



# USER'S MANUAL

## AirPal Air-Assisted Lateral Patient Transfer System



 Airpal, Inc. - 1488 Limeport Pike, Coopersburg, PA 18036  
airpal.com 800.633.4725 fax 610.965.2460



MEDICAL ELECTRICAL EQUIPMENT WITH RESPECT  
TO ELECTRICAL SHOCK, FIRE AND MECHANICAL HAZARDS ONLY IN  
ACCORDANCE WITH UL60601-1  
Complies with LR1074 CSA601.1M90

UL COVERAGE IS FOR THE AIR SUPPLY ONLY

AS1100 (North America) Power Requirements: 115VAC +/-10%,  
60HZ, 9.0A or 1100 W max.

PA1200 (Europe) Power Requirements: 230VAC +/-10%,  
50-60HZ, 9.0A or 1200 W max.



**DANGER**  
Risk of explosion if used in the  
presence of flammable anesthetics

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**Indications**

Patients weighing up to 1,200 lbs. (SPS disposable <1000 lbs.)  
Patients whose body weight and size pose a significant risk or  
care management issue to the patient or staff during performance  
of routine nursing care.  
Patients requiring a lateral transfer.

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**Contraindications**

Patients with total weight in excess of 1,200 lbs. (SPS > 1000 lbs.)  
Unstable cervical, thoracic and/or lumbar fracture

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**Precautions**

Side rail of the opposite side of the receiving surface, ie;  
bed/gurney, is raised and locked and that caster brakes are engaged  
prior to transfer.

# System Description

Each AirPal® System consists of the following components: The Patient TransferPad™, the Air Supply, and the optional Sani- Liner.

1. Pull straps
2. Patient restraint straps
3. Air entry positions
4. Flexible air hose
5. Air supply - motor and canister
6. Air supply power cord
7. Optional AirPal Stand



## TransferPad

The TransferPad is sewn construction consisting mainly of a vapor permeable nylon twill fabric of various widths in both durable and disposable versions. The total length of the TransferPad is approximately 78 inches. The underside is perforated for air release. Upon inflation on a typical hospital bed, a "cushion" of air is formed upon which the patient is moved almost effortlessly.

## UL 60601-1 Approved Air Supply

The low pressure air supply is connected to any standard wall outlet with a hospital approved plug. It is equipped with a two micron filter which may be washed, sterilized and reused. It comes with a flexible hose which is easily connected to the TransferPad. Also included is a hanging device which permits the air supply to be attached to, and transported with, any stretcher.

## Sani-Liner

The optional Sani-Liner may be placed between the patient and the TransferPad for infection control purposes. It is available in various widths and materials in both durable and disposable versions.

# Operating Instructions

## Placing the patient on the AirPal® TransferPad

The patient should be placed on the TransferPad while in the hospital bed using a patient-appropriate method. Roll the TransferPad lengthwise toward the center. Note: Care must be taken to ensure that the patient is placed on the non-perforated side of the TransferPad with the feet at the air entry end. If appropriate, the patient may be approached from either side and log rolled toward the attendant. The rolled section of the TransferPad is now placed against the patient where his body comes in contact with the bed. Roll the patient back and slightly to his opposite side. Proceed to unroll the TransferPad as you would when changing a sheet. To ensure the safest and most efficient transfer, the patient should be on the center of the TransferPad. If the patient is off to one side, repositioning of the TransferPad will be necessary.



After placement on the TransferPad, the patient should be secured by the restraint straps. The restraint straps should be in loose contact with the patient to allow for inflation and not drawn up tight.



After the patient is secured, the air hose is inserted in the TransferPad.

## Setting up the Air Supply

Plug the power cord into the nearest standard wall receptacle where the AirPal® is to be used. One end of the flexible air hose is already attached to the unit. The other end is inserted into the opening at the foot of the TransferPad. Align the fitting on the air hose with the snap or closure on the flap of the TransferPad and secure in place. The TransferPad has two openings for the air hose, both at the foot of the TransferPad, one on each side. Choose the side which will permit free travel of the hose without binding. If the Air Supply is not attached to the stretcher, it should be located next to the attendant making the transfer. This provides easy access to turn the unit on for transfer and off immediately after transfer. The Air Supply is turned on and off by depressing the on/off switch.



# Operating Instructions

## Positioning the transfer stretcher

After patient is placed upon the AIRPAL® TransferPad, the transfer stretcher is brought alongside. It is advised that the brakes be securely engaged and the stretcher side rail on receiving side be raised. Location should be such that after transfer, the patient will be centered longitudinally on the stretcher.

## Typical transfer of patient

Confirm that no handrail, accessory or sharp object obstructs the area over which the TransferPad will pass, and that the air hose is free of obstructions to move with the TransferPad while transferring.

Make sure that any patient support systems such as I.V. lines or oxygen hoses are free to move with the patient.

Turn on the Air Supply, grasp the pull straps and with one firm continuous pull, move the patient towards attendant to the desired surface. Raise the side rail of the stretcher. With certain patients it may be desired to have a slower rate of inflation for the TransferPad. In this event, place the heel of your hand on the Transfer Pad directly in front of the air input and depress as the air supply is turned on. The amount of pressure determines the flow of air which is permitted into the TransferPad.

Turn off the Air Supply. Never leave your patient unattended with the Air Supply on.



## Typical transfer conditions

Conditions vary with the many surfaces the AirPal® is designed to accommodate. Surface textures, space between adjacent transfer surfaces, and different elevations are the most important considerations.

a. In general, the harder and smoother the surface, the easier the AirPal® TransferPad glides. It is therefore necessary to use caution when transferring onto such surfaces as x-ray tables or smooth cushioned stretchers, to prevent the patient from traveling too far. The transferring attendant should always pull the patient toward him, using his body as additional assurance of controlling the transfer. When possible a second attendant on the opposite side of the patient assisting with the transfer provides additional security for both staff and patient. Whenever possible, it is advantageous to have the surface you are transferring to, lower than the surface you are transferring from. This way gravity works with you for an easier move.

Caution: It is advised that the side rail of the receiving stretcher on the opposite side of the bed is in the raised and locked position, and that the wheel locks are engaged prior to transfer.

b. Use a Diagonal Transfer Method. The preferred method of lateral transfer is accomplished by first pulling the patient's upper torso so that it leads the foot section by 16-24 inches. As the upper torso nears the desired location, diminish the pull on the upper torso while continuing to pull the foot section to the final position. This assists the transfer and adds to the patient's sense of security and comfort in the transfer.



# Location and Storage

## General Transportation

The AirPal® system may be used wherever a lateral transfer is necessary throughout the hospital. Hospitals vary in their system of transporting patients. Two suggested ways of introducing the AirPal® into a transport system are:

If the stretchers are kept in a central location or at a central transport station - the AirPal® TransferPad and Air Supply can be kept with the stretcher and can be dispatched with the transporter upon request. The stretcher and AirPal® system is then returned to the central location when transport is completed.

If the stretchers are kept in areas other than one central location - The equipment should be located near each nurse station or in a convenient storage area. When the stretcher arrives for transport, the AirPal® equipment is placed on it, and taken to the patient's room. The patient is placed upon the TransferPad, is transported and can remain on the TransferPad for scheduled procedures. After transfers are complete, the AirPal® TransferPad should be removed, cleaned and returned to the designated storage area.

## Departments

If the equipment is to be used exclusively for certain departments, and not hospital-wide, the product should be stored within the department itself or in a convenient storage area on each of the nursing floors

# Utilization by Department

## Nursing

Nursing should be well aware of procedures within this manual indicating proper use of the AirPal® system. The AirPal® virtually accommodates all patients and all departmental procedures (i.e. x-ray, CT Scan, nuclear medicine, radiation therapy, OR, and cardiac catheterization). The Sani-Liner accommodates transfers on and off of porous surfaces.

## Radiology, CT Scan, Nuclear Medicine and MRI

X-Ray and Nuclear Medicine - Occasionally procedure tables impose certain restrictions not found in other areas of the hospital. These tables sometimes have narrow or extra wide surfaces or the equipment itself prohibits the technician from being able to reach across to assist with the transfer. In this event, it is desirable to utilize two staff members to make the transfer, one at the head and one at the foot. Always have the side rail in the raised position on the opposite side of the receiving stretcher. When the air supply is turned on, each attendant grasps the pad, one hand on each corner of the AirPal®, transferring the patient to the desired location before turning the air supply off. One advantage of this technique is that total control is maintained over the patient as he is transferred onto the hard and slippery surface of the table. This method may be used in other hospital applications and is also advantageous with heavy patients or acute patients with high pain levels.

CT Scan - Of particular advantage to the CT department is the flexibility of the Transfer Pad while inflated. After the patient is transferred into the body tray, the head region of the AirPal® can be folded under and by cradling the head with one hand, the patient can be easily moved longitudinally into the headrest to complete a head scan. The air is turned off, the scan is completed, reverse the procedure to place the patient back onto the stretcher. The Transfer Pad accommodates all CT Scanners and does not produce artifacts.

MRI - There is no metal in the Transfer Pad, however the air supply does have metal parts. For this reason, the AirPal® system may be specially fitted to accommodate this department with a hose length so that the air supply can be left outside the room, if desired.

## Emergency Room

The AirPal® Transfer Pad is placed on a stretcher awaiting the emergency case. The trauma victim is placed directly on the AirPal® upon his arrival. If the victim arrives on a hard board, it can be placed directly on the AirPal® until the patient is stabilized. The patient can then be transported to X-Ray, CT Scan, fracture table or other procedures without further turning or aggravating their condition.

Portable X-Rays - The AirPal® is radio lucent and permits simple and accurate placement of X-ray cassettes eliminating the need to rotate the patient. With the AirPal® inflated, slide the x-ray cassette underneath the Transfer Pad near the desired location. The patient now can now be easily be positioned over the cassette for precise placement. Turn off the air supply and proceed. Re-inflate the Transfer Pad to remove the cassette.

The Sani-Liner is used to prevent excessive amounts of blood or body secretions from coming in contact with the Transfer Pad, as in the case of a trauma patient. The Sani-Liner is placed between the patient and the Transfer Pad and under what is to be transferred with the patient (chucks, incontinent pads etc.). After use, when the Sani-Liner and Transfer Pad are removed, both are to be sterilized by laundering or cleaning with the approved appropriate cleaning fluid.

## Operating Room and Recovery Room

The AirPal® may be used on the OR table during procedures. The Sani liner is also used sometimes to further limit fluid contact with the AirPal® by placing it under the patient and on top of the AirPal®. In the event the AirPal® is not used on the table, it may be placed on the recovery litter to assist though out recovery and transfer to the Med - Surg. Unit

## Oncology - Radiation Therapy

The properties of the materials that make up the AirPal® Transfer Pad allow it to be used during Radiation Therapy procedures. However, if the opinion of the department suggest otherwise, the Transfer Pad may still be used during transfers and then just folded away from the area of the body which is to receive treatment.

# Cleaning/Laundry Instructions

## TransferPads and Sani-Liners:

Wipe down after each use utilizing a properly diluted EPA approved germicidal cleaning solution, quaternaries, alcohol (70% isopropyl of Ethyl) or bleach solution diluted 1:10, or your hospital approved solution.

### Procedure:

1. Protective clothing must be worn when handling contaminated items.
2. Apply approved solution to TransferPad per your hospital protocol
3. Remove ALL visible soiling and wipe off excess solution
4. Disinfect the clean surface with proper mixed concentrations of chlorine solution.
5. Allow to air dry.

### Soils and Stains:

1. Soils or Stains: Wipe fabric clean with neutral suds and lukewarm water. Rinse with water
2. Hard to Clean Spots: Use standard liquid household/vinyl cleaners and/or soft bristle brush. Pre-soak as needed
3. Disinfection: Dilute disinfectants and/or germicides as specified on manufacturer's product label

### Laundry Procedure (durable/reusable TransferPads and Sani-Liners):

1. Pre-rinse to loosen soil
2. Place in washing machine with proper concentrated detergent, stain away bleach, anti-chlorine. Rinse cycle, add anti-chlorine liquid and neutralizer to control final pH.. The use of bleach (1 cup) during the washing cycle is strongly recommended.
3. When cycle is completed, remove to tumble dryer and dry at optimum temperature recommended for fabric (not to exceed 140 degrees F temperature).

### DO NOT IRON

Strict adherence to above described laundry procedures must be maintained. Failure to follow recommended procedures may prove harmful to fabrics resulting in loss of expected useful life and voiding of the warranty.