

Supplementary material

Table S1 Extract of questions from the household and general health survey used for this study.

Question	Response options
<i>Demographics and socio-economic status</i>	
What is your age (in years)?	[Number of years]
What is the highest qualification for PERSON NAME?	<ul style="list-style-type: none"> • Currently in primary school; • Finished primary school; • Currently in high school; • Finished high school; • Currently studying towards a tertiary qualification degree diploma; • Completed tertiary qualification degree diploma; • Other.
What is the total monthly income (in Rand) for this household? (Fieldworker: you can skip this question if the respondent is unwilling to disclose their income.)	[Amount in ZAR]
Which of the following best describes the situation of PERSON NAME?	<ul style="list-style-type: none"> • Retired person pensioner; • Unable to work due to disability; • Unemployed, not wishing to work; • Unemployed looked for work in past three months; • Unemployed, not looking for work but will accept work; • Housewife homemaker; • Self-employed, e.g., selling goods, hair salon etc.; • Part-time employed, including seasonal work; • Paid full-time employment;

1
2
3

	<ul style="list-style-type: none"> • School pupil full-time student; • School going age not going to school; • Too young for school; • Is in a crèche daycare centre during the day.
Do you ever eat less than you should because there is not enough money for food?	<ul style="list-style-type: none"> • Yes • No
Does this household ever run out of money to buy food?	<ul style="list-style-type: none"> • Yes • No
<i>Housing conditions/ household characteristics</i>	
Where is your toilet located?	<ul style="list-style-type: none"> • Inside the house • Outside the house
What is the main source of water for this household?	<ul style="list-style-type: none"> • Indoor tap; • Outdoor tap at the house; • Outdoor tap (away from the house) within 200m of the house; • Outdoor tap (away from the house) more than 200m from the house; • Water tanks such as JoJo tank; • Borehole; • Spring point at which water flows from the ground to the earth's surface; • Rainwater collected and stored; • Dam pool; • River stream; • Water vendor.
Is your household waste collected by the municipality or another agency?	Yes No
What do you do with your waste when it is not collected?	<ul style="list-style-type: none"> • Bury it; • Burn it;

	<ul style="list-style-type: none"> • Dispose of it in nearby open spaces; • Take it to the municipal waste dump site; • Other. • Yes • No • Yes, some rooms • Yes, all rooms • No
Does your stove make the house smoky inside?	<ul style="list-style-type: none"> • Yes • No
Does the house have a ceiling?	<ul style="list-style-type: none"> • Yes, some rooms • Yes, all rooms • No
<i>Main energy use</i>	
Which fuel do you use most of the time to cook? (Tick one option only)	<ul style="list-style-type: none"> • Electricity; • Gas; • Paraffin; • Wood; • Coal; • Other.
Which fuel do you use most of the time to heat your house? (Tick one option only)	<ul style="list-style-type: none"> • Electricity; • Gas; • Paraffin; • Wood; • Coal; • Other.
Which fuel do you use most of the time for lighting? (Tick one option only)	<ul style="list-style-type: none"> • Electricity; • Gas; • Paraffin; • Other.
<i>Health</i>	
Acute illness: During the past two weeks, has a doctor or nurse diagnosed PERSON NAME with one or more of the following illnesses?	<ul style="list-style-type: none"> • Stroke; • Heart attack; • Pneumonia; • Bronchitis non-chronic;

	<ul style="list-style-type: none"> • Meningitis; • Vomiting; • Diarrhoea; • None of the above.
<p>Chronic illness:</p> <p>Has a doctor or nurse ever diagnosed PERSON NAME with one or more of the following illnesses? You do not have to disclose this information if you feel uncomfortable doing so.</p>	<ul style="list-style-type: none"> • High blood pressure/ hypertension; • Diabetes/ High blood sugar; • Arthritis; • Tuberculosis; • Heart failure; • Asthma; • Chronic lung disease/ Bronchitis; • Headaches; • Cancer; • HIV/ AIDS; • None of the above.
Does PERSON NAME smoke?	<ul style="list-style-type: none"> • Yes • No
Does PERSON NAME smoke inside the house?	<ul style="list-style-type: none"> • Yes • No

4 Note: The analysis did not include data on household smoking, as only 7.5% of individuals in the households smoked. Among these,
5 only half smoked inside the house (n = 38 across both communities), and no discernible effect was established.