First aid kit

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[](http://en.wikipedia.org/wiki/File:Apteczkapp.jpg)

**Typical first aid kit from an**[**automobile**](http://en.wikipedia.org/wiki/Automobile)

A **first aid kit** is a collection of supplies and equipment for use in giving [first aid](http://en.wikipedia.org/wiki/First_aid), and can put together for the purpose (by an individual or organization, for instance), or purchased complete. There is a wide variation in the contents of first aid kits based on the knowledge and experience of those putting it together, the differing first aid requirements of the area where it may be used, and variations in legislation or regulation in a given area.

The international standard for first aid kits is that they should be identified with the [ISO](http://en.wikipedia.org/wiki/International_Standards_Organization) graphical symbol for first aid (from ISO 7010) which is an equal white cross on a green background, although many kits do not comply with this standard, either because they are put together by an individual or they predate the standards.

Format

First aid kits can be assembled in almost any type of container and this will depend on whether they are commercially produced or assembled by an individual. Standard kits often come in durable plastic boxes, fabric pouches or in wall mounted cabinets. The type of container will vary depending on purpose, and they range in size from wallet sized through to large rucksacks.

It is recommended that all kits are in a clean, waterproof container to keep the contents safe and [aseptic](http://en.wikipedia.org/wiki/Aseptic). Kits should also be checked regularly and restocked if any items are damaged or expired out of date.

Appearance

The [International Organization for Standardization](http://en.wikipedia.org/wiki/International_Organization_for_Standardization) (ISO) sets a standard for first aid kits of being green, with a white cross, in order to make them easily recognizable to anyone requiring first aid.

Whilst the ISO recommend the use of the green background and white cross, some individuals or organizations use a red cross on white background, but use of this symbol by anyone but the [International Committee of the Red Cross](http://en.wikipedia.org/wiki/International_Committee_of_the_Red_Cross) (ICRC) or associated agency may be illegal under the terms of the [First Geneva Convention](http://en.wikipedia.org/wiki/First_Geneva_Convention), which designates the red cross as a protected symbol in all countries signatory to it. One of the few exceptions is in North America, where despite the passing of the First Geneva convention is 1864, and its ratification in the United States in 1881, [Johnson & Johnson](http://en.wikipedia.org/wiki/Johnson_%26_Johnson) has used the red cross as a mark on its products since 1887 and registered the symbol as a U.S. [trademark](http://en.wikipedia.org/wiki/Trademark) for medicinal and surgical plasters in 1905.[[3]](http://en.wikipedia.org/wiki/First_aid_kit#cite_note-2)

Some first aid kits may also feature the [Star of Life](http://en.wikipedia.org/wiki/Star_of_Life), normally associated with [emergency medical services](http://en.wikipedia.org/wiki/Emergency_medical_services), but which are also used to indicate that the service using it can offer an appropriate point of care.

Contents

Commercially available first aid kits available via normal retail routes have traditionally been intended for treatment of minor injuries only. Typical contents include adhesive bandages, regular strength pain medication, gauze and low grade disinfectant.

Specialized first aid kits are available for various regions, vehicles or activities, which may focus on specific risks or concerns related to the activity. For example, first aid kits sold through marine supply stores for use in watercraft may contain seasickness remedies.

**Airway, Breathing and Circulation**

First aid treats the [ABCs](http://en.wikipedia.org/wiki/ABC_(medicine)) as the foundation of good treatment. For this reason, most modern commercial first aid kits (although not necessarily those assembled at home) will contain a suitable infection barrier for performing [artificial respiration](http://en.wikipedia.org/wiki/Artificial_respiration) as part of [cardiopulmonary resuscitation](http://en.wikipedia.org/wiki/Cardiopulmonary_resuscitation), examples include:

* [Pocket mask](http://en.wikipedia.org/wiki/Pocket_mask)
* [Face shield](http://en.wikipedia.org/wiki/Face_shield)

Advanced first aid kits may also contain items such as:

* [Oropharyngeal airway](http://en.wikipedia.org/wiki/Oropharyngeal_airway)
* [Nasopharyngeal airway](http://en.wikipedia.org/wiki/Nasopharyngeal_airway)
* [Bag valve mask](http://en.wikipedia.org/wiki/Bag_valve_mask)
* [Manual aspirator or suction unit](http://en.wikipedia.org/wiki/Aspirator_(medical_device))
* [Sphygmomanometer](http://en.wikipedia.org/wiki/Sphygmomanometer) ([blood pressure](http://en.wikipedia.org/wiki/Blood_pressure) cuff)
* [Stethoscope](http://en.wikipedia.org/wiki/Stethoscope)

**Trauma injuries**

Trauma injuries, such as bleeding, bone fractures or burns, are usually the main focus of most first aid kits, with items such as bandages and dressings being found in the vast majority of all kits.

* [Adhesive bandages](http://en.wikipedia.org/wiki/Adhesive_bandage) (band-aids, [sticking plasters](http://en.wikipedia.org/wiki/Sticking_plaster)) - can include ones shaped for particular body parts, such as knuckles
  + [Moleskin](http://en.wikipedia.org/wiki/Moleskin)— for blister treatment and prevention
* [Dressings](http://en.wikipedia.org/wiki/Dressing_(medical)) ([sterile](http://en.wikipedia.org/wiki/Sterilization_(microbiology)), applied directly to the [wound](http://en.wikipedia.org/wiki/Wound))
  + Sterile [eye](http://en.wikipedia.org/wiki/Human_eye) pads
  + Sterile [gauze](http://en.wikipedia.org/wiki/Gauze) pads
  + Sterile non-adherent pads, containing a non-stick [teflon](http://en.wikipedia.org/wiki/Teflon) layer
  + [Petrolatum](http://en.wikipedia.org/wiki/Petrolatum) gauze pads, used as an occlusive ( air-tight) dressing for sucking chest wounds, as well as a non-stick dressing
* [Bandages](http://en.wikipedia.org/wiki/Bandages) (for securing dressings, not necessarily sterile)
  + Gauze roller bandages - absorbent, breathable, and often elastic
  + Elastic bandages - used for sprains, and pressure bandages
  + Adhesive, elastic roller bandages (commonly called 'Vet wrap') - very effective pressure bandages or durable, waterproof bandaging
  + Triangular bandages - used as slings, tourniquets, to tie splints, and many other uses
* [Butterfly closure strips](http://en.wikipedia.org/wiki/Butterfly_closure_strips) - used like stitches to close wounds, usually only included for higher level response as can seal in infection in uncleaned wounds.
* [Saline](http://en.wikipedia.org/wiki/Saline_(medicine)) for cleaning wounds or washing out foreign bodies from eyes
* [soap](http://en.wikipedia.org/wiki/Soap) - used with water to clean superficial wounds once bleeding is stopped
* [Antiseptic](http://en.wikipedia.org/wiki/Antiseptic) wipes or sprays for reducing the risk of infection in abrasions or around wounds. Dirty wounds must still be cleaned for antiseptics to be effective.
* Burn dressing, which is usually a sterile pad soaked in a cooling gel
* [Adhesive tape](http://en.wikipedia.org/wiki/Adhesive_tape), [hypoallergenic](http://en.wikipedia.org/wiki/Hypoallergenic)
* [Hemostatic](http://en.wikipedia.org/wiki/Hemostatic) agents may be included in first aid kits, especially military or tactical kits, to promote clotting for severe bleeding.

**Personal protective equipment**

The use of [personal protective equipment](http://en.wikipedia.org/wiki/Personal_protective_equipment) or PPE will vary by kit, depending on its use and anticipated risk of infection. The adjuncts to artificial respiration are covered above, but other common[infection control](http://en.wikipedia.org/wiki/Infection_control) PPE includes:

* [Gloves](http://en.wikipedia.org/wiki/Medical_gloves) which are single use and disposable to prevent cross infection
* [Goggles](http://en.wikipedia.org/wiki/Goggles) or other eye protection
* [Surgical mask](http://en.wikipedia.org/wiki/Surgical_mask) or N95 mask to reduce possibility of airborne infection transmission (sometimes placed on patient instead of caregivers. For this purpose the mask should not have an exhale valve)
* [Apron](http://en.wikipedia.org/wiki/Apron)

**Instruments and equipment**

* [Trauma shears](http://en.wikipedia.org/wiki/Trauma_shears), for cutting clothing and general use
* [Scissors](http://en.wikipedia.org/wiki/Scissors) are less useful but often included instead
* [Tweezers](http://en.wikipedia.org/wiki/Tweezers)
* [Lighter](http://en.wikipedia.org/wiki/Lighter), for sanitizing tweezers or pliers etc.
* [alcohol](http://en.wikipedia.org/wiki/Alcohol) pads for sanitizing equipment, or unbroken skin. This is sometimes used to debride wounds, however some training authorities advise against this as it may kill cells which bacteria can then feed on
* Irrigation [syringe](http://en.wikipedia.org/wiki/Syringe) - with catheter tip for cleaning wounds with sterile water, saline solution, or a weak iodine solution. The stream of liquid flushes out particles of dirt and debris.
* Torch (also known as a [flashlight](http://en.wikipedia.org/wiki/Flashlight))
* Instant-acting chemical cold packs
* [Alcohol rub](http://en.wikipedia.org/wiki/Alcohol_rub) (hand sanitizer) or [antiseptic](http://en.wikipedia.org/wiki/Antiseptic) hand wipes
* [Thermometer](http://en.wikipedia.org/wiki/Thermometer)
* [Space blanket](http://en.wikipedia.org/wiki/Space_blanket) (lightweight plastic foil blanket, also known as "emergency blanket")
* [Penlight](http://en.wikipedia.org/wiki/Penlight)
* [Cotton swab](http://en.wikipedia.org/wiki/Cotton_swab)

**Medication**

Medication can be a controversial addition to a first aid kit, especially if it is for use on members of the public. It is, however, common for personal or family first aid kits to contain certain medications. Dependent on scope of practice, the main types of medicine are life saving medications, which may be commonly found in first aid kits used by paid or assigned first aiders for members of the public or employees, painkillers, which are often found in personal kits, but may also be found in public provision and lastly symptomatic relief medicines, which are generally only found in personal kits.

**Life saving**

* [Aspirin](http://en.wikipedia.org/wiki/Aspirin" \o "Aspirin) primarily used for central medical chest pain as an anti-platelet
* [Epinephrine autoinjector](http://en.wikipedia.org/wiki/Epinephrine_autoinjector) (brand name Epipen) - often included in kits for wilderness use and in places such as summer camps, to treat anaphylactic shock.

**Pain killers**

* [Paracetamol](http://en.wikipedia.org/wiki/Paracetamol) (also known as Acetaminophen) is one of the most common pain killing medication, as either tablet or syrup
* Anti-inflammatory painkillers such as [Ibuprofen](http://en.wikipedia.org/wiki/Ibuprofen), [Naproxen](http://en.wikipedia.org/wiki/Naproxen) or other [NSAIDs](http://en.wikipedia.org/wiki/NSAID) can be used as part of treating [sprains](http://en.wikipedia.org/wiki/Sprain) and strains
* [Codeine](http://en.wikipedia.org/wiki/Codeine) which is both a painkiller and anti-diarrheal

**Symptomatic relief**

* Anti [diarrhea](http://en.wikipedia.org/wiki/Diarrhea) medication such as [Loperamide](http://en.wikipedia.org/wiki/Loperamide) - especially important in remote or third world locations where dehydration caused by diarrhea is a leading killer of children
* [Oral rehydration salts](http://en.wikipedia.org/wiki/Oral_rehydration_therapy)
* [Antihistamine](http://en.wikipedia.org/wiki/Antihistamines), such as [diphenhydramine](http://en.wikipedia.org/wiki/Diphenhydramine)
* Poison treatments
  + Absorption, such as [activated charcoal](http://en.wikipedia.org/wiki/Activated_charcoal)
  + [Emetics](http://en.wikipedia.org/wiki/Emetic) to induce vomiting, such as [syrup of ipecac](http://en.wikipedia.org/wiki/Syrup_of_ipecac) although first aid manuals now advise against inducing vomiting.
* [Smelling Salts](http://en.wikipedia.org/wiki/Smelling_Salts) ([ammonium carbonate](http://en.wikipedia.org/wiki/Ammonium_carbonate))

**Topical medications**

* Antiseptic ointment, fluid, moist wipe or spray, including [benzalkonium chloride](http://en.wikipedia.org/wiki/Benzalkonium_chloride), [Neomycin](http://en.wikipedia.org/wiki/Neomycin), [Polymyxin B](http://en.wikipedia.org/wiki/Polymyxin_B) Sulfate or [Bacitracin](http://en.wikipedia.org/wiki/Bacitracin) Zinc.
  + [Povidone iodine](http://en.wikipedia.org/wiki/Povidone_iodine) is an antiseptic in the from of liquid, swabstick, or towelette
* [Aloe vera](http://en.wikipedia.org/wiki/Aloe_vera) gel - used for a wide variety of skin problems, including burns, sunburns, itching, and dry skin; used as a substitute for triple-antibiotic gel to keep a wound moist and prevent bandages from sticking
* Burn gel - a water-based gel that acts as a cooling agent and often includes a mild anesthetic such as [lidocaine](http://en.wikipedia.org/wiki/Lidocaine) and, sometimes, an antiseptic such as [tea tree oil](http://en.wikipedia.org/wiki/Tea_tree_oil)
* Anti-itch ointment
  + [Hydrocortisone](http://en.wikipedia.org/wiki/Hydrocortisone) cream
  + [antihistamine](http://en.wikipedia.org/wiki/Antihistamine) cream containing [diphenhydramine](http://en.wikipedia.org/wiki/Diphenhydramine)
  + Calamine lotion
* [Anti-fungal](http://en.wikipedia.org/wiki/Anti-fungal) cream
* [Tincture of benzoin](http://en.wikipedia.org/wiki/Tincture_of_benzoin) - often in the form of an individually sealed swabstick, protects the skin and aids the adhesion of butterfly strips or adhesive bandages.

Historic first aid kits

As the understanding of first aid and lifesaving measures has advanced, and the nature of public health risks has changed, the contents of first aid kits have changed to reflect prevailing understandings and conditions. For example, earlier US Federal specifications [[9]](http://en.wikipedia.org/wiki/First_aid_kit#cite_note-8) [[10]](http://en.wikipedia.org/wiki/First_aid_kit#cite_note-9) for first aid kits included incision/suction-type snakebite kits and mercurochrome antiseptic. As explained in the article on[snakebite](http://en.wikipedia.org/wiki/Snakebite#Outmoded_treatments), this type of snakebite kit is no longer recommended. [Mercurochrome](http://en.wikipedia.org/wiki/Merbromin) is not approved by the US FDA due to concerns over mercury poisoning. Other examples include the [CPR face shields](http://en.wikipedia.org/wiki/Pocket_mask) and specific [body-fluid](http://en.wikipedia.org/wiki/Bodily_fluid) barriers included in modern kits, to assist in [CPR](http://en.wikipedia.org/wiki/Cardiopulmonary_resuscitation) and to help prevent the spread of bloodborne pathogens such as [HIV](http://en.wikipedia.org/wiki/HIV). Modern CPR not having been popularized until after 1960, and HIV not being recognized until 1983.