

**CYCLONE GILLIAN.  
WARNINGS,  
AWARENESS AND  
PREPAREDNESS**

**A HOUSEHOLD SURVEY  
CONDUCTED BY THE DISASTER  
STUDIES CENTRE OF JAMES  
COOK UNIVERSITY OF NORTH  
QUEENSLAND, ON BEHALF OF  
THE BUREAU OF  
METEOROLOGY**

**TOWNSVILLE, FEBRUARY 1997**

# CYCLONE GILLIAN. WARNINGS, AWARENESS AND PREPAREDNESS

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### EXECUTIVE SUMMARY

### RESEARCH METHOD

A survey of 200 households was carried out in all urban suburbs of Townsville and Thuringowa between 18th and 20th February, one week after cyclone Gillian had approached the coast of Townsville on Wednesday 12th February. Households were selected randomly within each suburb. The number of households selected from each suburb was based upon the number of households enumerated in each suburb in the 1991 census. Thus the sample is proportionately representative of all communities within the urban area of Townsville and Thuringowa.

Data were collected by survey, using a questionnaire instrument which was administered directly to each respondent by a team of interviewers. This enabled both a rapid turn around of interviews as well as the collection of open ended comments or opinions. Answers were coded and analysed using SPSS (Statistical Package for the Social Sciences). This report was written by David King, Director of the Centre for Disaster Studies, and interviews were carried out by Bretta Girling-King, Kate Girling-King, Tom Measham, Pip Moore, Jay Quadrio, and Tim Pulsford

### RESULTS

**Table 1. Public perception of cyclone warnings**

| Attitude to warning advice | Number of respondents | Percent |
|----------------------------|-----------------------|---------|
| False alarm                | 22                    | 11.1    |
| Over reaction              | 53                    | 26.6    |
| Close call                 | 82                    | 41.2    |
| Near Miss                  | 28                    | 14.1    |
| Other                      | 14                    | 7.0     |

**Table 2. Expectations of the Impact of the Weather Based on BOM advice**

| Weather impact                 | Number of respondents | Percent |
|--------------------------------|-----------------------|---------|
| Weather was less than expected | 114                   | 57.3    |
| Weather was more than expected | 7                     | 3.5     |
| Weather was as expected        | 78                    | 39.2    |

**Table 3. Did You Plot the Cyclone on a Map**

| Did you plot the cyclone    | Number of respondents | Percent |
|-----------------------------|-----------------------|---------|
| Yes - in the telephone book | 25                    | 12.5    |

|                             |     |      |
|-----------------------------|-----|------|
| <b>Yes - on another map</b> | 35  | 17.5 |
| <b>No</b>                   | 139 | 69.5 |
| <b>Other response</b>       | 1   | 0.5  |

**Table 4. Perception of BOM Statements on Cyclone Precautions**

| <b>Preparation advice</b> | <b>Number of respondents</b> | <b>Percent</b> |
|---------------------------|------------------------------|----------------|
| <b>Very useful</b>        | 68                           | 34.2           |
| <b>Of some use</b>        | 94                           | 47.2           |
| <b>Of No use</b>          | 37                           | 18.6           |

**Table 5. Perception of BOM Statements on Cyclone Precautions by Age**

| <b>Age</b>            | <b>Very useful</b> | <b>Some use</b> | <b>No use</b> | <b>Row percent</b> |
|-----------------------|--------------------|-----------------|---------------|--------------------|
| <b>Under 30 years</b> | 12                 | 25              | 7             | 22.1               |
| <b>30 to 60 years</b> | 43                 | 57              | 19            | 59.8               |
| <b>Over 60 years</b>  | 13                 | 12              | 11            | 18.1               |
| <b>Column Percent</b> | 34.2               | 47.2            | 18.6          | 100                |

**Table 6. Perception of BOM Statements on Cyclone Precautions by Occupational Category**

| <b>Occupation Category</b>     | <b>Very useful</b> | <b>Some use</b> | <b>No use</b> | <b>Row percent</b> |
|--------------------------------|--------------------|-----------------|---------------|--------------------|
| <b>Professional/Managerial</b> | 8                  | 10              | 3             | 10.6               |
| <b>Clerical</b>                | 11                 | 9               | 7             | 13.6               |
| <b>Skilled Tradespersons</b>   | 14                 | 16              | 6             | 18.1               |
| <b>Semi skilled</b>            | 6                  | 10              | 0             | 8.0                |
| <b>Unskilled</b>               | 4                  | 7               | 6             | 8.5                |
| <b>Others *</b>                | 16                 | 32              | 5             | 26.6               |
| <b>Retired</b>                 | 9                  | 10              | 10            | 14.6               |
| <b>Column percent</b>          | 34.2               | 47.2            | 18.6          | 100                |

**Table 7. Opinion on Other Cyclone Information in Telephone Book**

| <b>Other information</b>         | <b>Number of respondents</b> | <b>Percent</b> |
|----------------------------------|------------------------------|----------------|
| <b>Very useful</b>               | 21                           | 10.5           |
| <b>Of Some use</b>               | 33                           | 16.5           |
| <b>Of No use</b>                 | 10                           | 5.0            |
| <b>Did not know it was there</b> | 136                          | 68.0           |

**Table 8. Understanding of Cyclone Warning Advice**

| <b>Cyclone Advice</b>          | <b>Number of respondents</b> | <b>Percent</b> |
|--------------------------------|------------------------------|----------------|
| <b>Easy to understand</b>      | 189                          | 94.5           |
| <b>Difficult to understand</b> | 10                           | 5.0            |
| <b>Other response</b>          | 1                            | 0.5            |

**Table 9. Source of Information on the Approach of the Cyclone**

| Source of information | Number of respondents | Percent |
|-----------------------|-----------------------|---------|
| Commercial TV         | 81                    | 40.5    |
| ABC TV                | 13                    | 6.5     |
| Commercial Radio      | 76                    | 38.0    |
| ABC Radio             | 11                    | 5.5     |
| Friends and relatives | 5                     | 2.5     |
| Employer              | 2                     | 1.0     |
| Other source          | 12                    | 6.0     |

**Table 10. Knowledge of the Location of the Nearest Cyclone Shelter**

| Knowledge of nearest shelter | Number of respondents | Percent |
|------------------------------|-----------------------|---------|
| Yes                          | 23                    | 11.6    |
| No                           | 176                   | 88.4    |

**Table 11. Time of Hearing Cyclone Alert**

| Time of Hearing Alert | Number of respondents | Percent |
|-----------------------|-----------------------|---------|
| Before 1 pm           | 86                    | 43.0    |
| Between 1 and 3 pm    | 26                    | 13.0    |
| After 3 pm            | 8                     | 4.0     |
| Not at all            | 79                    | 39.5    |
| Other response        | 1                     | 0.5     |

**Table 12. Time that Employer Instructed Employees to Leave**

| Time sent home          | Number of respondents | Percent |
|-------------------------|-----------------------|---------|
| Before 1 pm             | 20                    | 22.0    |
| Between 1 and 3 pm      | 17                    | 18.7    |
| After 3 pm              | 6                     | 6.6     |
| No instruction to leave | 45                    | 49.5    |
| Other response          | 3                     | 3.3     |

**Table 13. Source of Information on Early Closure of Schools**

| Information on school closure | Number of respondents | Percent |
|-------------------------------|-----------------------|---------|
| School contacted you          | 14                    | 22.6    |
| You contacted school          | 3                     | 4.8     |
| Employer/public address       | 5                     | 8.1     |
| TV/radio                      | 20                    | 32.3    |
| Unaware                       | 3                     | 4.8     |
| Other source of information   | 17                    | 27.4    |

**Table 14. Level of Satisfaction of Parents with Early Closure Arrangements**

| Level of satisfaction with school | Number of respondents | Percent |
|-----------------------------------|-----------------------|---------|
|-----------------------------------|-----------------------|---------|

|                          |    |      |
|--------------------------|----|------|
| <b>closure</b>           |    |      |
| <b>Very dissatisfied</b> | 8  | 12.7 |
| <b>Dissatisfied</b>      | 7  | 11.1 |
| <b>No opinion</b>        | 7  | 11.1 |
| <b>Satisfied</b>         | 29 | 46.0 |
| <b>Very satisfied</b>    | 12 | 19.0 |

**Table 15. Information on Early School Closure by Level of Parental Satisfaction**

| <b>Information source</b>      | <b>Very dissatisfied</b> | <b>Dissatisfied</b> | <b>No opinion</b> | <b>Satisfied</b> | <b>Very satisfied</b> | <b>Row percent</b> |
|--------------------------------|--------------------------|---------------------|-------------------|------------------|-----------------------|--------------------|
| <b>School contacted you</b>    | 1                        | 1                   | 1                 | 7                | 4                     | 23.0               |
| <b>You contacted school</b>    | 0                        | 0                   | 2                 | 0                | 0                     | 3.3                |
| <b>Employer/public address</b> | 1                        | 0                   | 1                 | 2                | 1                     | 8.2                |
| <b>TV/radio</b>                | 2                        | 2                   | 2                 | 9                | 5                     | 32.8               |
| <b>Unaware</b>                 | 1                        | 1                   | 1                 | 0                | 0                     | 4.9                |
| <b>Other source</b>            | 2                        | 3                   | 0                 | 10               | 2                     | 27.9               |
| <b>Column percent</b>          | 11.5                     | 11.5                | 11.5              | 45.9             | 19.7                  | 100                |