



HEALTH



• EDF Foundation > Health

The human body uses electricity that is produced and distributed by the brain to move, to communicate, to function, in a word - to live.

Consequently the EDF Foundation is involved in efforts to fight against the exclusion of the physically handicapped, by supporting research into neurological diseases and supporting efforts to help handicapped people regain mobility.

Research: the brain, an electrical power station

The brain is a veritable electrical power station, with each neurone acting as a generator. Every malfunction of the electrical system in the brain causes very disabling illnesses. In France 1.5 million people suffer from neurological conditions.

The EDF Foundation has decided, with the help of a scientific advisor, to commit itself, alongside the Federation for Brain Research (Fédération pour la Recherche sur le Cerveau - FRC), which includes five publicly recognised institutions, to fight against 5 major pathologies:

- Epilepsy
- Alzheimer's disease
- Parkinson's disease
- Multiple sclerosis
- Amyotrophic lateral sclerosis, or Charcot's disease

This partnership has already made it possible to double the number of contracts for research into these diseases. In addition, the company's medical service is taking part in epidemiological studies, while the engineers in the Research & Development Department are contributing to the FRC their skills and calculation resources.

To find out more about the FRC: <http://www.frc.asso.fr>

Helping the handicapped regain mobility

In France there are more than 30,000 paraplegics and 6500 tetraplegics. These people are comparatively young, with an average age of 32. Electricity is helping to improve their lives in their homes and during stays in hospital.

Since 2001 the EDF Foundation has been supporting the programme 'Rise up and walk', started by Prof. Pierre Rabischong of the Faculty of Medicine in Montpellier, which aims to get paralysed patients moving again thanks to an electronic implant that is connected via electrodes to the nerves and muscles. Already two paraplegics have started to walk again.