AFOs for Adults: A Practical Guide to Ankle-Foot Orthoses

If you have been told you need an **AFO**, you may be wondering what it is, how it will affect your walking, and whether you'll have to wear it permanently.

AFO stands for **ankle-foot orthosis**. It is a brace designed to support and/or control the position and movement of the foot and ankle. Depending on its design, an AFO can also influence how the knee and leg function during standing and walking.

AFOs are commonly prescribed for people experiencing weakness, instability, foot drop, balance impairments, nerve injuries, neurologic conditions, arthritis, stroke, multiple sclerosis, spinal cord injury, traumatic brain injury, muscular dystrophy, Charcot-Marie-Tooth disease, and other conditions affecting mobility.

An AFO is more than just a device that "holds the foot up." The right design can improve safety, walking efficiency, endurance, stability, and confidence with daily activities.

Why Might You Need an AFO?

An AFO may be recommended if you have difficulty:

- Lifting your foot while walking (foot drop)
- Preventing the foot from catching the ground
- Stabilizing the ankle during standing or walking
- Controlling foot or ankle alignment
- Managing weakness after stroke or nerve injury
- Improving balance and reducing fall risk
- Maintaining range of motion
- Supporting the foot and ankle after surgery or injury

The goal is not simply to support the ankle. The goal is to help you move more safely and efficiently while participating in the activities that matter to you.

What Do These Terms Mean?

Orthosis: A device designed to support, align, protect, or control part of the body.

AFO: An ankle-foot orthosis that encompasses some portion of the lower leg, ankle, and foot.

Orthotist: The healthcare professional who evaluates, designs, fits, and adjusts orthotic devices.

Brace: The everyday term many people use instead of orthosis.

Why Are There Different Types of AFOs?

Not all AFOs work the same way. Common designs include:

- Solid AFOs
- Hinged or articulated AFOs
- Floor-reaction AFOs
- Carbon-fiber AFOs
- Dynamic-response AFOs

Each design allows and restricts different amounts of movement. The appropriate AFO depends on your strength, balance, range of motion, walking pattern, activity level, and goals.

For example, someone recovering from a stroke may need a different AFO than someone with peripheral nerve injury or multiple sclerosis.

Custom vs. Prefabricated AFOs

Some AFOs are available in standard sizes and are called **prefabricated** devices. These can work well for straightforward cases such as mild foot drop.

Others are **custom-made** based on your anatomy and clinical needs. A custom AFO may be recommended if you have:

- Significant deformity
- Unique limb shape
- Complex neurological conditions
- Skin concerns
- Advanced instability
- Specialized functional goals

Your orthotist will help determine which option is most appropriate.

What Happens During the Evaluation?

The orthotist will assess:

- Strength
- Range of motion
- Balance
- Walking pattern
- Alignment
- Footwear
- Daily activities and goals

If a custom AFO is needed, your leg may be measured using either:

Traditional Casting

A casting material is wrapped around your lower leg and foot while the orthotist positions your foot appropriately. The cast is removed after it hardens and serves as a model for fabrication.

Digital Scanning

Many clinics now use 3D scanners to create a digital model of your leg. Scanning is quick, painless, and eliminates the need for plaster casting.

The AFO and Shoe Work Together

One of the most important things to understand is that **the AFO and shoe function as a system**.

Many AFOs are designed to be worn with supportive walking shoes. Appropriate footwear can improve:

- Stability
- Comfort
- Brace function
- Durability
- Safety

When purchasing shoes, bring your AFO with you whenever possible. Many people require a wider shoe or a removable insole to accommodate the brace comfortably.

What Should You Wear Under an AFO?

AFOs are generally worn over a sock rather than directly against the skin.

Choose socks that:

- Extend above the height of the brace
- Fit smoothly without wrinkles
- Have minimal seams
- Help manage perspiration

Moisture-wicking or seamless socks may improve comfort, particularly for individuals who wear their AFO for extended periods.

How Do You Put an AFO On Correctly?

One of the most important steps is ensuring that your heel is fully seated in the back of the brace.

A typical process includes:

1. Put on a clean sock.
2. Insert your foot into the AFO.
3. Ensure the heel is completely down and back.
4. Fasten the straps according to your orthotist's instructions.
5. Check that the heel remains seated.
6. Put on the shoe over the AFO.

Improper positioning can reduce the effectiveness of even a well-designed brace.

How Long Should You Wear It?

There is no universal wear schedule.

Your prescribed wear time may depend on:

- The reason for the brace
- Skin tolerance
- Rehabilitation goals
- Activity level
- Whether the device is for daytime or nighttime use

Many new users begin with a gradual break-in schedule to allow the skin and body to adapt.

Always follow the instructions provided by your orthotist and healthcare team.

When Should an AFO Be Checked?

Contact your orthotist if you notice:

- Persistent redness lasting more than 20-30 minutes after removal
- Pain
- New pressure areas
- Changes in walking
- Increased instability
- Difficulty putting the brace on
- Significant weight change
- Worn straps, pads, or components

Unlike children's braces, adult AFOs are usually replaced because of wear, changes in medical status, or changes in function rather than growth.

AFOs and Rehabilitation

For many adults, an AFO works best when combined with a broader rehabilitation plan.

Depending on your condition, this may include:

- Physical therapy
- Balance training
- Strengthening exercises
- Gait training
- Fall-prevention strategies
- Home exercise programs

The AFO provides mechanical support, while rehabilitation helps improve the skills needed to move safely and efficiently.

The Bottom Line

An AFO is much more than a brace around the ankle and foot. It is a clinical device designed to improve stability, safety, alignment, and mobility.

A successful AFO should:

- Address your specific functional goals
- Fit comfortably
- Work with appropriate footwear
- Be practical for everyday activities
- Support safe and efficient movement
- Be reviewed periodically as your needs change

The best AFO is not necessarily the most rigid, most expensive, or most technologically advanced. The best AFO is the one that helps you move more comfortably, safely, and confidently in your daily life.