10% reduction by 2014

Reducing tobacco use in the Western Pacific: Can we do it?

AM David, JA Rarick, SP Mercado

Learning Objectives

At the end of this session, participants should:

1. Recognize the recently modified "Stages of the tobacco epidemic" model;
2. Accurately determine the stage of the tobacco epidemic of various countries in the Pacific;
3. Identify priority areas for strategic action in tobacco control, given the stage of the tobacco epidemic.

A collaborative effort

WHO-WPRO:

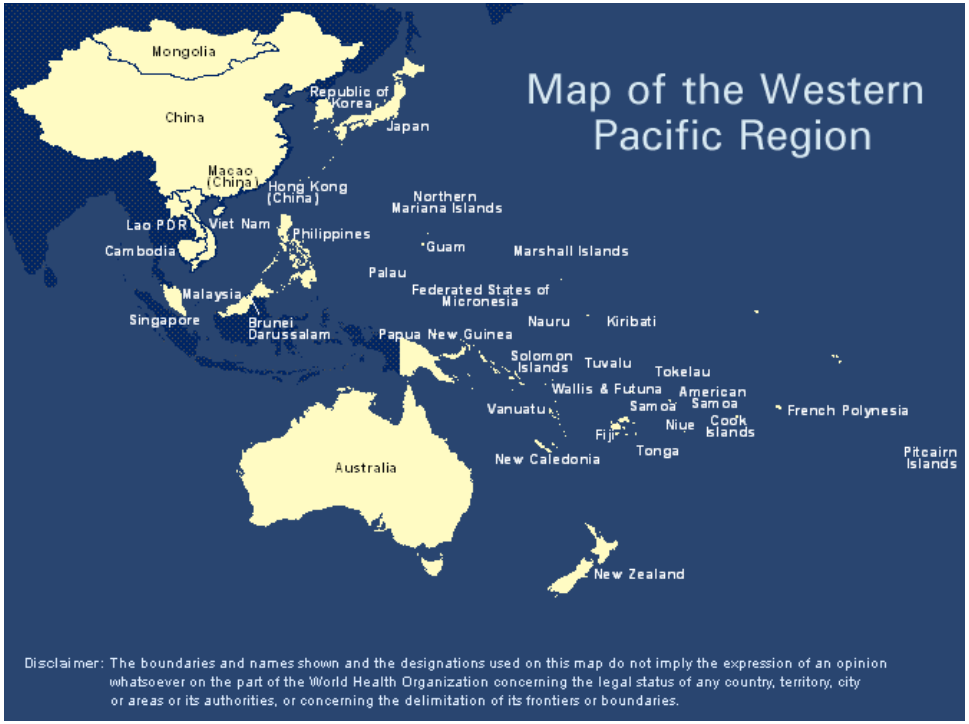
Dr. Susy Pineda-Mercado

Mr. James Rarick

Health Partners, LLC (Guam):

Dr. Annette M. David

Tobacco in the Western Pacific



37 Member States and Areas, with > ¼ of the world's population spread over 11 time zones

- A Region of great diversity
  - Largest population
  - Politically, economically and culturally diverse
- 1/3 of all smokers
- Rising tobacco use by women
- Significant use of smokeless tobacco

Tobacco in the Western Pacific

Mortality burden:

- 1 in 8 deaths (13%)
- 2 deaths every minute

Disease burden:

- 12,848,000 DALYs, of which >80% were in low and middle income countries

Global developments

WHO Framework Convention on Tobacco Control (FCTC)

- WPR 1st and to date, only Region, **with 100% ratification rate**
- Outside of the US Territories, all other WPR countries and areas are obliged to abide by the WHO FCTC articles

UN Declaration of the High-level Meeting of the General Assembly on the Prevention and Control of NCDs

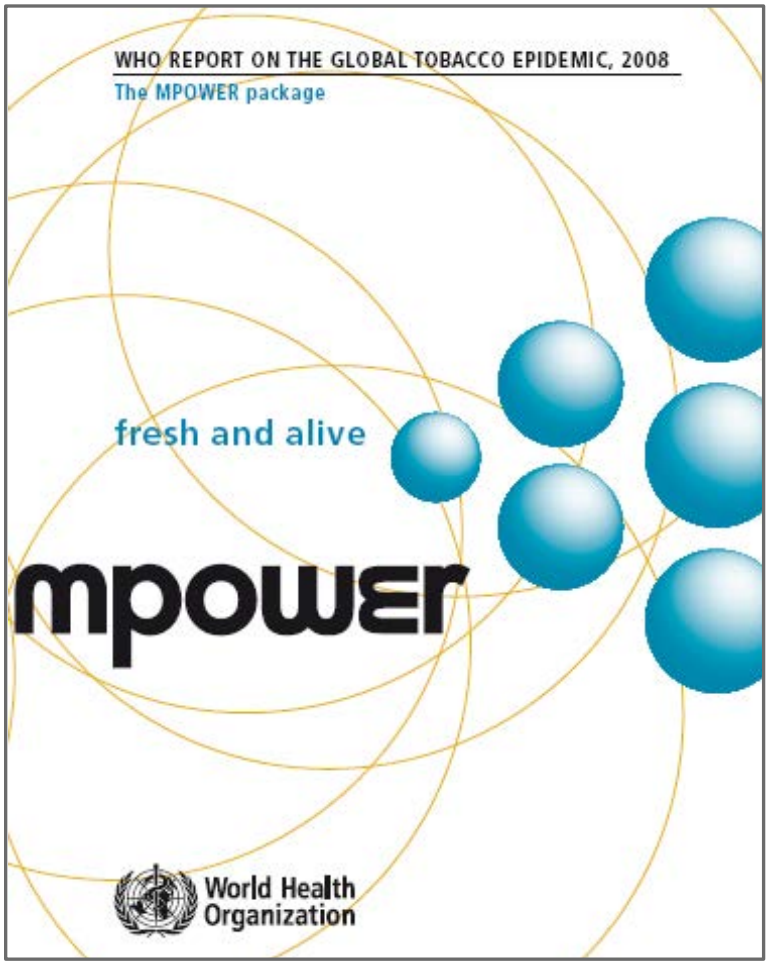
- Tobacco recognized as a major risk factor
- Target: reduce tobacco consumption by 30% in 2025

WHO FCTC: Core Provisions

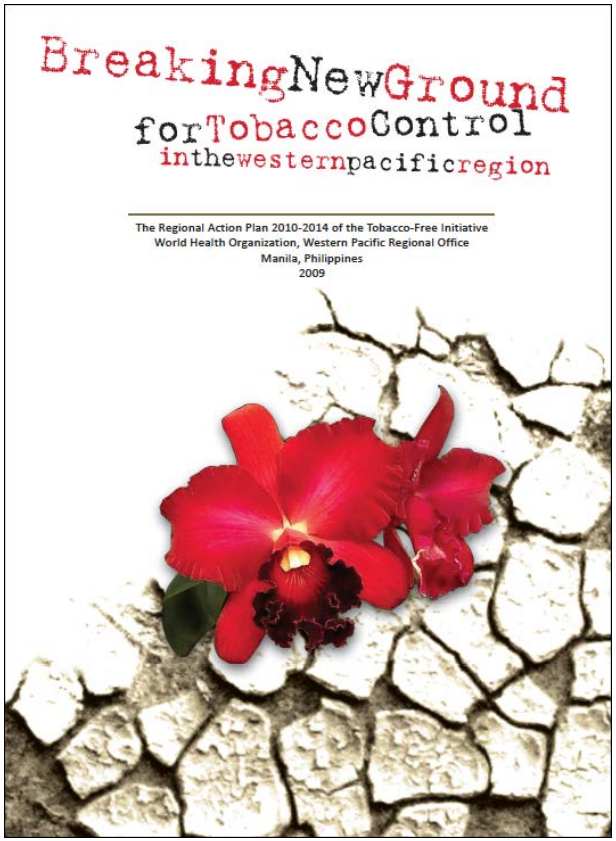
An evidence-based tool for tobacco control

mpower

- **m**onitor tobacco use and prevention policies
- **p**rotect people from tobacco smoke
- **o**ffer help to quit tobacco use
- **w**arn about the dangers of tobacco
- **e**nforce bans on tobacco advertising, promotion and sponsorship
- **r**aise taxes on tobacco



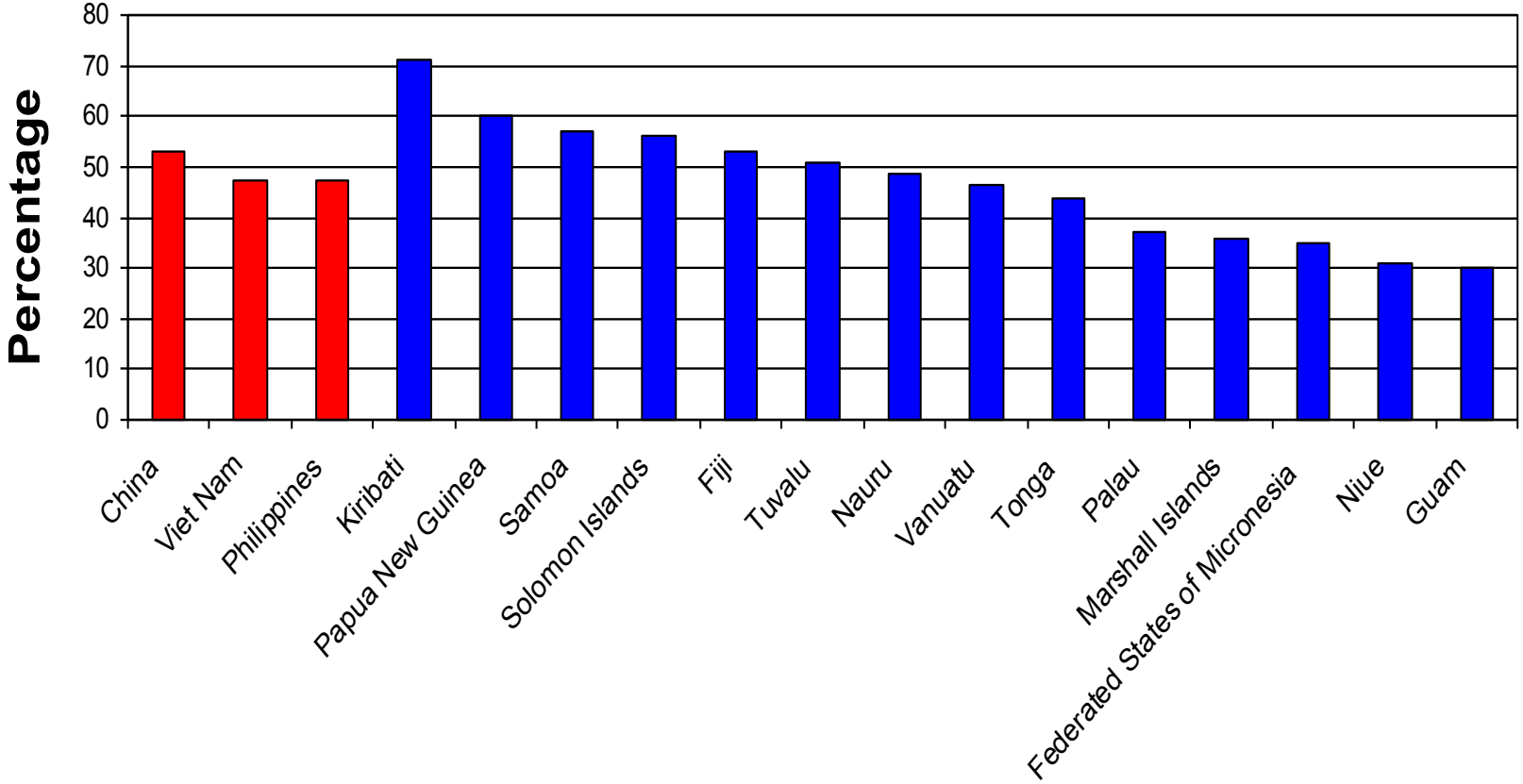
Regional Developments



WPR Regional Action Plan 2010-2014:

- Target: Reduce tobacco use by 10% in 2014
- Strategic approach; FULL implementation of the WHO FCTC
- Uses data from GTSS (GYTS, GATS) and other surveys to monitoring progress

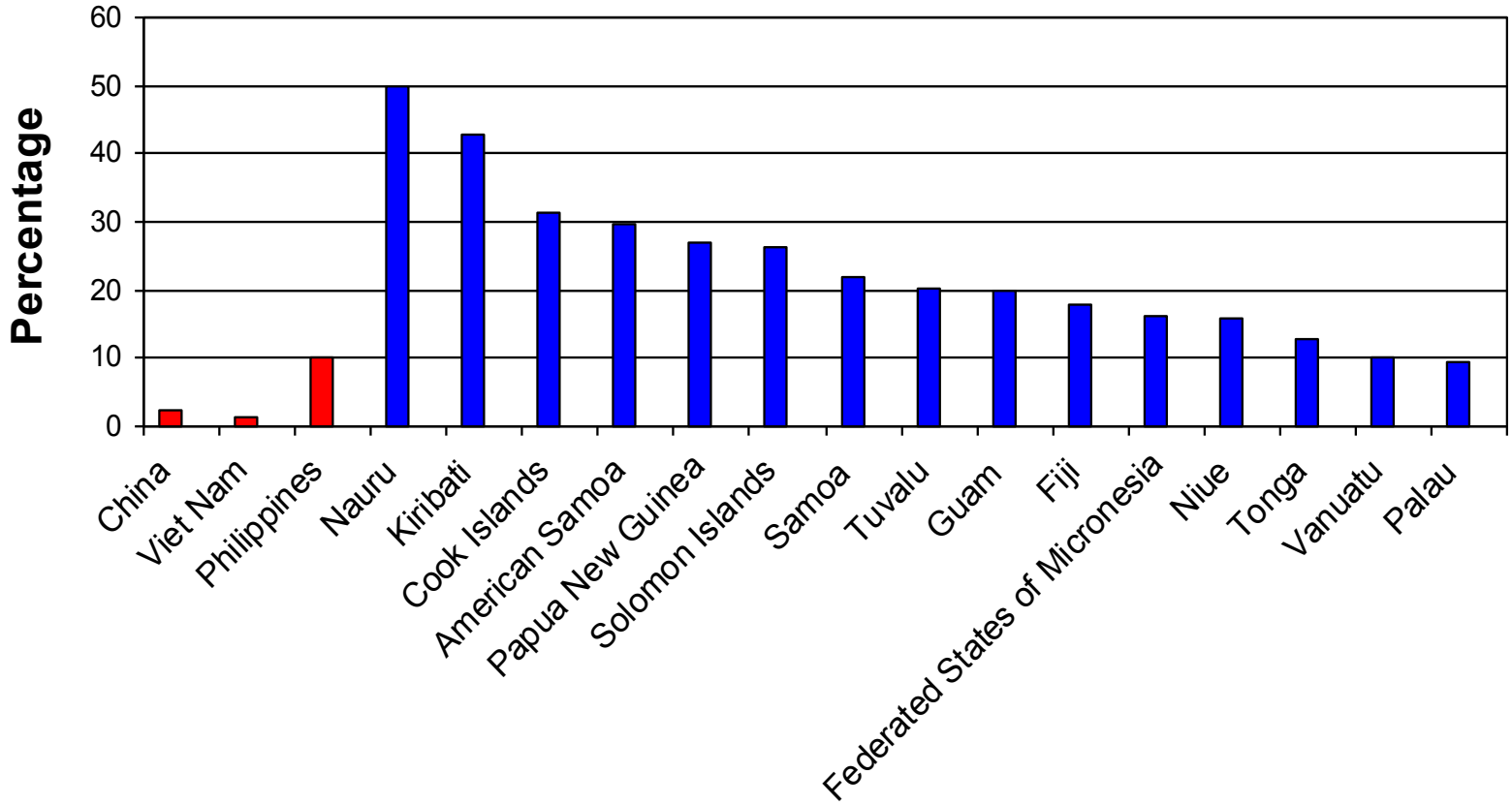
Adult Prevalence, Smoking - Males



WPR Countries that have completed the Global Adult Tobacco Survey (GATS)

Pacific Island Countries and Areas

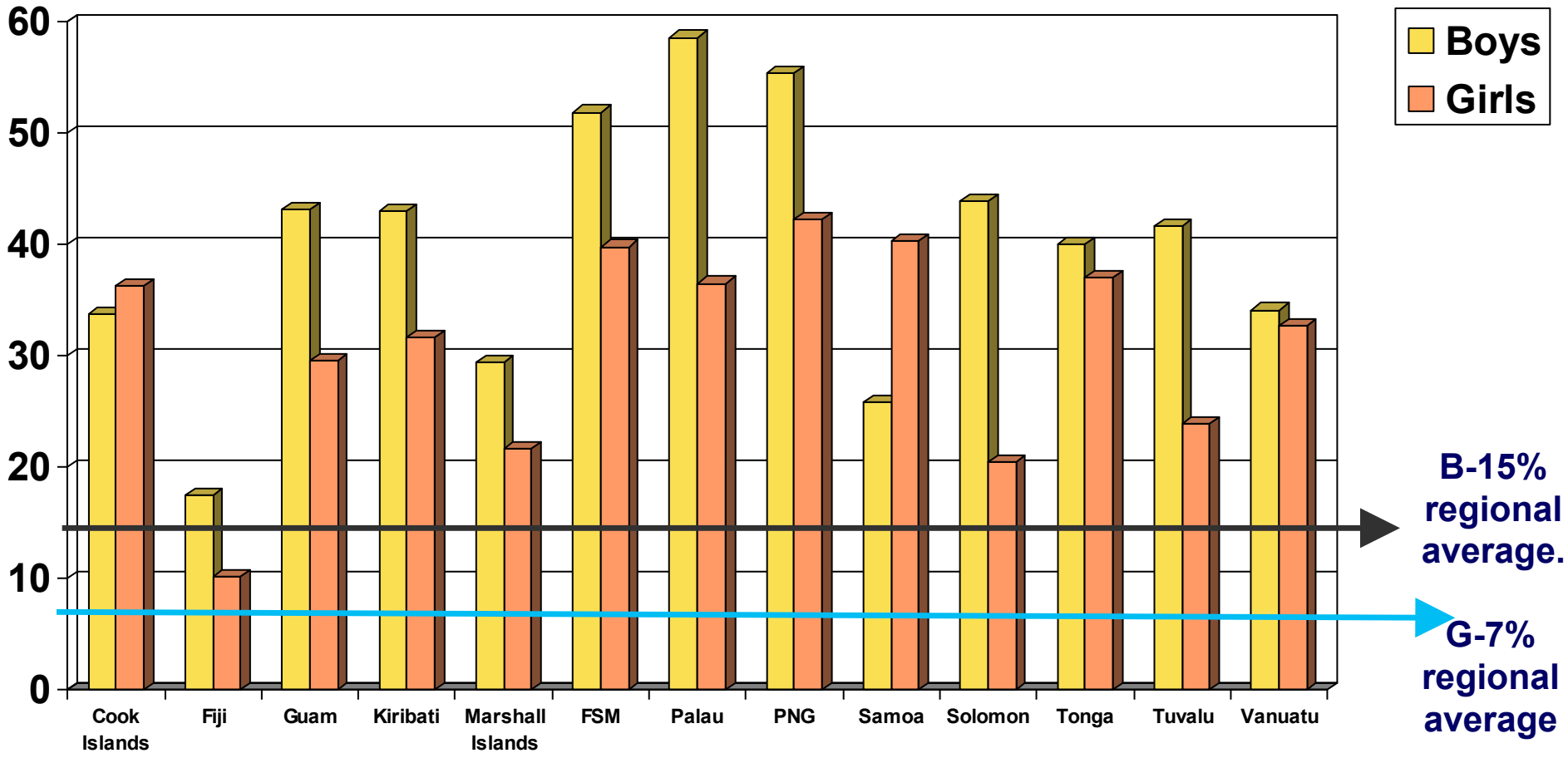
Adult Prevalence, Smoking - Females



WPR Countries that have completed the Global Adult Tobacco Survey (GATS)

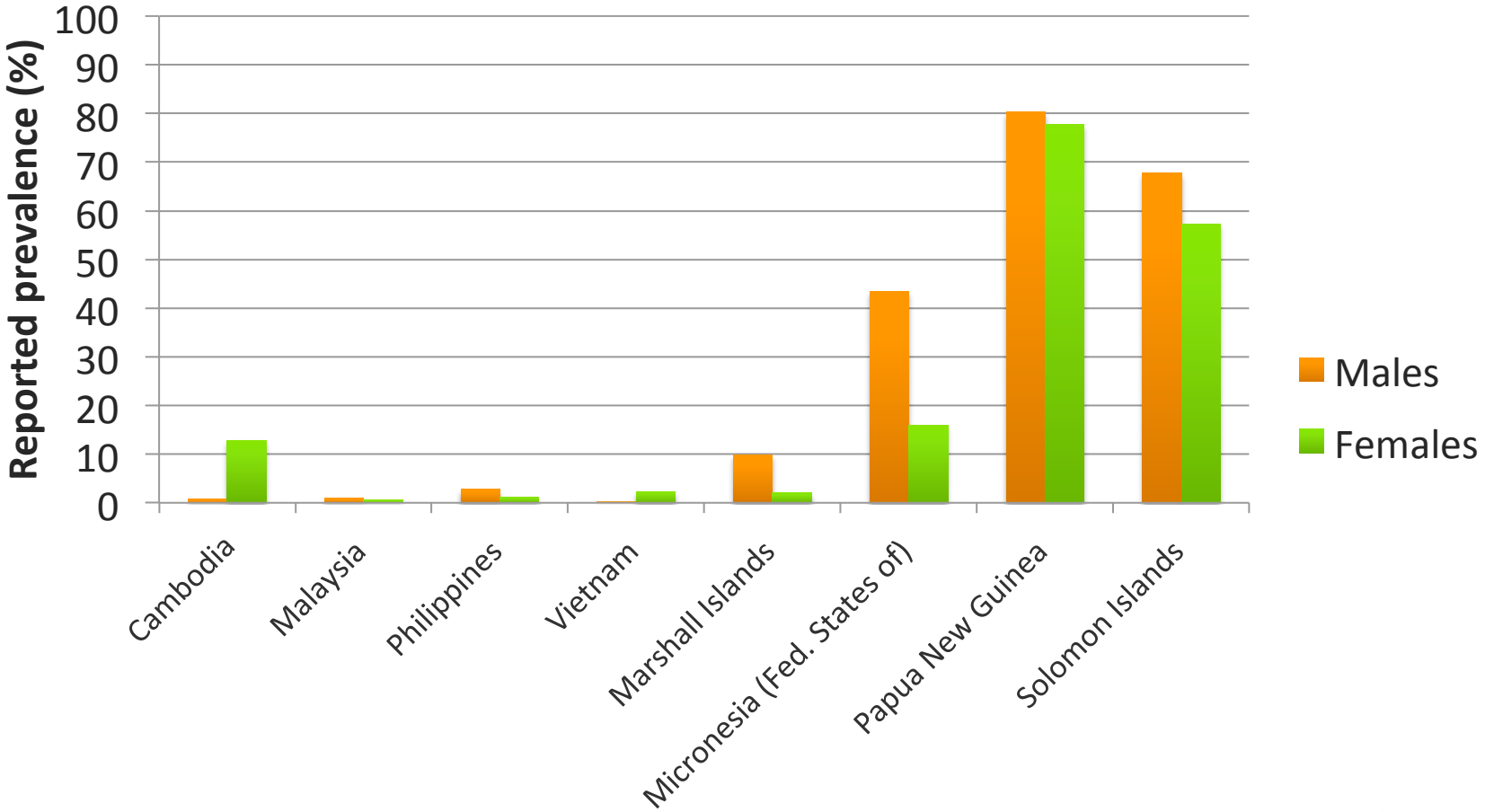
Pacific Island Countries and Areas

Youth Prevalence, Smoking, Pacific islands



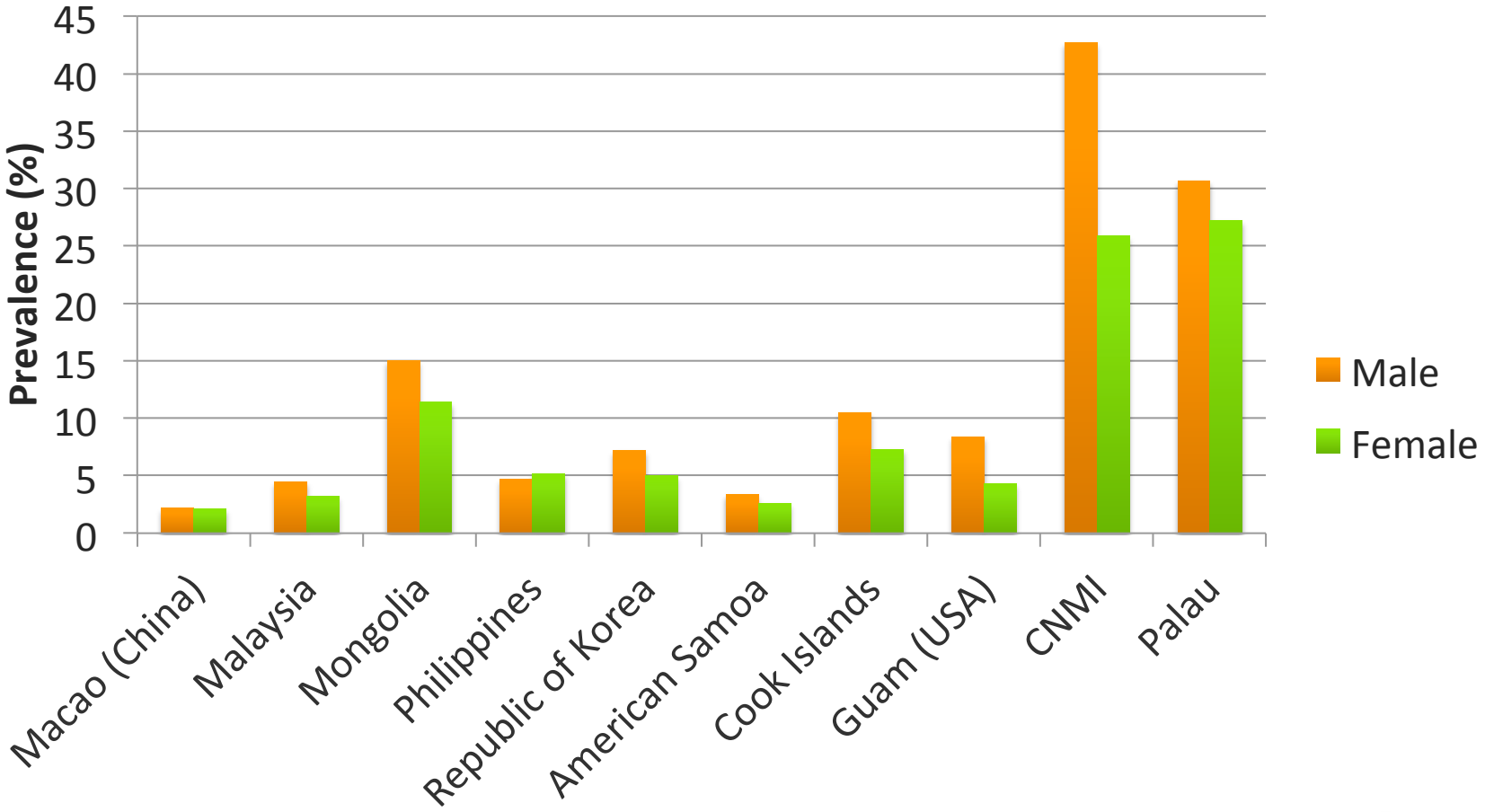
Source: GYTS country surveys

Adult Prevalence, Smokeless/Betel nut use



Sources: WHO STEPs, GATS, BRFSS or national surveys

Youth Prevalence, Smokeless tobacco use



Source: GYTS country surveys

Pacific islands' challenge

- Higher overall baseline prevalences for PICs implies greater reductions needed to meet regional and global targets
- All PICs other than USAPIs are Parties to the FCTC – mandated to implement FCTC articles
- BUT: given resource and capacity challenges, how to prioritize action steps? Where do we start re: MPOWER?

Adult Prevalence, Smoking

Country or Area	Year	Age	Males		Females	
			Current	2014 Target	Current	2014 target
American Samoa*	2007	25-64	49.0	44.1	29.7	26.7
CNMI*	2009	15 +	29.9	26.9	17.7	15.9
Fiji	2009	15 +	17.7	15.9	3.0	2.7
Guam (USA)*	2003	18+	30.0	27.0	21.0	18.9
Kiribati	2009	15 +	71.0	63.9	42.9	38.6
Marshall Islands	2009	15 +	35.8	32.2	7.0	6.3
Micronesia (Federated States)	2009	15 +	29.9	26.9	17.7	15.9
Palau	2009	15 +	37.2	33.4	9.5	8.5
Papua New Guinea	2009	15 +	57.7	52.0	30.8	27.7
Pitcairn Islands (UK)	2006	15-64	74.1	66.7	43.1	38.8
Tonga	2009	15 +	43.7	39.3	12.9	11.6

Youth Prevalence, Smoking

Country or Area	Year	Age	Males		Females	
			Current	2014 Target	Current	2014 target
American Samoa*	NA	NA	NA	NA	NA	NA
CNMI*	NA	NA	NA	NA	NA	NA
Fiji	2009	13-15	12.8	11.5	5.8	5.2
Guam (USA)*	2011	13-15	32.9	29.6	17.7	15.9
Kiribati	2009	13-15	26.3	23.7	13.9	12.5
Marshall Islands	2009	13-15	17.0	15.3	10.6	9.5
Micronesia (Federated States)	2007	13-15	36.9	33.2	19.8	17.8
Palau	2009	13-15	52.0	46.8	31.0	27.9
Papua New Guinea	2007	13-15	52.1	46.9	35.8	32.2
Pitcairn Islands (UK)	NA	NA	NA	NA	NA	NA
Tonga	2010	13-15	37.5	33.8	18.9	17.0

Adult Prevalence, Smokeless Tobacco or Betel Nut Use

Country or Area	Year	Males		Females	
		Current	2014 Target	Current	2014 target
Cambodia	2011	0.7	0.6	12.7	11.4
Malaysia	2011	0.9	0.8	0.6	0.5
Marshall Islands	2002	Betel nut: 9.8	8.8	Betel nut: 2.1	1.9
Micronesia (Fed. States of)	2008	Betel nut: 43.5	39.2	Betel nut: 16.0	14.4
Papua New Guinea	2008	Betel nut: 80.3	72.3	Betel nut: 77.8	70.0
Philippines	2009	2.8	2.5	1.2	1.1
Solomon Islands	2010	Betel nut: 67.8	61.0	Betel nut: 57.3	51.6
Vietnam	2010	0.3	0.27	2.3	2.1

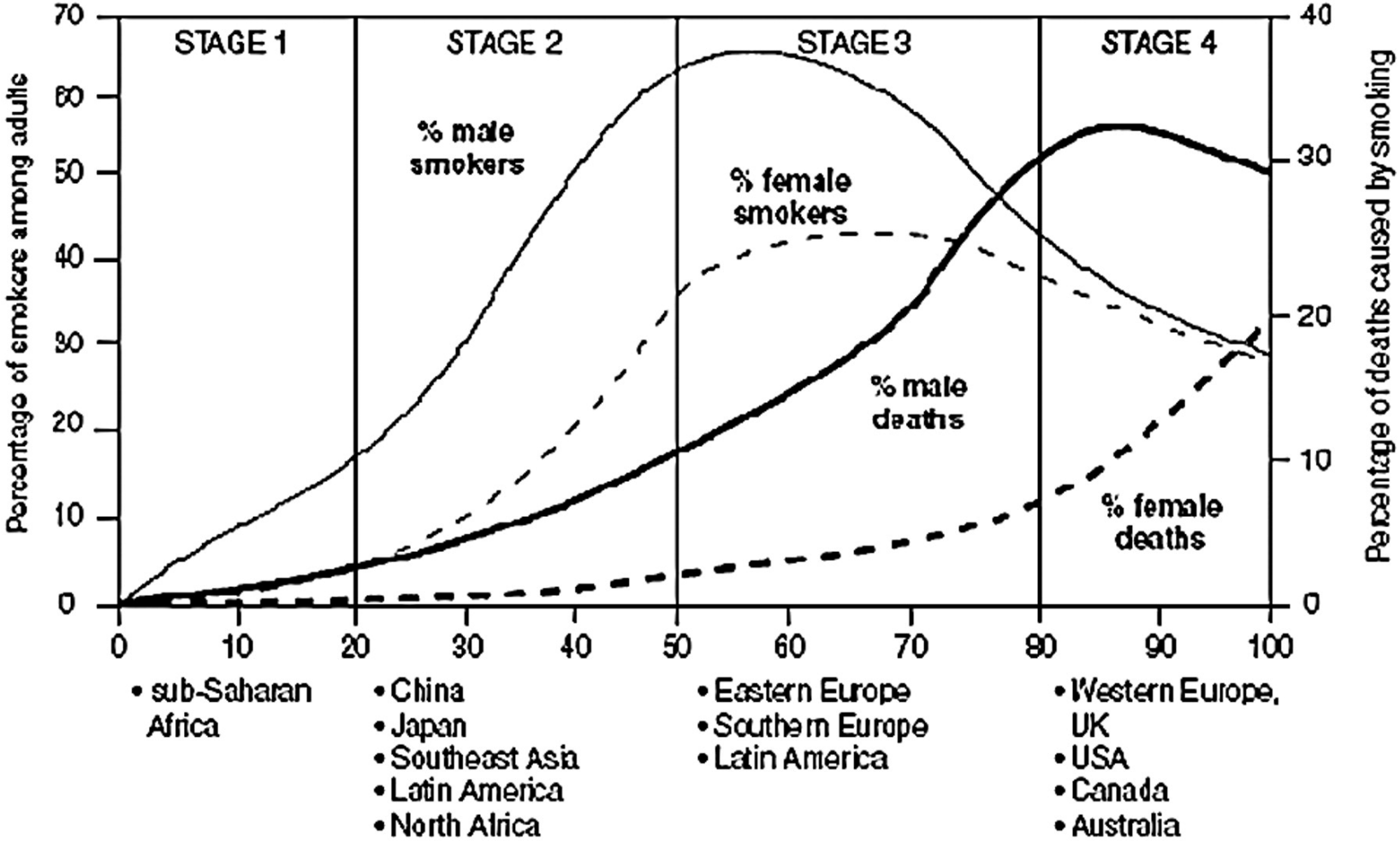
Youth Prevalence, Other Tobacco Use

Country or area	Year	Smokeless tobacco use				Chewing betel nut with tobacco			
		Male		Female		Male		Female	
		Current	2014	Current	2014	Current	2014	Current	2014
American Samoa	2005	3.4	3.1	2.6	2.3	NA	NA	NA	NA
Cook Islands	2008	10.5	9.5	7.3	6.6	NA	NA	NA	NA
Guam (USA)	2002	8.4	7.6	4.3	3.9	8.8	7.9	4.7	4.2
Macao (China)	2010	2.2	2.0	2.1	1.9	NA	NA	NA	NA
Malaysia	2009	4.5	4.1	3.2	2.9	NA	NA	NA	NA
Mongolia	2007	15	13.5	11.4	10.3	NA	NA	NA	NA
CNMI	2004	42.7	38.4	25.9	23.3	47.2	42.5	34.4	31.0
Palau	2009	30.7	27.6	27.2	24.5	NA	NA	NA	NA
Philippines	2007	4.7	4.2	5.2	4.7	NA	NA	NA	NA
Republic of Korea	2008	7.2	6.5	5	4.5	NA	NA	NA	NA

Stages of the Tobacco Epidemic

- 1994: Lopez et.al. model – 4 stages of the tobacco epidemic
  - Used adult smoking rates and smoking-attributable mortality
  - Data from developed countries

A descriptive model of the cigarette epidemic.



Araújo A et al. The Oncologist 2007;12:201-210

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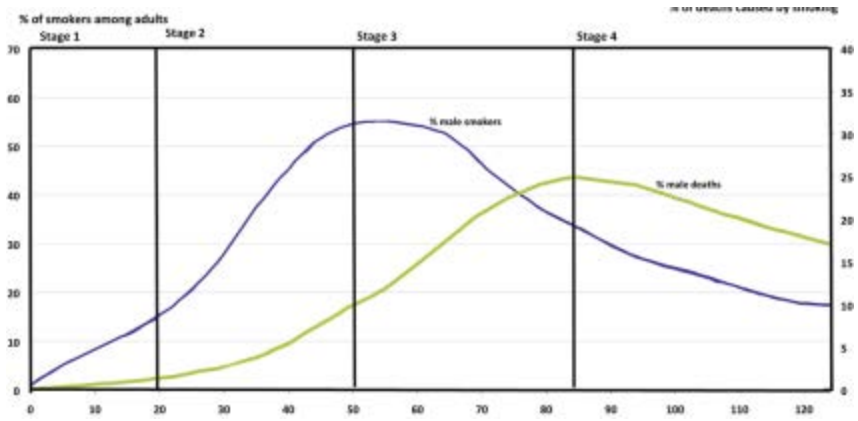
The Oncologist

Stages of the Tobacco Epidemic

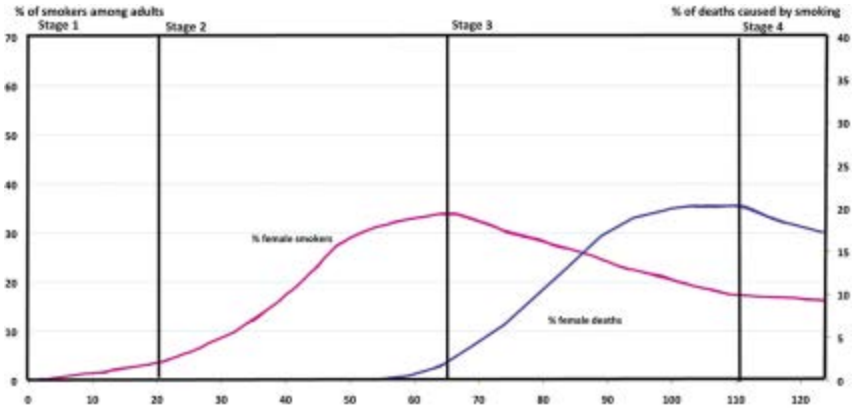
- 2012: Thun et. al. – modified version
  - Stages described separately for males and females
  - Smoking-attributable mortality in middle age (35-69 years) used instead of smoking-attributed proportion of all deaths

Revised Model

Males



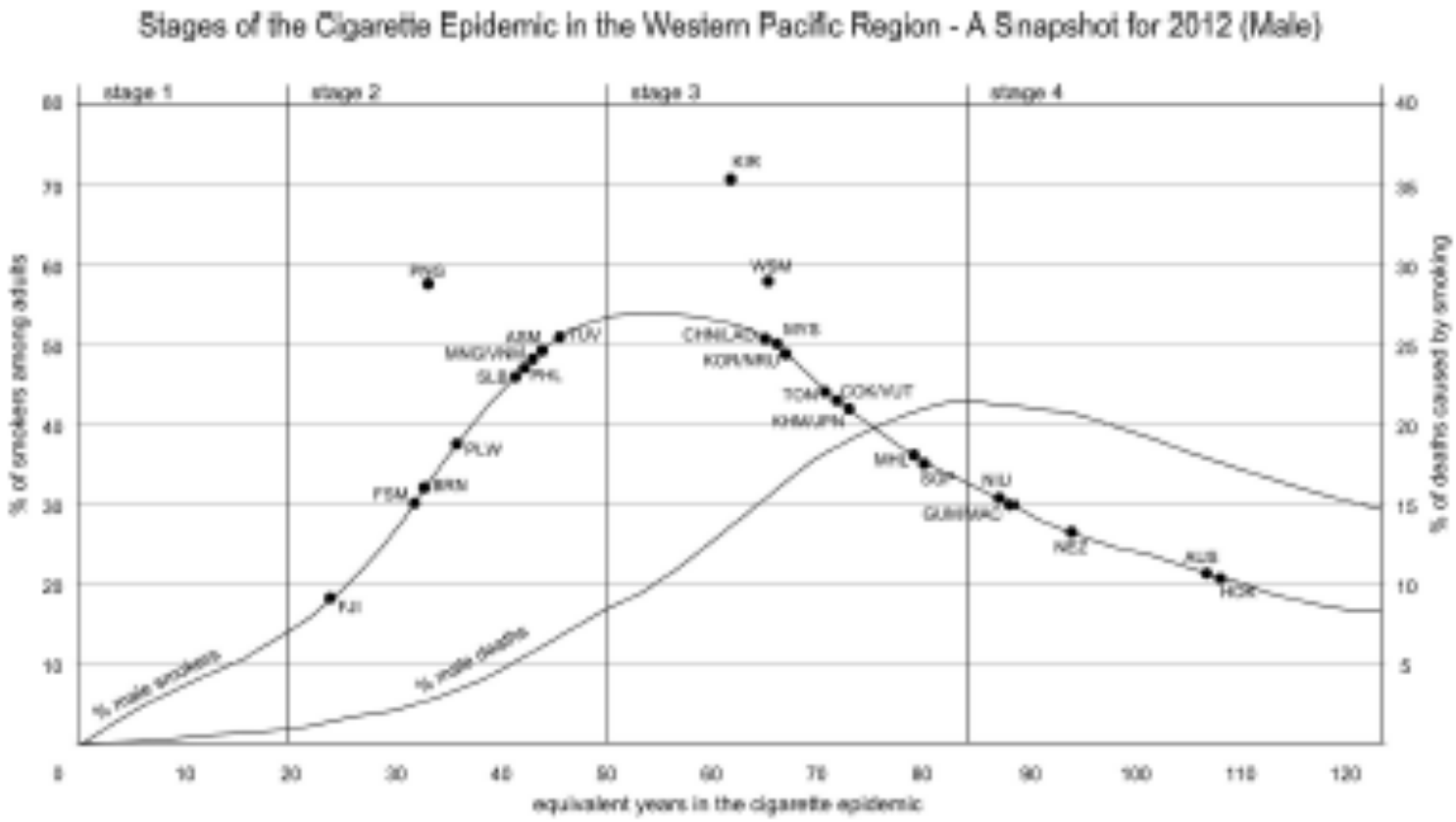
Females



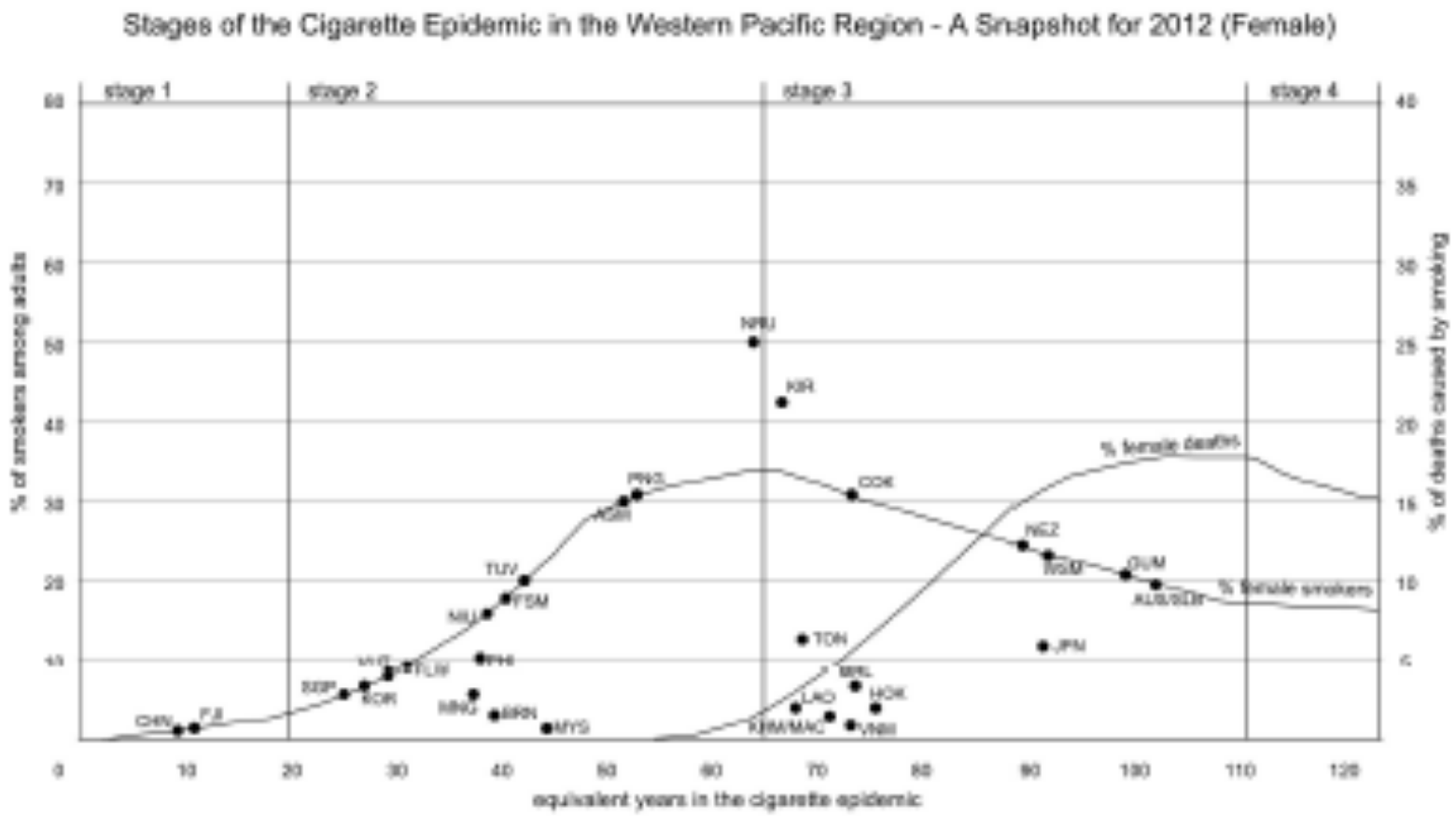
Note:

- ~25-35 year lag between the peak in smoking prevalence and the peak in tobacco related death
- Even after tobacco use has declined significantly the rate of tobacco-related deaths will continue to climb.
- Impact of tobacco use among women is significantly greater in terms of tobacco-related deaths relative to prevalence than for men.

Tobacco Epidemic in WPR - Males

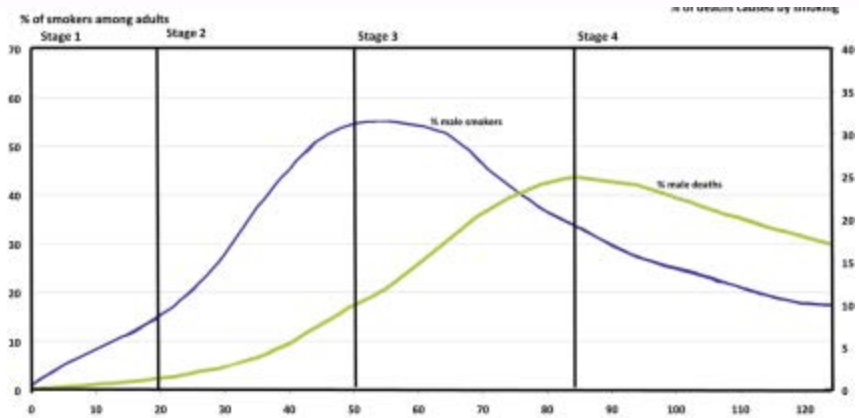


Tobacco Epidemic in WPR - Females

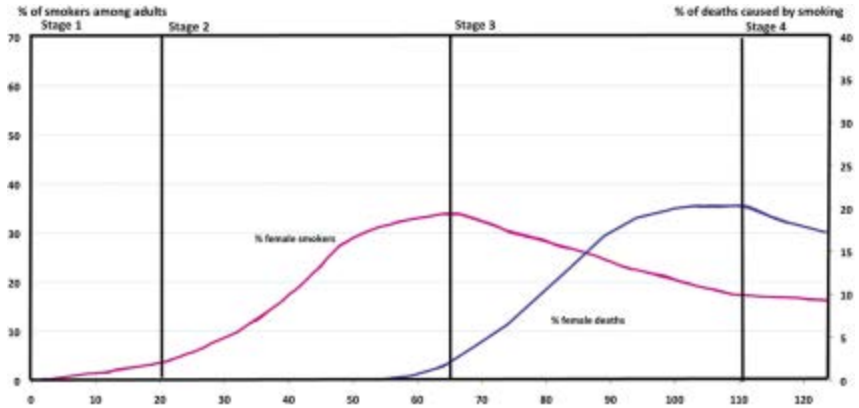


A Framework for Prioritizing Action

Males



Females



Data (M)

Prevention (W)

Demand reduction

- Ad bans (E)
- Tax increases (R)
- Smoke-free laws (P)

Cessation (O)

Caveats

- Staging of WPR countries still an evolving process
- Stages of epidemic for smokeless tobacco/ betel nut not well characterized
- Implementation of WHO FCTC – impact on shape of epidemic curve?

Conclusions

- Ultimately, a comprehensive tobacco control strategy with all of the MPOWER elements needed.
- In resource and capacity-challenged Pacific Islands, using the tobacco epidemic stages model to define priority strategies provides a practical framework to make progress towards the 10% reduction by 2014 goal.