

Medical Treatment in Traveller

Characteristics fall into two categories: physical and mental. The physical characteristics include Strength, Dexterity, Speed, Agility, Endurance and Body Mass which added together constitutes the PCs physical hit points. The mental characteristics include Intelligence, Charisma, Determination, Awareness, Memory and Psionic Strength (if applicable) which added together constitute the PCs mental status and memory capacity. Integrity, Appearance and Social Status are not considered in damage assessment, although Appearance may be affected as a result of damage.

Combat damage consists of wounds, broken bones and lost body parts. On some occasions damage may occur as a result of biological agents, toxins, legal or illegal drugs, lack of oxygen (drowning or vacuum exposure), exposure to extremes of temperature, burns due to fire, electric shock, radiation or hazardous chemicals.

Using a separate piece of paper and a pencil with an erasure, subtract damage as it occurs from physical characteristics. Let's use the example of Dr. Wilson: He's on the battlefield treating the wounded. A grenade goes off a few feet away and he takes 5 points of damage. The damage is considered minor but it must be taken away from one or more of his primary physical or mental characteristics. Since the doctor is conscious he ignores his own wounds and continues his duties. By reducing a characteristic the die modifier (DM) is reduced.

Several minutes later he is shot by a rifle round and suffers 14 points of internal damage. Because the number of damage points received are between 13 and 24 the wound is rolled on the Moderate Damage table and the exact nature of any injuries is also determined. The doctor rolls damage to the right leg but suffers no broken bone. Because this amount of damage is greater than any maximum human characteristic it immediately reduces the highest physical characteristic to zero. The doctor's highest characteristic is Dexterity of 10. On any roll where the damage is greater than the highest characteristic the character must take all the damage to the highest characteristic. He can not spread out the damage. When any characteristic is zeroed out the PC immediately loses consciousness. Since the damage is a bleeding wound it must be immediately treated or the PC continues to lose hit points from loss of blood. Remember also that the doctor took 14 points, which means that the other 4 damage points must be accounted for. The PC chooses to take two points off of Strength and two points off of Speed.

So how long does the doctor remain unconscious? Roll 2d6 in minutes. In this case the doctor rolls 7, meaning he will be unconscious for 7 full minutes. Under moderate damage the PC would take one additional point of damage for every three-minute period that their wound goes untreated. These points are also added to the time the doctor remains unconscious. Thus, if he is left untreated for six minutes, and the original time was 7 minutes, the doctor would still have 5 minutes of unconsciousness from the original roll, plus two additional minutes added on for the six minutes left untreated, meaning he would be out 7 minutes before awakening—that is if he were treated at that time. If treated within the three minute limit he suffers no additional damage and no additional time penalty.

Upon regaining consciousness the doctor may take several seconds or more to become aware of his immediate situation. Roll 2d6 to determine the number of seconds he needs in order to regain situational awareness. Once the doctor has reoriented himself and alert, the initial 10 points that were zeroed out must now be accounted for by distributing them amongst the PCs overall

characteristics. The Player should be careful about which characteristics to reduce since taking away points will lower the PCs DMs in performing other tasks.

If the doctor receives several additional minor wounds it can continue to reduce this characteristic. He may continue to perform his duties but will most likely make mistakes (rolling a greater number of task failures) since his DMs are reduced. When the PC losses half or more of his total physical hit points he must roll to determine if system shock sets in, which will result in total collapses into unconsciousness due to the loss of blood.

Minor Damage Table (2d6) (Determine Location & Extent of Damage)

2-4	Head / Face / Neck		
		2	Flash Burns to Eyes (Loss of Vision & Orientation for 2d6 Minutes)
		3	Extreme Noise Trauma to Ears (Loss of Hearing & Orientation for 2d6 Minutes)
		4-6	Impact Blow to Head (Loss of Orientation for 1d6 minutes / Minor Bleeding)
		7-9	Fracture to Skull (Loss of Orientation for 2d6 seconds / Minor Bleeding)
		10-11	Flesh Wound to Facial Area but No Damage to Eyes (Minor Bleeding)
		12	Impact Concussion to Head (Loss of Orientation for 5d6 seconds)
5-7	Chest / Abdomen / Hips		
		2-3	Damage to Chest Muscle Tissue (Minor Bleeding)
		4-5	Fracture to Rib(s) (Minor Bleeding)
		6-8	Damage to Kidney (R or L) (Minor Bleeding)
		9-10	Gall Bladder (Minor Bleeding)
		11-12	Damage to Buttocks Muscle Tissue (Minor Bleeding)
8-9	Arm / Hand		
		2	Damage to Shoulder Joint (Some Immobility to Entire Arm Except Hand / Minor Bleeding)
		3	Damage to Elbow Joint (Immobility to Lower Arm Except Hand / Minor Bleeding)
		4-5	Damage to Shoulder Muscle Tissue (Minor Bleeding)
		6-7	Damage to Wrist Joint (Immobility to Lower Arm Including Hand / Minor Bleeding)
		8-9	Damage to Lower Arm Muscle Tissue (Minor Bleeding)
		10-11	Fracture to Bones in Hand (Minor Immobility to Hand & Fingers / Minor Bleeding)
		12	Damage to Finger(s) (Loss of Finger(s) / Minor Bleeding)
10-11	Upper Leg / Lower Leg / Foot		
		2-3	Damage to Knee Joint (Some Immobility to Lower Leg / Minor Bleeding)
		4-5	Damage to Upper Leg Muscle Tissue (Minor Bleeding)
		6-7	Damage to Ankle Joint (Some Immobility to Foot / Minor Bleeding)
		8-9	Damage to Lower Leg Muscle Tissue (Minor Bleeding)
		10-11	Fracture of Bones in Foot (Immobility to Foot / Minor Bleeding)
		12	Damage to Toe(s) (Loss of Toe(s) / Minor Bleeding)
12	Skin		
		2-6	First Degree Chemical or Flash Burns to Skin
		6-9	Minor Surface Shrapnel Wounds (Minor Bleeding)
		10-12	Minor Lacerations and Abrasions (Minor Bleeding)

Major Damage Table (5d6+10)
(Determine Location & Extent of Damage)

2	Head	2-3	Damage to Cerebellum (Immediate Death)
		4-5	Damage to Cerebrum (Unconsciousness 2d6 Days) *
		6-8	Blunt Impact Damage to Optic Nerve (Loss of Vision 2d6 Minutes)
		9-10	Blunt Impact Damage to Ears (R or L or B / Loss of Hearing 2d6 Minutes)
		11-12	Fracture to Skull (Minor Bleeding)
3	Face	2-3	Flash Burn Damage to Eyes (R or L or B / Loss of Vision 2d6 Minutes)
		4-7	Fracture to Jaw (Can't Use Mouth / Difficulty Talking / Minor Bleeding)
		8-10	Damage to Mouth (Injury to Teeth & Gums / Minor Bleeding)
		11-12	Fracture to Cheekbone (R / L / B) (Minor Bleeding)
4	Neck	2-3	Fracture to Cervical (Spinal Cord) (Paralysis from the Neck Down) *
		4-5	Damage to Jugular Artery / Vein (Critical Bleeding) *
		6-9	Damage to Trachea-Esophagus (Breathing Emergency) *
		10-12	Damage Vocal Cord (Loss of Speech)
5	Chest	2-3	Damage to Heart-Aorta (Immediate Death)
		4-5	Fracture to Thoracic Spinal Cord & Rib(s) (Paralysis from Chest Down) *
		6-8	Damage to Trachea-Lungs & Rib(s) (Breathing Emergency)
		9-10	Fracture to Ribs & Sternum (Major Breathing Difficulty / Major Bleeding)
		11-12	Damage to Chest Muscle Tissue (Major Bleeding)
6	Abdomen	2	Fracture to Lumbar Spinal Cord (Paralysis from Abdomen Down) *
		3	Damage to Colon (Disembowelment / Major Bleeding) *
		4-5	Damage to Major Artery or Vein (Critical Bleeding) *
		6-8	Damage to Stomach (Minor Bleeding / Acid Burns to Nearby Tissue)*
		9-10	Damage to Kidney (R or L) (Minor Bleeding) *
		11	Liver (Minor Bleeding) *
		12	Damage to Bladder (Minor Bleeding)
7	Shoulder-Upper Arm	2	Damage to Major Upper Arm Nerve (Paralysis to Entire Arm / Bleeding) *
		3	Damage to Major Artery or Vein (Critical Bleeding) *
		4	Fracture of Clavicle (Immobility to Arm Except Hand / Minor Bleeding)
		5	Major Damage to Shoulder Joint (Immobility to Entire Arm Except Hand)
		6-8	Fracture of Humerus (Immobility to Entire Arm Except Hand)
		9-10	Major Damage to Elbow Joint (Immobility to Lower Arm Except Hand)
		11-12	Damage to Shoulder Muscle Tissue (Major Bleeding)
8	Hip	2-3	Damage to Spinal Cord (Paralysis to Hip Down / Major Bleeding) *
		4-5	Damage to Major Artery or Vein (Critical Bleeding) *
		6-8	Damage to Genitalia or Internal Reproductive Organs (Major Bleeding)
		9-10	Fracture of Pelvis (Immobility to Lower Body)
		11-12	Damage to Hip / Buttocks Muscle Tissue (Minor Bleeding)

9	Upper Leg	2-3	Damage to Major Leg Nerve (Paralysis to Entire Leg / Major Bleeding) *
		4-5	Damage to Major Artery or Vein (Critical Bleeding) *
		6-8	Fracture to Femur (Immobility to Entire Leg / Minor Bleeding)
		9-10	Major Damage to Knee Joint (Some Immobility to Lower Leg)
		11-12	Damage to Upper Leg Muscle Tissue (Major Bleeding)
10	Lower Arm	2-3	Major Damage to Major Lower Arm Nerve (Paralysis to Lower Arm / Minor Bleeding) *
		4-5	Major Damage to Major Artery or Vein (Major Bleeding) *
		6-8	Fracture to Radius and/or Ulna (Immobility to Lower Arm Including Hand / Minor Bleeding)
		9-10	Major Damage to Wrist Joint (Immobility to Lower Arm Including Hand)
		11	Major Damage to Lower Arm Muscle Tissue (Major Bleeding)
		12	Fracture of Bones in Hand and Fingers (Immobility to Hand and Fingers / Minor Bleeding)
11	Lower Leg	2-3	Damage to Major Lower Leg Nerve (Paralysis to Lower Leg Down / Minor Bleeding) *
		4-5	Damage to Lower Leg Artery or Vein (Critical Bleeding)*
		6-8	Fracture to Tibia and/or Fibula (Immobility to Lower Leg / Minor Bleeding)
		9-10	Major Damage to Ankle Joint (Immobility to Foot / Major Bleeding)
		11	Damage to Lower Leg Muscle Tissue (Major Bleeding)
		12	Fracture of Bones in Foot and Toes (Immobility to Foot)
12	Skin	2-3	Third Degree Thermal or Chemical Burns to Skin (Deep Charring to Bone) (1d10% of Body) *
		4-5	Second Degree Thermal or Chemical Burns to Skin (Loss of Outer Layer of Skin) (1d10% of Body) *
		6-8	First Degree Flash Chemical Burns to Skin (Surface Only) (1d10% of Body)
		9-12	Minor Lacerations and Abrasions (Minor Bleeding)

* Denotes life threatening injury that requires immediate first aid to prevent critical blood loss or possibility of future paralysis due to nerve tissue damage, or prevent complications such as infection or system shock. If wounds are caused by projectiles or piercing weapons they can also damage surrounding tissue and organs.

Minor bleeding equals one characteristic point loss for every 36 minutes untreated

Major bleeding equals one characteristic point loss for every 12 minutes untreated

Body Modification

While a teenager the PC may have suffered a major accident, a serious disease or genetic conditions that required surgery or specialized therapy. Roll 2d6 to determine treatment course.

- 2-5 Physical Fitness / Diet Modification / Plastic Surgery / Cosmetic Therapy
- 6-7 Prosthetic Device / Organ Transplant Surgery
- 8-9 Bionic Implant Surgery
- 10 Genetic Therapy
- 11 Nano Therapy
- 12 Drug Therapy

Physical Fitness / Diet Modification / Plastic Surgery / Cosmetic Therapies

A variety of physical fitness and diet modification programs are available for PCs willing to spend time and energy in improving their bodies. The easy way is through body sculpting procedures including face lifts, liposuction, breast augmentation or reduction, plastic implants to enhance facial or other body features, laser skin treatments, Lasik vision enhancement surgery, botox injections and hair replacement transplants are common procedures. The extreme being sterile sex change surgery. Firms that specialize in such procedures are often referred to as “Body Shops”. With plastic surgery a PC can change from a Solomani into a Vilani or Zhodani, but their DNA can’t be changed

Prosthetic Devices / Organ Transplants

A prosthetic device has few if any, electronic components, and no form of enhancements or augmentation. It’s generally a low-tech solution that works fine in many cases. It’s an anthropomorphic representation of the PCs natural arm or leg. They are available at TL-7. They can include: Hearing Aids or Contacts, Orthopedic Replacement of Joints or Bones, Prosthetic Limbs (Arms / Hands / Legs / Feet), Electro-Mechanical Organs Transplant (All except Brain), Advanced Synthetic Organ Transplant (All except Brain) or Advanced Personal Transportation Device (Customized Grav-Chairs). This has some limitations in regards to natural organ donor transplants since growing an identical clone for organ harvesting is illegal within the Imperium, genetically compatible private donors, and on some worlds, death penalty prisoners may voluntarily donate their bodies or specific organs for transplant, and there’s a highly illegal underground market for acquiring and selling organs, referred to as “organlegging” or “organ-running”.

Bionic Implants (Cyberwear)

A augmented bionic implant is a device that utilizes advanced electronics circuitry and futuristic materials that’s designed to look and feel like its’ human counterpart. In most cases it includes major enhancements or augmentation for the user. Examples are bio-synthetic organs, bionic limbs, internal hearing and vision circuitry, and neuro-net brain-linkage circuitry (sometimes referred to as a Cyberjack). This is available at TL-13. This can include: Bionic Leg (can include one or both hips, legs, knees, ankles or feet — If only one leg is affected it will general be a standard prosthetic device instead), Bionic Arm (includes one or both shoulders, arms, elbows, wrists or hands), Bionic Organ, Bionic Eye (one or both), Bionic Ear (one or both), Neural Interface Implant with a protective Feedback Gate (Cyberjack Device) or a Computer Implant. Rejection, adverse reactions and side-effects can sometimes occur.

Genetic Therapy (Biowear)

A genetic bio-medical enhancement therapy is a unique medical treatment that effectively changes or modifies the PCs DNA sequence whereby growing a new limb or organ. Genetically tailored DNA can treat cancer affecting only malignant cells. While some procedures are quite safe and practical, others contain significant risks and can result in undesirable or even dangerous side effects. Available at TL-11. Genetic engineered viruses could produce tailored weapons. On a positive note parents can decide on the sex, hair and eye color and other traits of their child. Other possibilities could include: Inductive Stem Cell Therapy resulting in Specific Tissue Regeneration Techniques (regrowing an organ or limb), Selective Rapid Growth Tissue Techniques (using the donors DNA to grow an organ in a laboratory vat), Myosynthetic (Muscular Augmentation) Therapy (increases strength), Antigathic Therapy (anti-aging), Chromatasporic Skin Therapy (provides stealth capability), OstoFusion Therapy (fusing bones with alloy metals or carbon fibers), Neural Sheathing (shielding the brain from psionics), or Brain Growth Therapy (increased intelligence). Adverse reactions and side-effects can sometimes occur.

Nano Therapy

Nano-Bionics / Nano Antibodies

Drug Therapy

Standard Generic & Brand-name Pharmaceuticals, Multi-Vitamins, Genetically Tailored Drugs, Broad-Spectrum Antibiotics, Analgesics-Anesthetics, Various Serums & Vaccines,

This could include anabolic steroids, human growth hormone, Taniron (increases strength), Donlarian, Kentol Alpha / Beta or Xanthium (combat drugs), AnaRad (also known as “NoGlo”) (anti-radiation serum), Vadrigan (speed drug), ReGen IV (Healing Acceleration), Burn Foam (regenerates skin tissue), BioStasis (reduces patients heart rate at 1/10th normal), CryoG (cryogenic anti-freeze drug), Stims (stimulates), Neural Stasis (preserves tissue of recently dead for medical autopsy), various cosmetic drugs (Skin Agents, Botox, Wrinkle Creams), immuno-suppressants, various forms of recreational drugs, Anesthetics, Freezone (sedative drug), Panomycin (broad-spectrum antibiotic), Tranq (knocks the patient out), and various forms of anagathics (anti-aging drugs). An excellent article about Anagathics is listed under www.freelancetraveller.com under Doing It My Way titled “Anagathics”.

Unique or Specialized Therapies (2d6)

Memory Reprogramming (Memory Wipes) / Brain Mapping-Taping / Memory RNA Training / Radio & Chemo Therapy in treating cancers /

Medical Technologies

Neutron Beam Irradiation Scanners, Advanced Low-Field MRI, High-Speed DNA and Protein Sequencing, 3D Ultrasound, X-Ray Holography, Computational & Combinatorial Bio-Chemistry, Molecular Bio-Engineering, High Resolution 3D CT Scanners, Chip-based Molecular Biology Laboratories