

An Agilent 34970A Data Acquisition/Switch Unit is shown in the foreground. The screen displays 'MUX' and 'T/E 305'. Below the screen are buttons for 'Sto/Rec', 'Scan', 'Measure', 'Interval', and 'Configure'. The background is blurred, showing a person in a white lab coat.

How can we know our homes are healthy?

The Healthy House Index

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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, HNZA, 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	<input type="text"/>	1/0
6.2 Required but not provided	<input type="text"/>	1/0
6.2 Split level house with internal stairs between levels	<input type="text"/>	1/0
6.3 Vertical height gained by longest single flight	<input type="text"/>	metres
6.3 Staircase structurally sound?		
Yes	<input type="text"/>	1
No	<input type="text"/>	0
6.4 Slippery		
Yes	<input type="text"/>	1
No	<input type="text"/>	0
6.5 Too steep (greater than 42 degrees)?		
Yes	<input type="text"/>	1
No	<input type="text"/>	0
6.6 Stair gates provided?		
6.6.1 At the top of the stairs?		
Yes	<input type="text"/>	1
No	<input type="text"/>	0
6.6.2 At the bottom of the stairs?		
Yes	<input type="text"/>	1
No	<input type="text"/>	0
6.6.3 Stair gate is secure/sturdy?		
Yes	<input type="text"/>	1
No	<input type="text"/>	0

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**