

Fourteen Health Indicators

2004 - 2010

This document presents the status of the Federated States of Micronesia's Fourteen Health Indicators for annual monitoring through the Department of Health and Social Affairs in-collaboration with the four-state departments of health services. The data presented in this report covered a period from 2004-2010. However, the specific purpose is to present the current data/updates of 2010.

Federated
States of
Micronesia,
Department of
Health and
Social Affairs

July 14, 2011

I. Federated States of Micronesia, National Health Indicators

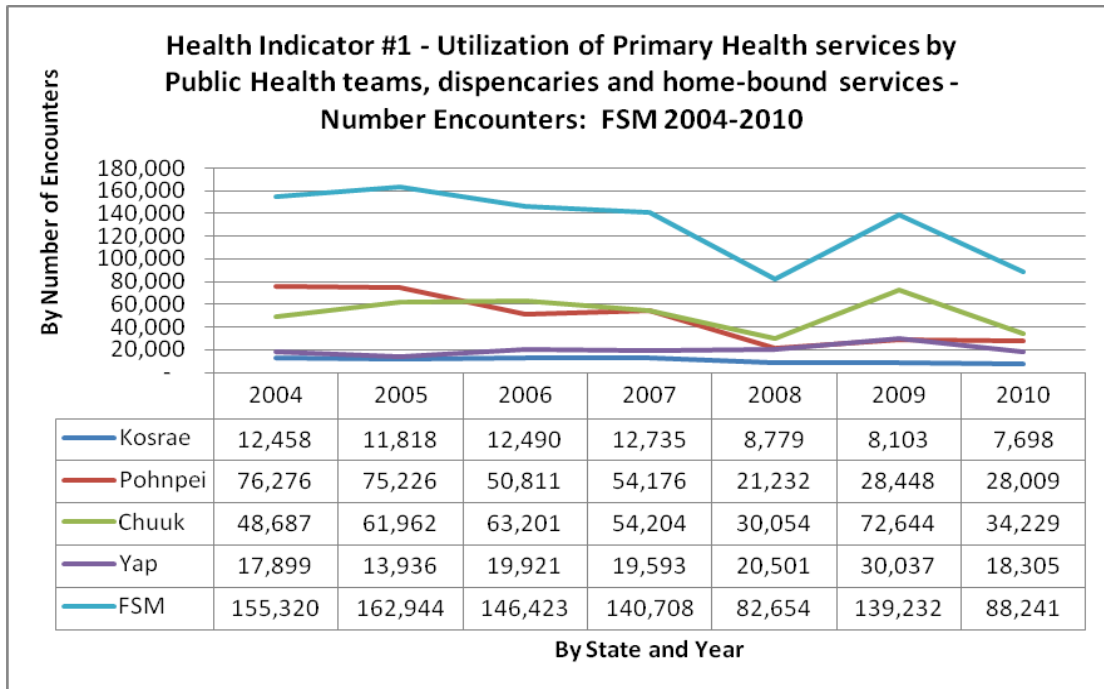
There are fourteen (14) national health indicators selected and agreed upon for annual monitoring and reporting. These fourteen health indicators measured health statuses, availability of essential drugs, health care utilizations (patient encounters), and functionality of bio-medical equipment including quality assurance in each state hospital.

Table 18
Health Outcome Measures - Federated States of Micronesia

1. Decentralize primary care services - number of encounters provided in homes and dispensaries will increase 20% by 2010 (2004 Baseline)

Year	FSM	Chuuk	Kosrae	Pohnpei	Yap
2004	155,320	48,687	12,458	76,276	17,899
2005	162,944	61,962	11,818	75,226	13,936
2006	146,423	63,201	12,490	50,811	19,921
2007	140,708	54,204	12,735	54,176	19,593
2008	82,654	30,054	8,779	21,232	20,501
2009	139,232	72,644	8,103	28,448	30,037
2010	88,241	34,229	7,698	28,009	18,305

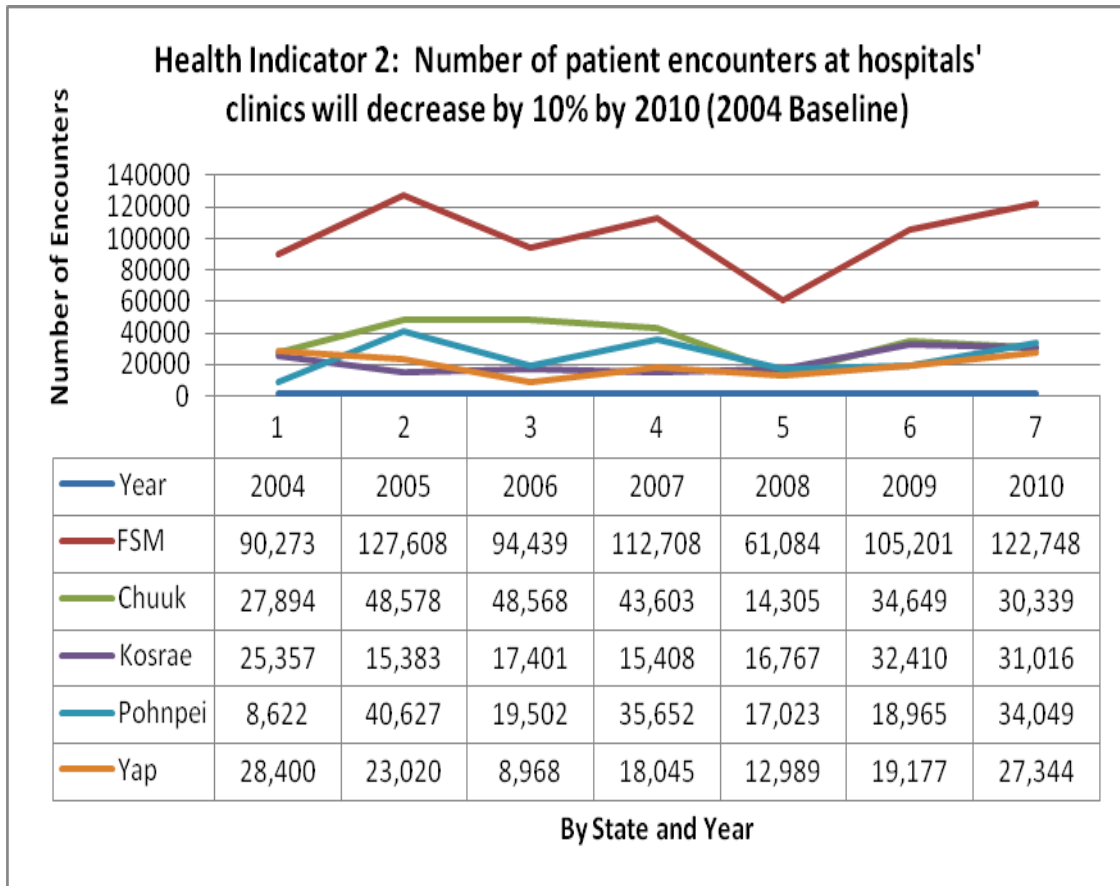
Number of people seen at homes and in dispensaries decrease in 2010 due in part of out-migration from OI to State centers and out of country out-migration. However, remaining population continued utilizing OI dispensaries and services provided by public health teams on periodic basis. Out of stock supplies in dispensaries; improper recording and reporting of home-bound encounters are some of the contributing factors in placing this health indicator in **Red Condition** (needs improvement).



2. Decentralize primary care services - number of patient encounters at hospitals' clinics will decrease by 10% by 2010 (2004 Baseline)

Year	FSM	Chuuk	Kosrae	Pohnpei	Yap
2004	90,273	27,894	25,357	8,622	28,400
2005	127,608	48,578	15,383	40,627	23,020
2006	94,439	48,568	17,401	19,502	8,968
2007	112,708	43,603	15,408	35,652	18,045
2008	61,084	14,305	16,767	17,023	12,989
2009	105,201	34,649	32,410	18,965	19,177
2010	122,748	30,339	31,016	34,049	27,344

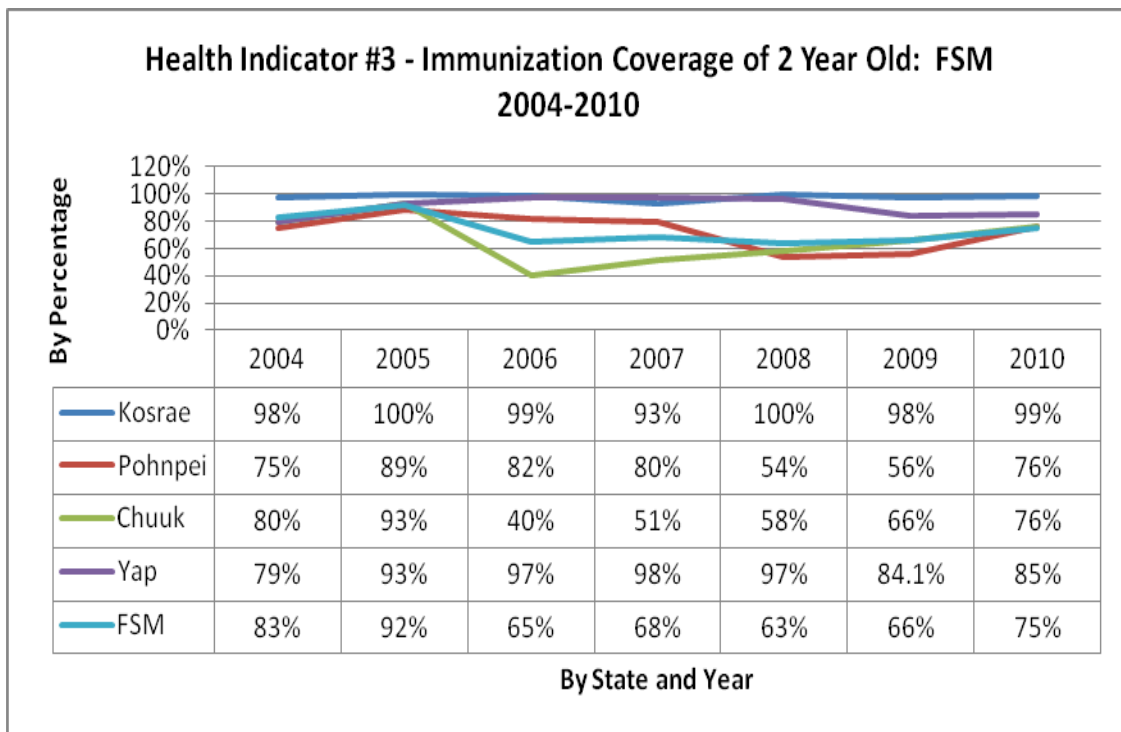
Encounters at state hospitals' clinics increased in 2010, probably in some cases, due to closed-out of some dispensaries and health clinics, including out of stock medications. Patients still prefer to utilize the hospital clinics than the dispensaries and health posts. Patients prefer to be seen by a physician rather than a health assistant. This indicator is in **Red Condition**.



3. Immunization coverage of 2 year old children is increased to not less than 90% by year 2010 (2004 Baseline).

Year	FSM	Chuuk	Kosrae	Pohnpei	Yap
2004	83%	80%	98%	75%	79%
2005	83%	93%	90%	83%	74%
2006	66%	54%	79.00%	81.40%	89%
2007	69%	50%	99%	80%	94%
2008	63.40%	58%	100%	53.70%	98%
2009	81.00%	68%	97%	76.00%	84%
2010	75%	69%	99%	76%	85%

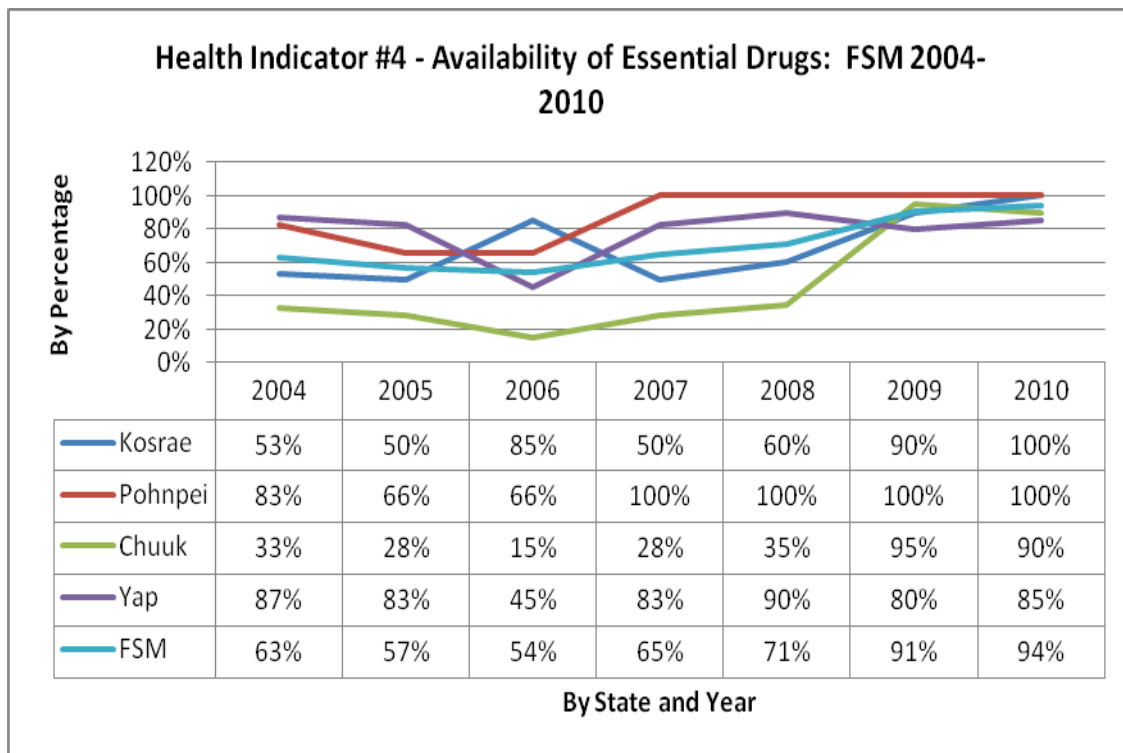
The overall immunization coverage in 2010 was low from the desire goal as normal operation was interrupted with an additional antigen of which tend to pull down the coverage level. Transportation to outer-island still poses problem with outreach campaigns. This indicator is in **Red Condition** (needs improvement)



4. Essential drugs and supplies available (indicators: ORS, combo OCP, Amox, IV, chloramphenicol, glyburide, ethanol, HCTZ, all in stocked 80% of days.

Year	FSM	Chuuk	Kosrae	Pohnpei	Yap
2004	63%	33%	53%	83%	87%
2005	57%	28%	50%	66%	83%
2006	54%	15%	85%	66%	45%
2007	65%	28%	50%	100%	83%
2008	71%	35%	60%	100%	90%
2009	91%	95%	90%	100%	80%
2010	94%	90%	100%	100%	85%

Most essential drugs were made available in most states as noted from states' data. Most states, however, experienced delayed in acquiring these essential drugs due to long procurement processes and price quotes. All states performed well on this health indicator. This indicator is considered in **Yellow Condition**

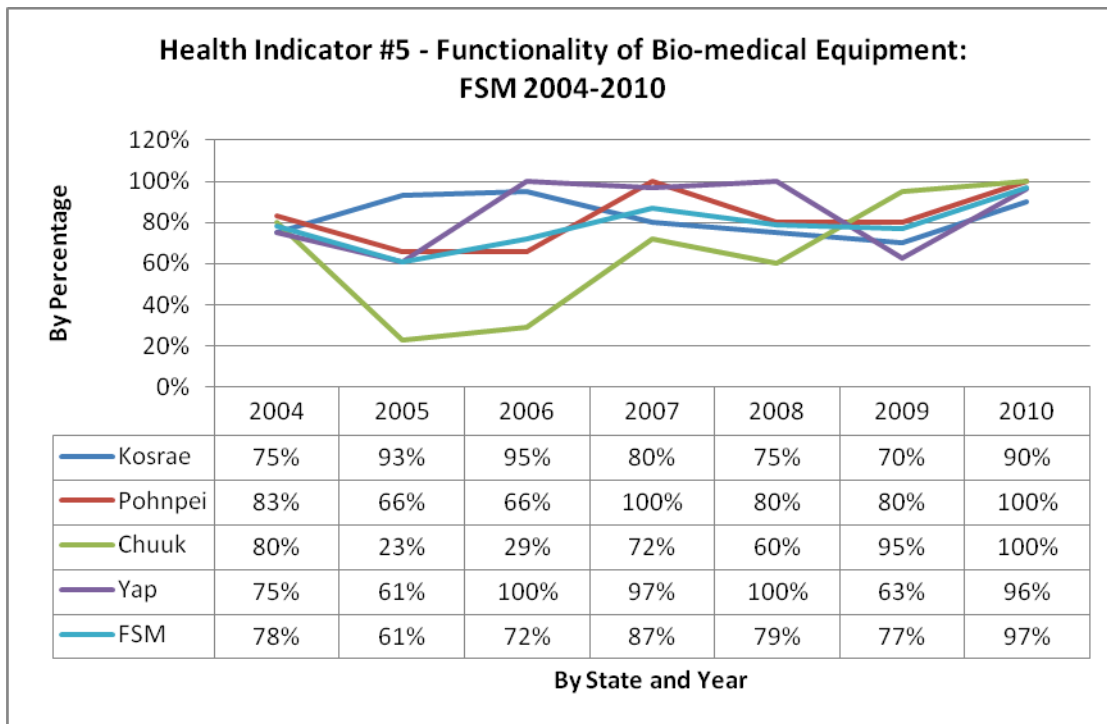


5. Bio-medical equipment is functional (indicator: Na+ K+ ALT, Bili, Creatinin, All available 80% of days)

Year	FSM	Chuuk	Kosrae	Pohnpei	Yap
2004	78%	80%	75%	83%	75%
2005	61%	23%	93%	66%	61%
2006	72%	29%	95%	66%	100%
2007	87%	72%	80%	100%	97%
2008	79%	60%	75%	80%	100%
2009	77%	95%	70%	80%	63%
2010	97%	100%	90%	100%	96%

Comments:

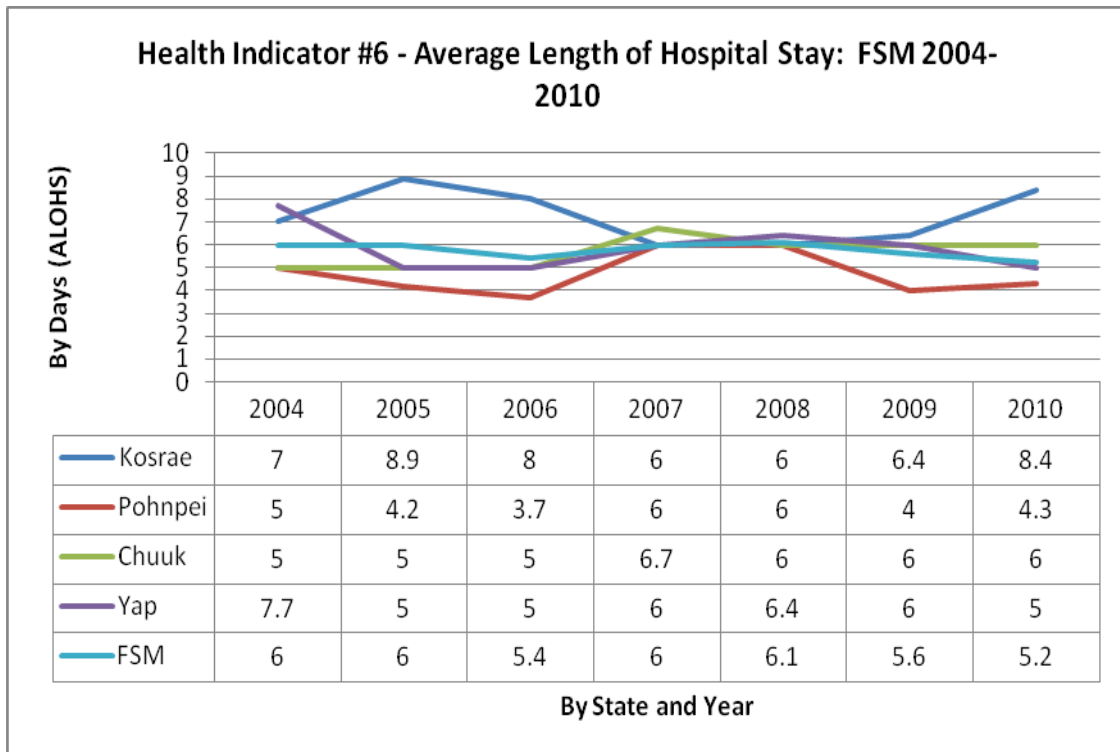
With the exception of Kosrae State, most states seem to be performed satisfactory in providing support services to both medical and public health units. The problem, however, had to do with procurement of medical supplies needed. The process took so long in acquiring price quotes. Kosrae's x-ray and ultra-sound machines were inoperable due to imaging problem. This indicator is considered as satisfactory. **Green Condition**



6. The average length of hospital stay is less than 7 days for each State Hospital by 2010 (2004 Baseline)

This indicator seems to maintain the same number of days in previous year. NCD cases, mainly diabetes, continued to stay longer in hospitals than any other illnesses. **Green Condition.**

Year	FSM	Chuuk	Kosrae	Pohnpei	Yap
2004	6	5	7	5	7.7
2005	6	5	8.9	4.24	5
2006	5.4	5	8	3.7	5
2007	6	6.71	6	6	6
2008	6.1	6	6.03	6	6.4
2009	5.6	6	6.4	4	6
2010	5.2	6	5.4	4.3	5

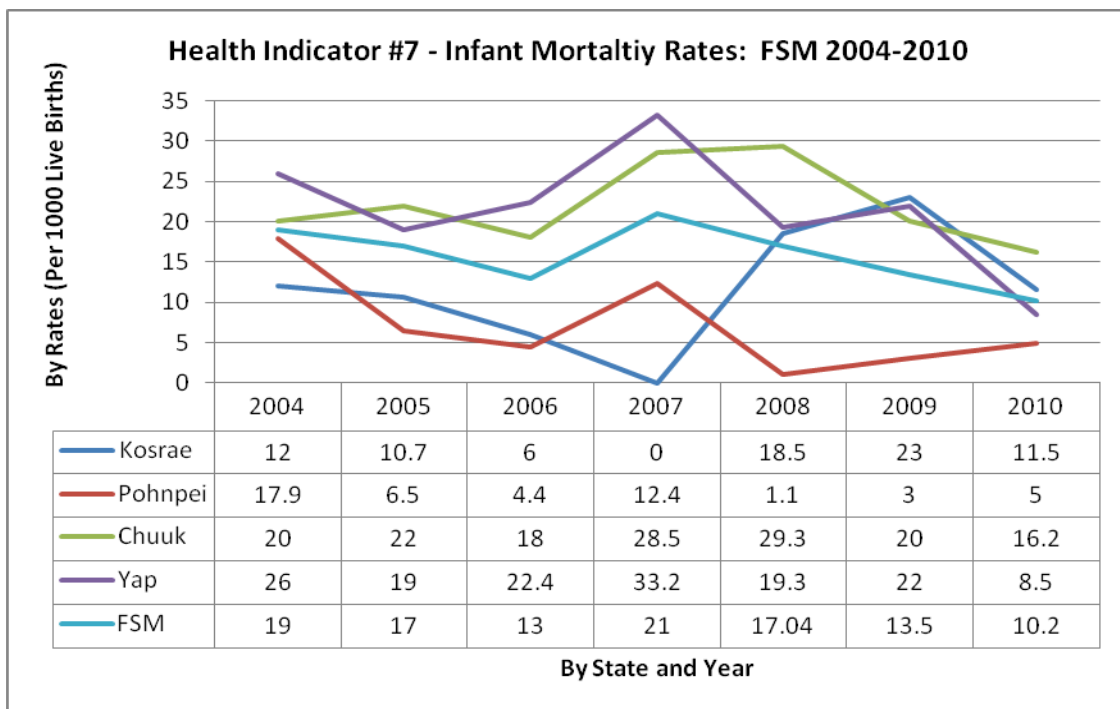


7. Infant Mortality Rate is reduced to less than 16/1000 by 2010 (2004 Baseline)

Year	FSM	Chuuk	Kosrae	Pohnpei	Yap
2004	19	20	12	17.9	26
2005	17	22	10.7	6.5	19
2006	13	18	6	4.4	22.4
2007	21	28.5	0	12.4	33.2
2008	17.04	29.3	18.5	1.06	19.3
2009	13.5	20	23	3	22
2010	10.2	16.2	11.5	5	8.5

Comments: FSM IMR recorded at 10.2 per 1000 live births in 2010. Numbers of infant deaths are hospitals' reported deaths.

Outer islands, in most case, are not included (dispensary reporting). Infant deaths are under-reported. In 2010 most infant deaths are due to pre-mature births (prematurity). Based on these data, this indicator is considered in **Green Condition**.

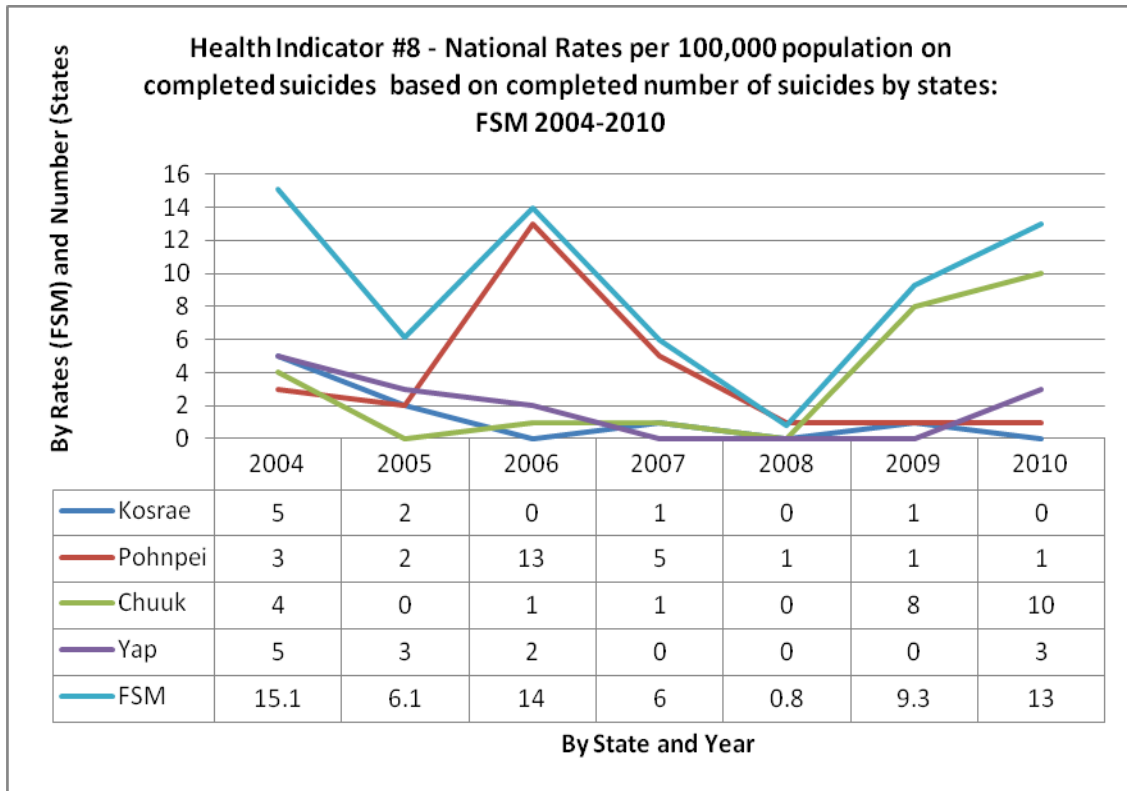


8. Mental illness is reduced (Indicator: Rate of completed suicide reduced to 10% by 2010 (2004 Baseline))

(States are number of completed suicides and FSM is based on rates- total number each year by mid-year project population)

Year	FSM	Chuuk	Kosrae	Pohnpei	Yap
2004	15.1/100000	4	5	3	5
2005	6.1/100,000	0	2	2	3
2006	14/100000	1	0	13	2
2007	6/100000	1	1	5	0
2008	0.8/100000	0	0	1	0
2009	9.3/100,000	8	1	1	0
2010	13/100,000	10	0	1	3

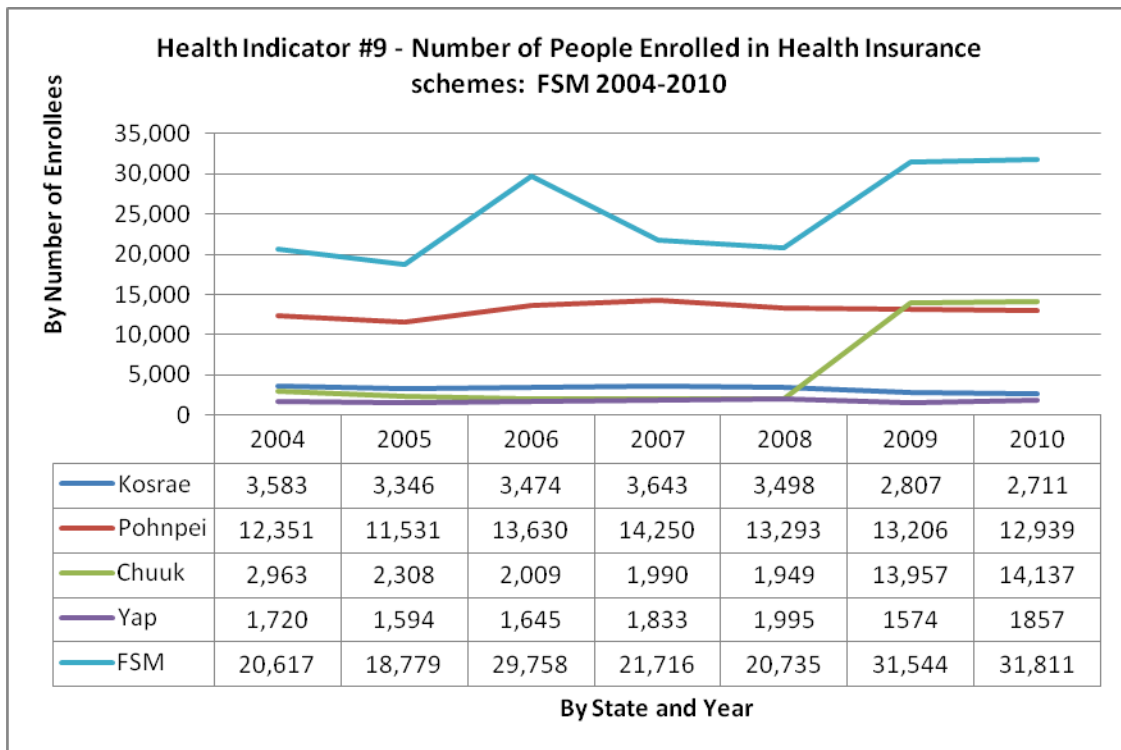
The suicide rate has increased due to the increased in number of completed suicide in Chuuk. Whereas, Yap and Pohnpei reported 3 and 1 respectively in 2010 in causing the spike. Suicide, whether attempted and completed is still a major public health issue in the FSM due in part of socio-economic conditions. Based on the increased in number and rate, this health indicator is **in Red Condition**



9. The number of individuals enrolled under a health insurance plan is increased 10% by 2010 (2004 Baseline)

These data include both MiCare and Chuuk Health Plan enrollees. As noted at the bottom, a total of 167 enrollees is considered as out-of-country. This total number is included in the total figure for FSM 2010.

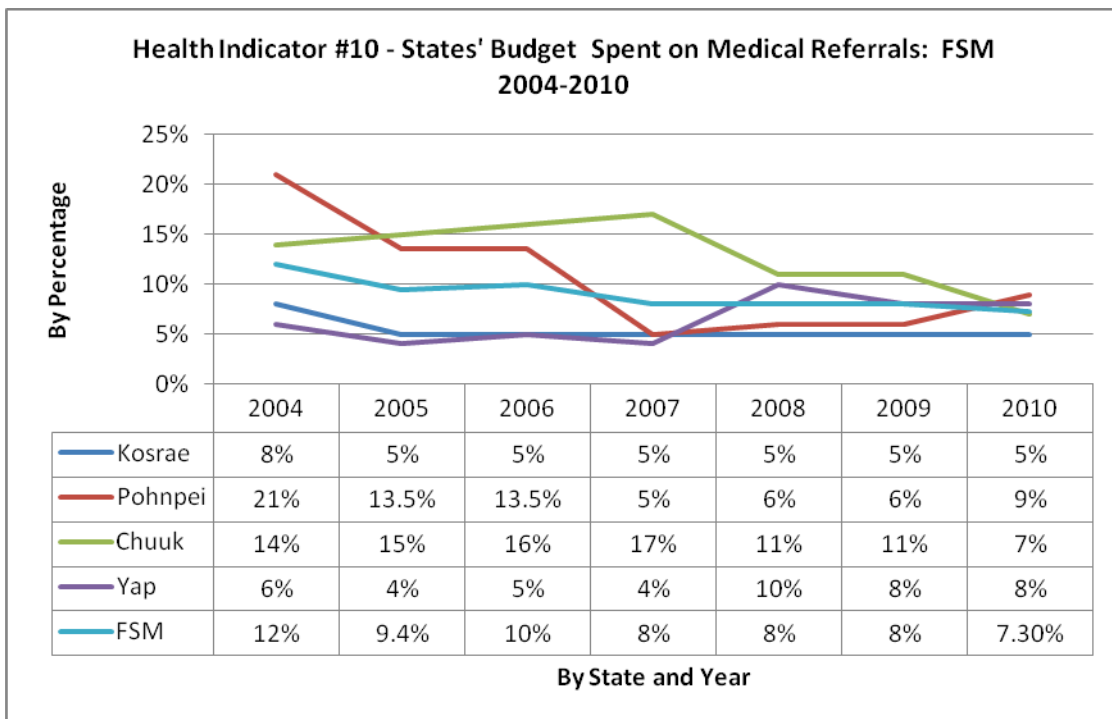
Year	FSM	Chuuk	Kosrae	Pohnpei	Yap
2004	20,617	2,963	3,583	12,351	1,720
2005	18,779	2,308	3,346	11,531	1,594
2006	29,758	2,009	3,474	13,630	1,645
2007	21,716	1,990	3,643	14,250	1,833
2008	20,735	1,949	3,498	13,293	1,995
2009	31,544	13,957	2,807	13,206	1,574
2010	31,811	14,137	2,711	12,939	1,857



10. Off-island medical referral costs in all states reduce to less than 10% of total health sector expenditures (2004 Baseline)

Year	FSM	Chuuk	Kosrae	Pohnpei	Yap
2004	12%	14%	8%	21%	6%
2005	9.40%	15%	5%	13.50%	4%
2006	10%	16%	5%	13.50%	5%
2007	8%	17%	5%	5%	4%
2008	8%	11%	5%	6%	10%
2009	8%	11%	5%	6%	8%
2010	7.3%	7%	5%	9%	8%

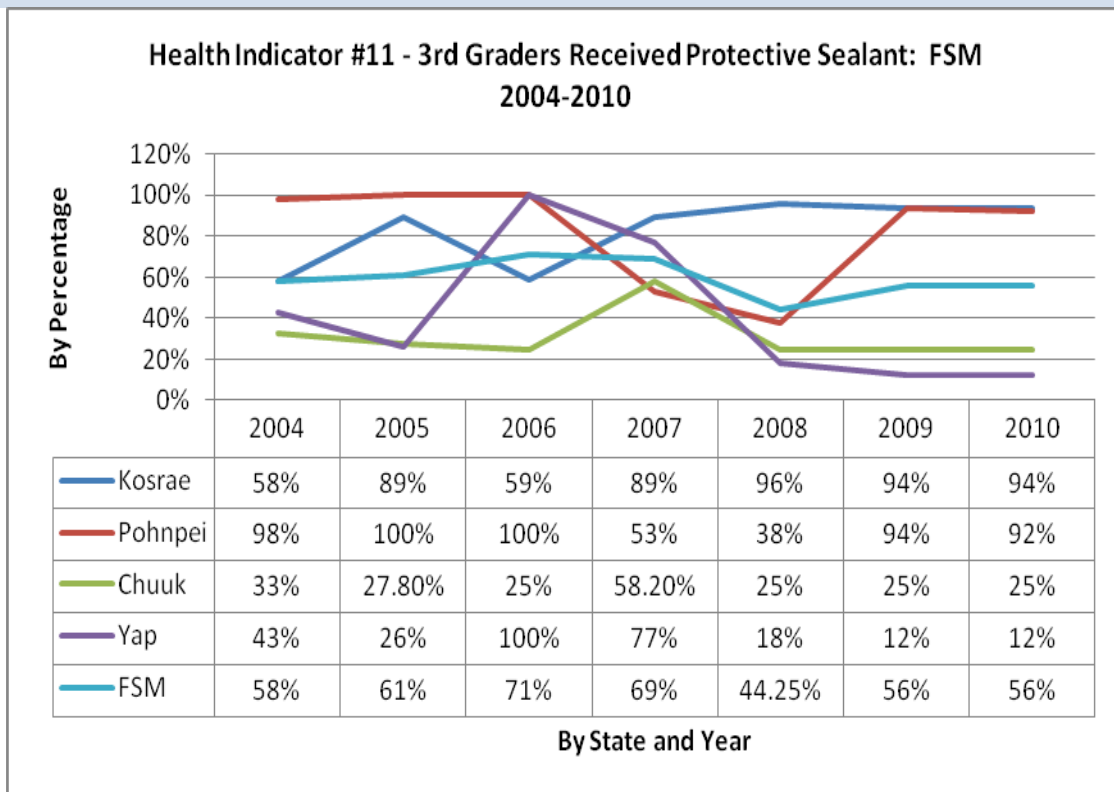
Based on these data all states performed satisfactorily in maintaining their off-island medical referral costs to less than 10% of their Health sector budget. This indicator is in **Green Condition**.



11. AT least 70% of 3rd graders received sealant by 2010 (2004 Baseline)

Low coverage was noted for this indicator due to insufficient dental supplies and lack of transportation to do on-site (school outreach) treatment. MCH (Oral Health) needs to work with schools system in improving this indicator as this indicator is in **Red Condition**.

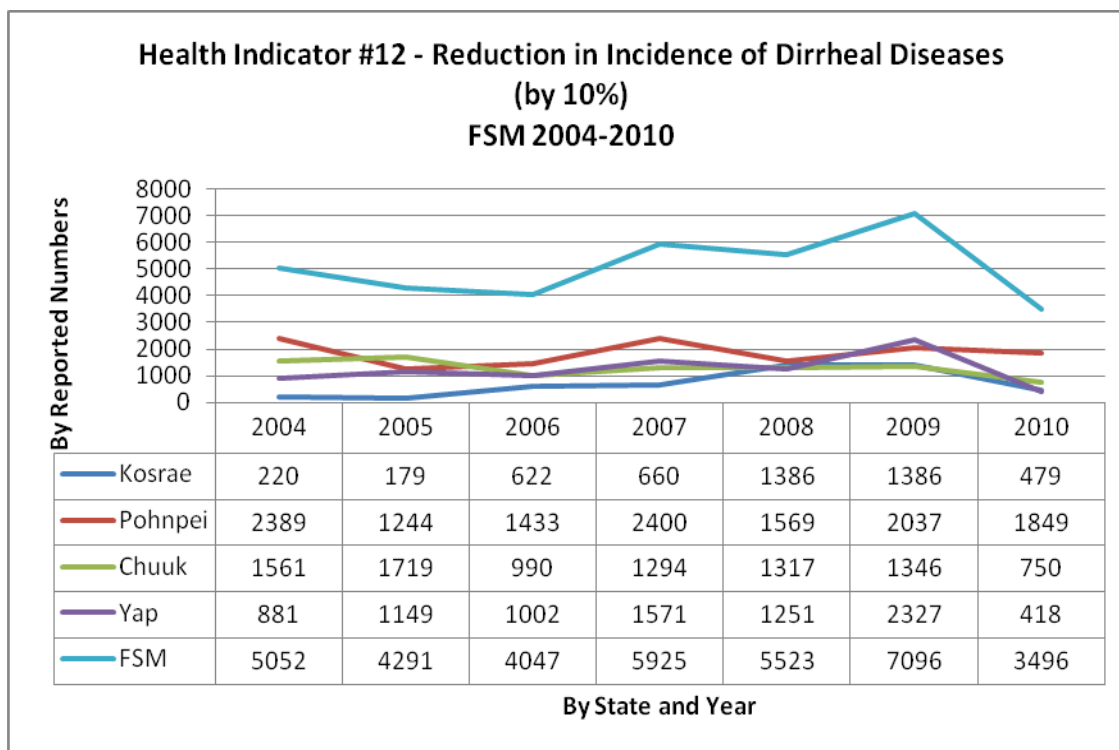
Year	FSM	Chuuk	Kosrae	Pohnpei	Yap
2004	58%	33%	58%	98%	43%
2005	61%	27.80%	89%	100%	26.00%
2006	71%	25%	59%	100%	100%
2007	69.3	58.20%	89%	53%	77%
2008	44.25%	25%	96%	38%	18%
2009	56%	25%	94%	94%	12%
2010	56%	25%	94%	92%	12%



12. Reduce incidence of diarrheal diseases by 10% by 2010 (2004 Baseline)

Year	FSM	Chuuk	Kosrae	Pohnpei	Yap
2004	5,052	1,561	220	2,389	881
2005	4,291	1,719	179	1,244	1,149
2006	4,047	990	622	1,433	1,002
2007	5,925	1,294	660	2,400	1,571
2008	5,523	1,317	1,386	1,569	1,251
2009	7,096	1,346	1,386	2,037	2,327
2010	3,496	750	479	1,849	418

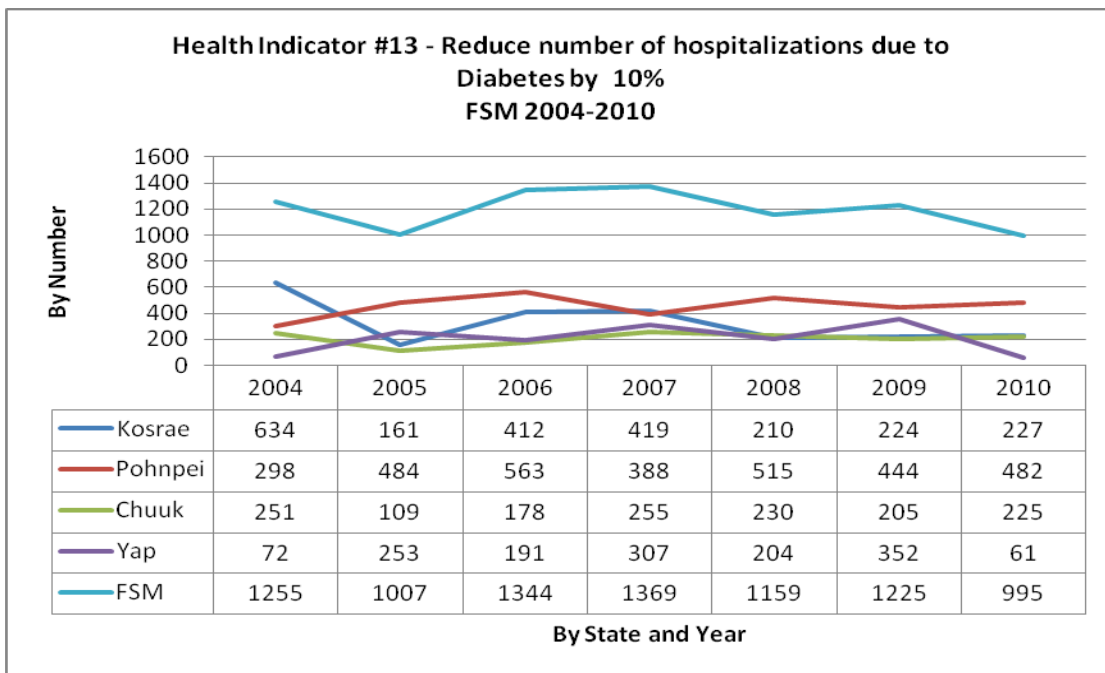
Although decreased in terms of reported number, diarrhea and gastroenteritis still common and prevalence is high, especially among children. Timely data inputting by medical record technicians and vital statisticians needs to be improved to prevent back-logging of health data. This is a problem in many of the states. This indicator is placed in **Yellow Condition**



13. NCD Control (Indicator: Reduce the incidence of diabetic hospitalization by 10% in 2010 (2004 Baseline))

Year	FSM	Chuuk	Kosrae	Pohnpei	Yap
2004	1,255	251	634	298	72
2005	1,007	109	161	484	253
2006	1,344	178	412	563	191
2007	1,369	255	419	388	307
2008	1,159	230	210	515	204
2009	1,225	205	224	444	352
2010	995	225	227	482	61

There has been a sharp reduction on number of diabetes cases noted in Yap while the rest of the states have seen increases with their diabetes hospitalizations as compare to previous year. Diabetes is still a big public health and medical problem in all states. Reporting is one of the problem with this indicator as there is no central registry, but to rely on encounters (INPAT) from the HIS. This indicator is also in **Yellow Condition**.



14. Quality Assurance Systems Functioning (Indicator: Quarterly audits and improvement plans, based on written policy and

procedure standards are produced for the following areas in each state hospital – (wards, OPD, medical staff, x-ray, lab, dental public health)

Comments: There are some types of QA measures in placed in all state hospitals.

Some are fully functioning in certain units or divisions in the hospitals.

Year	FSM	Chuuk	Kosrae	Pohnpei	Yap
2004	Not	NFF	Established	PF	NFF
2005		NFF	PF	PF	NFF
2006	fully	NFF	PF	PF	Functioning
2007		NFF	PF	PF	Functioning
2008	functioning	NFF	PF	PF	Functioning
2009		PF	PF	PF	Functioning
2010	PF	PF	PF	PF	Functioning

Quality Assurance needs to be fully operational in all public hospitals. This health indicator is in VERRY BIG **Red Condition**.