# What are we doing about infant mortality in Harrow?

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No Infant Death .....IS BEST

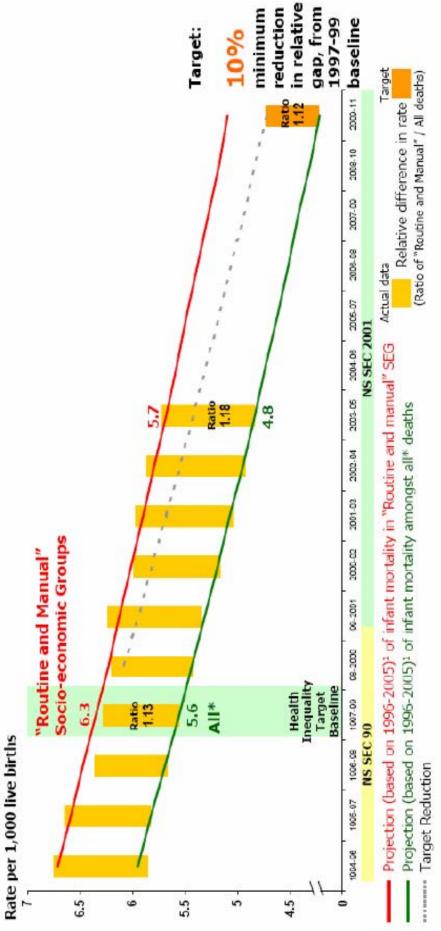
#### Outline

- Why does it matter?
- What are the key causes/determinants?
- Where are we compared to others?
- What are we doing and what more do we need to do?

### Why does it matter?

- Infant mortality
  - Sensitive marker of the wellbeing of a nation's health
  - Public Service Agreement target:
  - "Starting with children less than 1 year of age by 2010 to reduce by 10% the gap in the infant mortality rate between routine and manual (R and M) groups and the population as a whole"

Figure 4: Infant mortality rates in England and Wales from 1994-2005 by socio-economic group with projection to 2010 target



<sup>1</sup>Projection of data for the five years 2001-2005, since NS SEC 2001 was introduced, result in a more encouraging assessment of progress.

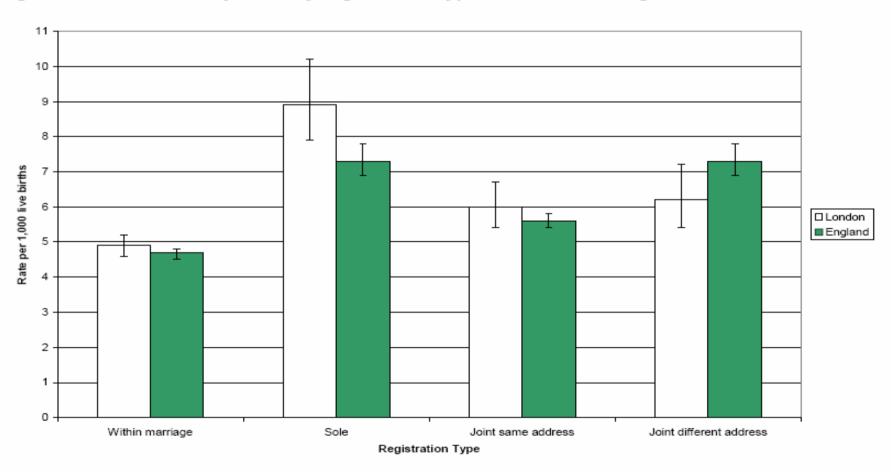
Source: Office for National Statistics



<sup>\* &</sup>quot;All" relate to inside marriage and joint registrations outside marriage, not including "social class not specified" for 1995 and 1999. Sole registration and unlinked births are excluded. Information on the father's occupation is not collected for births outside marriage if the father does not attend the registration of the baby's birth. Figures for live births are a 10 per cent sample coded for father's occupation.

# Problem with the classification according to occupation of father

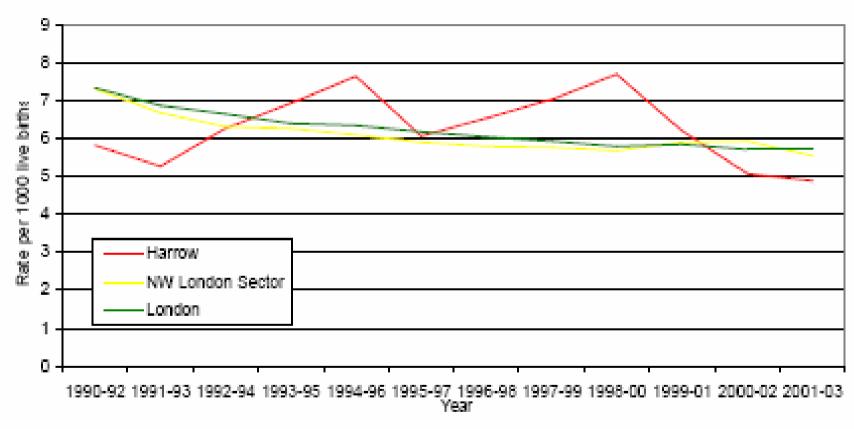
Figure 7: Infant mortality rates by registration type, London and England, 2001-2003



Source: ONS, analysis by LHO

#### Where is Harrow?

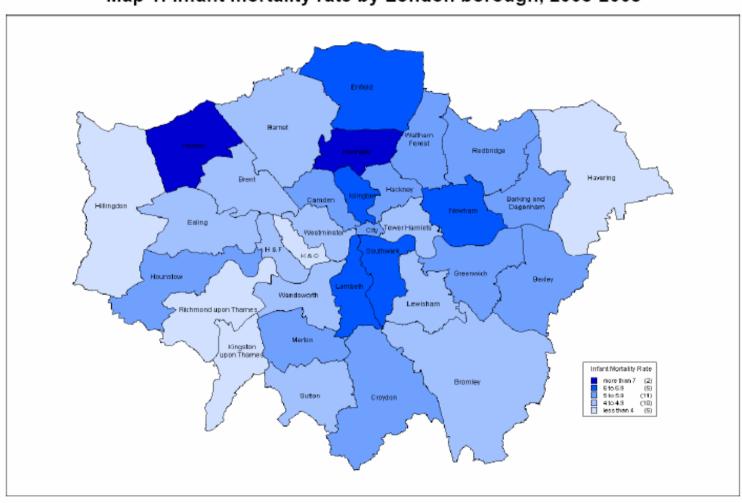
Figure 26 Three-year average infant mortality rate per 1000 live births, 1990-2003



Source: ONS mortality & birth data 1990-2003, Analysis LHO

# Where is Harrow compared to other Boroughs?

Map 1: Infant mortality rate by London borough, 2003-2005

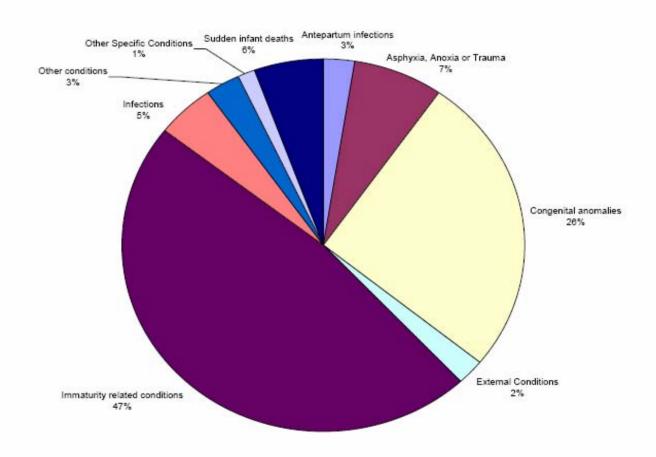


ource: ONS, analysis by LHO

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## What are the key causes/determinants?

Figure 10: Infant deaths by cause, London, 2001-2003

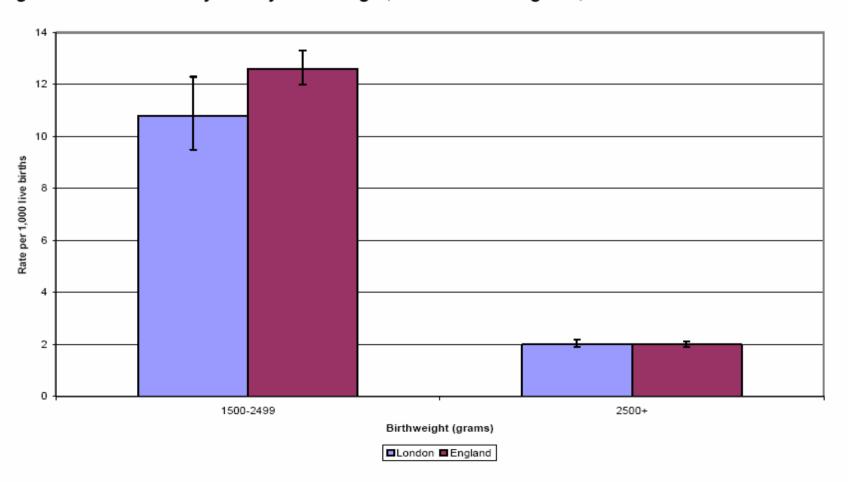


Source: ONS, analysis by LHO

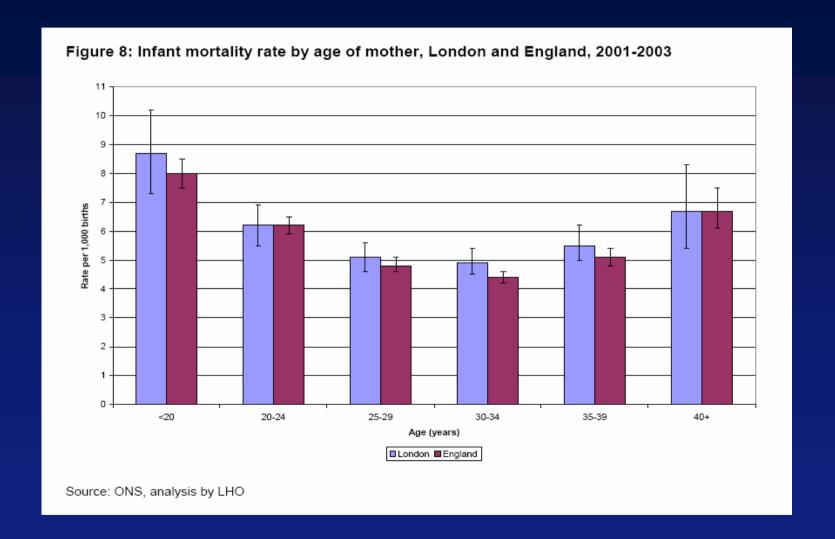
# Low birthweight

Source: ONS, analysis by LHO

Figure 9: Infant mortality rate by birth weight, London and England, 2001-2003



# Young mothers



# High risk groups

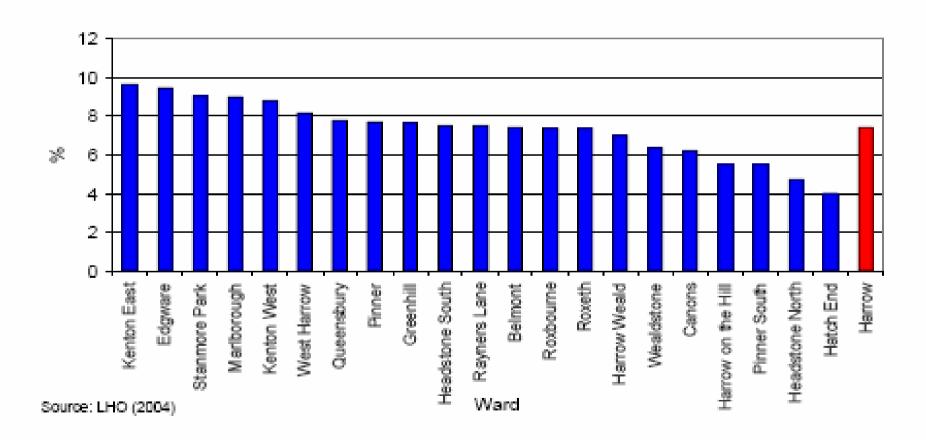
Table 2: Infant mortality rate by country of birth. England & Wales and London 2001-03

	Engl	land & Wales	;		London	
Country of birth	Live births	Infant deaths	Infant deaths per 1,000 live births	Live births	Infant deaths	Infant deaths per 1,000 live births
England and Wales	1,462,185	7,355	5.0	170,024	893	5.3
Ireland	22,899	100	4.4	5,750	29	5.0
Scotland	18,432	86	4.7	3,384	13	3.8
India	21,811	133	6.1	7,979	41	5.1
Pakistan	45,046	496	11.0	7,377	43	5.8
Bangladesh	25,550	152	5.9	12,527	73	5.8
Sri Lanka	7,015	33	4.7	5,791	27	4.7
West Africa	22,386	229	10.2	15,916	174	10.9
East Africa	11,447	70	6.1	5,818	41	7.0
Caribbean Commonwealth	10,007	88	8.8	6,712	57	8.5
Eastern Europe	23,330	107	4.6	14,367	72	5.0
Other Western Europe	36,574	145	4.0	12,758	45	3.5
Rest of World and not stated	104,978	526	5.0	51930	264	5.1

Source: ONS, analysis by LHO

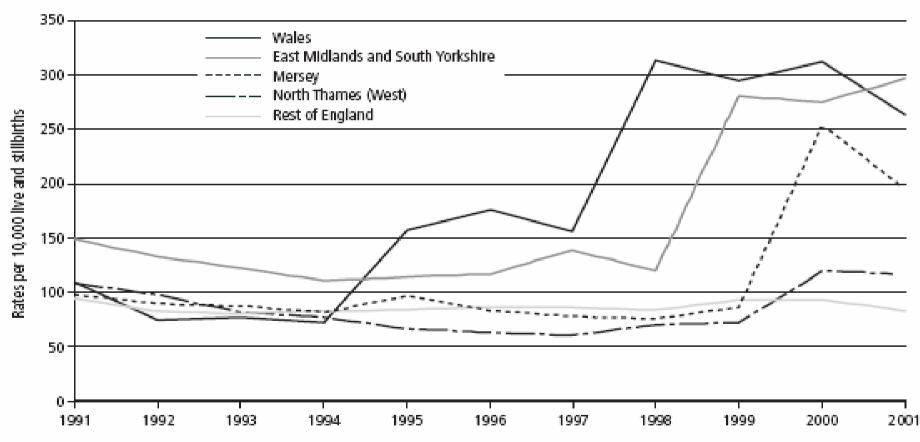
#### Small babies

Figure 25 Singleton births resulting in low birth weight (less than 2500g) babies, Harrow wards, 2001-2003



# Congenital anomalies

# Congenital anomalies notifications to NCAS from local registers and the rest of England, 1991–2001



Source: National Congenital Anomaly System. Data at 27 November 2002

#### What can be done?

#### 5.1 Direct interventions

Tackling health inequalities: What works? identifies action that will reduce inequalities in infant mortality within the target timescale of 2010. Priorities include:

- Reducing smoking in pregnancy in disadvantaged groups, focussing also on paternal smoking.
- Improving nutrition in women in disadvantaged groups of childbearing age.
- Reducing teenage pregnancy which is strongly correlated with socio-economic status.
- Increasing breast-feeding initiation and duration rates in disadvantaged groups.
- Maintaining immunisation coverage and improving service planning for increased uptake in disadvantaged groups.
- Effective education about ways to promote health, e.g. immunisation, focussing on disadvantaged groups.

Estimates in the Review of Health Inequalities Infant Mortality PSA Target were developed for a review of progress towards the target and they suggest that for England:

- If the prevalence of obesity in the routine and manual group were to fall by 23% to the current levels of obesity in the population as a whole, this would reduce the gap by
- Meeting the national target to reduce smoking in pregnancy from 23% to 15% in the routine and manual group would reduce the gap by 2.0%.
- persuading 1 in 10 women in this group to avoid sharing a bed with their baby or putting Reducing sudden unexpected infant deaths in the routine and manual group by it to sleep prone (on its front) would reduce the gap by 1.4%.
- Achieving the teenage pregnancy target would reduce the gap by 1%.

Data is not currently available for London to replicate this modelling. This highlights the need for more local level data to clearly identify interventions and impacts at this level.

# EVERYBODY'S **BUSINESS**

#### Timing of actions to prevent infant mortality

Continuing to: Reduce poverty in children and families

Improve maternal and infant nutrition - including actions to reduce maternal obesity and increase breastfeeding Improve housing and reduce homelessness for expectant

women and families

Continuing to: Provide smoking cessation for the whole family during

and after pregnancy

Improve maternal and infant nutrition - including actions to reduce maternal obesity and increase breastfeeding

Improve the quality of healthcare and training of

healthcare professionals

Develop services and support for teenage mothers and families

Accessible and acceptable healthcare, which is culturally sensitive, must

be in use

Optimising preconception care

Reducing teenage pregnancy Targeted interventions to prevent Sudden Unexpected deaths in infancy

> Antenatal and neonatal screening



Preconception



One year











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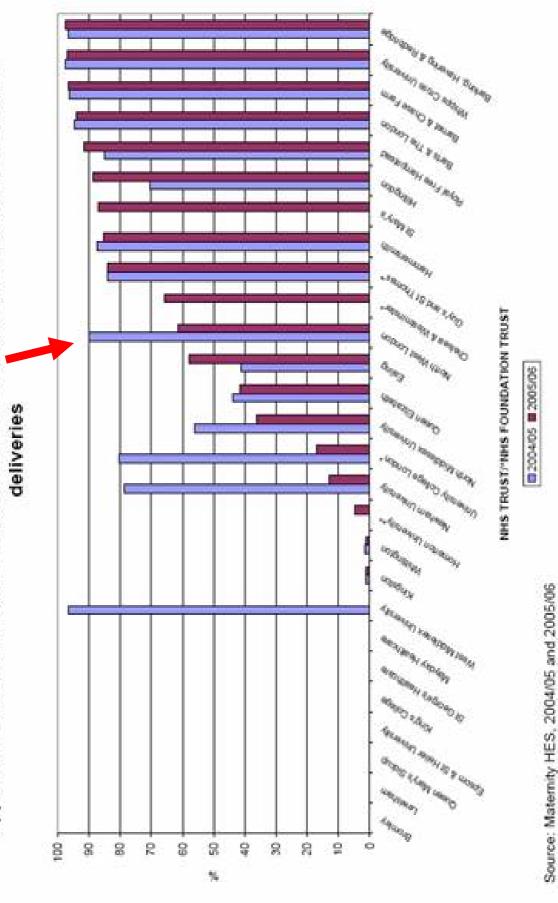
- N utrition prevention of obesity, folate, vits and Ca
- I mmunisation uptake in first year
- S moking cessation
- B reast feeding initiation
- E arly antenatal booking
- S IDS prevention- Back to Sleep
- T eenage pregnancy prevention/ support

INDICATOR	Rate/%	Target rate 07/8	Current ascertainment	Ascertainment TARGET 07/8
Obesity rate in Year	16%	15%	?	?
11 girls				
Completion of 1 <sup>st</sup> 3	?	95%	?	?
immunisations by 9				
months				
Pregnancy smoking	12.3%	8%	93%	98%
rate				
Breast feeding	67%	75%	75%	80%
initiation				
Early Antenatal	19.9%	30%	57%	70%
booking <12 weeks				
SIDS rate	?	?	?	?
Pregnancy less than	28/1000	22/1000	?	?
20 years old				

#### Moving in the right direction

Composite score of "Positive action on Infant Mortality Reduction" – max 7 with a positive score given for each indicator moving in the desired direction. Negative score for reverse trend.

Figure 12: Proportion of all deliveries coded with gestation period at first antenatal appointment in 2004/05 and 2005/06 in each acute trust with over 2,000 London



"Homerton University hospital is only included in the 2005/06 analysis as it had less than 2,000 deliveries in 2004/05

Table E2: Local indicators known to have a positive impact on infant mortality by London PCTs

			Projected to	γı		Projected to			% of deliveries coded with	venes		
PCIs	%nothers smoking in pregnanc/*	%smoking in meet year pregnancy end 2007// unknown Q4**	meetyear end 2007/08 Q4**	initiating %initiating meet year breastfeeding breastfeeding end 2007/08 curkmown Qt**	%initiating breastfeeding unknown	meet year end 2007/08 Q4**	%eanlybook (less than 12 veeks)		gestational age at first antenatal booking	al age at enatal ing	%of deliveries coded with ethnicity	iveries ivith ofty
Year	2006			2006	2008		2004/05 2005/06	30/500	2004/05 2005/06		2004/05 2005/06	2005/06
Barking & Dagenham	9.4	2	YES	66.3	22	YES	27.6	25.1	96.3		71.1	75.0
Barnet	14.4	1.7	YES	1:68	12	YES	4.6	7.2	83.7	83.5	828	88.7
Bexley	16.1	0 0	YES .	121	0	VES .	0.4	4.0	8.1	10.6	88.5	86.2
Bent	9.9	5.4	YES .	87.9	6.8	PDR	10.7	14.1	6.63	71.8	728	84.3
Brantey	6.1	9'9	YES .	723	0	PDR	0.1	16.7	0.7	9.0	64.8	65.4
Camden	7	1.5	NO ON	79.1	9.6	HOR	2.9	10.9	723	58.2	822	91.4
Oity & Hadmey	7.5	28	QV	821	62	YES	8.4	24.2	725	7.9	78.1	83.3
Ooydan	6		3.5 NO	908	3.2	32 YES	0.1	14.3	9.0	9.0	676	91.9
Ealing	6.5	2	YES	84	3.2	PDR	8.2	10.3	624	65.4	200	58.7
Enfield	17.5	9.0	NO ON	84.1	1.1	1.1 YES	14.2	19.3	97.7	63.0	58.5	6.36
Geenwich	124	21	SEA	71.9	0	ON O	20	3.7	38.5	36.6	96.8	94.0
Hammersmith & Fulham	7.2	27	27 NO	81.2	1.3	1.3 PDR	6.4	19.7	46.7	76.4	83.7	85.8
Haringey	123	1.5	1.5 NO	86.1	3.5	YES	5.7	13.7	423	28.6	87.0	808
Harrow	8.8	25	YES	9.99	7.4	YES	18.5	19.9	80.3	57.1	64.0	81.1
Havering	6.1	24	YES	9:59	3	3 NO	18.5	18.8	95.0	96.5	94.1	96.3
Hilingdon	13.5	0	YES	51.1	0	ONO ONO	3.8	5.2	65.4	828	620	78.6
Hounstow	11.1	1.3	YES	823	21	YES	10.5	226	82.7	24.0	97.1	98.5
Islington	126	1.8	ON.	218	9	VES .	5.4	15.7	41.2	14.8	2003	968
Kensington & Chelsea	3.5	15.5	YES	87.7	1.1	1.1 PDR	22	18.4	16.3	73.1	80.2	74.6
Kingstan	6.5	0	NO	89.5	0	O PDR	0.1	8.6	1.8	1.6	91.0	9296
Lambeth	5.5	23	NES .	9:68	1.6	1.6 PDR	9.4	35.0	43.0	42.1	93.8	94.8
Lewisham	8.8	11.6	YES	83.9	6.6	6.6 PDR	24	26.4	10.2	11.2	81.1	71.2
Newham	5.8	3.9	NO	70.9	5.2	5.2 NO	11.1	19.3	81.8	23.9	94.2	91.4
Redbridge	5.1	4.5	NO	80.7	27	27 YES	421	43.1	97.5	96.4	90.4	868
Richmond & Twickenham	5.3	0	YES	91	0	PDR	4.2	23.1	33.2	13.5	91.0	94.1
Southwark	6.8	22	YES	86.8	1.4	PDR	7.2	27.9	38.7	38.3	94.0	94.7
Sutton & Merton	5.2	29.5	YES	71.4	19	YES	0.0	25.3	9.0	1.7	0.00	822
Tower Hamlets	4.4	0.9	ON	76.8	3	YES	54.8	64.1	928	89.1	98.0	94.3
Waltham Forest	9.6	13.6	SNO	822	3.5	3.5 PDR	18.0	39.6	96.6	91.4	81.8	82.1
Wandsworth	6.5	27	27 YES	80.9	0.9	0.9 NO	0.9	24.0	7.5	28.4	83.8	83.7
Mhodminotor	00	4.4	216	00	* 4	000	0	, 0,				700

PDR poor data recording in earlier years 03/04 and 04/05, unable to work out growth using this data

>10%	>5%	2	<75%	>5%	2	< 10%	<50%	×80%
5-10%	1-5%		75-85%	1-5%	PDR	10-50%	50-80%	80-30%
% <u>G</u> >	%L>	SEA	>82%	%1>	YES	> 20%	>80%	%06<
						ľ		

\*this is based on mothers known to have been smoking at time of delivery \*\*this is based on LHO performance report data projected trends \*\*\*within 48 hours of birth

### Summary

 We are doing good things in reducing the DETERMINANTS of infant mortality

 BIG push needed to get data quality improved for these

We must ALL remember NO .... IS BEST

young people a hoaliny start 7 Smo 6 Viole 6 Viole 10 Observator 10 Physics 10 Observator	1 Income deprivation 2 Ecological footprint 3 Homelessness 4 Children in poverty 5 GCSE achievement * 6 Violent crime 7 Smoking in pregnancy 8 Breast feeding 9 Obese children 10 Physically active children * 11 Teenage pregnancy (under 18) *	25825 n/a	12.2	H	-		-	Best
posiguà aprit Aonid beobje s Oni commuges		n/a		87	31.1	O A	6	3.3
postph sput konuð beobje s On, communi		90	5.346	5.470	6.430	•	4.8	4.904
hosithy start young people a Our com		28	1.9	7.8	35.8	<ul><li>○</li><li>■</li><li>◆</li></ul>	0	0.0
no seliqoeq gruoy		7845	18.8	21.3	58.8	<b>○</b>	ισ.	5.2
yeşs kujired Yonuğ berdire		1389	64.3	57.5	33.6	0	, jo	81.9
hade Yolling a		3028	14.3	19.8	41.1	<b>*</b>	ισ.	5.0
young people a								
s Kugieou oed Bunok								
pou Junos								
		122	29.4	42.1	85.3	<ul><li>◆</li></ul>	12	12.8
12 Adult	12 Adults who smoke *	n/a	17.8	26.0	37.3	•	#2	15.5
	13 Binge drinking adults	n/a	10.0	18.2	29.2	◆	80	8.8
	14 Healthy eating adults	n/a	31.9	23.8	11.4	•	8	38.1
2 15 Phys	15 Physically active adults	n/a	112	11.8	7.5	00	12	17.2
	16 Obese adults	n/a	19.3	21.8	31.0	0 0	7	14.6
17 Life	17 Life expectancy - male *	n/a	7.8.7	6.97	72.5	•	78	82.2
18	Life expectancy - female *	n/a	82.6	1.18	78.1	<b>○</b>	8	86.2
100	Deaths from smoking	269	186.0	234.4	366.5	<b>⋄</b>	4	147.6
% % 20 Early	Early deaths: heart disease & stroke *	161	78.7	90.5	151.3	0	4	44.9
terliv 24	Early deaths: cancer *	208	102.8	119.0	168.0	<ul><li>○</li><li>□</li><li>○</li></ul>	έō	81.6
	22 Infant deaths *	20	7.1	5.1	8.6	•	-	1.2
23 Roak	23 Road injuries and deaths	7.9	37.6	59.9	214.1	•	20	20.2
24 Feeli	24 Feeling 'in poor health'	14286	6.3	7.8	15.4	<b>○</b>	4	4.2
	25 Mental health	2720	19.9	27.4	72.0	0	œ	8.5
ıβλ	26 Hospital stays due to alcohol	274	126.3	247.7	852.4	<b>◇</b>	86	85.6
ınuu	27 Drug misuse	742	5.2	6.6	34.9	<ul><li>*</li></ul>	1	1.3
78 Peop	28 People with diabetes	11248	5.3	3.7	5.9	<ul><li>•</li></ul>	2	2.1
10	29 Children's tooth decay	n/a	2.0	1.5	3.2	•	0	9.4
	30 Sexually transmitted infections							
31 Olde	31 Older people: hip fracture	214	557.8	565.3	836.8	♦	25	259.7
Significa Significa Not sign	Significantly better than England average Significantly worse than England average Not significantly different from England average * PSA Target Measure 2005-2008	g <sub>1</sub>		ш	England Worst	Regional average England average	England Best	Pu