

The Acurest newsletter will keep you up to date with the latest developments in the research and treatment of sleep apnea and will provide you with hints and tips to help you continue with your CPAP therapy.

## Acurest News:

### Who invented Custom-Made Masks?

While travelling in Sydney last month, Acurest director Scott Coulter called in on the inventor of CPAP therapy, Prof Colin Sullivan, in the Medical School at Sydney University. Prof Sullivan had seen our Logical® mask at a technicians demonstration and made contact to see what we were doing.

For those who don't know the story, Prof Sullivan developed CPAP when treating severe sleep apnea sufferers in the late 1970s and early 1980s. Until then, the only treatment for sleep apnea was a tracheotomy (putting a hole in the airway at the base of the neck, bypassing the collapsible upper airway). Normally, only the most severe cases were treated in this way.

Prof Sullivan initially used a vacuum cleaner exhaust to generate airflow, connected a tube to the vacuum and glued the other end to the patient's nose. The results were immediate and spectacular; the airway was completely supported during sleep and all apneas were resolved.

This single discovery spawned an entire industry and gave hope and quality of life to millions of people around the world.

As the CPAP "experiment" continued and refinements were made, Prof Sullivan's team began custom-making masks so that patients could use the therapy at home. They also found and developed alternatives to the old Hoover!

When Prof Sullivan asked me how I got involved in making masks, I told him about the inventor of our masks, Collin Anderson. Prof Sullivan stopped me, led me to a wall of custom-made masks he and his team had produced and wryly observed that actually *HE* had invented custom-made CPAP masks! And he's right.

Having conceded the point, I then asked, "Why, when custom-made masks were the first clinical approach to this therapy, did we end up with a *small, medium or large* approach to masks?"

The answer is that as the therapy became widely accepted around the world, millions of masks were needed. And filling this level of demand is simply much easier using standard production methods.

It was probably also thought that the level of suffering without CPAP was so great that a little mask discomfort would be easily tolerated.

**Now we know that many CPAP users abandon therapy and cite mask discomfort and frustration as the key reasons. The comfort of the mask is crucial if CPAP is to be used all night, every night.**

In some ways, Acurest's masks are really "back to the future". Putting mask comfort first makes using the therapy easier. And having a mask that seals effectively eliminates noise and provides better overall therapy.

### Retail Partners now in all major capitals:

Have you seen our new website? Many CPAP users and their families have found the website and have given us great feedback on the information it contains about our TrueFIT™ Custom Mask.

But you wouldn't buy a car without kicking the tyres, right?

The solution is for us to put demonstration masks somewhere you can easily go and see them. And that's what we've done! So if you are interested in the world's only custom-made CPAP mask, if you live

in Adelaide, Brisbane, Melbourne, Perth or Sydney and you want to "kick the tyres" of a TrueFIT™ Custom Mask, then please see the stockists page of our website for details:

[\(http://www.acurest.com.au/truefit-custom-mask/stockists/\)](http://www.acurest.com.au/truefit-custom-mask/stockists/)



## Sleep Facts

We all know what it is, and we all do it so often it's just a normal part of life. So, what is sleep?

Most of the characteristics that people cite to define sleep (like immobility, eye closure, snoring, etc) can be easily simulated in the waking state. What then is the most fundamental difference between being awake and being asleep?

Answer: The crucial thing that occurs as we fall asleep is an abrupt shut down of the neural processes that allow us to perceive the world around us. At one moment we are awake, and can see and hear. A

fraction of a second later we are asleep, and we are completely blind and completely deaf.

Another way of saying this is that sleep is a behavioural state of complete perceptual disengagement from the environment. Sleep is an active process in which sensory stimulation is blocked or modified in some way such that we cease to be conscious of the world around us. In fact, research over the past couple of decades has decisively established that the sleeping brain is an active brain.

Many people believe that sleep occurs when the brain is "turned off". Not so. The brain never sleeps!

## Upcoming 2010 Interstate Visits

Acurest will be visiting the following locations for TrueFIT™ Custom Mask consultations and mouldings. See [www.acurest.com.au](http://www.acurest.com.au) for the full 2010 schedule and contact [info@acurest.com.au](mailto:info@acurest.com.au) to make your booking.

<b>Adelaide:</b>	12-14 May	<b>Melbourne:</b>	9-11 June
<b>Sydney:</b>	16-18 June	<b>Perth:</b>	14-16 July

## Interesting research about CPAP and Sleep Apnea:

### Could CPAP reduce the road toll?

Truck drivers and other professional drivers in the US may soon be required to participate in a sleep study to screen for obstructive sleep apnea before they receive their certification.

Maggi Gunnels, director of medical programs for the US Federal Motor Carrier Safety Administration, recently confirmed that the Administration's medical review board is expected to recommend that a sleep study be required for professional drivers who are of a predetermined level of obesity. Those who test positive for OSA would be required to treat the condition with CPAP before being certified.

As so often happens, professional drivers are in the spotlight not because they are the biggest cause of problems, but because they are relatively easy to reach. They need a special license for their job and their livelihoods depend upon complying with the terms of the license. But professional drivers account

for only a small percentage of road accidents.

What about the vast majority of road users who are not professional drivers? They are as likely to be obese, as likely to have sleep apnea and may be more likely to drive while sleepy. How would they be policed?

The fact is that if you have OSA, or if you are sleepy during the day or if you drift off or fall asleep while driving; you must find a way to treat it. CPAP, with a comfortable and effective mask, is a simple and life-sustaining option.

What is clear is that sleepiness, whether caused by a medical condition or simply by not being alert, is a major and preventable cause of road accidents. While the authorities are increasingly aware of this as a potential means of addressing the road toll, it is individual responsibility that is the key to solving the problem, just as it was with drink-driving.

**We hope you found this edition of sleep.energy.life an interesting and informative read. We'd love to hear your feedback on the newsletter. Simply email us at [info@acurest.com.au](mailto:info@acurest.com.au)**