



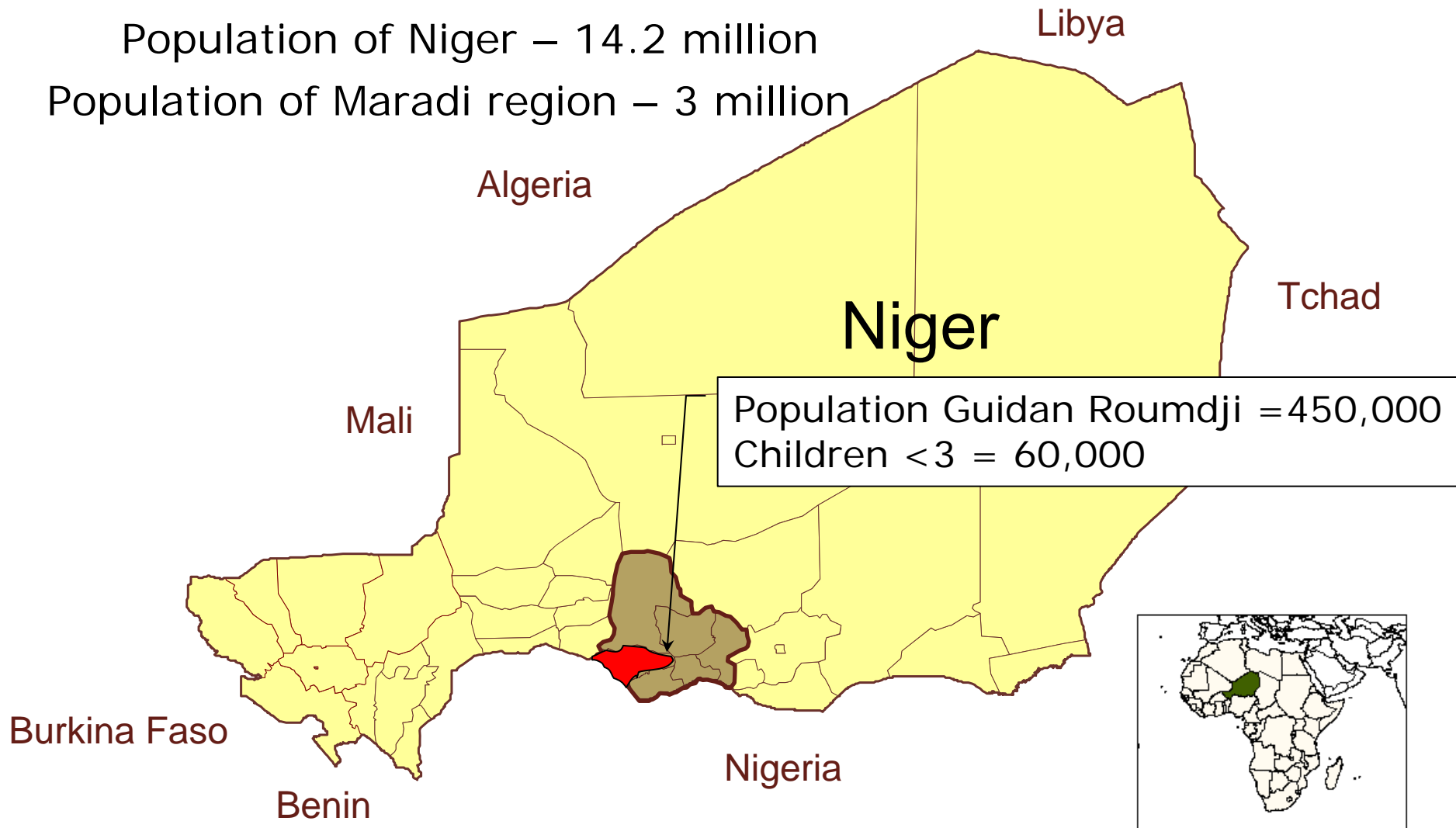
Taking CMAM to scale in a Malnutrition 'Hotspot'

MSF-France Programme in
Maradi, Niger
2002-2007

Region of Maradi, Guidan Roumdji

Population of Niger – 14.2 million

Population of Maradi region – 3 million



Niger MICS-3 2006 Nutrition Data (NCHS)

	HFA		WFH	
	-3Z	-2Z	-3Z	-2Z
Niamey	8,6	21,3	1,2	6,7
Agadez	20,1	38,8	1,6	10,5
Diffa	24,2	46,6	2,1	12,7
Dosso	19,6	41,2	2,5	10,3
Maradi	43,6	62,2	1,0	11,6
Tahoua	24,2	46,7	1,5	10,3
Tillabéri	24,2	46,7	1,5	8,7
Zinder	39,3	58,7	1,5	10,6



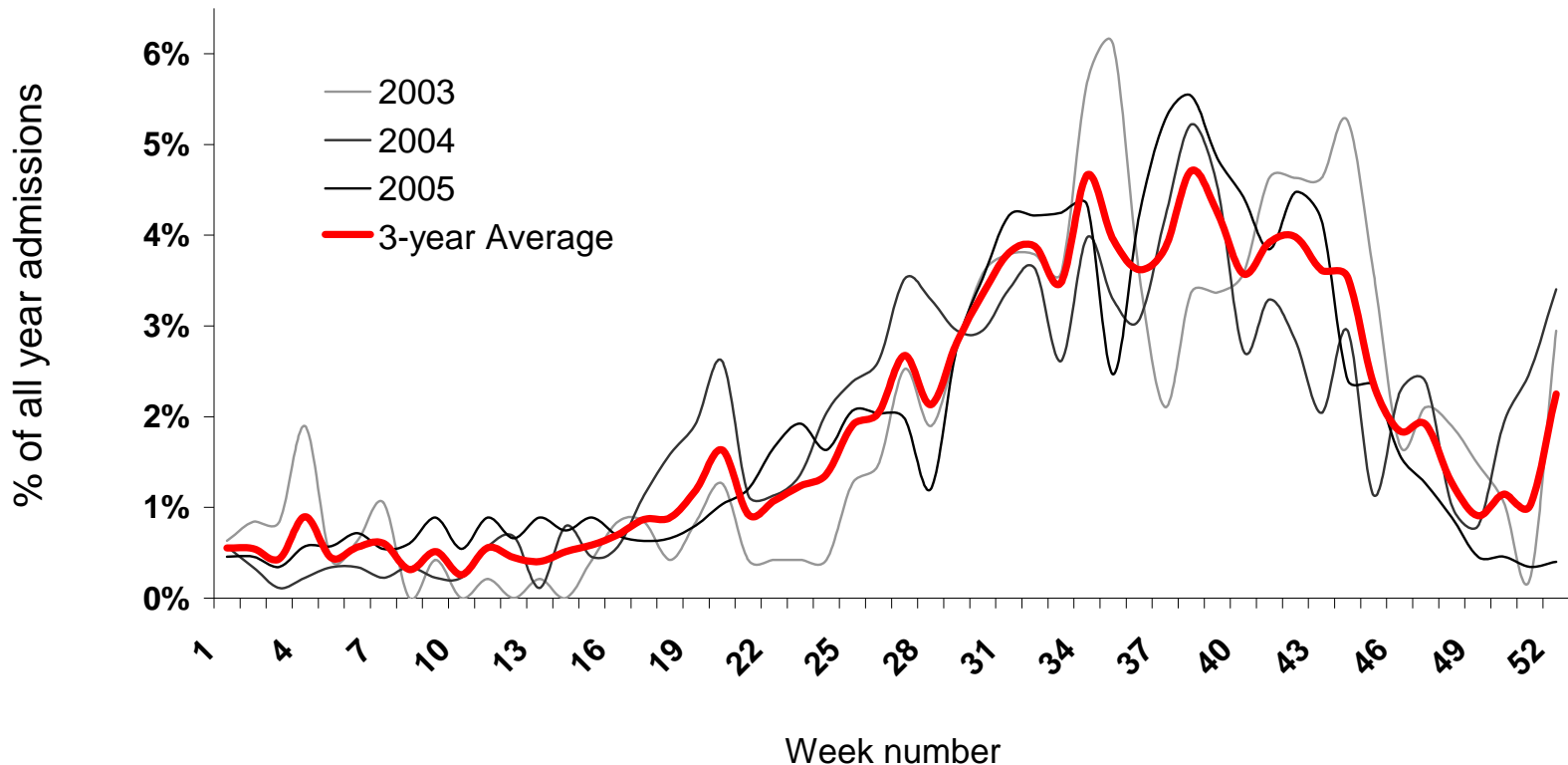
Niger MICS-3 2006 Mortality Data

Région	NN	PNN	IM	JM	U5M
Niamey	29	28	57	80	132
Agadez	29	24	53	62	111
Diffa	31	32	63	61	120
Dosso	49	48	97	131	215
Maradi	46	61	106	140	231
Tahoua	40	51	91	136	214
Tillabéri	27	48	74	128	193
Zinder	56	57	113	177	269

Seasonality severe malnutrition

Admissions of children with W/H < 70% (NCHS) weekly proportion of total inclusions in the year

Guidan Roumji, Niger, 2003-2005

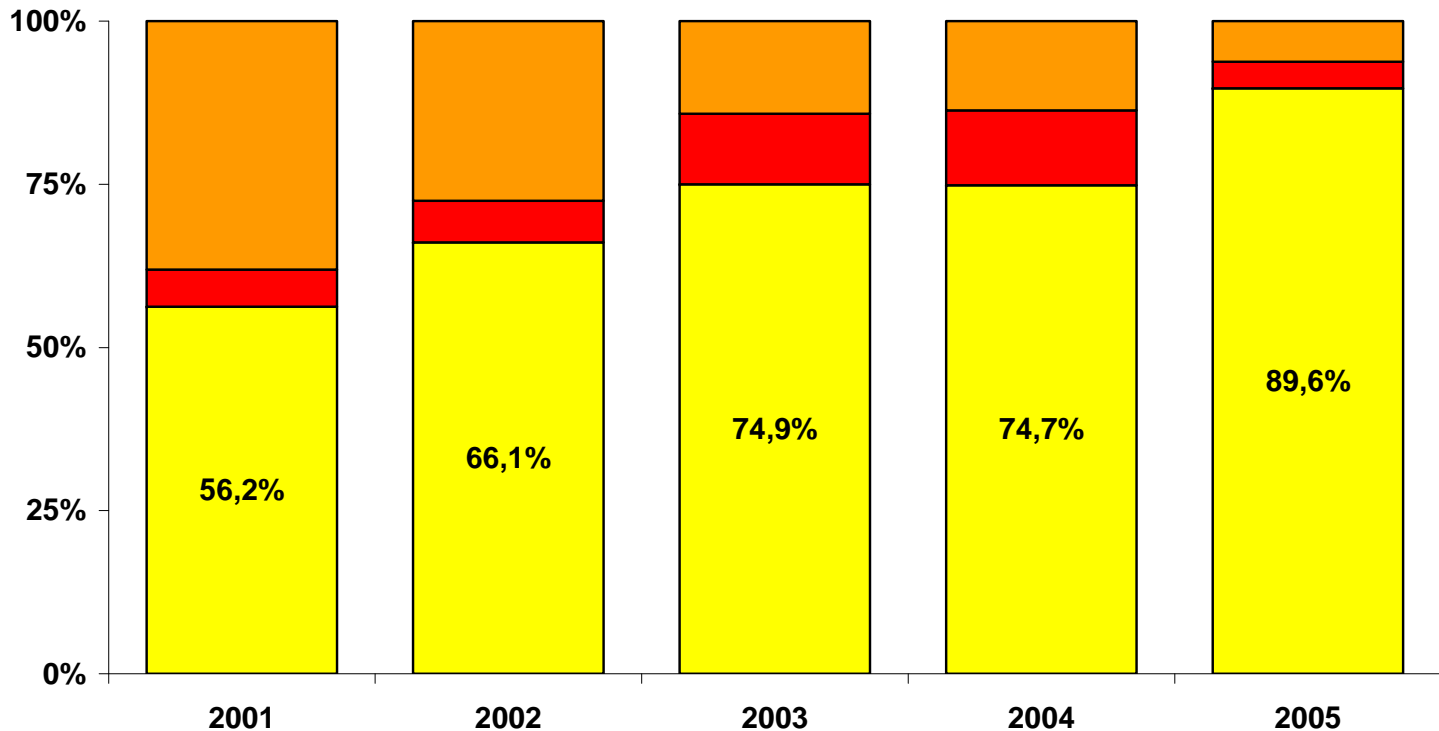


MSF France Program 2001-2005



Program results 2001-2005

Outcomes of children with Weight for Height <70% (NCHS), Guidan Roumji 2001-2005



Admissions:

1114

1803

1423

2471

7039

Earlier Treatment of Malnutrition



2006

RUTF for Moderate malnutrition



- Passive recruitment, 5 centers open 5 d/wk.
Admission criteria : NCHS W/H < 80%
Discharge : 2 weights >80%
- Human resources ~ 20 nurses + 1 doctor, 60 personnel total
- All children are managed by medical personnel
 - Only change to protocol: No systematic antibiotics
 - RUTF: 2 packets per day

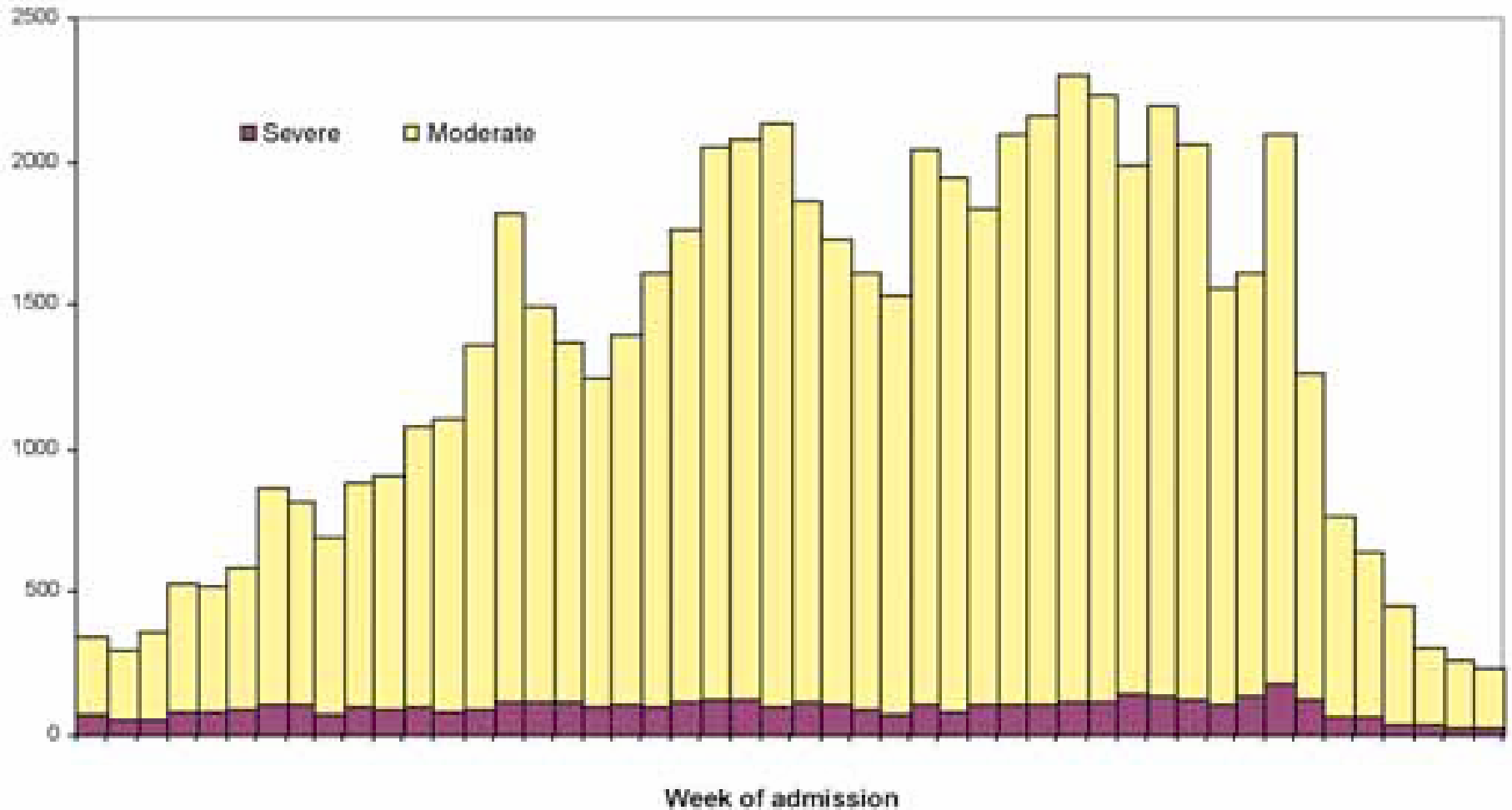
RUTF for Moderate malnutrition



➤ Results

- 32,262 admissions for est 60,000 children < 3 yrs
AROUND 50% OF CHILDREN IN THE DISTRICT
- 32,254 discharged, all screened by medical personnel
- Exit criteria : 2 consecutive weeks, W/H > 80%
- Recovery rate : 95.5%
- Weight gain (g/kg/day) : 5.3 (5.25 ;5.32)
- Mean length of stay (days) : 31.4 (31.3;31.6)

Figure 1 Weekly admissions of children, MSF therapeutic nutrition programme, Maradi region, Niger, 2006



Earlier Treatment of Malnutrition

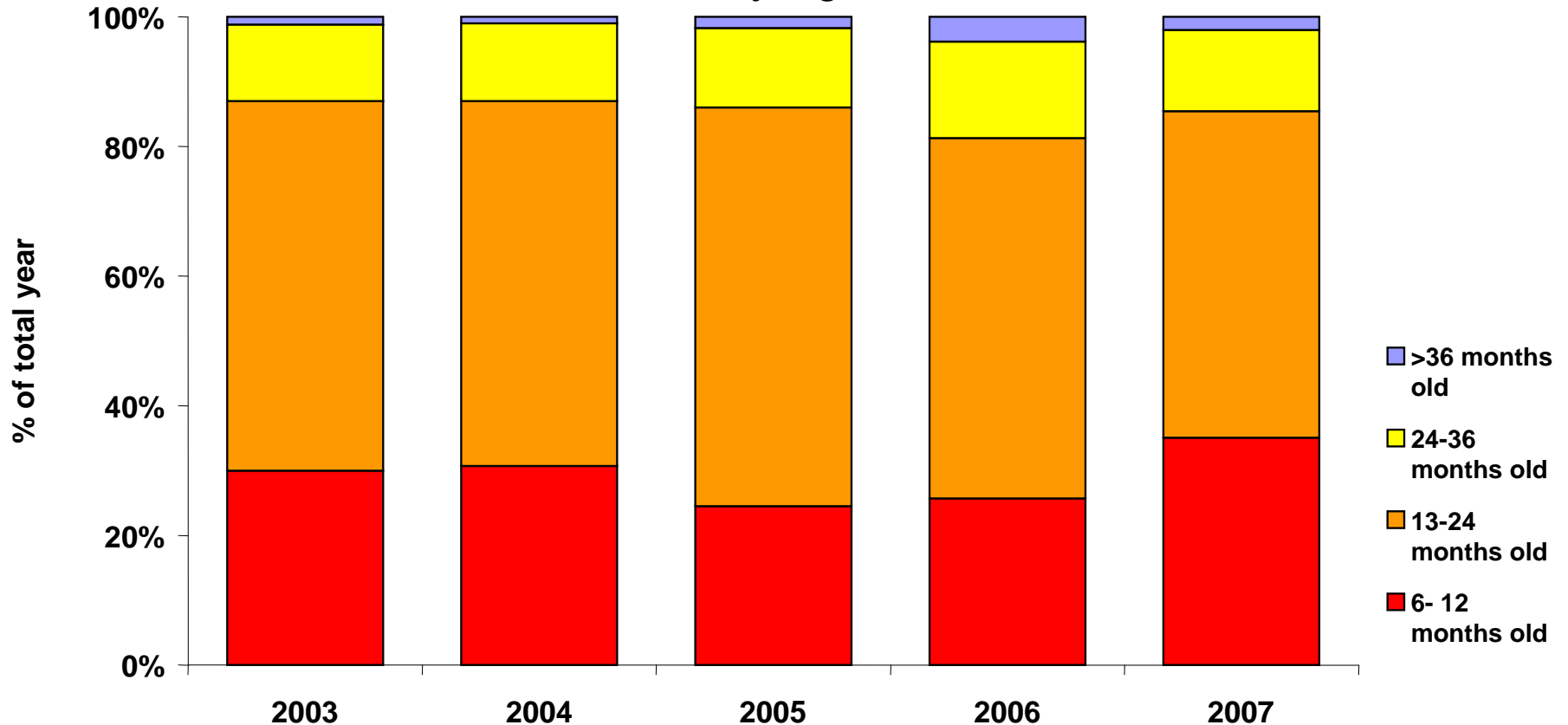


2007

Young children are affected

Age classes among severely malnourished (NCHS) in MSF program

Guidan Roumji Niger, 2003-2007



Rapport d'enquête nationale Nutrition et Survie de l'Enfant

June 2007

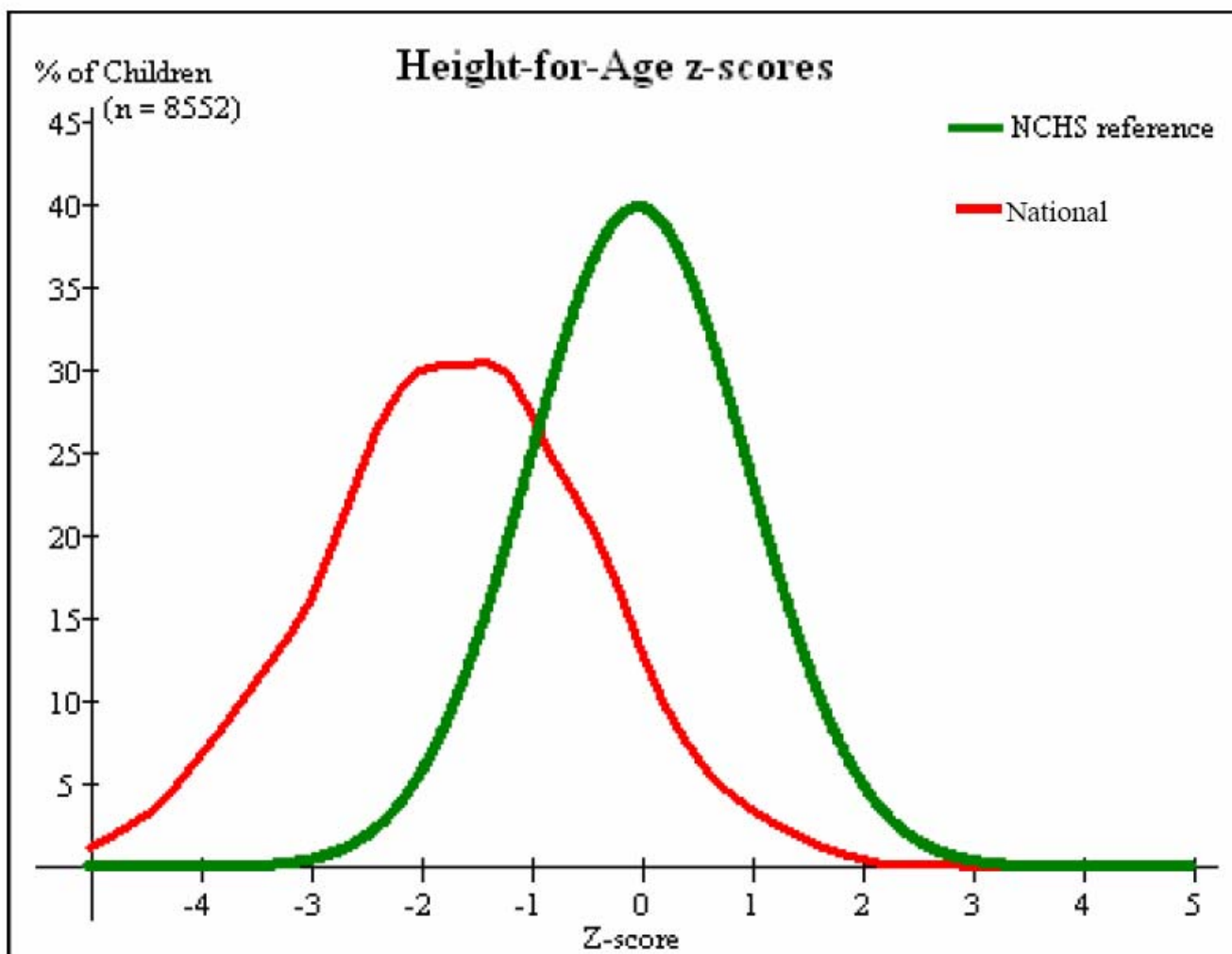


Figure 5. Distribution de la sous-nutrition chronique en Z-score par rapport aux références NCHS, 1977.

Targeted distribution lower dose RUTF

➤ ***Blanket distribution***

RUTF (46 g/ day) every month for 7 months during hunger gap for all children 6m to 3 yrs.

➤ 52 distribution sites

➤ 7 teams of 5 people + daily workers

➤ SAM treated using WHO standards

Targeted distribution in 2007

- 62 878 children 6 months to 3 yr received lower dose RUTF
- 7258 severely wasted admitted to therapeutic program (WHO 2005)
 - Cure rate : 89%
 - 1532 were severely malnourished according to NCHS







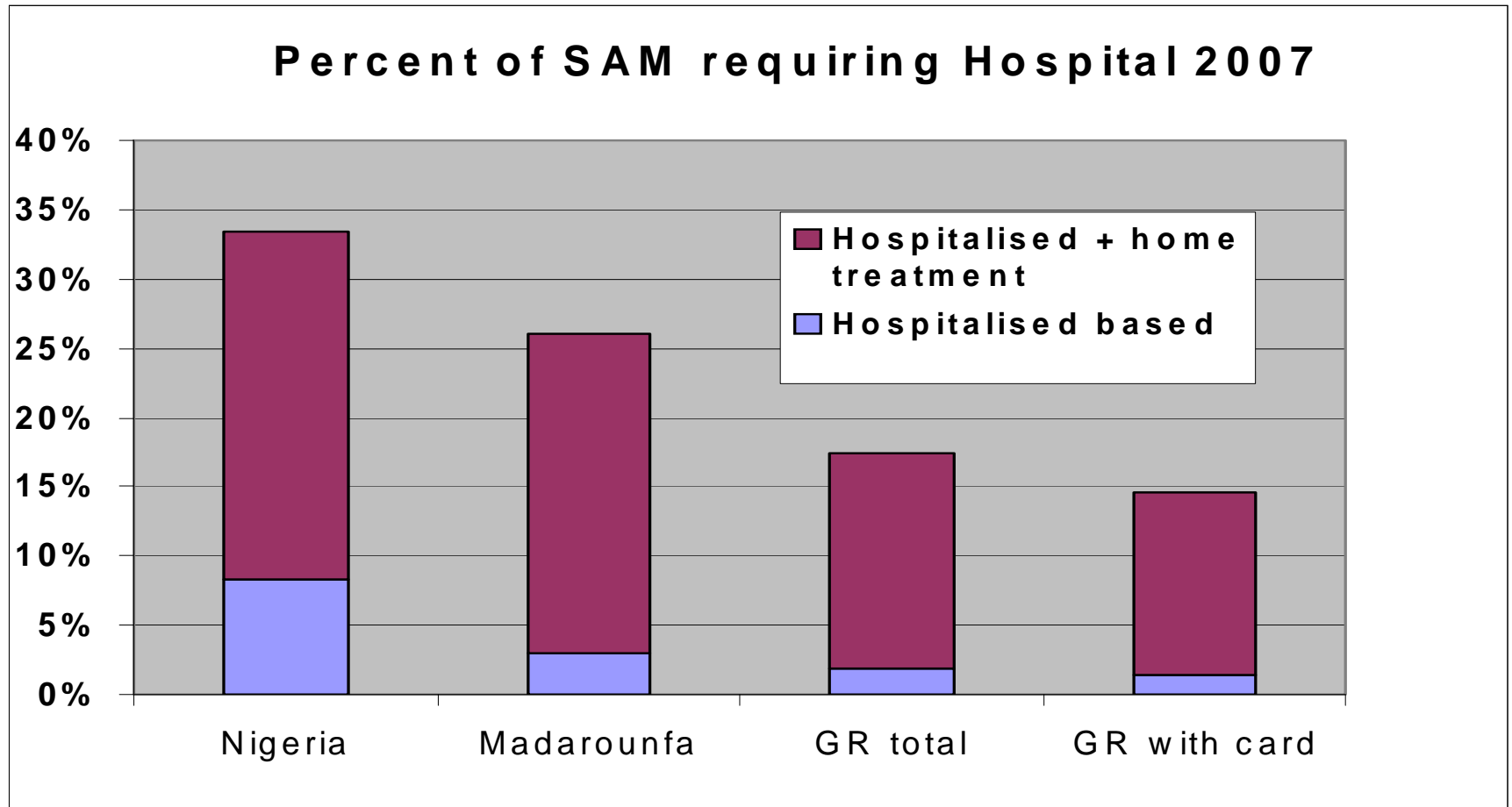
Defaulter rate in the distribution

Month	Beneficiaries #	Drop out #	Drop out %
May	62,922	0	0.0
June	62,902	20	0.0
July	62,865	57	0.1
August	62,756	166	0.3
September	62,680	242	0.4
October	61,961	961	1.6

Detection of children with SAM by MUAC < 110mm

Month	TOTAL	Normal		Severe		New severe	
	#	#	%	#	%	#	%
2007							
May	49,248	33,737	69	200	0.4	200	0.41
June	56,172	40,784	73	204	0.4	136	0.24
July	60,605	47,089	78	125	0.2	30	0.05
Aug	61,506	47,646	77	108	0.2	12	0.02
Sept	61,858	45,472	74	129	0.2	18	0.03
Oct	60,556	42,529	70	147	0.2	37	0.06

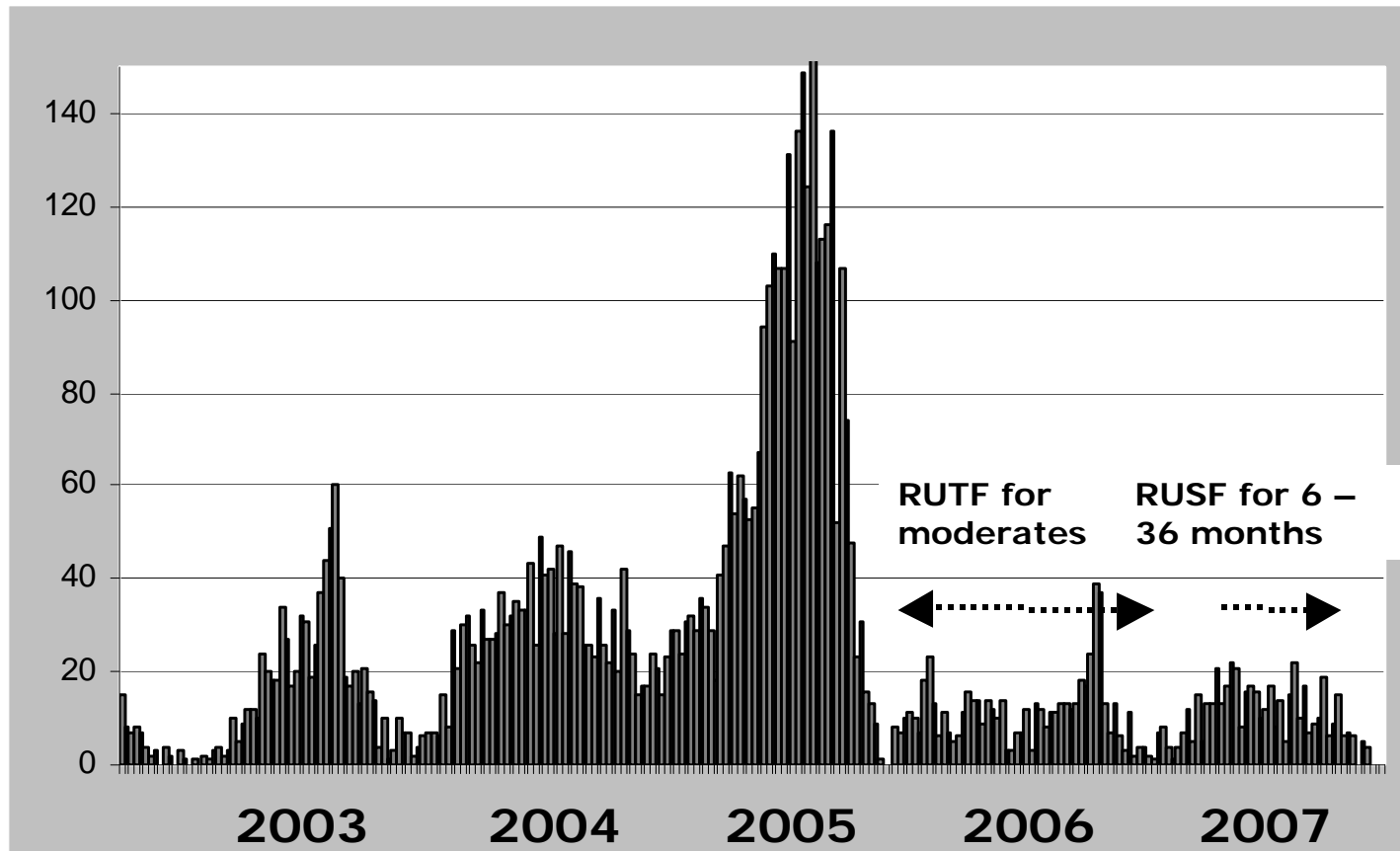
...relative decrease in severity of SAM



...downward trend in admissions

	2001	2002	2003	2004	2005	2006	2007
Admissions NCHS	1114	1803	1423	2471	7039	1599	1532
MUAC <110mm	700	1006	762	1267	3130	586	491
W/H <60%	27	75	51	49	139	26	29
Oedema	52	156	186	323	423	139	135
Hospitalisations	1091	1774	1264	1231	2893	756	680

Admissions Guidan Roumdji by MUAC 2003-7



Key Messages



- In high burden areas, whole population affected by deficiencies
- RUTF in lower doses can mitigate seasonality and severity of acute malnutrition
- Places food quality at the center of effective response to childhood undernutrition



Tableaux Comparatif Plumpy'Nut et PlumpyDoz

	Plumpy'Nut	PlumpyDoz		Plumpy'Nut	PlumpyDoz
INDICATION	Traitement de la malnutrition sévère	Prévention de la malnutrition modérée et sévère		Traitement de la malnutrition sévère	Prévention de la malnutrition modérée et sévère
DOSE JOURNALIERE RECOMMANDEE	184 g (2 sachets) pour enfant 4-8 kg	46.3 g (3 cuillères à soupe) pour enf 6 mois-3 ans		184 g (2 sachets) pour enfant 4-8 kg	46.3 g (3 cuillères à soupe) pour enf 6 mois-3 ans
Energy	1000 kcal	247 kcal	Vitamin A	1680 µg	400 µg
Proteins	25 g	5.9 g	Vitamin E	36.8 mg	6 mg
Protéines (% kcal)	9.5 %	9.5 %	Calcium	590 mg	387 mg
Lipides	65.6 g	16.0 g	Magnésium	170 mg	60 mg
Lipides (% kcal)	58.2 %	58.2 %	Selenium	55.2 µg	17 µg
Vitamine B1 / Thiamine	1.2 mg	0.5 mg	Zinc	20 mg	4 mg
Vitamine B2/ Riboflavin	3.4 mg	0.5 mg	Fer	21.2 mg	9 mg
Niacin	10 mg	6 mg	Iode	184 µg	90 µg
Vitamine B5/ Pantothenic Acid	5.6 mg	2 mg	Cuivre	3.3 mg	0.3 mg
Vitamine B6 / Pyridoxine	1.2 mg	0.5 mg	Phosphore	550 mg	275 mg
Folate	386 µg	160 µg	Potassium	2044 mg	310 mg
Vitamine B12	3.4 µg	0.9 µg	Manganese	-	0.17 mg
Vitamine C	96 mg	30 mg			

Monthly MUAC measurements for children receiving RUF

Guidan Roundji, Niger May-Oct 2007

