

# STRIDING TOWARDS INDEPENDENCE

*For children with conditions that make it difficult for them to walk, a few simple aids can make all the difference. These aids can be made out of tree branches, pieces of wood or metal tubing (which may require welding).*

Wherever possible, a physiotherapist or other health professional should be consulted to make sure that the designs are safe and appropriate. Where such advice is difficult to obtain, the Hesperian Guide, *Disabled village children*, provides a wealth of information on how to safely make many kinds of walking, standing, washing and sitting aids.

## WALKING AIDS

If possible, walking aids should be designed to meet the needs of each individual child. They should take into account the type and level of impairment, as well as the child's stage of development. Finding designs that work best will often involve experimenting and changing different features.

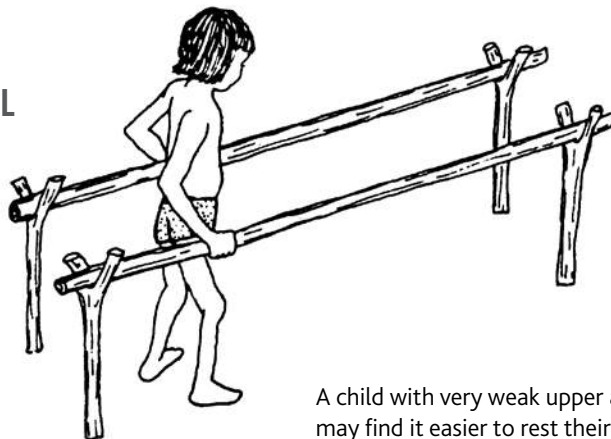
As children grow, their needs change. Frequent re-evaluation is necessary to find out if an aid should be altered or is no longer needed.

On this page is an example of how a child might progress through different types of aid as they learn to walk more independently.

*Adapted from the Hesperian Guide Disabled village children which can be downloaded free of charge from <https://hesperian.org/books-and-resources>. Printed copies can be ordered by emailing [bookorders@hesperian.org](mailto:bookorders@hesperian.org) or writing to Hesperian Foundation, 1919 Addison Street, Suite 304, Berkeley, CA 94704, USA.*

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## PARALLEL BARS



Simple parallel bars can be a first step towards helping children with limited mobility learn to walk.

For most children, the bars should be about hip height, so that the elbows are a little bent.

A child with very weak upper arms may find it easier to rest their forearms on the bars. In that case, the bars will need to be elbow high.

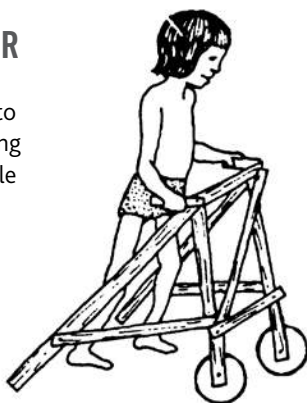
A child who tends to slump forward may benefit more if the bars are just below shoulder height, so they have to stand straighter to rest their arms on them.

Simple walking aids such as this one in Tanzania can help children with mobility problems gain independence. Photo: Dieter Telemans/CCBRT



## 2 WHEELED WALKER

There are many ways to make walkers or walking frames. Here is a simple design for someone with strong arms and good body control. A higher walker will be better for someone with poor balance or body control.



A walker with no wheels is very stable but harder to move. A walker with two wheels is fairly stable and moves easily. A walker with four wheels is very easy to move but can roll out from under the child.

## 3 CRUTCHES MODIFIED TO FORM A WALKER

This type of walker provides stability as a child gets used to using crutches.



## 4 UNDERARM CRUTCHES

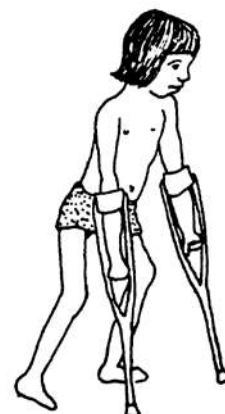
Make sure the crutches are the right length for the child. They should stop below the armpits. The elbows should be slightly bent so the arms can lift the body when walking.

**Warning:** putting weight on the armpits can cause nerve damage that in time can lead to loss of feeling in the hands. Teach the child to put weight on their hands, not their armpits.



## 5 BELOW-ELBOW CRUTCHES

One way to make sure a child does not push down on crutches with their armpits is to use elbow crutches like these.



## 6 CANE WITH WIDE BASE

Rubber tips for canes and crutches can be made from car tyres. For walking in sandy places, make the tips extra wide.



## 7 WALKING STICK (CANE)

For a child who needs to strengthen a weak leg, a cane might be better than crutches. Crutches let them avoid using the leg, but a cane allows them to strengthen the leg muscles needed for walking.



## 8 IF POSSIBLE, NO AIDS AT ALL

