

NHS Trust

Communications Department Tel: 01225 825489 / 821299 Email: communication@ruh.nhs.uk

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PRESS RELEASE

A most unusual delivery for the RUH!

An iron lung, loaned to the RUH by St.Thomas Hospital in London, has proved a real crowd puller at an exhibition held this week to celebrate 60 years of the NHS and it's all thanks to the intervention of one of the country's largest department stores.

Following an appeal on BBC Local Radio, the Iron Lung was collected and delivered to the RUH by John Lewis, with their compliments.

Driver, Mark Spacagna, who works for the Cribbs Causeway store, heard the appeal on BBC Radio Bristol and got in touch. The trust had almost given up hope of having the iron lung in the exhibition due to the cost and complexity of transporting it.

Head of Communications at the RUH, Helen Robinson-Gordon, says "We spent many weeks trying to source an iron lung for our exhibition which looks at developments in the NHS 1948-2008. As we had many child patients with polio here in 1948 that would have used an iron lung – we very much wanted to feature one. It weighs a ton literally and has proved a real attraction – fascinating patients, school children and

doctors alike. Many of our clinicians had never seen one so it's been educational for all of us! In addition, our Chief Executive James Scott cited it as the single most interesting thing in the exhibition. We are extremely grateful to John Lewis for helping out"

Driver Mark Spacagna from Long Ashton near Bristol says,

"John Lewis is involved in a lot of charitable work and I thought this was something we would want to assist with. Collecting the iron lung was not as big a job as I thought it would be but it certainly sent a chill through me when I saw it. As a dad, I thought of my children being in there – I'm sure it's a machine that could tell some stories."

Notes to Editors

AN IMAGE OF THE LUNG AND DRIVER MARK SPACAGNA IS AVAILABLE

The iron lung was invented in 1927. *Polio epidemics* were common at the time and many people died in the early stages of the infection when the virus paralysed their chest muscles and they were unable to breathe. However, those who survived the initial stages often recovered well. The challenge was to invent a machine which could help the patient breathe during the crucial one or two weeks until they could breathe for themselves.

The first iron lung was a large, cylindrical, rigid, metal box weighing about three tons. The person lay flat on their back inside the box with their head sticking out of one end with a rubber collar making an airtight seal around their neck. An electric motor with two *vacuum* cleaners removed air from inside the box so that the pressure inside was below atmospheric pressure. This caused air to be drawn into the lungs through the mouth and nose. When the pressure around the chest was returned to normal the person breathed out normally. This is called *negative pressure ventilation* as it works by creating a negative (reduced) pressure

around the chest. In 1948 an iron lung cost a few hundred pounds, the same price as a house. While thousands of these noisy machines were in use at that time, only a handful are still being used.



