

Parent's Attitudes to Immunisation

(in the HSE West – Donegal, Sligo, Leitrim, W. Cavan)

Childhood Immunisation Research Study 2005



Louise Cullen
Surveillance Scientist
Dept. of Public Health Medicine

Bernie Mc Nulty
Assistant Director PHN - Immunisation



3rd National Immunisation Conference 3rd May 2006 Cork

Context

Every year more than 3 million people die from vaccine preventable diseases:

Disease	Deaths
Measles	540,000
Hib	386,000
Pertussis	294,000
Tetanus	198,000
Diphtheria	4,000
Polio	<1,000

Source WHO 2002



Why we carried out this research



1. Lack of Irish research.
2. To ascertain parental knowledge and attitudes at local level.
3. Recognition of parental opinion and concerns regarding childhood immunisation.
4. Identification of service need and improvements needed for best practice.

Background

- This study was carried out in a predominately rural area much of it with high levels of deprivation.
- Literature would suggest that:
 - Knowledge of vaccines
 - Influential factors eg. media, internet
 - Personal and economic factors eg. transporthave an impact on the uptake of childhood vaccines.



“ Parents with lower income and less education have more reservations about the benefits of immunisation and the risk of contacting disease, as well as a higher belief that serious side effects will result from immunising their children than did those with higher income and more education ”

(The Epidemiology and Surveillance Division of the Centre for Disease Control)

Aim of project

The aim of this study was to identify reasons why parents in the North West region do not commence or complete the immunisation program for their child.



Objectives



- To identify what factors influence parents decision making.
- To ascertain the level of knowledge amongst parents.
- To explore communication channels between health professionals and parents.
- To identify any particular organisational barriers.



Target Population

- All children born between:
1st June 2002 and 31st August 2003.
(who had not commenced or completed the recommended immunisation schedule)
- 1,205 children
- Each child was checked with either the practice nurse or public health nurse to ensure that our immunisation database was holding accurate information regarding their immunisation status.
- A comparative group of fully vaccinated children born during the same time period were used as controls.

Methodology



- A sample size calculator was used to generate the number needed to be surveyed.
- 1244 questionnaires were sent out in total:
 - 623 (Control) to fully vaccinated children
 - 621 (Target) to unvaccinated / not fully vaccinated
- A cover letter and a stamped addressed envelope was sent with each anonymous questionnaire and a reminder postcard 1 month later.
- 40% of questionnaires were returned & analysed.

Questionnaires Sent Out

- Control group – 623 children
All children had received their vaccinations according to the schedule (+/- 6 months)

- Target group – 621 children
Required:

1 st ,2 nd & 3 rd 5 in 1, Men.C & MMR	71
2 nd & 3 rd 5 in 1, Men.C & MMR	100
3 rd 5 in 1, Men.C & MMR	203
MMR only	224
Refused	23
Total	621





Results

Section A: Background Information on your Child

Section B: Your Details

Section C: Immunisation History

Section D: Level of knowledge of Immunisation

Section E: Factors Influencing Immunisation

Section F: Reasons for **NOT** completing your Child's Immunisation Programme





Section A - Background





- 481 (39%) questionnaires were returned
 - 325 (52%) from the Control Group
 - 151 (24%) from the Target Group

- 98% of questionnaires were completed by the child's mother
(97% in the Control group and 99% in the Target group)

- Of those who replied
 - 285 (60%) are resident in Donegal,
 - 191 (40%) are resident in Sligo/Leitrim

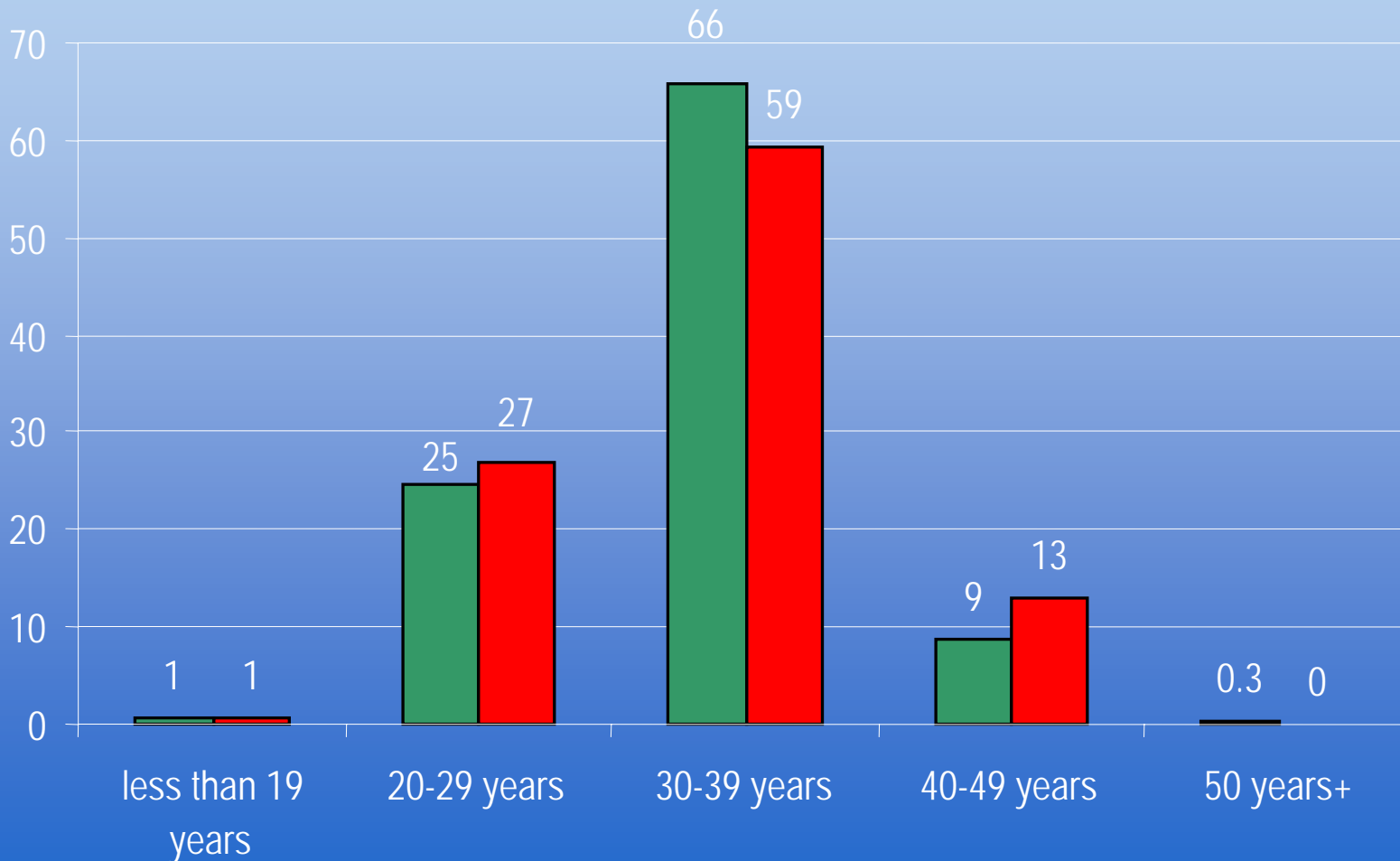


Section B - Your Details



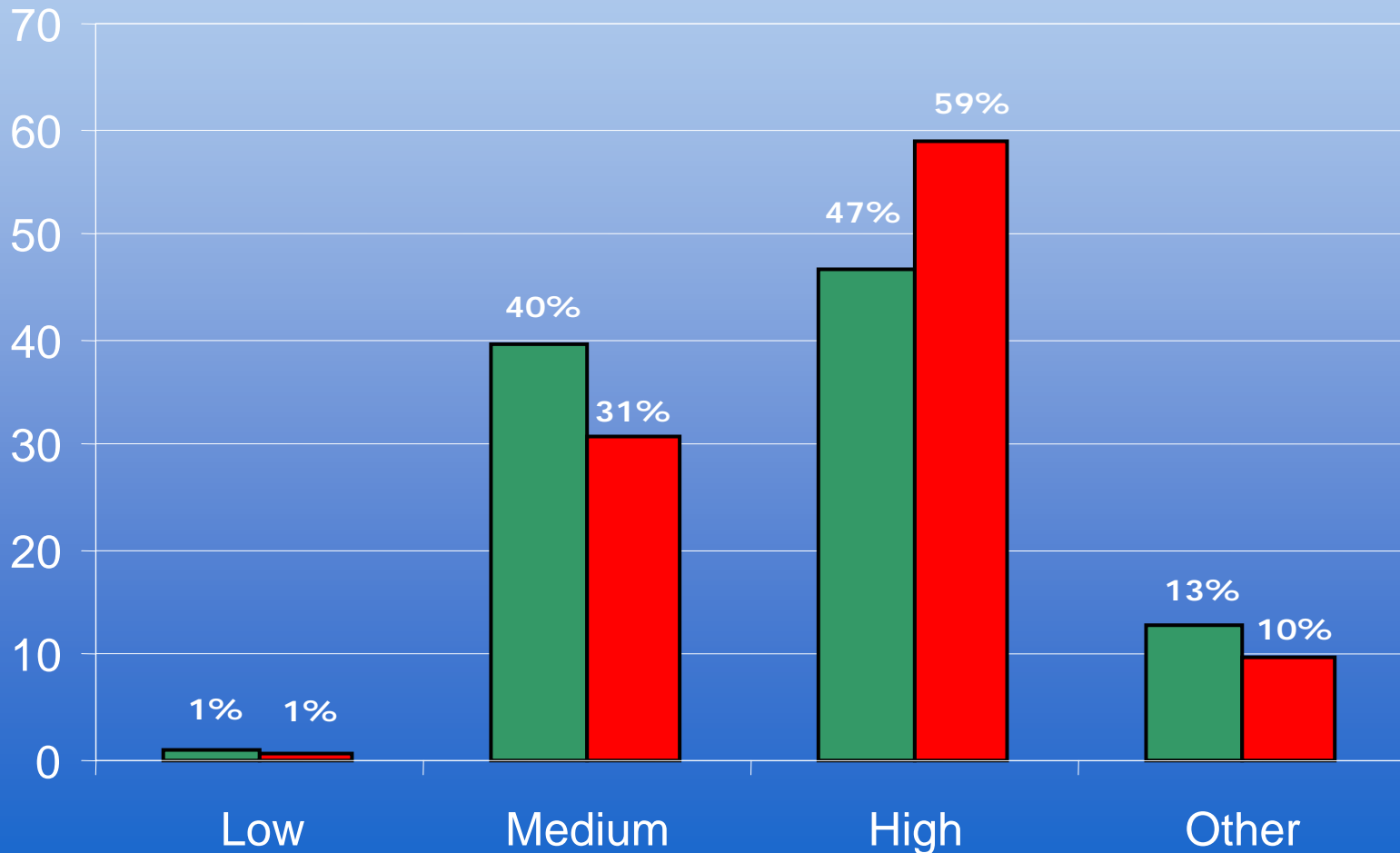
What age are you?

■ % Control ■ % Target

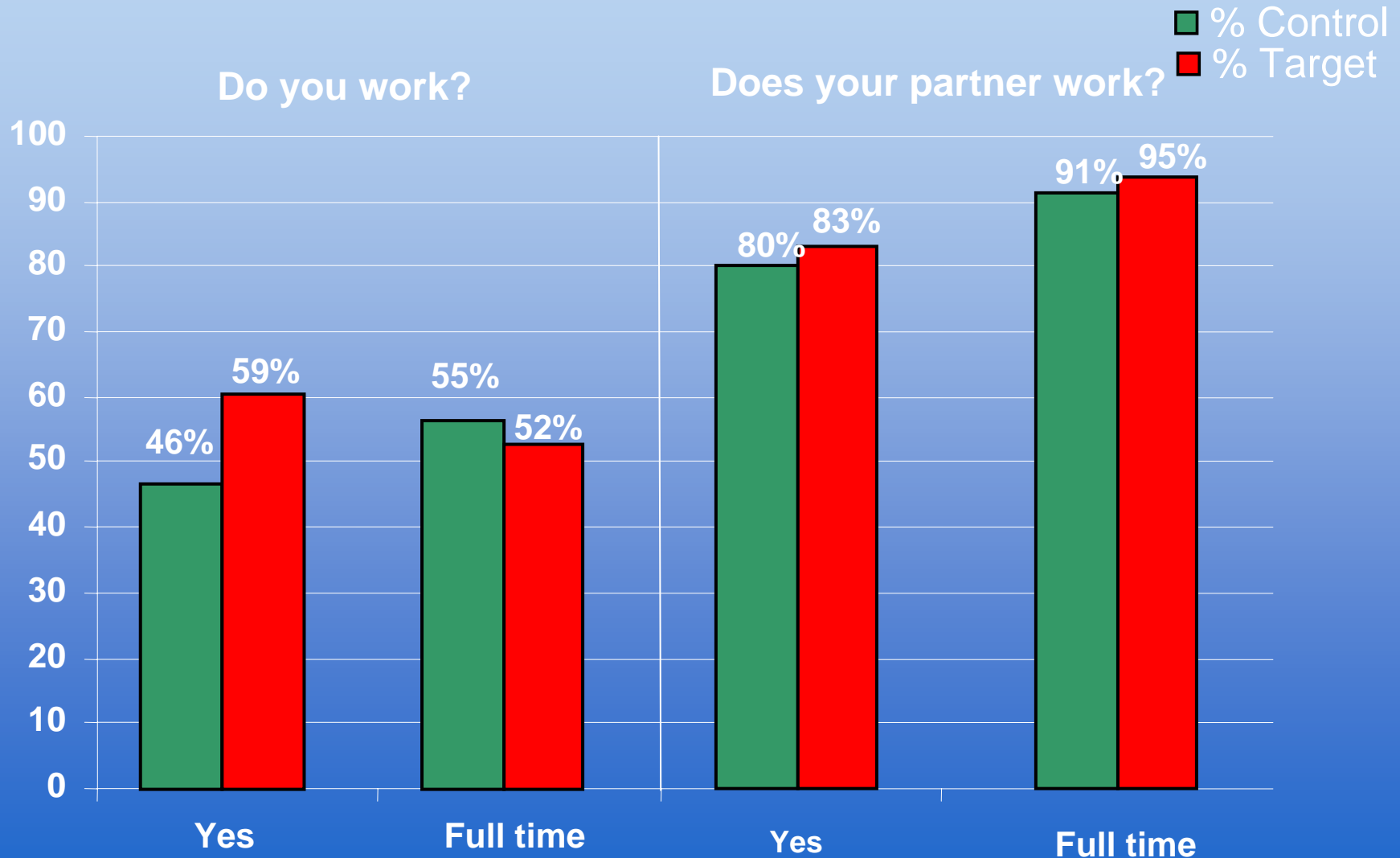


Educational Attainment?

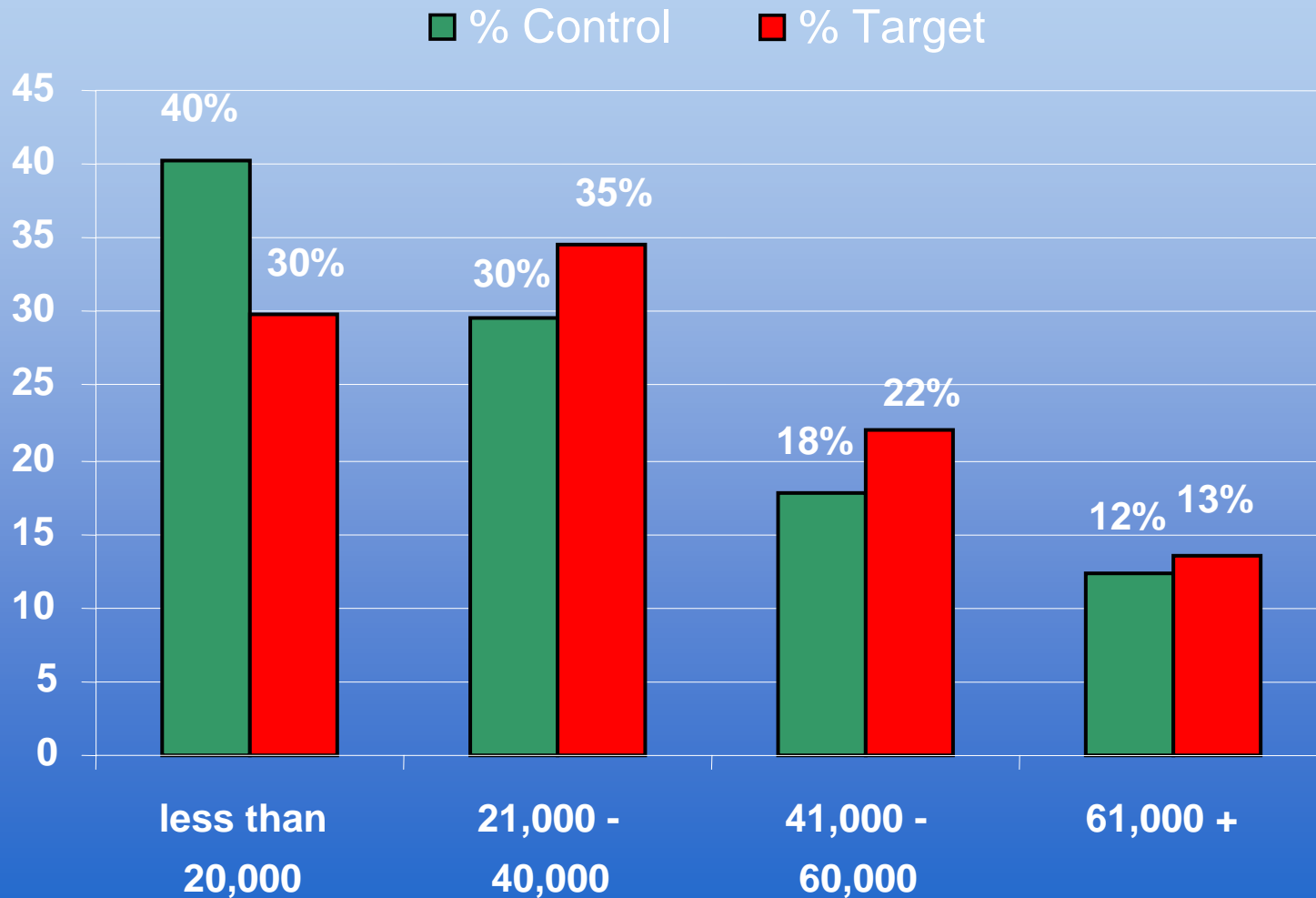
■ % Control ■ % Target



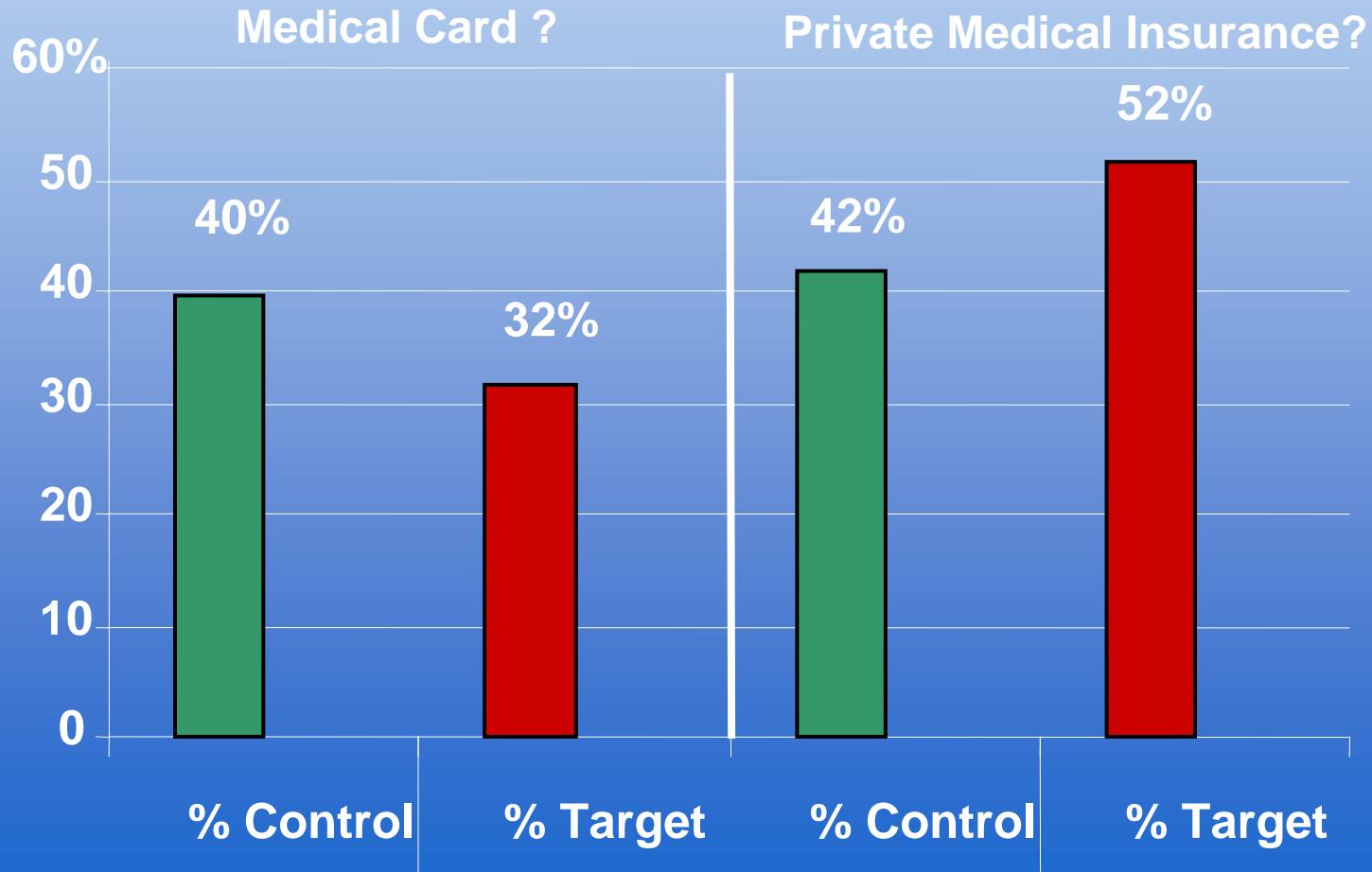
Employment Status?



What is your average gross household income per year?



Do you have a Medical Card / Private Medical Insurance?

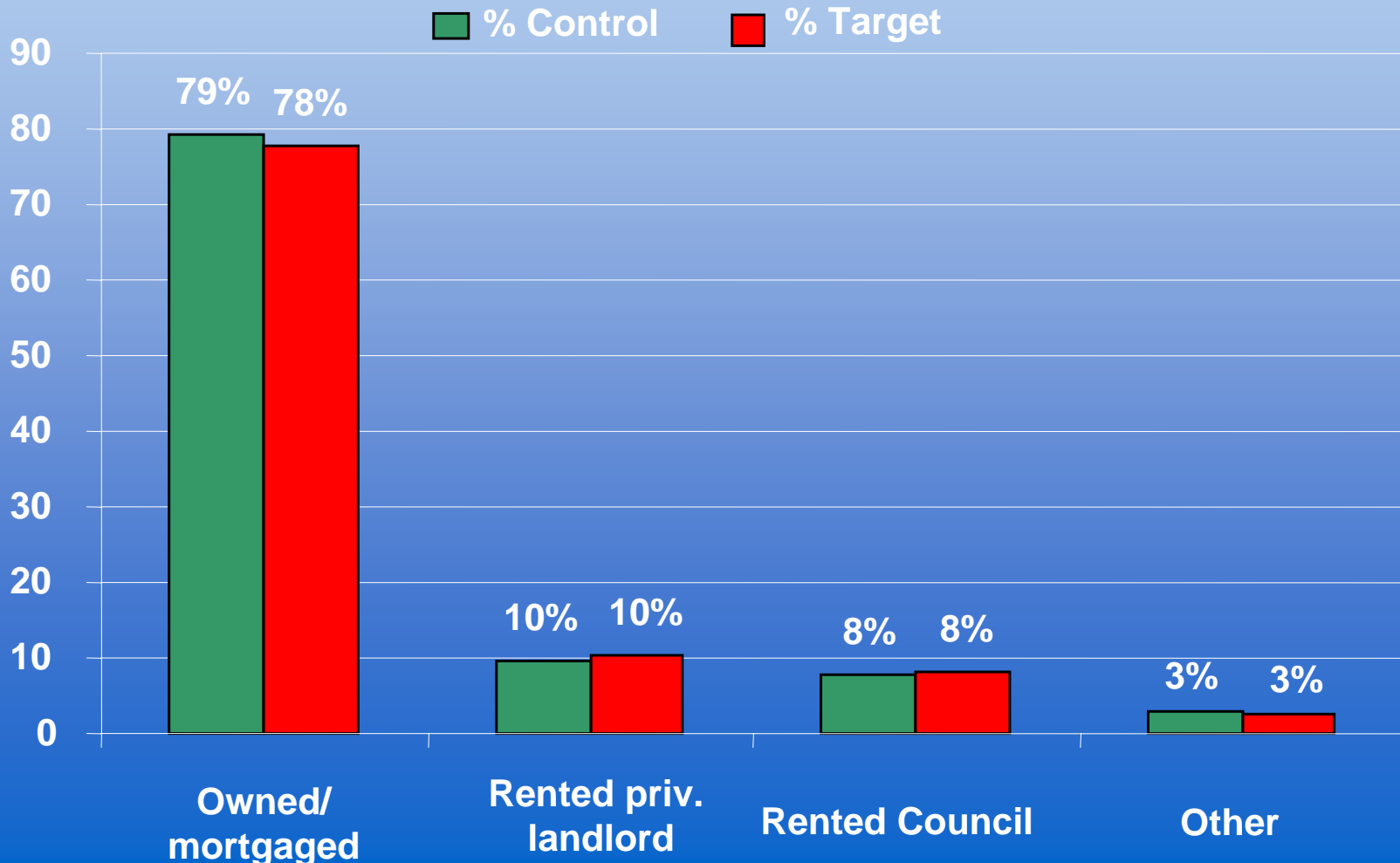


How many cars do you have?



Residence

98% of the Control Group and 97% of the Target Group said that their permanent residence was a house



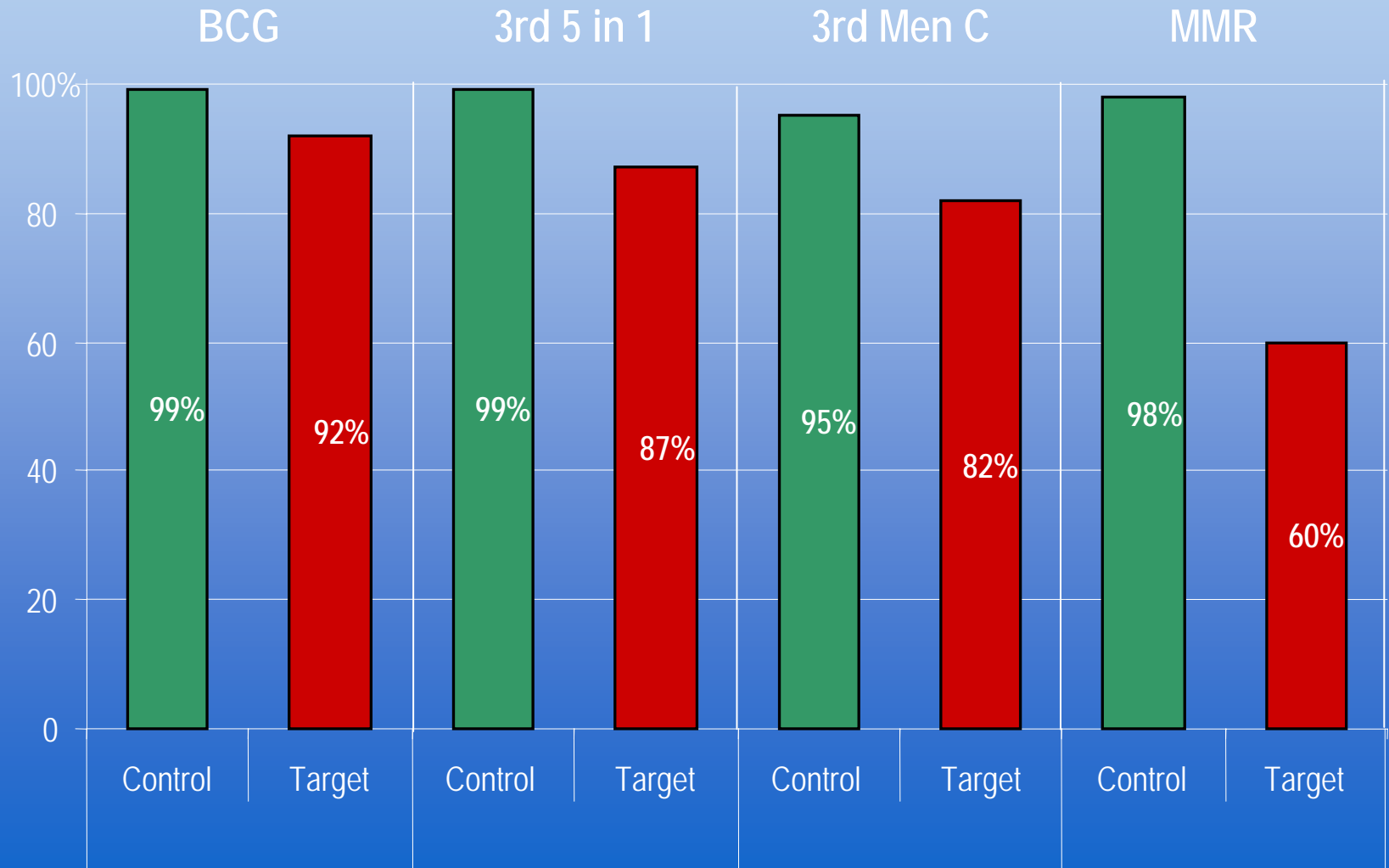


Section C – Immunisation History

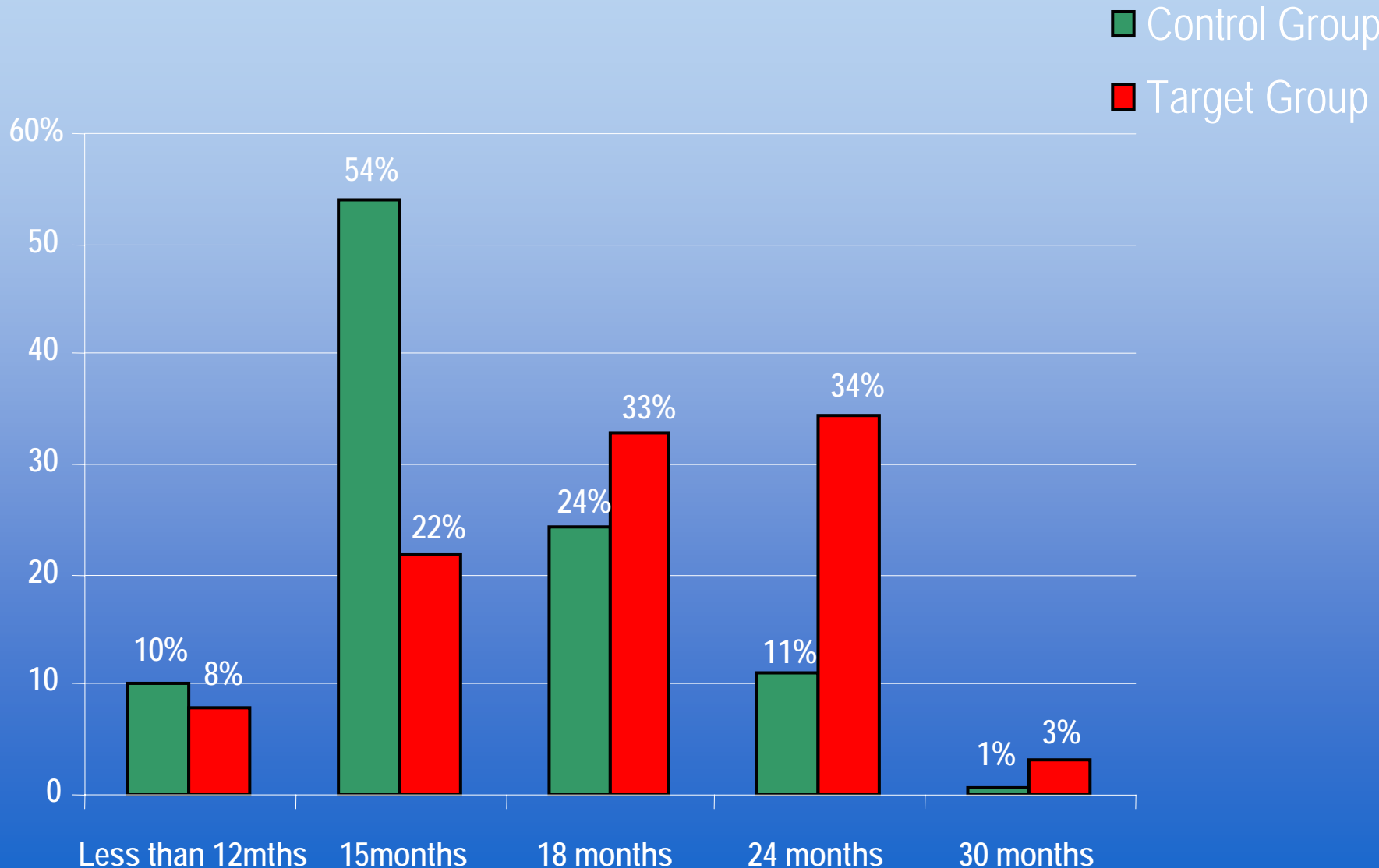


Immunisation History

■ Target
■ Control



Age when MMR vaccine was given



Parental confusion regarding age of administration of MMR vaccine



Control group (who were all fully vaccinated):

- 20% did not answer this question
- 10% said they had received the MMR vaccine under 12mths
- 78% said they had been given the MMR between 12 & 18mths

Target group (in which no child had received the MMR):

60% thought that their child had received the MMR, of these:

- 8% said that they had received the MMR vaccine under 12mths
- 55% said they had been given the MMR between 12 & 18mths
- 34% said they had been given the MMR between 19 & 24mths

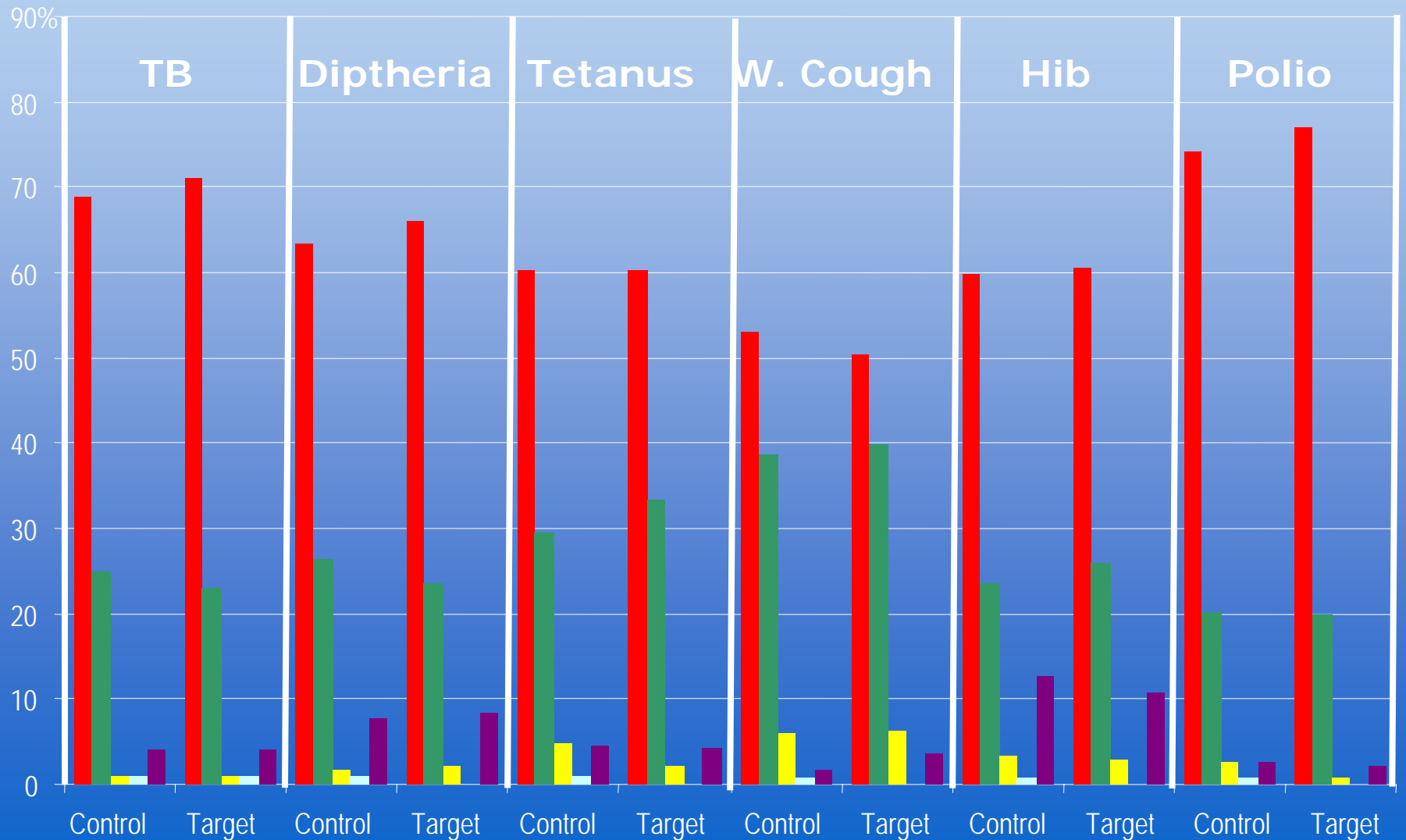


Section D - Immunisation Information



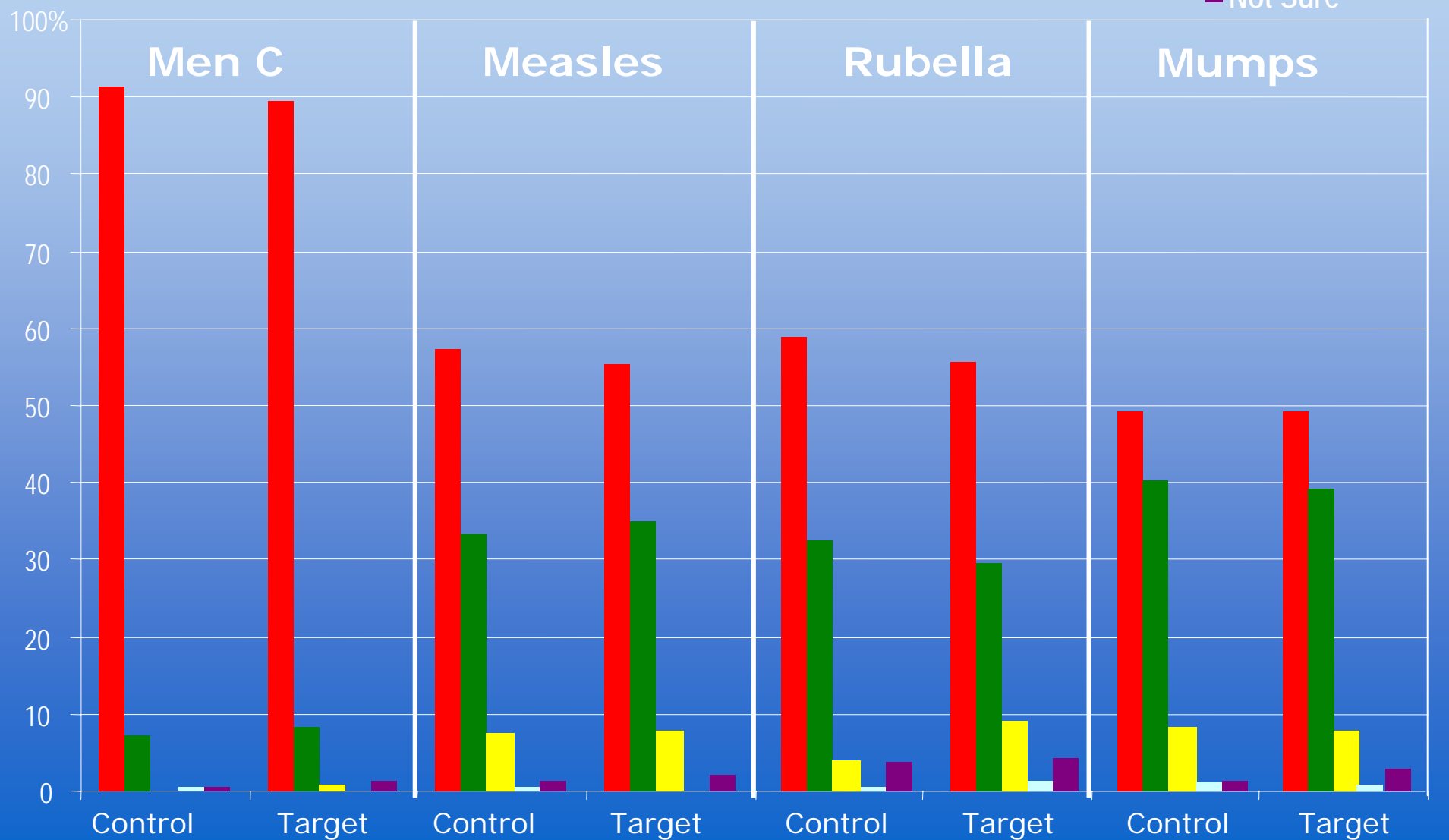
How Serious do you consider ?

- Very Serious
- Serious
- Not Very Serious
- Not at All Serious
- Not Sure



How Serious do you consider ?

- Very Serious
- Serious
- Not Very Serious
- Not at All Serious
- Not Sure



Parental perception of the most serious vaccine preventable disease

Disease	Control	Target
Meningitis C	1 st	1 st
Polio	2 nd	2 nd
Diphtheria	3 rd	4 th
Hib	4 th	5 th
Rubella	5 th	7 th
Measles	6 th	8 th
Mumps	7 th	10 th
Tuberculosis	8 th	3 rd
Tetanus	9 th	6 th
Whooping Cough	10 th	9 th

Please tell us if you believe the following statements are true or false?

1. Immunisations are provided free of charge

Control 99% **Target 98%**

2. Your child is vulnerable if not up to date with their immunisations

Control 98% **Target 93%**

3. Immunisation not only benefits your child but protects the entire community

Control 95% **Target 91%**

4. Your child does not need to be immunised because the diseases that immunisation protect against no longer exist

Control 4% **Target 6%**

5. Immunisation is a necessary part of your child's health program

Control 100% **Target 91%**

6. Your child needs 3 doses of the 5 in 1* and Men C vaccine to be fully protected against these diseases

Control 98% **Target 94%**

Do you agree or disagree with the following statements?

		Strongly agree/agree	Neutral	Strongly Disagree or Disagree	Don't Know
Vaccines are carefully and consistently tested for safety	Control	78 %	8%	2%	13%
	Target	60 %	18%	9%	13%
Children no longer die from vaccine preventable diseases such as measles	Control	33%	6%	48%	13%
	Target	27%	2%	57%	14%
Healthy children do not need immunisations	Control	4%	1%	95%	1%
	Target	7%	1%	91%	1%
A child with a cold should not get immunised	Control	84%	4%	4%	7%
	Target	92%	3%	3%	2%
It is difficult for me to find the time to take my child to get immunised	Control	8%	5%	87%	0
	Target	15%	1%	84%	0



Section E – Factors Influencing Immunisation



Has your child completed his/her immunisation programme?

■ Control Group

Immunisation database

- All children were fully immunised

Parents replied

- 80%

■ Target Group

Immunisation database

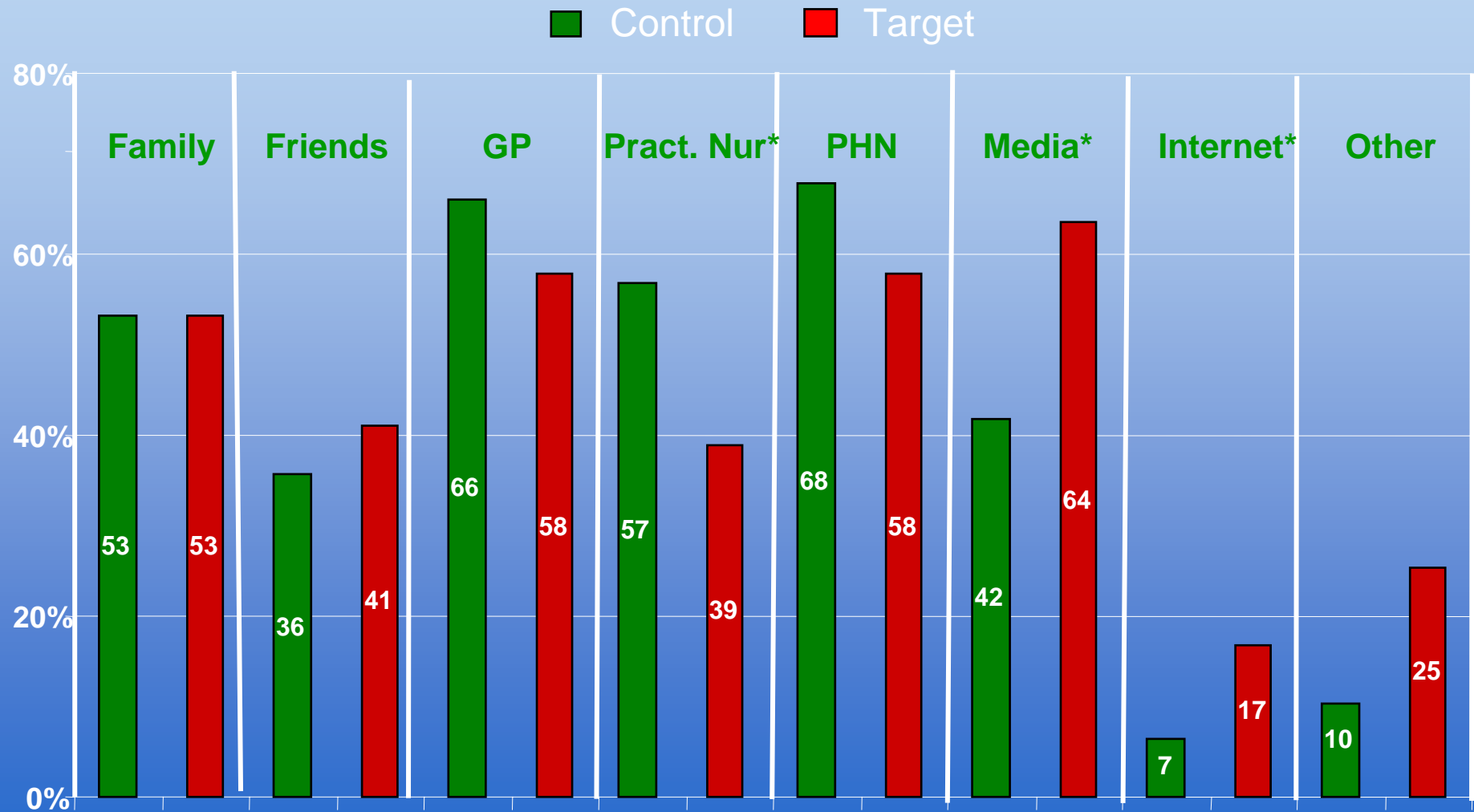
- No child was fully immunised

Parents replied

- 42% immunised



Do you feel that your decision for getting / not getting your child immunised was influenced by any of the following?



Who had the most Influence?



Group	Control	Target
PHN	1 st	2 nd
GP	2 nd	2 nd
Practice Nurse *	3 rd	6 th
Family	4 th	4 th
Media*	5 th	1 st
Friends	6 th	5 th
Internet*	7 th	7 th

Access to Immunisation Services?



1. Do you have access to immunisation at a time that suits you?

Control 88% **Target 83%**

2. Do you have adequate transport to bring your child for immunisation?

Control 95% **Target 94%**

3. Would any of the following made it easier to get your child immunised?

Evening Clinics

Control 53% **Target 55%**

Weekend Clinics

Control 53% **Target 55%**

When visiting G.P. for another reason

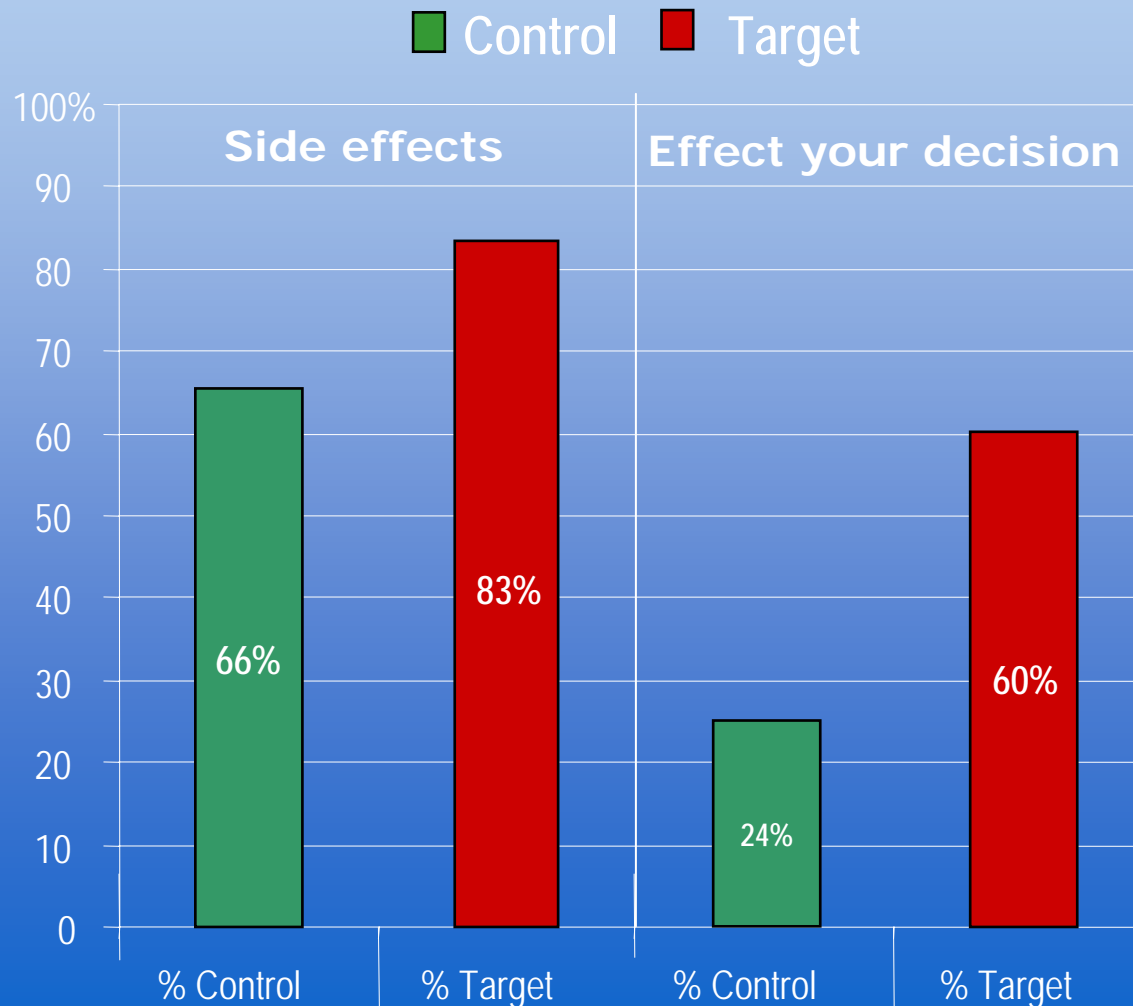
Control 36% **Target 42%**

4. Did you receive a reminder for your child's immunisation?

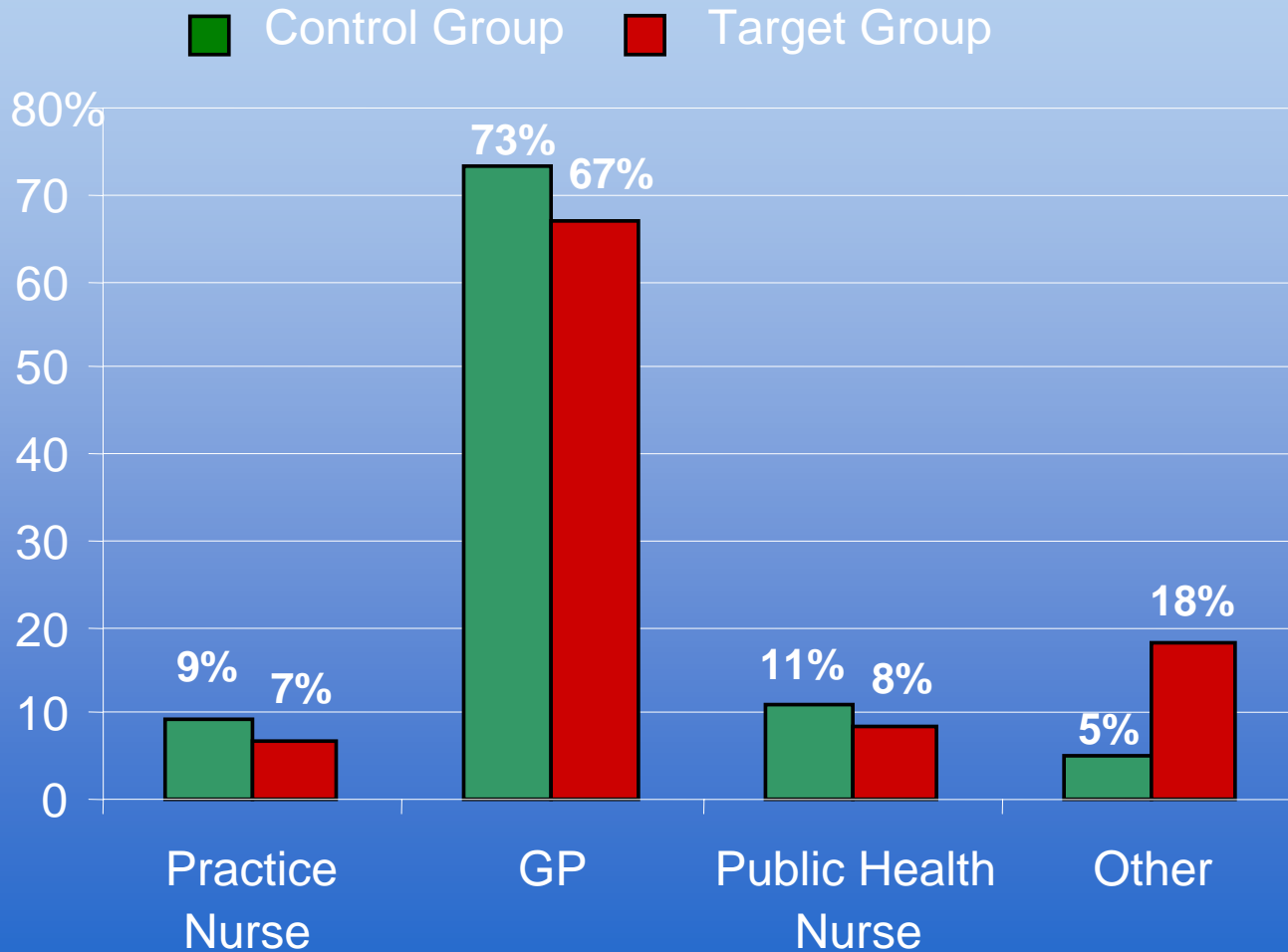
Control 30% **Target 44%**

1.Do have concerns regarding the side effects of immunisations?

2.Did this effect your decision to have your child immunised?

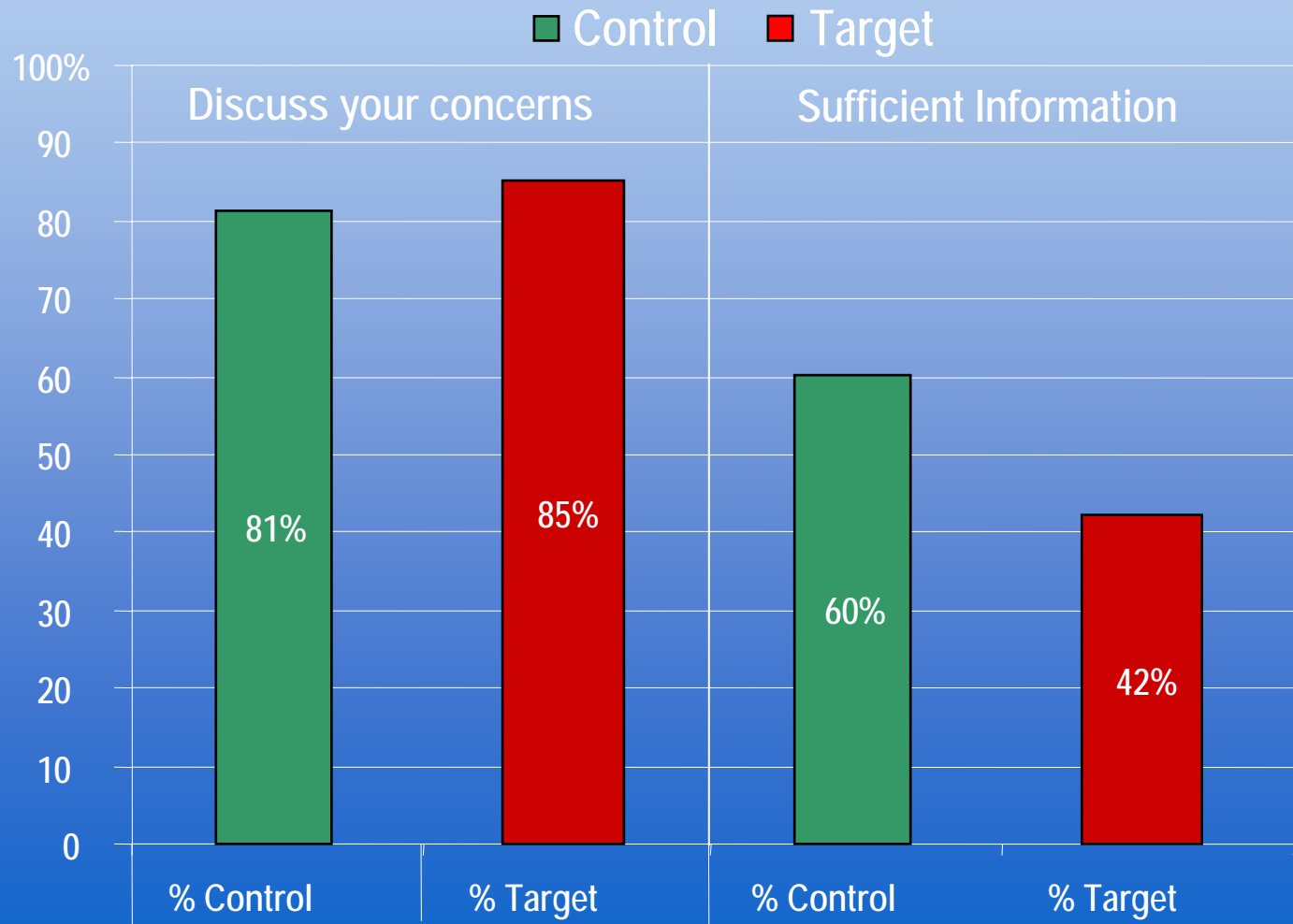


If you have any fears or concerns regarding immunisation of your child whom would you discuss these with?



Did you have the facility to discuss your concerns about immunisation with a health professional?

Do you feel that there is sufficient information about the side effects of immunisation available to you?





Section F-

Reasons for not completing your child's immunisation programme

Completed by the target group only



Reasons for not completing your child's immunisation programme

- | | |
|--|-----|
| 1. Your child became unwell after their last dose of vaccine | 18% |
| 2. Another member of your family had a reaction to an immunisation | 16% |
| 3. Your previous experience attending for immunisation was unpleasant | 11% |
| 4. Child would be immunised against too many diseases at the same time | 32% |
| 5. You were unaware that your child needed more than one dose | 9% |
| 6. Your child received adequate protection after one dose of the vaccine | 6% |
| 7. You felt that too much time had elapsed to continue the programme | 7% |
| 8. You did not have the facility to discuss your concerns | 12% |



In Summary
.....

■ **To identify what factors influence parents decision:**

- Control Group - PHN, GP, Practice Nurse,
- Target Group - Media, GP, PHN,

■ **To ascertain the level of knowledge amongst parents:**

- The Control group scored 75% compared to 76% in the Target group for the level of knowledge about immunisation
- Measles, Mumps & Rubella were not seen as serious disease

■ **To explore communication between health professionals and parents:**

- 84% of the Control group and 80% of the Target group were advised of the benefits of immunisation by a Health Professional
- 83% of the Target group had concerns regarding the side effects of immunisations, while only 67% discussed these fears with their GP

■ **To identify any particular organisational barriers:**

- Over 50% of both groups felt that evening & weekend clinics would have made it easier to get their child immunised
- 30% of the Control Group and only 44% of the Target group got a reminder about the vaccination

Factors Affecting Immunisation Uptake

Literature Suggests:

- Knowledge of vaccines
- **Media, Internet**
- Access to transport
- Deprivation – medical cards
- Low Income
- Lower Education

Our Results Show:

- Comparable knowledge
- Target were;
 - **Influenced by Media, Internet**
 - More access to transport
 - Higher Income
 - Higher Education
 - More likely to have private medical insurance

In light of this study what do we need to do differently in the NW

- Reminder letters to the defaulters
- Pilot evening and weekend GP clinics
- Using GIS to identify areas of low uptake

Conclusion.....

This study illustrates the value of Irish based research and also highlights the need and benefit of local research.

Currently we are working with local providers to implement the lessons learned from this study.

Acknowledgements

- Funding – Department of Health & Children
- Martina Walsh – Data Entry of Questionnaires
- Tracey Mc Cole – Data Entry of Questionnaires
- Amanda Mc Erlene – Surveillance Officer
- Dr. Anthony Breslin – Consultant in Public Health Medicine

