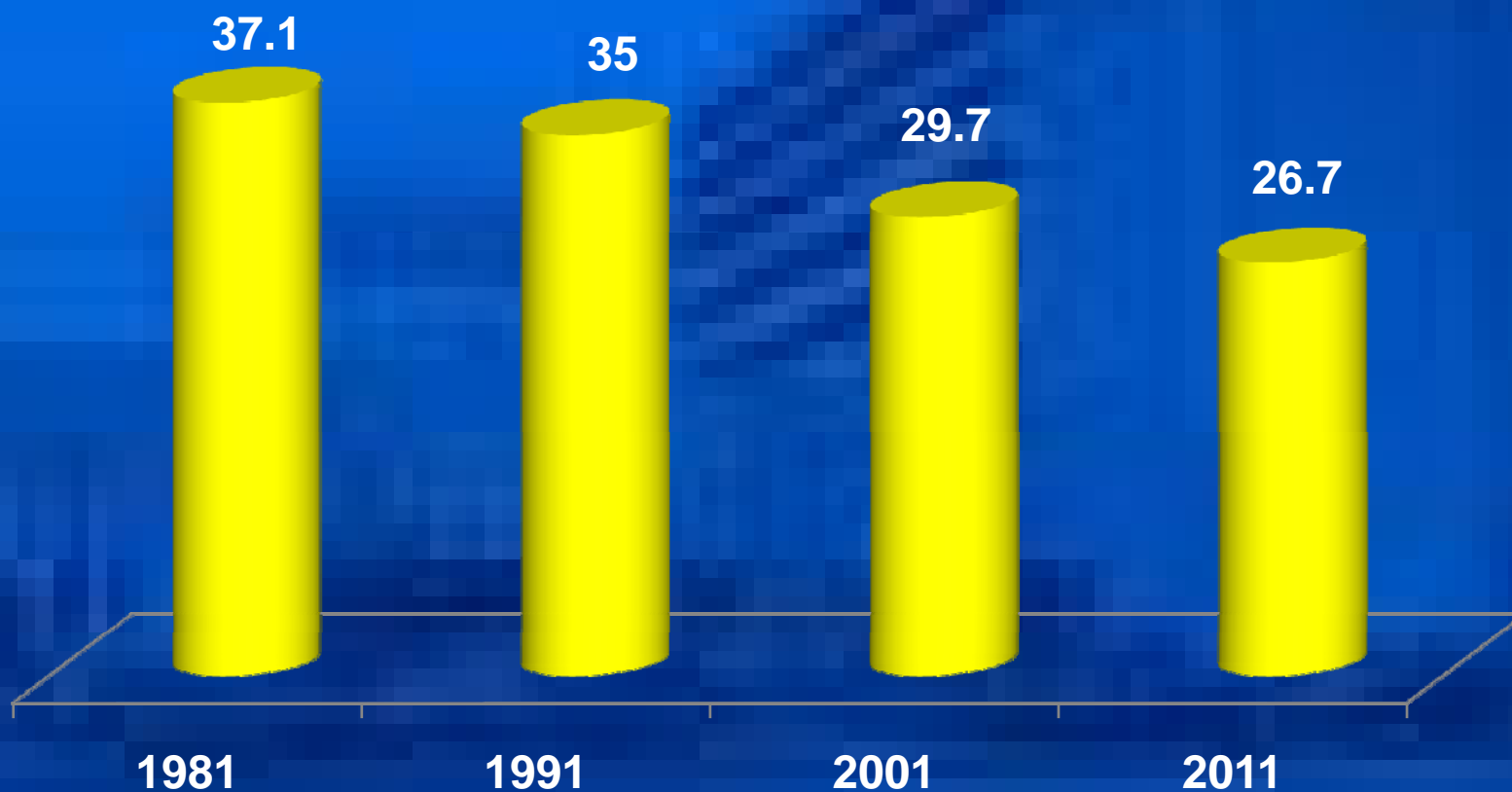
Birth Rate (India)



Source: SRS 2011



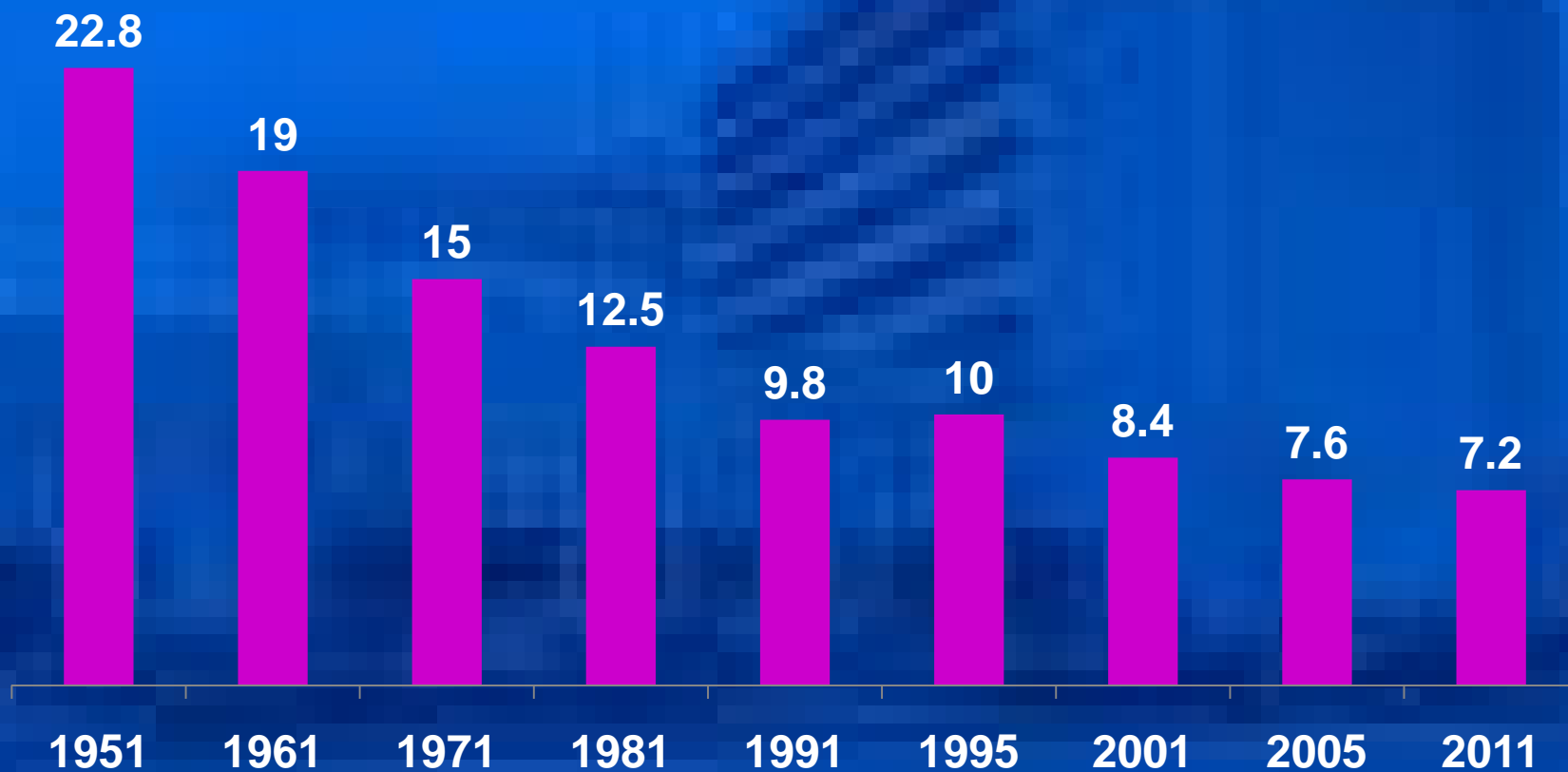
Birth Rate (Rajasthan)



Source: Planning Commission/ Rajasthan Development Report; SRS 2011



Death Rate (India)



Source: SRS 2011



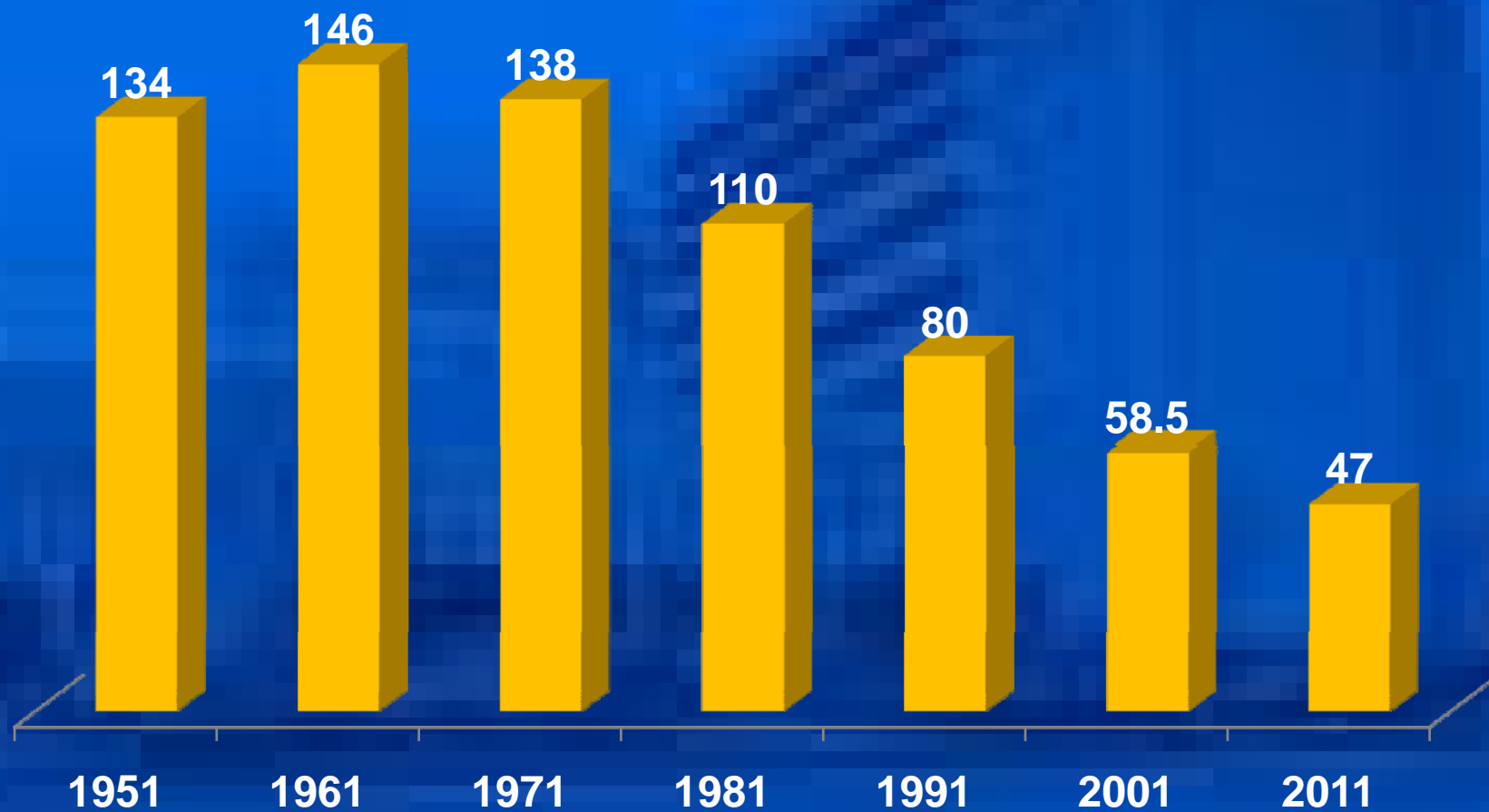
Death Rate (Rajasthan)



Source: Planning Commission/ Rajasthan Development Report; SRS 2011

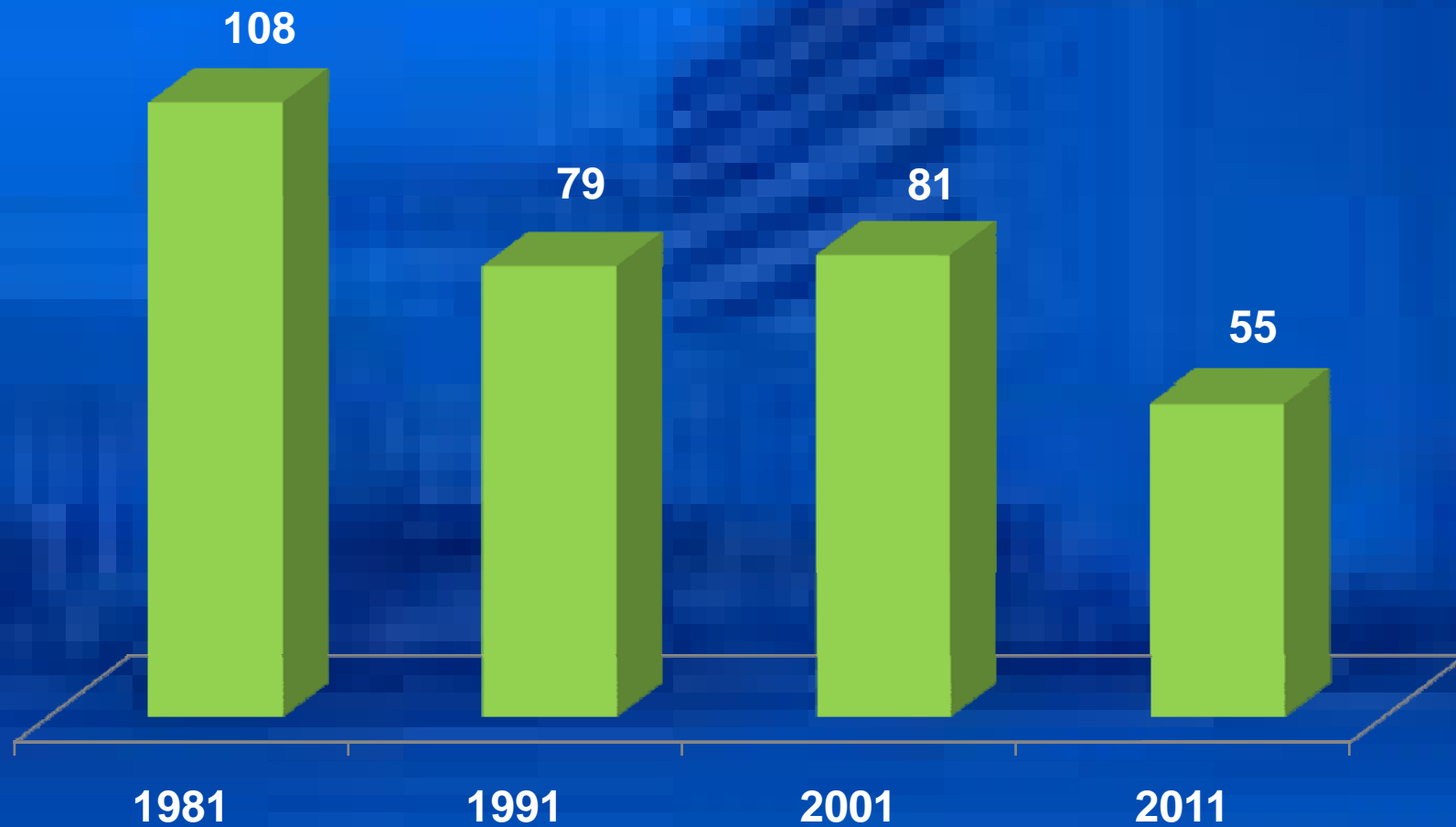


Infant Mortality Rate (India)



Source: SRS, 2011

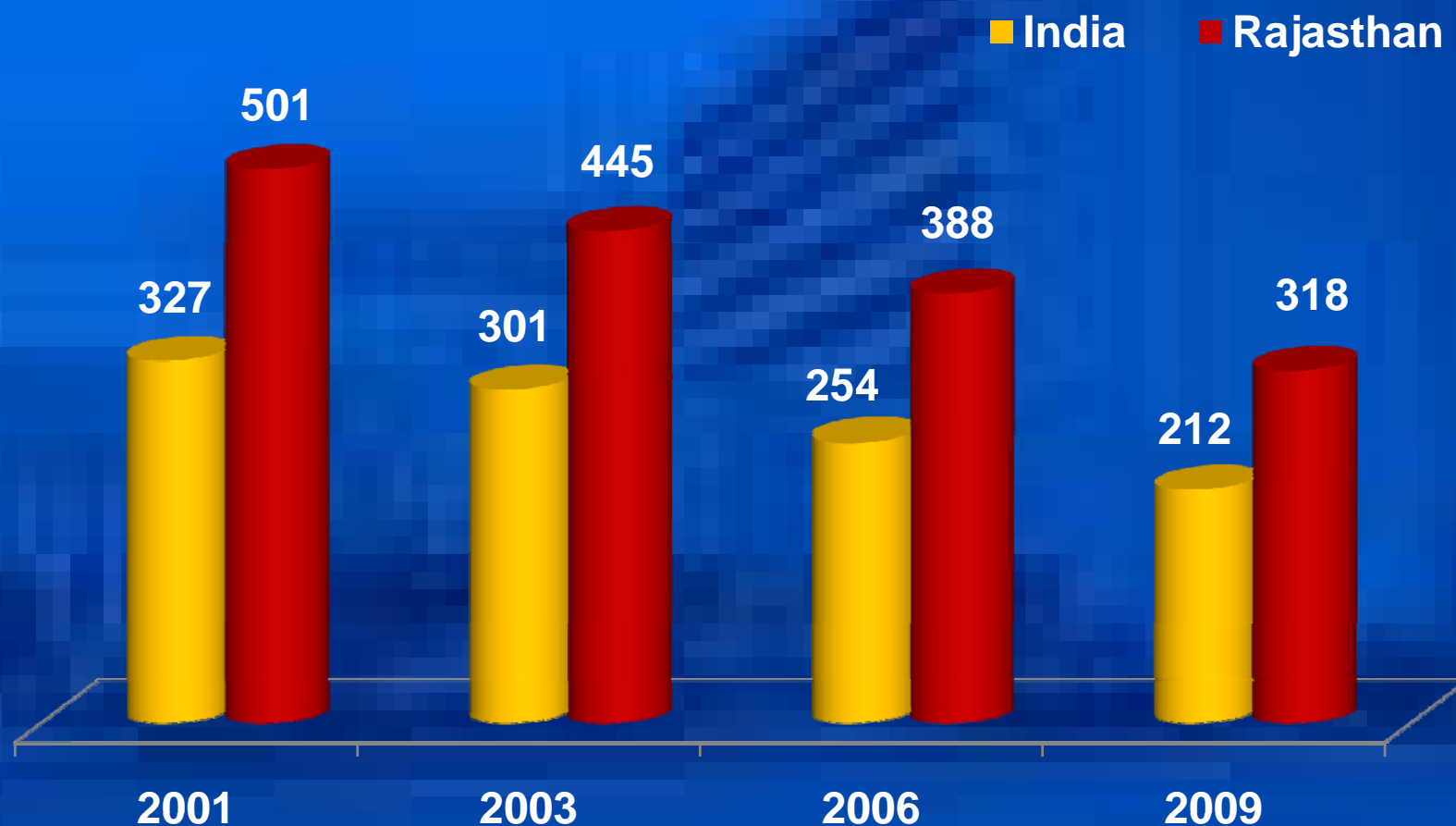
Infant Mortality Rate (Rajasthan)



Source: SRS



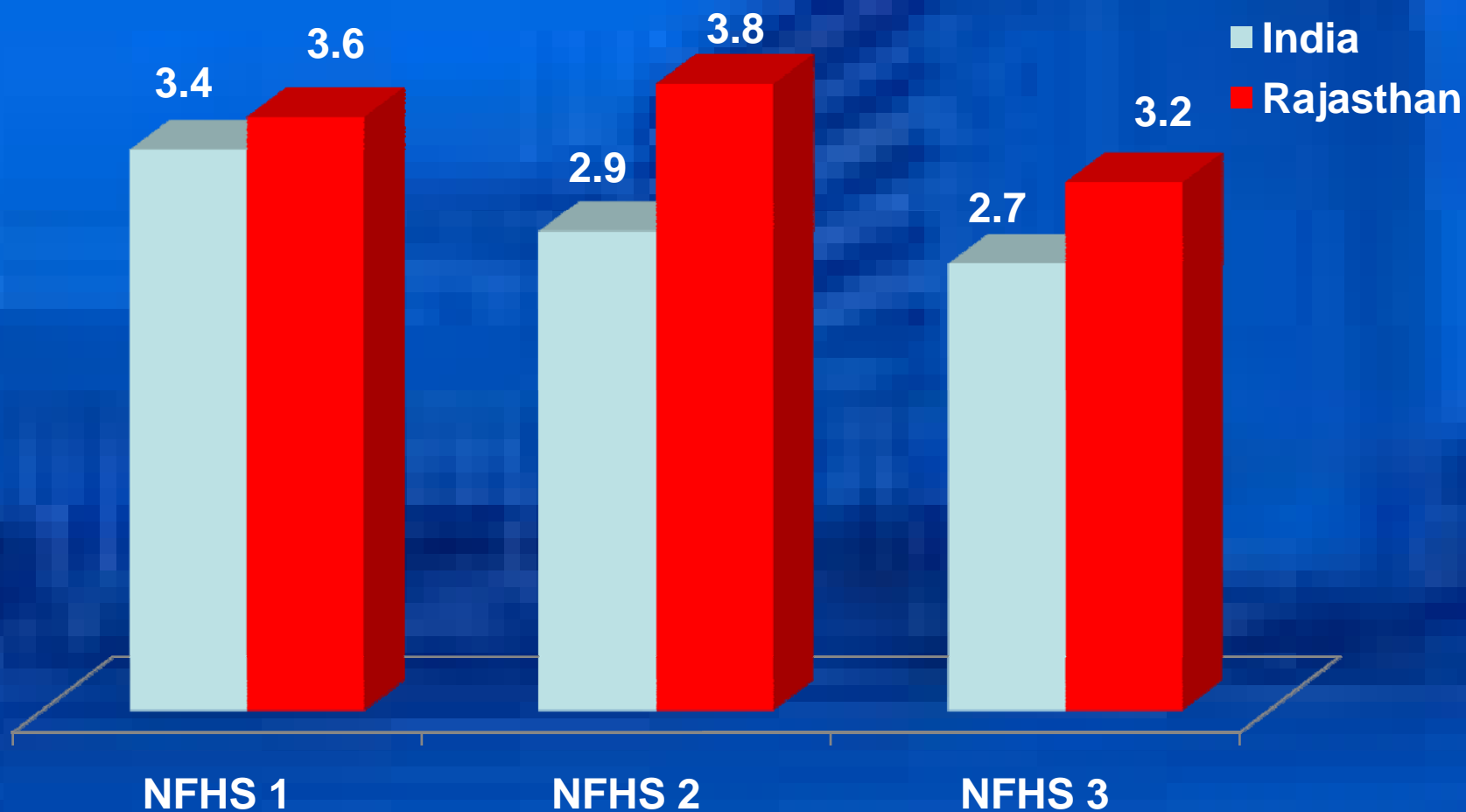
Maternal Mortality Ratio



Source: SRS



Total Fertility Rate



Source: NFHS

SIHFW: an ISO9001: 2008 certified institution



Health care in India

- Entitlements by policy and not rights
- Focus on preventive and promotive care
- Grossly under-provided facilities
- Poor investments hitherto
- Declining public expenditures and new investments
- Structural Adjustment programming under World Bank dictate



Major Programs

- National AIDS Control Program
- National Cancer Control Program
- National Diarrheal Disease Control Program
- National Filaria Control Program*
- National Family Welfare Program
- National Iodine Deficiency Disorders Control Program
- National Leprosy Eradication Program



- National Malaria Eradication Program*
- National Program for Control of Blindness & Visual Impairment
- National Reproductive and Child Health Program
- National Program for surveillance Program for Communicable diseases
- National Tuberculosis Control Program (Revised)

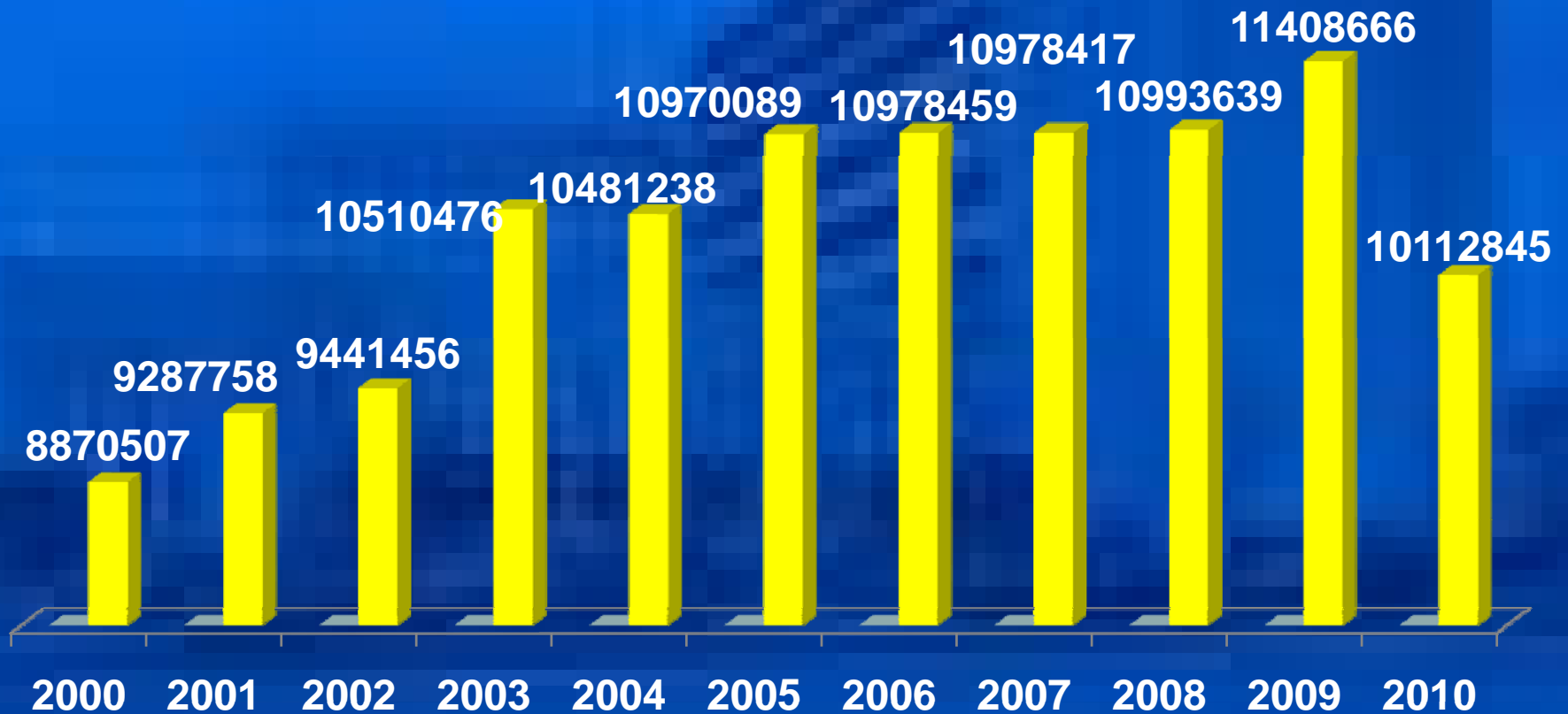
(Programs are merged into*

National Vector Borne Disease Control Program since 2003-04)



Epidemiological Profile

Diarrhea Cases

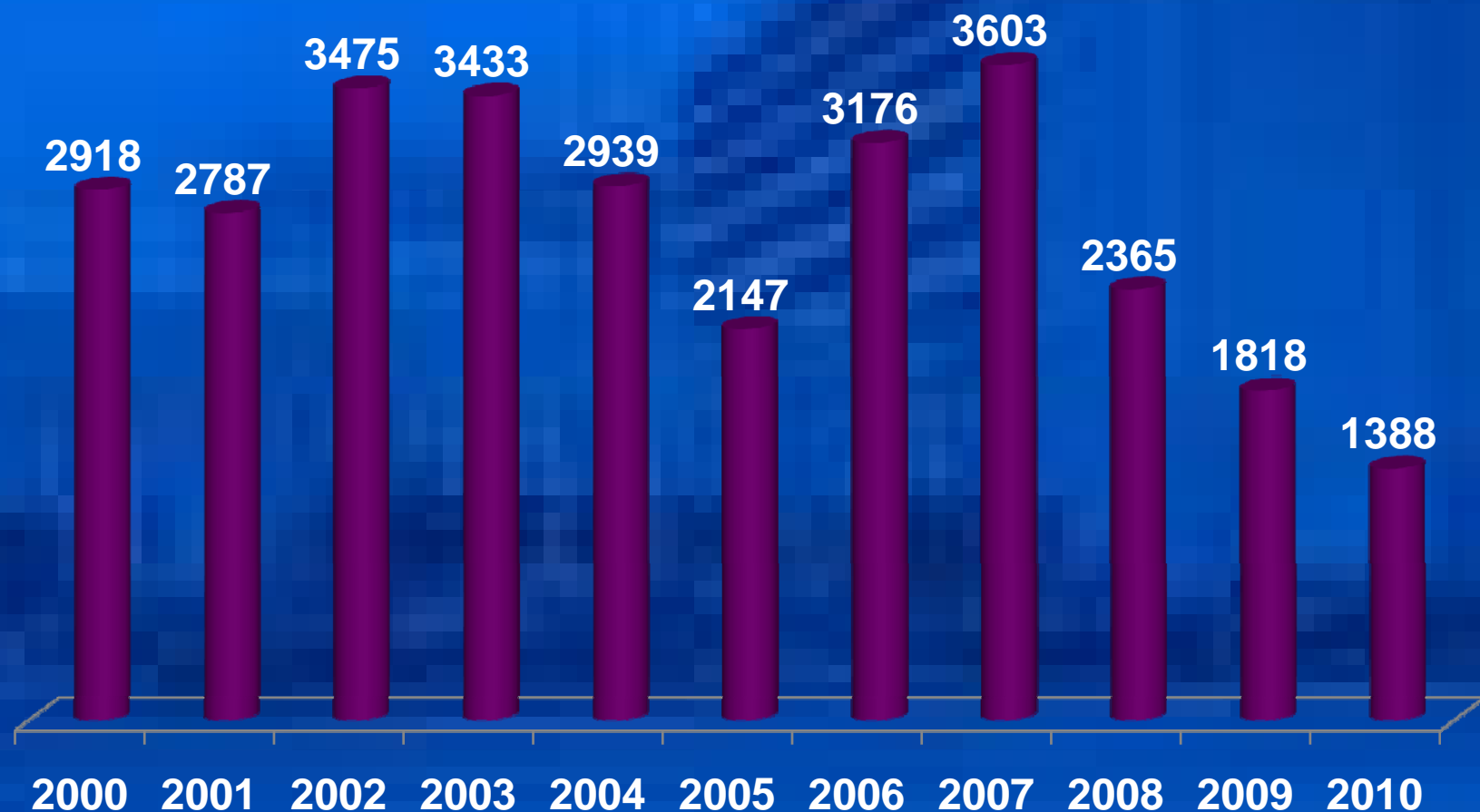


Source: CBHI,NHP-2010 and MOHFW

SIHFW: an ISO9001: 2008 certified institution



Diarrhea Deaths

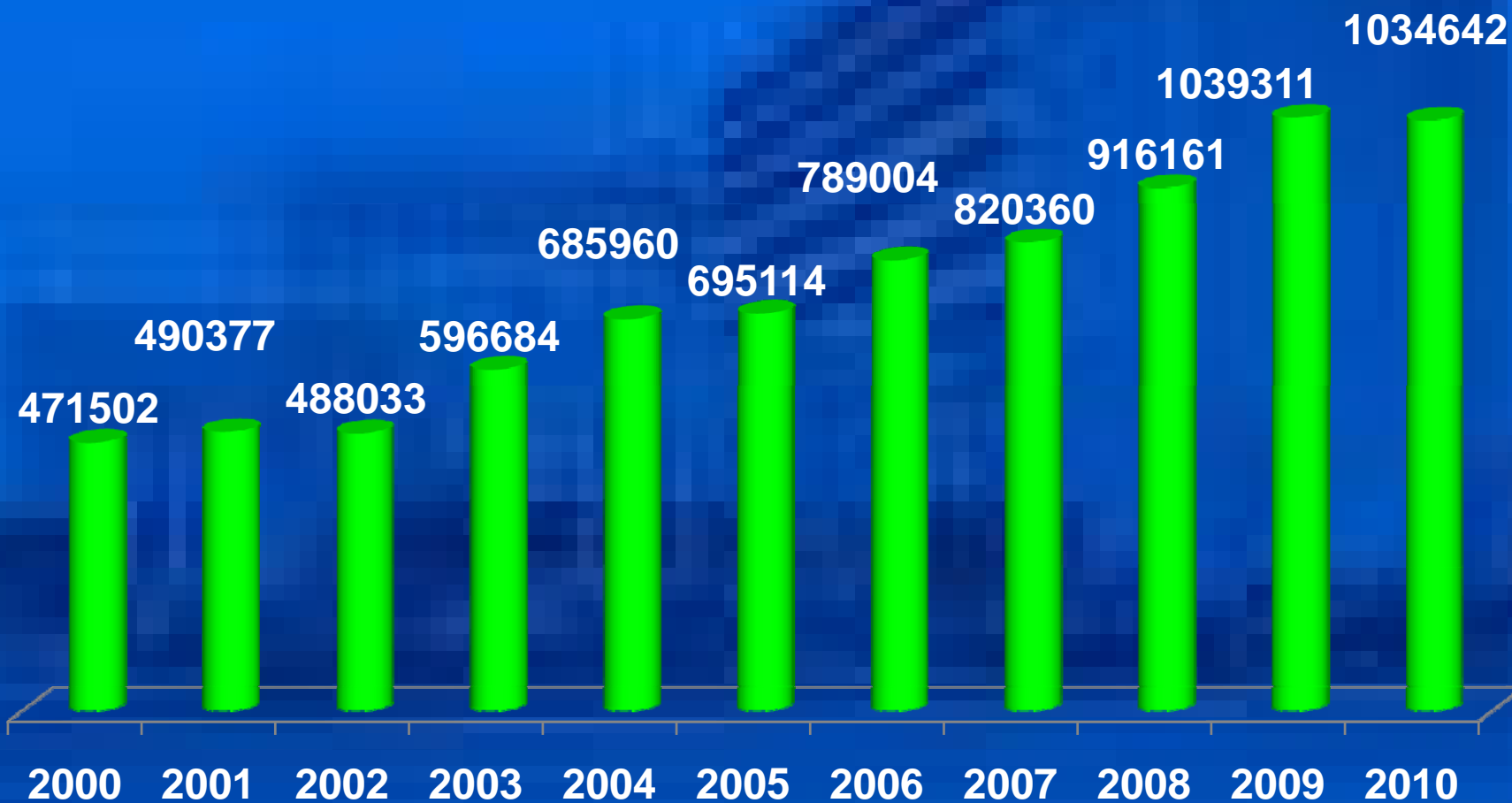


Source: CBHI, NHP-2010 and MOHFW

SIHFW: an ISO9001: 2008 certified institution



Enteric Fever Cases

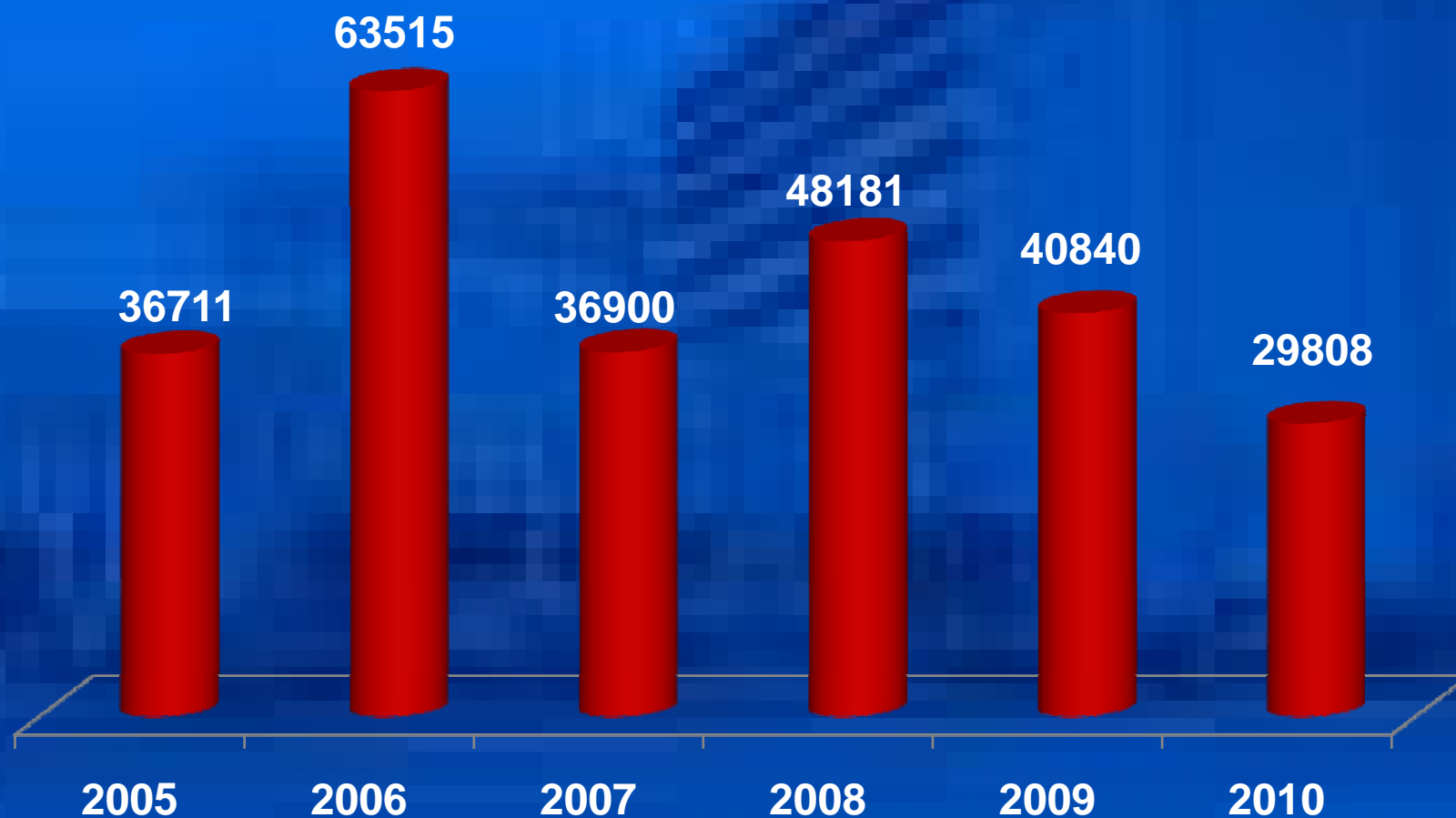


Source: CBHI,NHP-2010 and MOHFW

SIHFW: an ISO9001: 2008 certified institution



Measles Cases



Source: CBHI,NHP-2010 and MOHFW

SIHFW: an ISO9001: 2008 certified institution



Measles deaths



Source: CBHI,NHP-2010 and MOHFW

SIHFW: an ISO9001: 2008 certified institution



Polio – cases and deaths



Source: CBHI-NHP-different years/ for year 2011 data source National Polio Surveillance Project (WHO)



ARI Cases



Source: CBHI, NHP-2010 and MOHFW

SIHFW: an ISO9001: 2008 certified institution



ARI Deaths

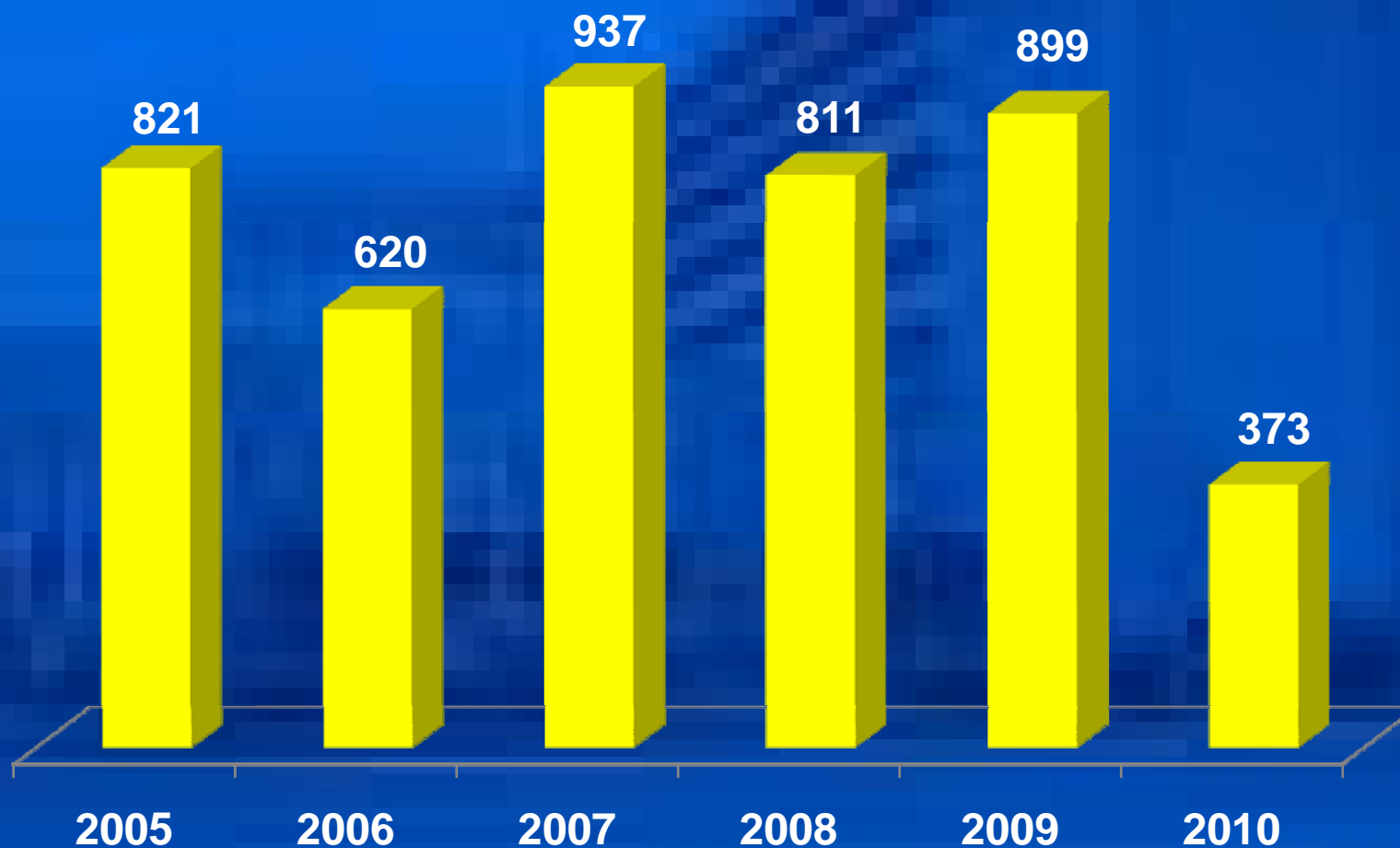


Source: CBHI,NHP-2010 and MOHFW

SIHFW: an ISO9001: 2008 certified institution



Neonatal tetanus Cases

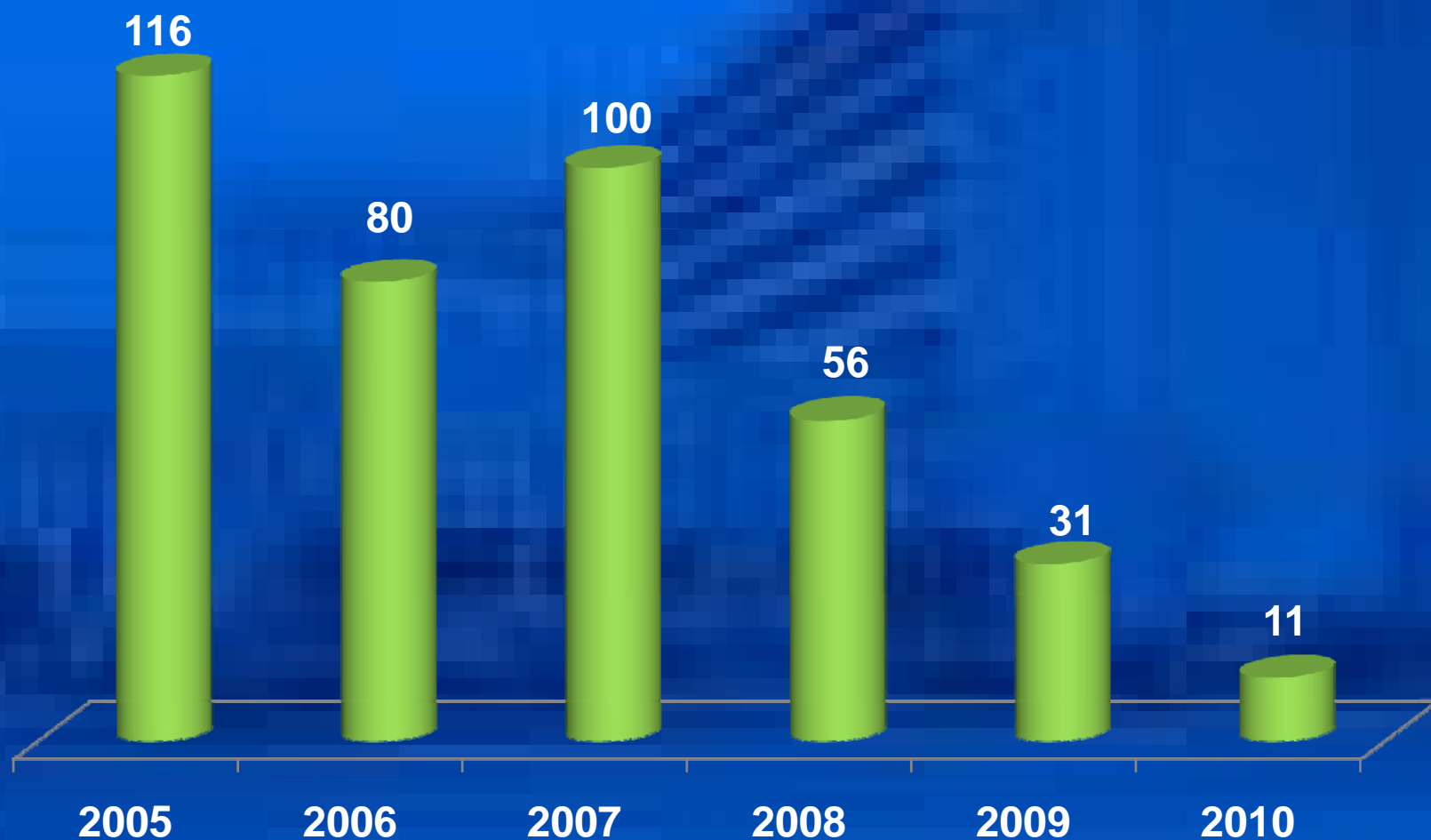


Source: CBHI,NHP-2010 and MOHFW

SIHFW: an ISO9001: 2008 certified institution



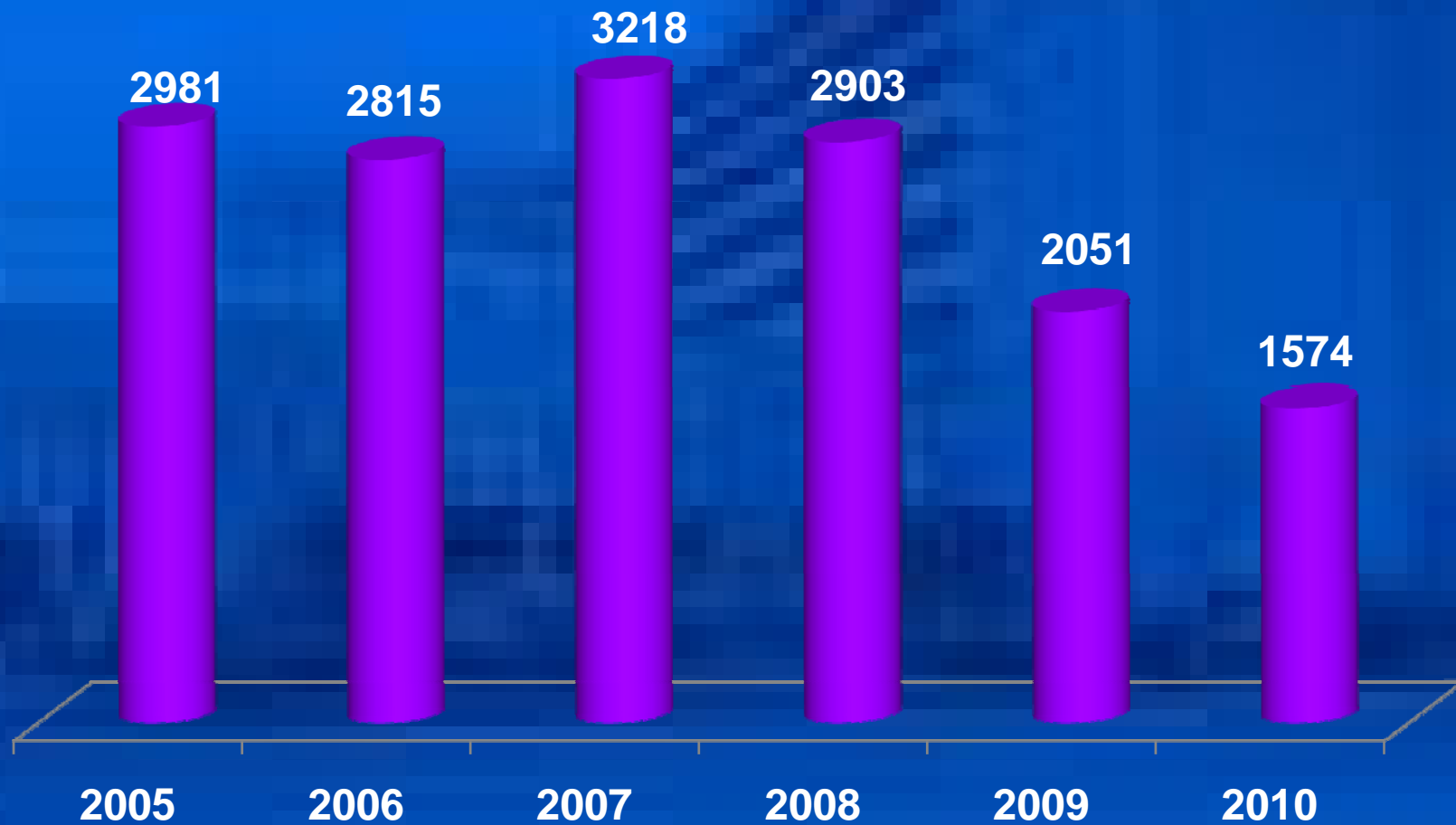
Neonatal tetanus Deaths



Source: CBHI,NHP-2010 and MOHFW

SIHFW: an ISO9001: 2008 certified institution

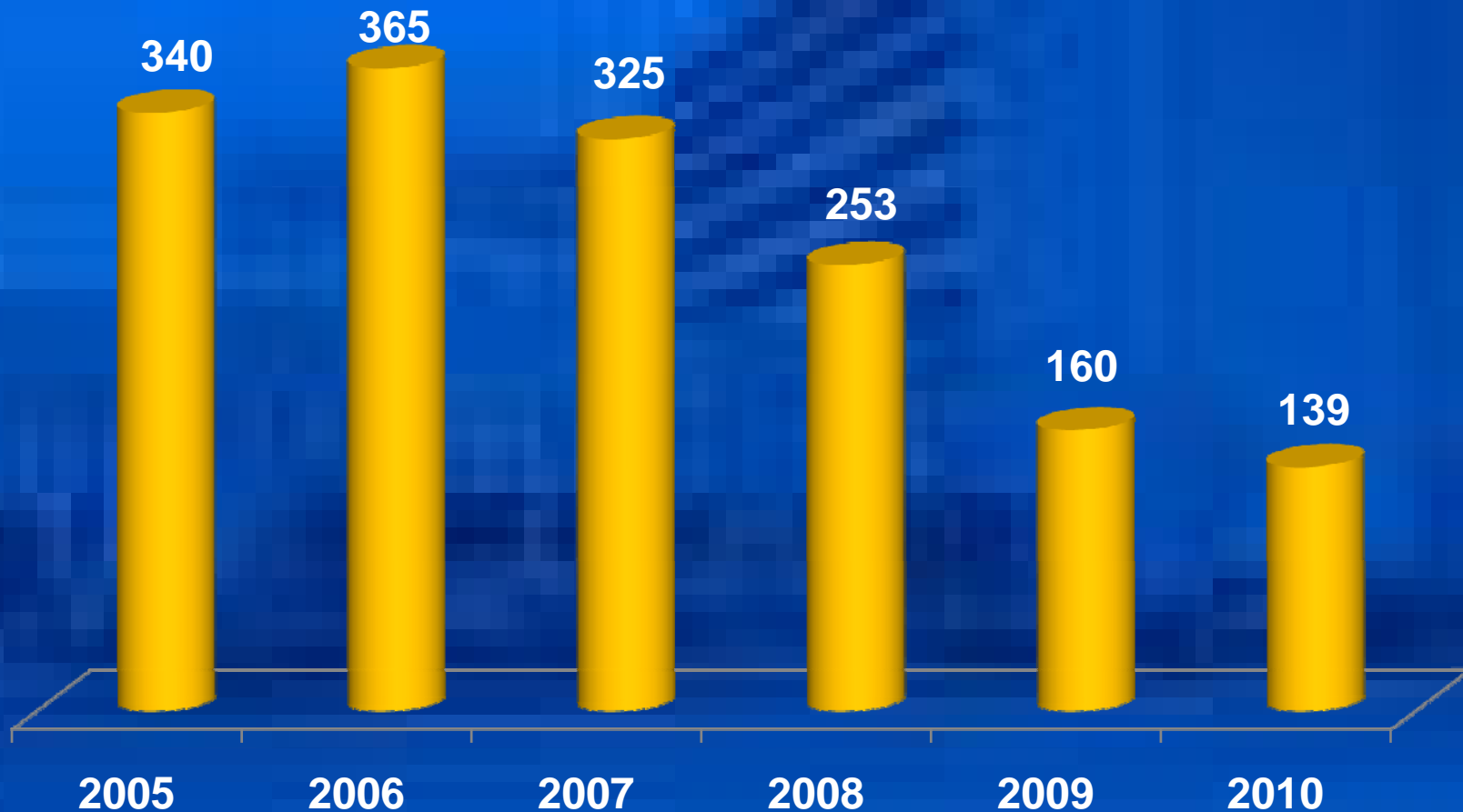
Cases of Tetanus other than Neonatal



Source: CBHI,NHP-2010 and MOHFW

SIHFW: an ISO9001: 2008 certified institution

Deaths due to Tetanus other than Neonatal

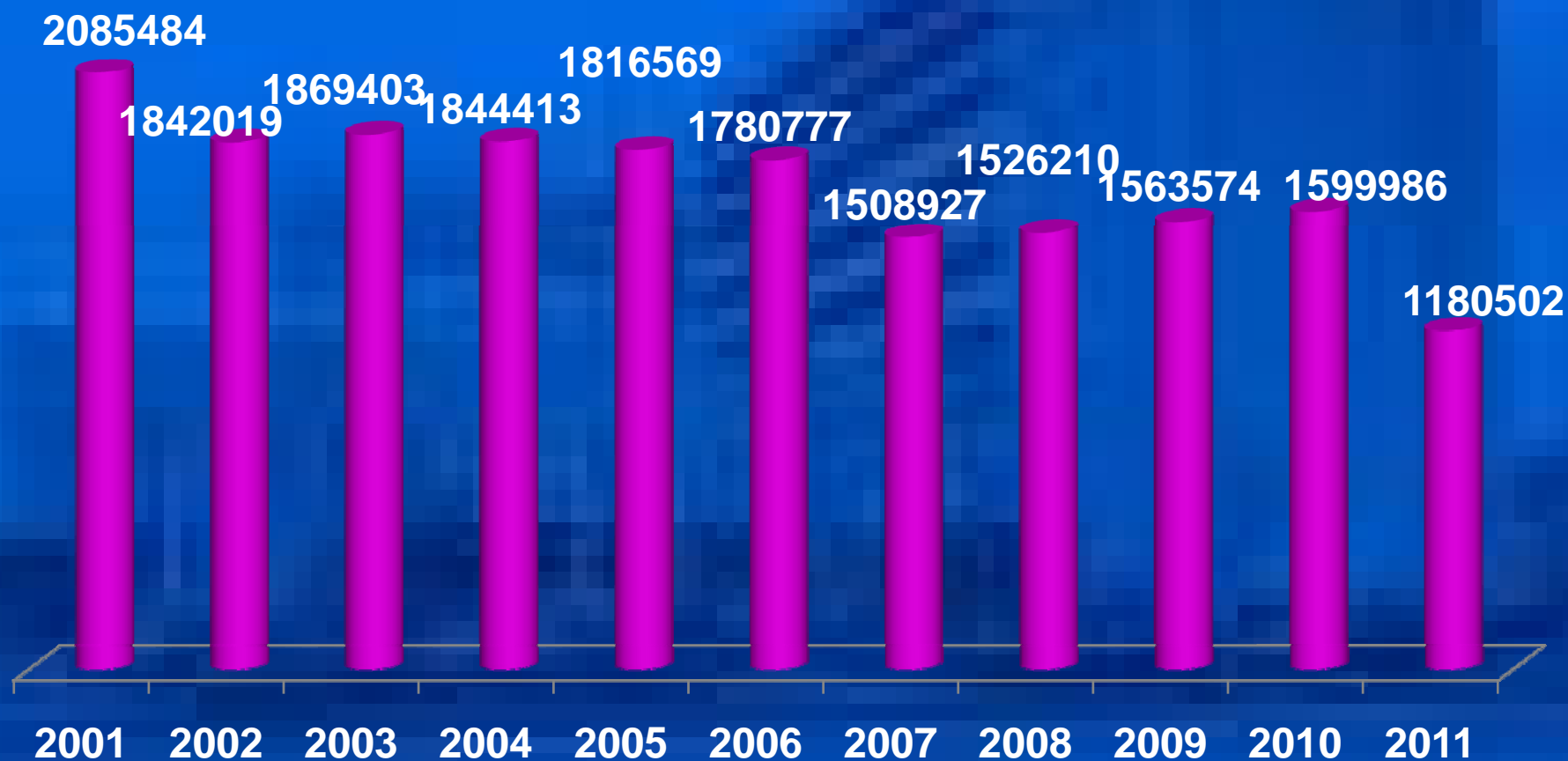


Source: CBHI,NHP-2010 and MOHFW

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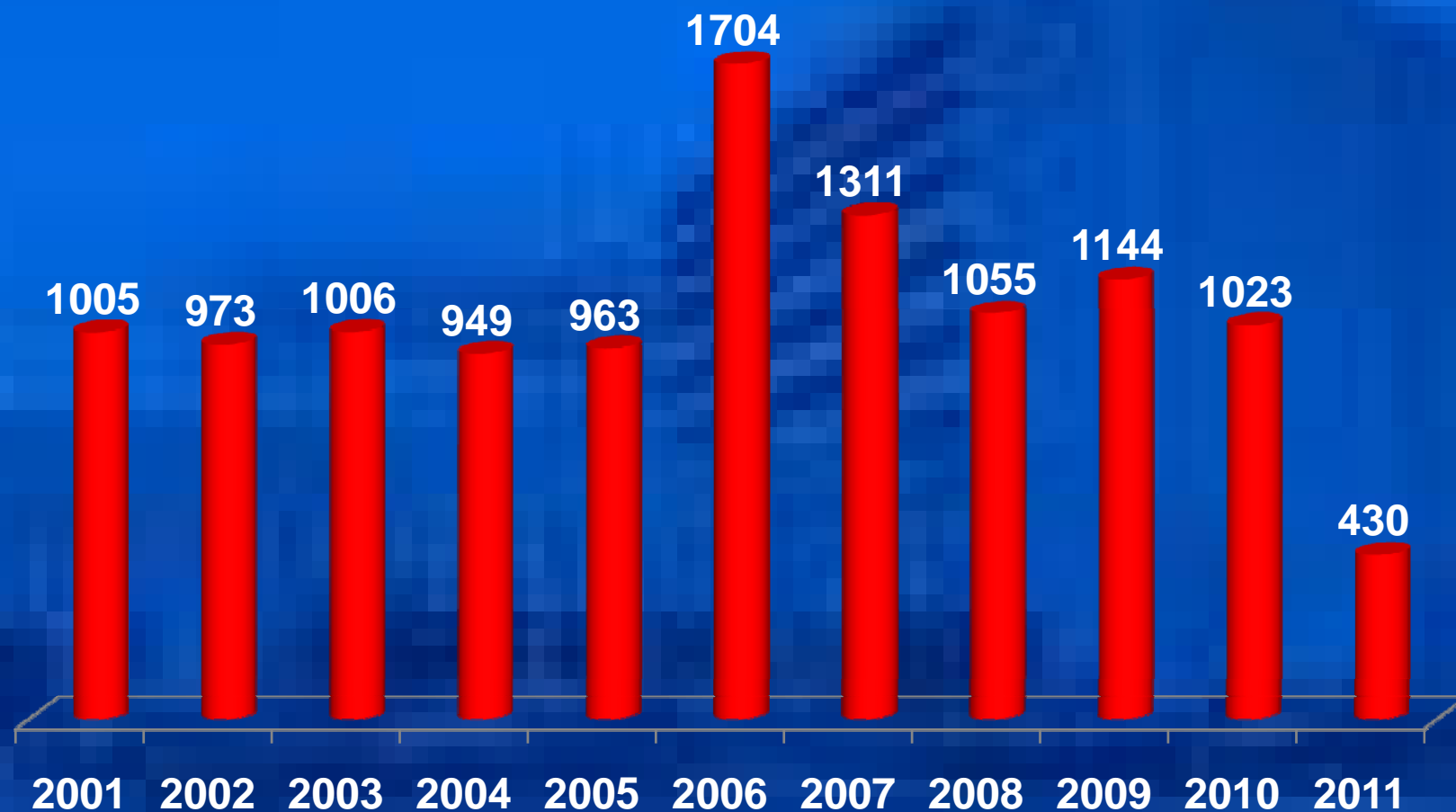
Malaria Cases : India



Source: CBHI,NHP-2010 and MOHFW
For 2011 data upto Nov.



Malaria Deaths :India



Source: CBHI,NHP-2010 and MOHFW
For 2011 data upto Nov.



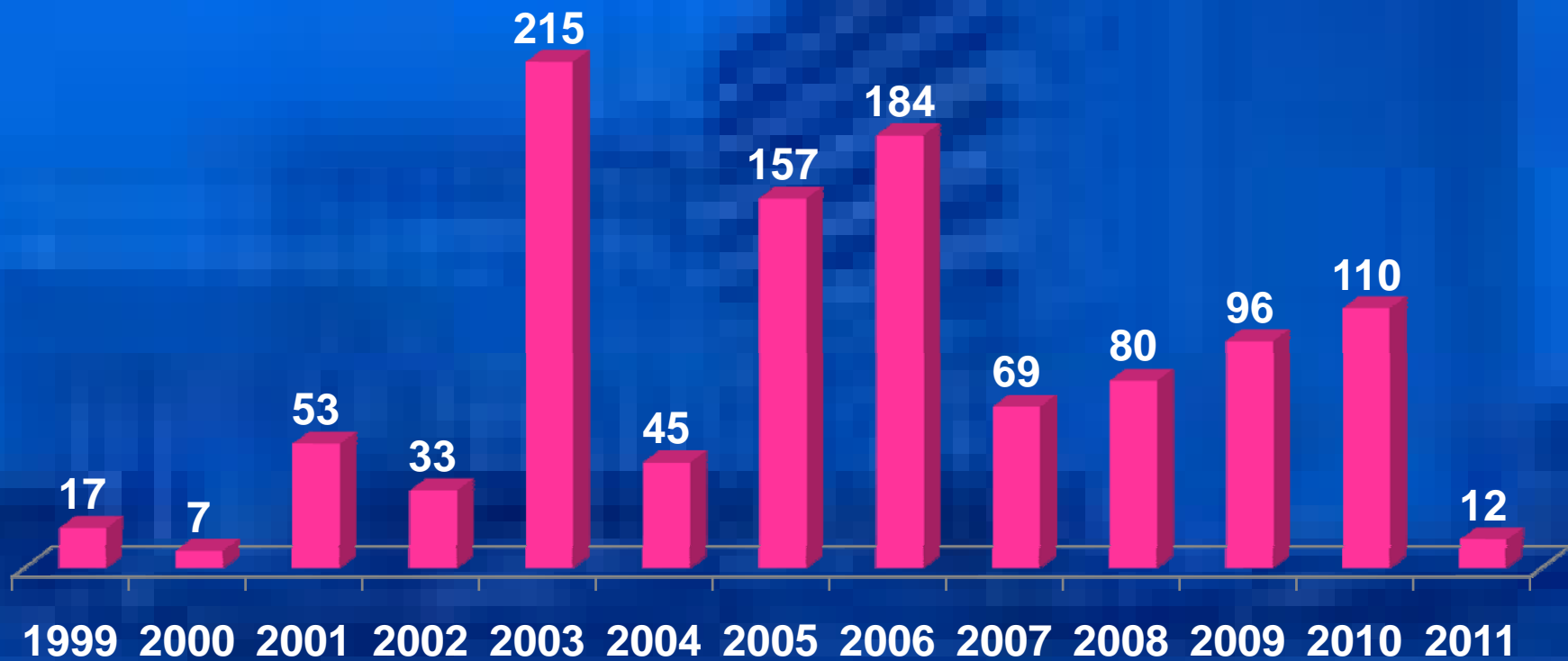
Dengue Cases : India



Source: CBHI,NHP-2010 and MOHFW

SIHFW: an ISO9001: 2008 certified institution

Dengue Deaths : India



Source: CBHI,NHP-2010 and MOHFW

TB Cases : India

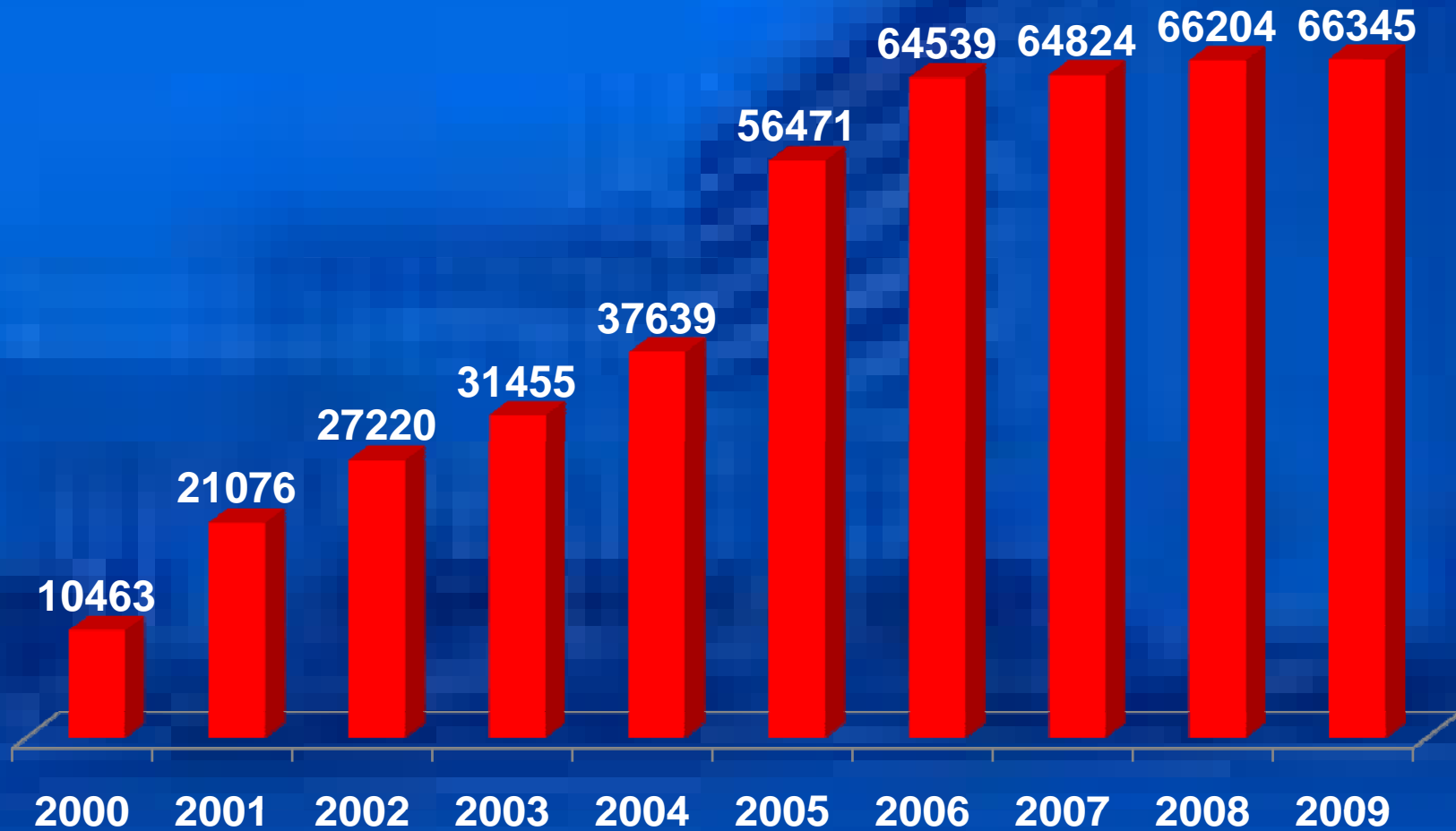


Source: CBHI, NHP-2010

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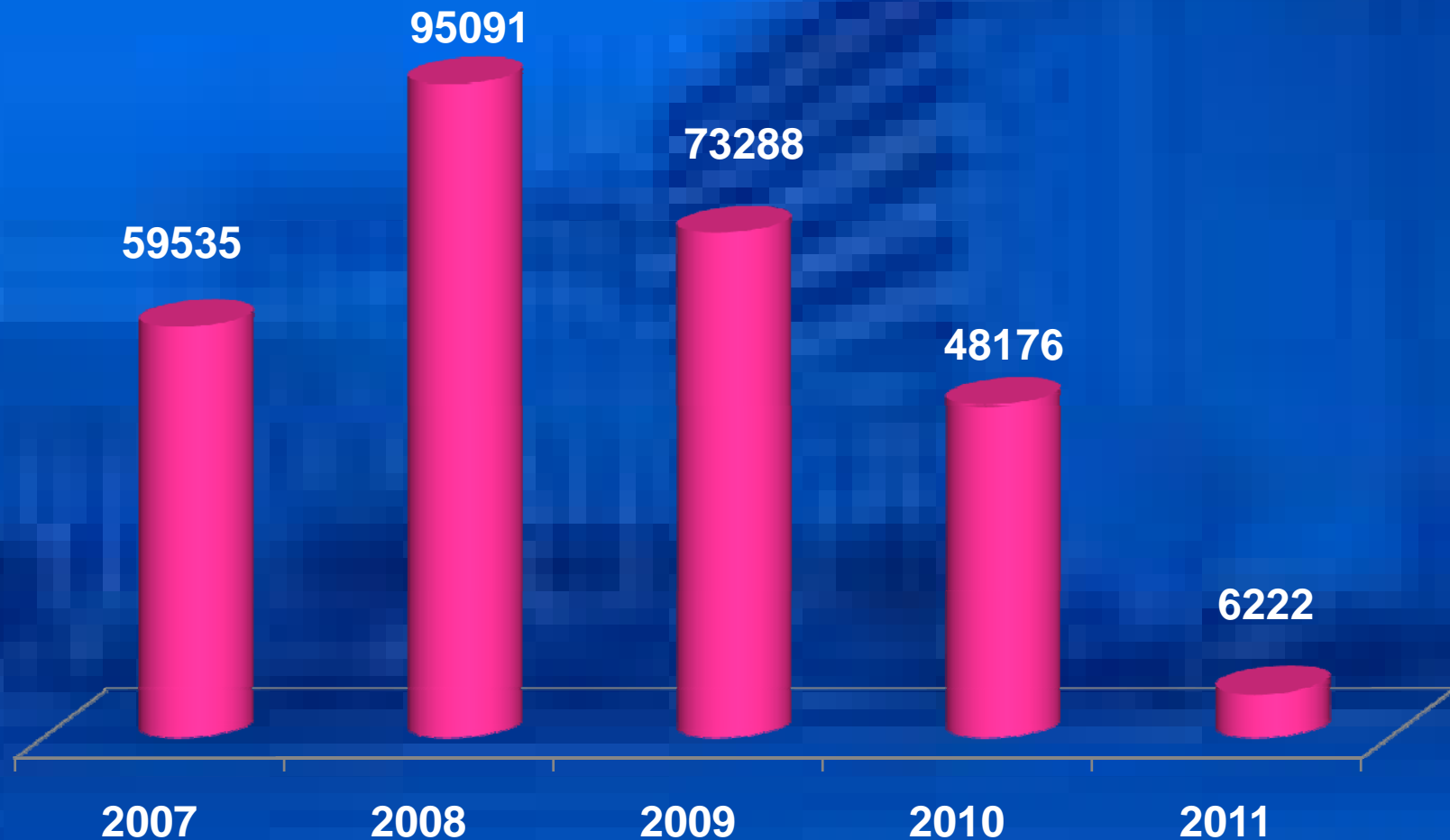
TB Deaths : India



Source: CBHI,NHP-2010

SIHFW: an ISO9001: 2008 certified institution

Suspected Chikungunya Cases : India



Source: NRHM/ MoHFW



Kala Azar Cases : India

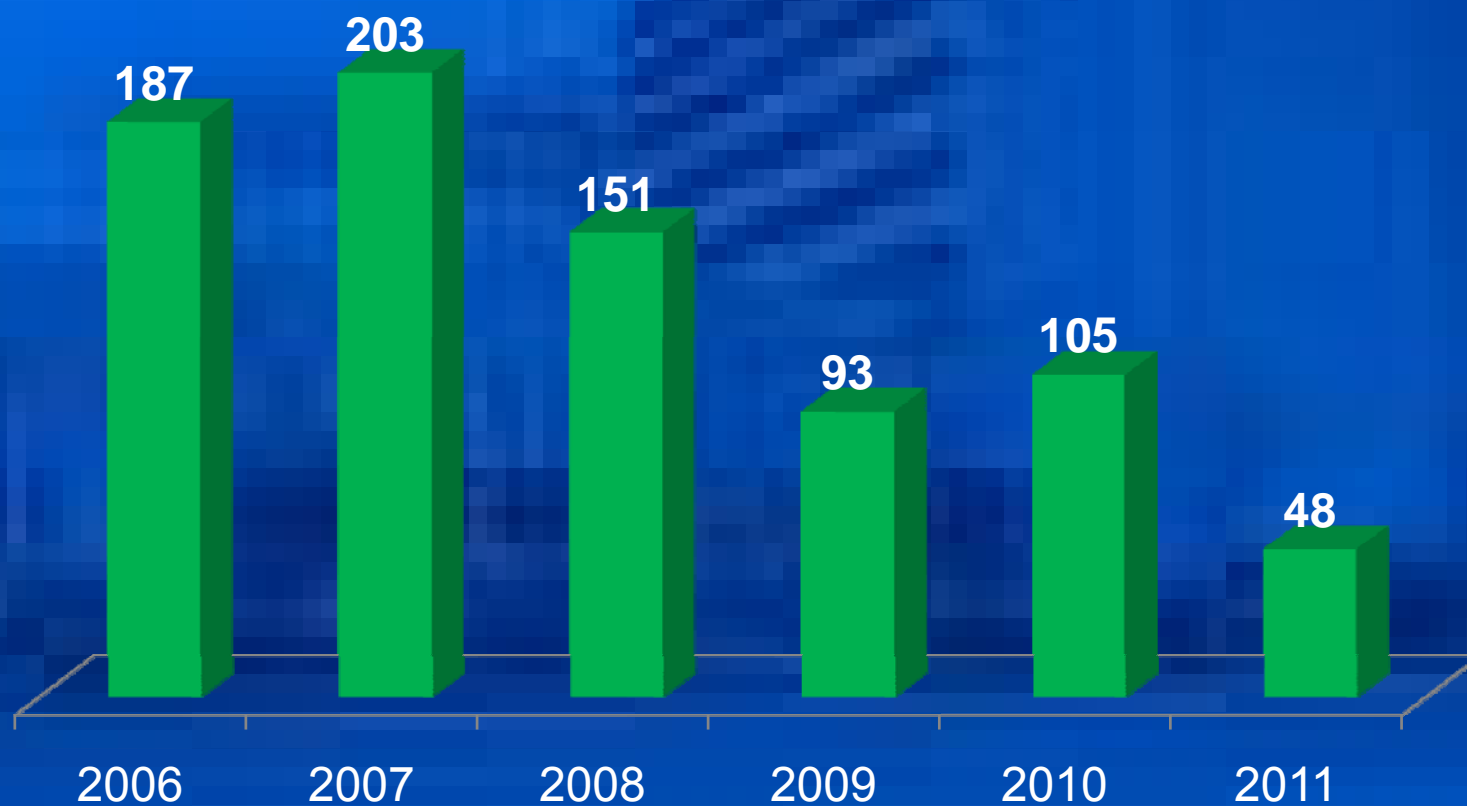


Source: NRHM/ MOHFW

SIHFW: an ISO9001: 2008 certified institution



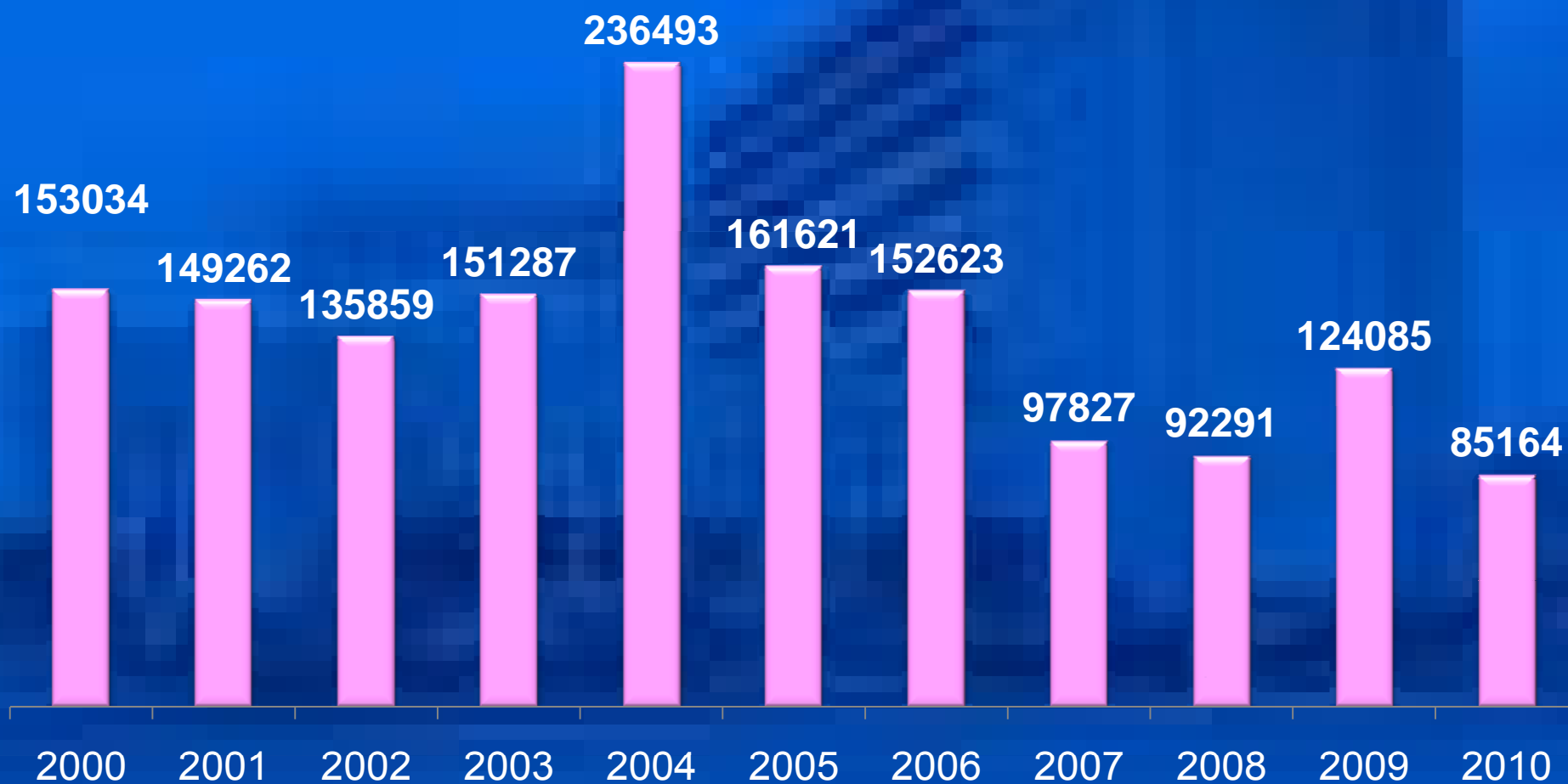
Kala Azar Deaths : India



Source: NRHM/ MOHFW



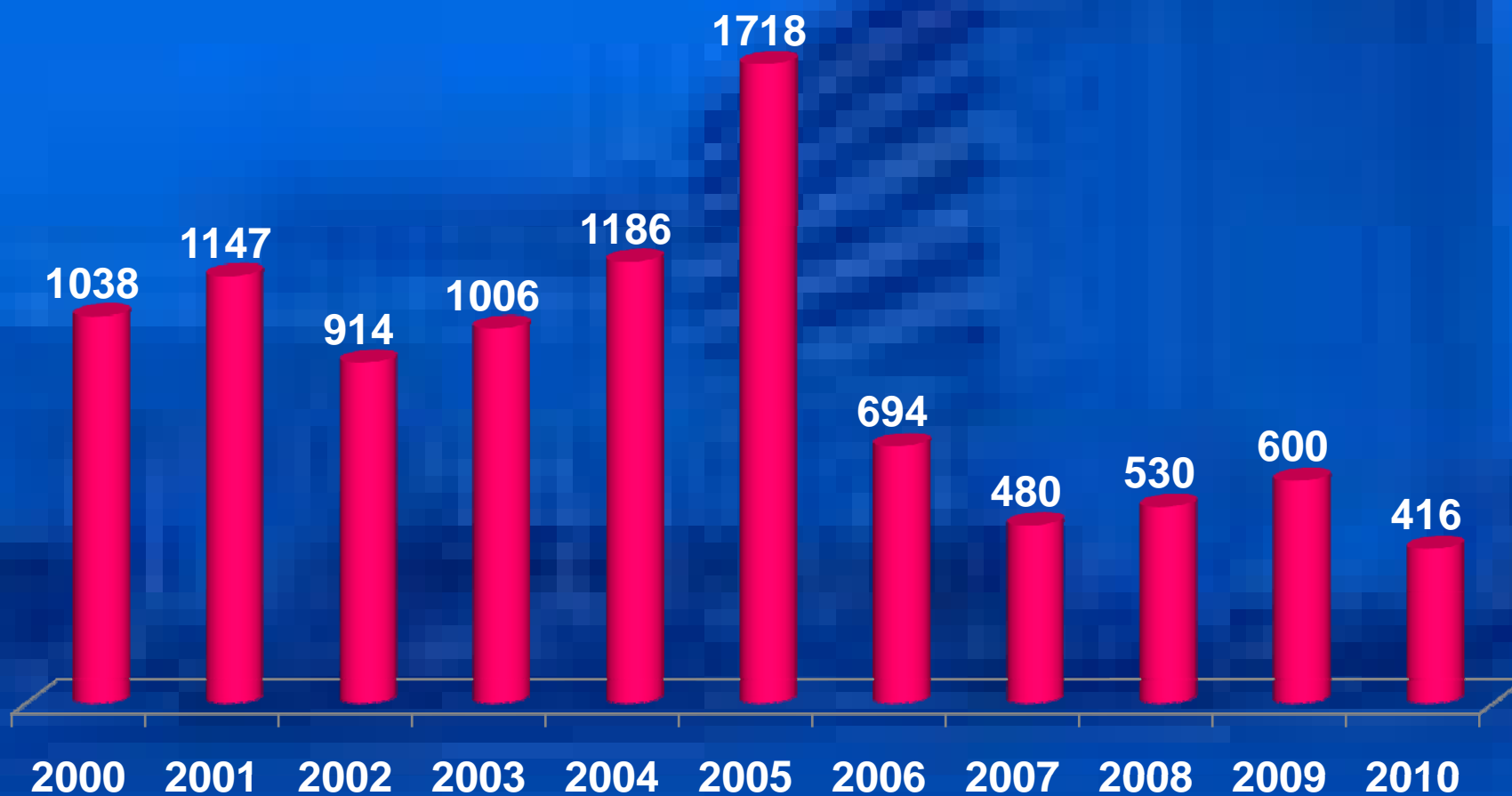
Viral Hepatitis Cases : India



Source: CBHI,NHP-2010



Viral Hepatitis Deaths : India



Source: CBHI,NHP-2010



Thank You

For more details log on to
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