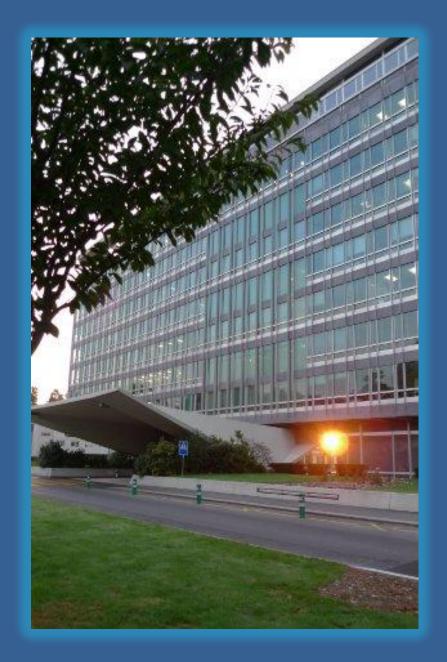


# Diabetes and Diabetic Retinopathy

Dr Silvio Paolo Mariotti World Health Organization Geneva



# DIABETES

- 347 million people worldwide have diabetes
- In 2004, an estimated 3.4 million people died from consequences of high fasting blood sugar
- More than 80% of diabetes deaths occur in low- and middle-income countries (3).
- WHO projects that diabetes will be the 7th leading cause of death in 2030
- Healthy diet, regular physical activity, maintaining a normal body weight and avoiding tobacco use can prevent or delay the onset of type 2 diabetes.

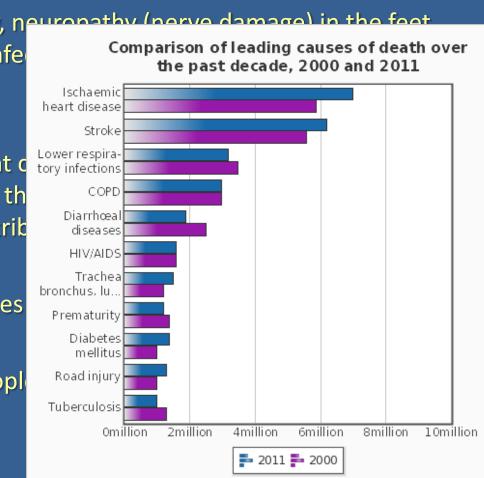
#### The 10 leading causes of death in the world **Tschaemic** 7 million heart disease Stroke 6.2million Lower 3.2million respiratory inf. COPD 3million Diarrhœal 1.9 million diseases HIV/AIDS 1.6 million Tracheal 1.5 million bronchus, lu. Diabetes 1.4 million mellitus Road injury 1.3million Prematurity 5 cm 1.2 million Om illion 2million 4million 6million 8million 10million CCITC OF BIONGI

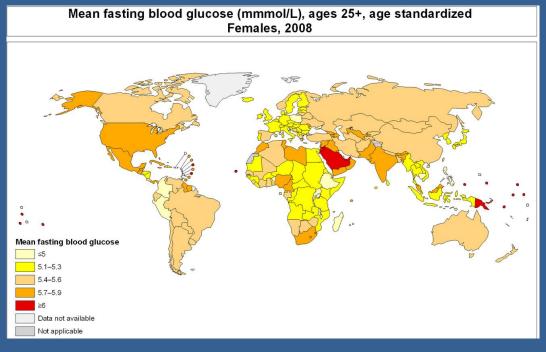
Diabetes is among the leading causes

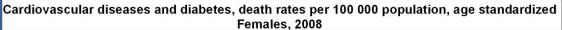
 The overall risk of dying among people of their peers without diabetes

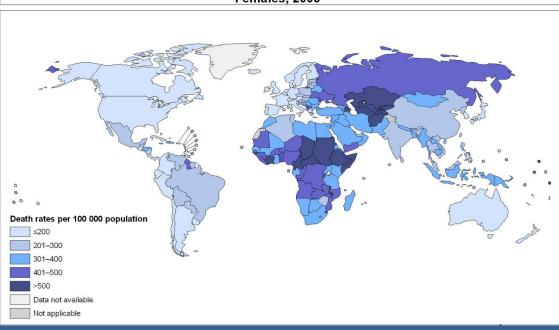
# BETES

disease and stroke. 50% of people with (primarily heart disease and stroke)

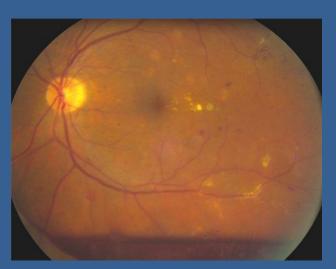






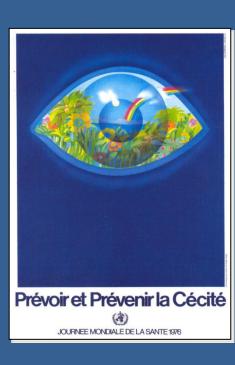


# DIABETIC RETINOPATHY









# DIABETIC RETINOPATHY

DR is estimated responsible of 4.8% of all cases of blindness

More than 75% DM patients experience some form of DR

DR develops in almost all Type 1 and 77% of Type 2 diabetes patients >20 yrs survival

90% of persons with DM for over 10-15 years have some degree of DR\*

**Evidence-based treatment can reduce the risk of vision loss by >90%** 

From our latest global estimates, people with VI solely attributed to DR are 4.2 millions

Only 50% of DM patients and only 60% of high risk (DR+) DM patients receive regular eye examination once a year

#### **MAGNITUDE OF VISUAL IMPAIRMENTS**

#### **2004 Estimates**

**2010 Estimates** 

• 314 M Visually Impaired

• 285 M Visually Impaired

- 45 M Blind
- 269 M Low Vision

• 39.3 M Blind

246 M Low Vision

Tot pop 6.21B

> 50 y.o. 1.14B

Tot pop 6.79B

> 50 y.o. 1.34B

+18%

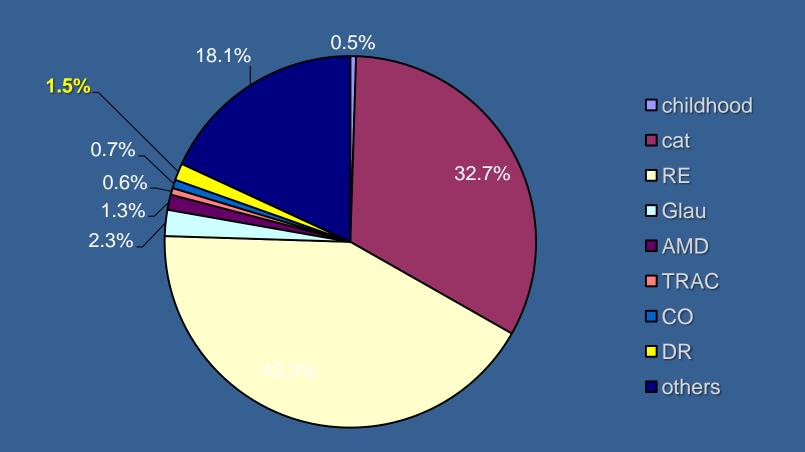
+8%

- 9.2%

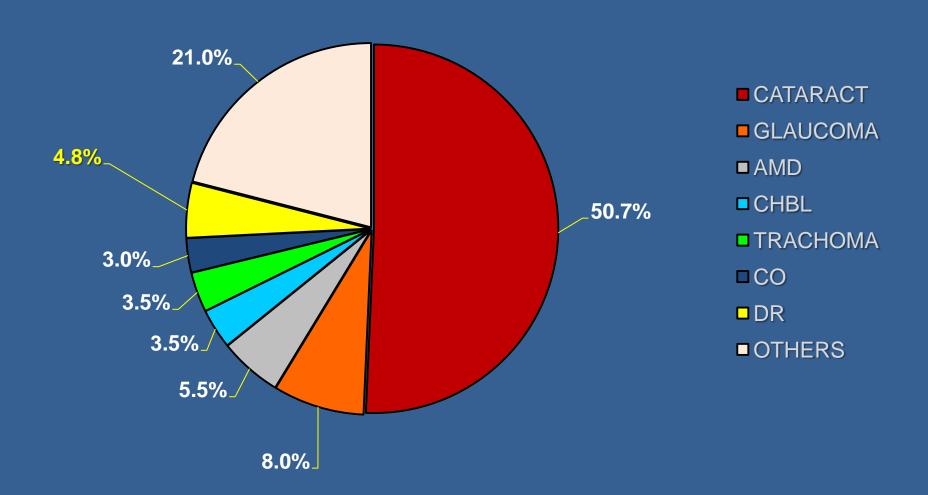
4,2 M VI from DR 1,2 M Bl From DR

155 M DR / 14.6 M sight threatening DR

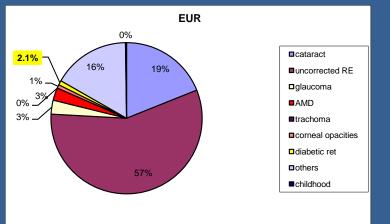
### CAUSES OF VISUAL IMPAIRMENT

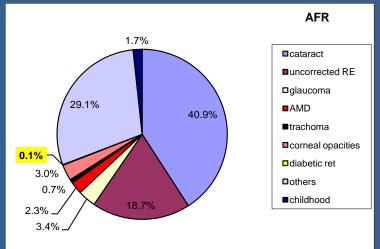


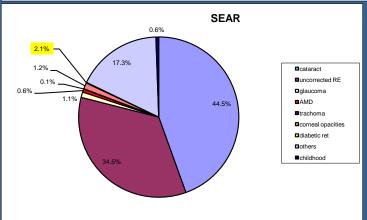
## CAUSES OF BLINDNESS

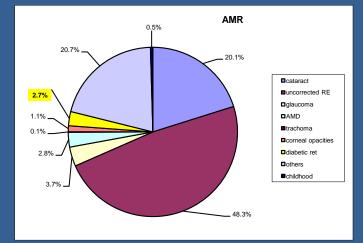


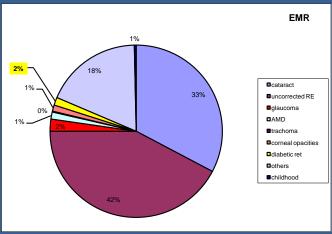
	Visual Impairment including blindness										
	tot VI	cataract	uncorrected RE	glaucoma	AMD	trachoma	corneal opacities	diabetic ret	others	childhood	
Eur	28,214,708	5343646	16,064,549	837,687	753,299	12,792	210,311	268,774	4,658,356	65,294	
Amr	26,612,131	5,360,158	12,849,813	981,724	751,292	25,216	302,497	718,550	5,501,012	121,870	
Sear	90531576.09	40,282,848	31,206,982	991,578	557,763	80,566	1,115,525	123,947	15,658,364	514,004	
Wpr	90,236,374.63	23,960,077	45,681,885	2,245,390	787,895	126,779	624,056	2,715,863	13,903,631	190,798	
Afr	26,294,865	10,749,777	4,922,817	898,371	617,904	184,057	797,578	28,923	7,659,895	446,936	
Emr	23,499,161	7,689,483	9,935,365	534,315	311,195	38,531	273,671	346,001	4,289,819	81,804	
Word	285,388,816	93,385,988	120,661,412	6,489,065	3,779,347	467,940	3,323,638	4,202,059	51,671,077	1,420,706	

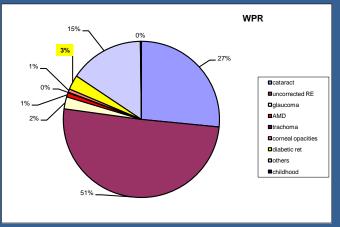


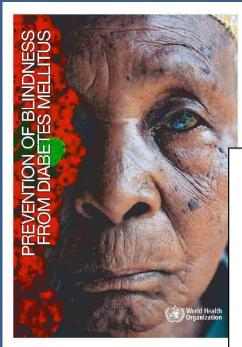




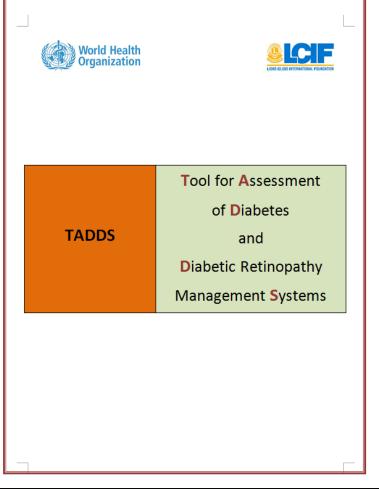








#### DM and DR management systems assessment project



16 countries in 2 years

REPORT

Assessment of
Diabetes
Management
Systems
in the Philippines

Tool for Assessment of
Diabetes Management
Systems
Systems