

A close-up, black and white photograph of an Agilent 34970A Data Acquisition/Switch Unit. The device features a digital display showing 'MUX' and 'T/E 303'. Below the display are several control buttons including 'Sto/Rcl', 'Scan', 'Measure', 'Interval', 'Configure', and 'Control'. A large, semi-transparent grey arrow points from the left towards the right, passing behind the main title text.

# How can we know our homes are healthy?

**The Healthy House Index**  
**Malcolm Cunningham, BRANZ**

# Collaboration

**Between:**

- **BRANZ (Ltd)**
- **Housing and Health Group (Wellington School of Medicine)**

# What is the Healthy House Index (HHI)?

- **A single number**
- **Summarising the healthiness and safety of a given house**

# Aimed at:

- **Local Government**
- **Central Government.** Health, ACC, Building and Housing, Social Welfare, TPK, Statistics, SANZ, EECA, HNZC, etc.
- **District Health Boards**
- **Large Landlords (HNZ, Iwi, Local Government)**
- **Designers**

# To provide them with a quantitative tool for:

- improving occupant health
- assessing stock condition
- policy development
- targeting of resources
- setting of targets
- designing and auditing retrofit regimes
- regulation
- advocacy
- common language for communication between agencies

# Pilot Study in the Hutt Valley

- **Supported by:**

- ACC
- Hutt DHB
- Hutt City Council

# Pilot Study in the Hutt Valley

- **Tested a HHI questionnaire**
- **Refined protocols and logistics**

# Sample of questionnaire

## 6. INTERNAL STAIRS

6.1 None required

	1/0
	1/0
	1/0

6.2 Required but not provided

6.2 Split level house with internal stairs between levels

6.3 Vertical height gained by longest single flight

	metres
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6.3 Staircase structurally sound?

Yes

	1
--	---

No

	0
--	---

6.4 Slippery

Yes

	1
--	---

No

	0
--	---

6.5 Too steep (greater than 42 degrees)?

Yes

	1
--	---

No

	0
--	---

6.6 Stair gates provided?

6.6.1 At the top of the stairs?

Yes

	1
--	---

No

	0
--	---

6.6.2 At the bottom of the stairs?

Yes

	1
--	---

No

	0
--	---

6.6.3 Stair gate is secure/sturdy?

Yes

	1
--	---

No

	0
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# Results

- **Found a statistically significant correlation between accident rate and the number of hazards**

## **Taranaki study**

- **To create data showing correlations between house condition and health of occupants**

# After that

- **Market the HHI**
- **Train Assessors**
- **Create central database**

## **REALISTICALLY ACHIEVABLE**

- **Very widely used nationwide infrastructure to quantitatively assess the health and safety of homes**

## **LEADING TO**

- **Healthier NZ population living in more healthy and safer homes**