

PEOPLE LIVING IN INFORMAL SETTLEMENTS

GENERAL CONSIDERATIONS	
<i>Issues</i>	<p>Perinatal diseases</p> <p>Diarrhoeal diseases</p> <p>Physical injuries</p>
<i>Type of indicator</i>	<p>Exposure (distal/state)</p> <p>Can also be used as a measure of action in relation to housing quality.</p>
<i>Rationale</i>	<p>Rapid urbanization and inadequate capability to cope with the housing needs of people in urban areas have contributed to the development of informal settlements. Living in these settlements often poses significant health risks. Sanitation, food storage facilities and drinking water quality are often poor, with the result that inhabitants are exposed to a wide range of pathogens and houses may act as breeding grounds for insect vectors. Cooking and heating facilities are often basic, with the consequence that levels of excessive exposures to indoor pollution may occur. Access to health and other services may be limited; overcrowding can contribute to stress, violence and increased problems of drugs and other social problems. Together, these pose special risks to children both during the prenatal period and after birth. This indicator provides a general measure of these risks.</p>
<i>Issues in indicator design</i>	<p>Severe problems exist both in defining 'informal settlements' and in obtaining reliable data on the number of people who live within them.</p> <p>The definition of informal settlements is context-specific. Various definitions have thus been proposed, but that suggested by the UN Habitat Programme is probably the most widely applicable. This defines informal settlements as: i) residential areas where a group of housing units has been constructed on land to which the occupants have no legal claim, or which they occupy illegally; ii) unplanned settlements and areas where housing is not in compliance with current planning and building regulations (unauthorized housing).</p> <p>Many other terms and definitions have also been devised for informal human settlements, for example: unplanned settlements, squatter settlements, marginal settlements, unconventional dwellings, non-permanent structures, inadequate housing, slums, housing in compliance etc. <i>Unconventional dwellings</i> are commonly defined by the number of housing units occupied by households, but considered inappropriate to human habitation. <i>Housing in compliance</i> is used as a Human Settlements Indicator by the UN Habitat Programme and is defined as the percentage of the total housing stock in urban areas which is in compliance with current regulations (authorized housing). Housing may also be categorized by its type or permanence (e.g. permanent, semi-permanent, non-permanent), although definitions of these categories vary widely from country to country.</p> <p>Problems occur in measuring the extent or defining the boundaries of such settlements. By definition, officially recognized boundaries to these settlements rarely exist, and the settlements themselves often merge almost imperceptibly into formal areas of housing, industrial or rural areas. Use of remotely sensed data (e.g. aerial photography or high resolution satellite data) may be useful in this context.</p> <p>Similar difficulties occur in obtaining data on the numbers of people who live within these settlements. They are often not covered by formal censuses,</p>

	and many of the people living in the settlements may not be registered or officially recognized. Most population data are therefore estimates, and as such are subject to considerable uncertainties.
SPECIFICATION	
<i>Definition</i>	Percentage of the population (or number of people) living in informal settlements.
<i>Terms and concepts</i>	<p>Informal settlements: based on the UN Habitat Programme definition, these are defined as: i) residential areas where a group of housing units has been constructed on land to which the occupants have no legal claim, or which they occupy illegally; ii) unplanned settlements and areas where housing is not in compliance with current planning and building regulations (unauthorized housing).</p> <p>Unauthorized housing: excludes units where land titles, leases or occupancy permits have been granted (UN 1996).</p> <p>It should be noted that informal settlements do NOT cover the homeless.</p>
<i>Data needs</i>	<p>Number of people living in informal settlements.</p> <p>Total population.</p>
<i>Data sources, availability and quality</i>	<p>Information on the number of people living in informal settlements is often limited, since inhabitants are often only inadequately covered by formal censuses: census data may therefore not provide a clear separation of those living in informal settlements. Where suitable census data do not exist, special surveys may be necessary.</p> <p>Data on the total population should be available from national censuses and should be broadly reliable.</p>
<i>Level of spatial aggregation</i>	Municipality, district etc
<i>Averaging period</i>	Annual to decadal
<i>Computation</i>	<p>The indicator is computed as:</p> $100 * P_{inf} / P_{tot}$ <p>where P_{inf} is the number of people living in informal settlements and P_{tot} is the total number population.</p>
<i>Units of measurement</i>	Percentage (or number)
<i>Worked example</i>	<p>Assume that a total of 3 600 people are counted in informal settlements, from a total city population of 26 900. In this case, the value of the indicator will be:</p> $100 * (3\ 600 / 26\ 900) = 13.4\%$
<i>Interpretation</i>	<p>This indicator provides a relatively straightforward measure of the quality of housing, and thus of the risks to children's health. A large percentage of people living in informal settlements can be taken to imply an increased risk to children's health; a low percentage implies a reduced risk.</p> <p>Nevertheless, the relationship between the number of people living in informal settlements and environmental health is not always simple. In particular, those living in formal settlements are not necessarily better provided for (e.g. the homeless or people living in crowded or unsafe</p>

	housing). Problems of data accuracy also mean that the indicator should be interpreted with care, especially where comparisons are being made between different surveys.
<i>Variations and alternatives</i>	<p>The indicator proposed above is non-specific, in that it relates to the total population. In practice, variations on this indicator are likely to be useful, aimed at more specific age groups. For perinatal diseases, the target group should be women of childbearing age (15-49 years); for respiratory illness the 0-5 year age group is likely to be the most relevant; for physical injuries all children (0-14 years) should be included.</p> <p>This indicator can also be defined on the basis of different classifications of informal settlements (or other, similar concepts).</p> <p>Where suitable data on population are not available, the indicator might alternatively be measured as the area (e.g. km²) of informal settlements. This may be estimated from aerial photographs. It is liable to understate the scale of the problem, however, since it makes no allowance for population density, which is often higher in informal settlements than in formal settlements.</p>
<i>Examples</i>	<p>WHO <i>Environmental health indicators: framework and methodologies</i></p> <ul style="list-style-type: none"> • Population in informal settlements <p>UN <i>Indicators of sustainable development</i></p> <ul style="list-style-type: none"> • Area and population of urban formal and informal settlements
<i>Useful references</i>	<p>UN 1996 <i>Indicators of sustainable development. Framework and methodologies</i>. New York: United Nations.</p> <p>UNCHS (Habitat) and the World Bank 1993 <i>The housing indicators programme</i>. Report and the Executive Director (Volume I). Nairobi: United Nations Centre for Human Settlements.</p> <p>UNCHS (Habitat) 1995 <i>Monitoring the shelter sector. Housing Indicators review</i>. Nairobi: United Nations Centre for Human Settlements.</p> <p>UNCHS (Habitat) 1995 <i>Monitoring human settlements, abridged survey</i>. Indicators Programme. Nairobi: United Nations Centre for Human Settlements.</p> <p>UNCHS Urban Indicators Programme website: http://www.urbanobservatory.org/indicators/database/</p> <p>WHO 1999 <i>Environmental health indicators: framework and methodologies</i>. Geneva: WHO. (Available at http://www.who.int/docstore/peh/archives/EHIndicators.pdf)</p>