

Advanced Plastics in Modern Medicine: Only Possible with Hydraulic Fracturing *Improving Lives, Saving Lives*



Americans often take for granted the thousands of products made from oil and natural gas that they use every day, from lightweight automobile parts and paint to food packaging and performance clothing. These important consumer items can only be made by processing crude oil and natural gas, using chemical treatments and technologies to make each product. The same goes for the hundreds of petroleum-derived items used by health care providers, from simple items such as band-aids and latex gloves, to complex heart valves and artificial joints. More than 90 items made possible through the processing of oil and natural gas into advanced plastics and synthetic rubber are shown in this photo of a typical emergency room.

Items in a typical emergency room

| | | | |
|--------------------------------|-------------------------|---------------------------------|--------------------------|
| Blood pressure cuff | IV Pole wheels and hook | Overhead lamp/bulbs | Suction canister |
| Blood pressure cuff tubing | IV pump | Oxygen saturation finger probe | Suction tubing |
| Chair | IV pump power cord | Oxygen wall to tubing adapter | Thermometer |
| Code cart/wheels | Laminated charts | Patient education packets | Thermometer probe covers |
| EKG Leads | Monitor/cables | Plastic patient belonging bag | Trash bag |
| EKG wire covers | Nasal canula | Plastic slip cover for mattress | Trash can |
| End-Tidal carbon dioxide cable | Ophthalmoscope | Plastic-lined pillows | Wall oxygen dial |
| Fluorescent light covers | Otoscope | Stethoscope label | Wall suction dial |
| Infectious waste container | Otoscope covers | Stethoscope tubing | Yankauer suction |

Items found in an ER code cart

| | | | |
|------------------------|------------------------|------------------------------------|-----------------------|
| AED | Intubation blade | Needle caps | Plastic tape |
| Alcohol swab packaging | IV catheters | Non-rebreather mask | Portable suction pump |
| Ambu bag | IV fluid bags | Oral airways | Saline flushes |
| Atomizer | IV tubing | Oxygen tank dial | Sharps container |
| Code cart lock tab | Lubrication | Pacer pads | Syringe caps |
| CPR back board | Medication ampules | Plastic cart housing | Tourniquets |
| Endotracheal tubes | Medication bottles | Plastic cover over tip of scissors | Venti-mask |
| Exam gloves | Nasopharyngeal airways | Plastic syringes | |

Other medical devices used on a daily basis

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|------------------------|----------------------------|----------------------------------|---------------------|
| Adhesive foam | Jackson Pratt drain | Peripheral venous catheter | Sterile gowns |
| Bedpan | Medical glue | Plastic boxes of gauze | Sterile packaging |
| Bleach wipe containers | Nasogastric tubes | Plastic medicine cups | Sutures |
| Crutch pads/grips | Ostomy bags and appliance | Plastic packaging on medications | Three-way stopcocks |
| Date stickers | Patient call bell | Pyxis machine | Urinary catheters |
| Hemovac drain | Patient room phone | Skin barrier packaging | Walkers/canes |
| IV caps | Patient socks/grip bottoms | | |