

QMJS-Mod by Mark Smith.

This is version 1.8, 1/22/14. This is a work in progress, not the final version.

I am reachable from the Mod page at Moddb.com (<http://www.moddb.com/mods/qmjs-mod>), although I may or may not check it very often, or as QMJS on Steam.

This mod is for Dead Island Riptide on the PC. All rights and copyrights belong to Techland, the game developer, and Deep Silver, the publisher.

This mod increases the difficulty and options available to the player. Essentially, characters will be more versatile, zombies will be more dangerous and less predictable, and there are many more inventory items, weapons, and craftplans available. This will increase the re-playability of the game as well as the challenge level considerably. My end goal is for it to be hard enough to be challenging, but not so hard as to be frustrating. The whole point is for it to be fun without being boring. I think that probably will work out to no more than one death every half hour, but no less than one an hour.

IF YOU READ NOTHING ELSE, KNOW THAT YOU NEED TO START A NEW CHARACTER (and you really should do the prologue).

Sections below indicate installation direction, other MOD and DISE compatibility, character notes, enemy notes, inventory notes, and controls. After the controls is a list of new or modified useable items, enemy resistances, and then there is a section of current issues with the mod and future plans. You don't have to read everything here, but browsing it is recommended.

If you have an issue not noted in the current issues section below, let me know and I will attempt to correct it. Although nothing in the mod can cause damage to your computer, use the mod at your own risk.

Installation: If you have other mods installed, back them up first, and then delete the contents of the Data directory before installing this mod. Once this mod is installed, it is unlikely that previous mods will work. You can reinstall as necessary from your backup.

Unzip the file into C:\Users\YOURUSERNAME\Documents\Riptide\out (Desktop\YOURUSERNAME\Documents\Riptide\out). In most cases you can place the zip file in the Out directory and then right-click and select "Extract Here." If this option is not available to you, extract it as normal and place the Data directory within Out.

The Data directory should be in the same directory as a file called FirstRun.scr. When installed correctly, the directory will contain four files: check, ConsoleHistory_Engine.txt, ConsoleHistory_GameScript.txt, and EngineConsoleSettings.dat, and three folders, Logs, Settings, and Data.

When updating from a previous version, please double-click and run the CleanupUnusedFiles.bat in the Data directory. This will remove some files that are no longer needed.

There are three BAT files located in the C:\Users\YOURUSERNAME\Documents\Riptide\out\data directory that may be used to make the mod easier or harder. The default installation is Normal, and may be reset by using NormalDifficulty.bat. EasyDifficulty.bat and HardDifficulty.bat make the mod easier or harder. All you have to do is double-click them, and they will make some changes to files within the mod. A list of what is changed is noted later in the file under Difficulty Modifications.

Compatibility: Other mods are not likely to be compatible if they utilize the same files. Unless you are comfortable with file management, it is best to only use one mod at a time. Some other mods can work as long as they do not attempt to modify the same files. One example of this is "Dead Island Riptide Day & Night Cycle Henderson" uploaded to ModDB by Dead-deadisland (<http://www.moddb.com/games/dead-island-riptide/downloads/dead-island-riptide-day-night-cycle-henderson-to>), which works quite well.

DISE (Dead Island Save Editor, by Steffen Langnes, available at <http://deadislandsaveeditor.steffenl.com>), does work with games saved using this mod, but with a number of significant problems. DISE does not recognize these new inventory items, skill trees, or the craftplans used in this mod. If you add any unknown items, those will be assigned with generic coding that causes them to count against your weapon inventory. Because the game only checks to see if you are at your

maximum inventory, and not if you are actually above it, this has the effect of giving you an effectively unlimited inventory. In most cases this will not crash the game, but it can cause extreme delay when opening your inventory, including selling, repairing, upgrading, and modding items.

Character Notes: Because of the different skill trees, importing a character from Dead Island or attempting to use a character already created in Riptide may cause significant issues up to and including crashing the game. Always start a new character when starting to use this mod, and it would be well worth your time to complete the prologue when starting. If you skip the prologue, you will find the first few quests to be extremely difficult, if not impossible. The various prebuilt skill trees have also been cleared, and are unable to be selected. Your characters will always be custom builds.

All characters have been expanded and have the ability to learn how to use any weapon type. Overall, all characters will get all skills by level 70, but continue to be better with their 'special' weapon types than with others. The unique abilities noted below are granted by their first Fury skill, and that skill should be selected upon character creation; however, not doing so does not create a penalty, other than not having the ability to use Fury.

The number of inventory slots, amount of ammunition carried, and total hit points have been increased, and all characters heal somewhat, but at a relatively slow rate.

Purna is the firearms specialist. She has average hit points and low stamina. Her special abilities grant her some bullet damage resistance, the ability to carry more ammunition, and increased performance with all types of guns.

Sam B. is the blunt weapon specialist. He has high hit points and high stamina. His special abilities give him faster healing, melee damage resistance, increased aggro generation (zombies will prefer him as a target compared to other characters, and will approach from a greater distance), and increased performance with blunt weapons.

Xian is the sharp weapon specialist. She has low hit points and high stamina. Her special abilities allow her to jump and run longer than other characters and provide increased performance with bladed weapons.

Logan is the thrown weapon specialist. He has average hit points and moderate stamina. His special abilities provide some fire and explosion damage resistance and increased performance with thrown weapons.

John is the hand-to-hand specialist. He has average hit points and moderate stamina. His special abilities give him slightly faster healing, a small amount of melee, fire, and explosion damage resistance, and better unarmed and fist weapon performance.

Enemy notes: Unless noted below, zombies refers to both zombies, infected, and special zombie types.

Zombies have improved stamina, greater hit points, greater sight range, and cause increased damage.

Their ranged attacks have slightly more range.

More zombies may attack at once, and some will attack the character even once knocked down.

Some very slow enemies are now slightly faster.

Many zombies will regenerate if not being constantly attacked.

Higher level zombies do proportionally more damage, and can be up to 6 levels higher.

Special zombies take reduced damage from different damage types.

Zombies have a much greater selection of weapons for those that are armed, but will not throw their weapons as often.

They have greater variability in positioning, and are more aggressive, detecting and following for a greater distance. The number of zombies appearing and the variety of zombies has been increased, including a considerable number of special boss-type zombies that can appear randomly. Base defense will be considerably harder with the enlarged spawns.

Humans have moderately improved hit points and a greater variety of useable weapons.

The need to study zombies to determine whether or not they are taking reduced damage from your attacks, combined with the increased numbers and types may require you to change your tactics. There will be times when you simply must run. You will need to be observant and aware of your surroundings far more than in the unmodified game. Dead Zones will be considerably more difficult.

Inventory notes: Most craftplans will be acquired by purchasing them from the various stores. There are many craftplans in

the world to find, but many are only available from the stores.

There are a large number of new craftplans, including some alternate plans (items that have the same effects but are created using different parts).

Quests that previously gave craftplans have mostly been changed to provide a useful weapon, and some repeatable quests now require multiple items to complete, and often provide smaller rewards.

Most weapon mods require more craftparts and more cash to create. The Sticky Bomb and Tesla Bomb mods have been changed to regular electric/impact weapons instead of explosives.

A large number of additional items have been added. Many of these are new parts used in crafting, but some exist simply to sell. Because they are craftparts, they will not fill up your inventory, so if you are unsure of whether it will be useful you can always carry them. Many of these are simply items that would be useful or have value to survivors. Rare craftparts have also been made available as loot drops, so it is not necessary to farm dead zones for those parts, although they are still available there as well.

There are a few new weapons, including a large number of additional throwable bombs. These can be found randomly, bought at various stores, or created with craftplans. There is a hunting rifle, midway between a semi-automatic sniper rifle and a single shot rifle in performance. New Legendary weapons include a wrench, tanto, crowbar, staff, heavy revolver, heavy pistol, single shot rifle, and burst rifle. The legendary weapons are identical to normal Orange/Gold weapons of the same type, except melee weapons have double the durability, and firearms have an increased ammo capacity. They are extremely expensive and are only available for use at level 50 or above. All of the legendaries are now indicated by the Superior prefix.

To compensate for the increased difficulty of base defense missions partially, fences are a little stronger, and the stationary guns have increased ammunition. Team members have also been adjusted, with improved weapons.

All food can be picked up and carried for later use. A number of useable items have been added, including additional healing items and medical drugs, alcohol, food, armor, and tool kits.

Many more items have been added to the various stores. Only one store sells Orange/Gold quality weapons, and those are the legendary weapons.

Other than the legendaries noted above, the only Orange/Gold quality weapons will be random drops, making them rare and valuable.

Occasionally you may find one of the collectibles on a boss or special-type zombie.

Controls review: Although the controls remain set to their defaults, some abilities may be confusing to control. This is a basic list.

ESC- main menu/pause

TAB- group quest menu

L- quest menu

U- upgrade/skills menu

M- map

V- Show active quest

W- move forward

S- move backwards

A- Strafe/sidestep left

D- Strafe/sidestep right

SHIFT- Sprint/Run (if you have taken ramming, you will automatically knock back or down enemies that you run into)

R- Charge WHILE RUNNING (if you have taken this skill, you will cause damage to the target you charge into, but you must not have a gun equipped, otherwise the reload action will take place.)

CONTROL- Crouch/Stand toggle

SPACE- Jump

E- Kick/Stomp/Jump attack (once you have progressed enough in one of the combat types, you can use this key to stomp on

a zombie that is on the ground, or jump down on a zombie from above. Watch for the special attack indicator overlaid on the zombie.)

F- Use/Search to activate items in the environment or search for loot in a container or on a dead opponent.

LEFT MOUSE BUTTON- Attack or throw a carried heavy object. When aimed directly at an opponents head, a quick click will execute a precision attack, and a second quick click may allow a follow-up attack.

RIGHT MOUSE BUTTON- aim (for throwing a melee weapon or to use the gun-sights on a firearm) Also allows uppercut melee attack (if skill taken and unarmed or using fist weapons)

LEFT AND RIGHT MOUSE BUTTONS- pressed at the same time while aimed at the head will attempt to knock them out (if skill taken)

LEFT MOUSE BUTTON followed by RIGHT MOUSE BUTTON- attempt to escape from a grappling/grabbing enemy

C- spot or mark target in co-op mode.

MOUSE WHEEL- Tap to switch weapons, hold to select from the weapon wheel.

I- Inventory (Double click a weapon and then select a spot on the weapon wheel to equip a weapon. Useable items such as armor, food, and medicines can be selected from the Miscellaneous tab (use the << and >> to navigate) and activated by clicking USE.

T- Flashlight, toggles on/off. The flashlight has a limited duration and then will need to recharge.

BACKSPACE- Drop current weapon or heavy object.

H- Heal using a carried healing item (med-kit or food)

R- Reload weapon

Q- Quick melee attack when you have a firearm equipped, pushes the enemy back slightly.

ENTER- Chat/Conversation in Co-Op.

Z- Activate Fury mode when the Fury indicator is full. Press Z again before attacking to activate group fury mode, which cancels your fury mode but gives you and your teammates a bonus for 30-60 seconds. Group Fury bonuses include Sam (critical hit bonus), Purna (health regeneration), Logan (experience and loot increase), Xian (no stamina costs/unlimited stamina, and John (movement, attack, and reload speed increase.)

X- Throws a flare and then returns to previously equipped weapon

Vehicle controls:

F- enter or exit the vehicle

X- engine on/off

W - increase speed/forward

S - slow down/reverse

A - turn left

D - turn right

SPACE – break/stop

O- blows horn, in car only

P- turns on lights, in car only

SHIFT - Temporary speed boost, useable in boats only. This can be used to run over or knock off climbing zombies

Useable Items:

These are short descriptions of the effects of various useable items. There is no visible indication of armor/tool kit use or duration. You will have to be observant or note the time to be sure they are still working. (Fire damage can be due to open flame or metal heated by electricity. Impact damage can come from heavy weight or electrical effects.)

These may only be used when already injured:

Bottled Water - adds 0.3 regeneration for 5 minutes

Apple Juice - heals 75 hp

Bandages - heals 75 hp

Canned food - heals 60 hp

Energy Drink - heals 75 hp

Extra Snack - heals 60 hp

Fruit - heals 50 hp

Fruit Juice - heals 75 hp

Gauze - heals 75 hp

Gotu Kola - heals 60 hp

Large Medkit - heals 125 hp

Lemon Juice - heals 90 hp

Medium Medkit - heals 90 hp

Snack - heals 55 hp
Soda - heals 75 hp

These may be used at any time:

Adrenaline - adds 0.9 regeneration for 5 minutes
Antibiotics - adds 0.6 regeneration for 5 minutes
Analgesic - adds 0.3 regeneration for 5 minutes and adds 50 hp to maximum
Painkillers - adds 0.2 regeneration for 5 minutes and adds 120 hp to maximum
Steroids - adds 0.2 regeneration for 5 minutes and adds 50 hp to maximum, improves maximum stamina and stamina regeneration

Tool kit - for 1 hour, decreases weapon durability loss 35 percent and reduces costs of repairs and upgrades.
Repair kit - for 1 hour, decreases weapon durability loss 25 percent and reduces costs of repairs and upgrades.

Bulletproof Vest - for 30 minutes reduces melee damage 20%, ranged damage 80%, and environmental damage 10%. Slows movement 10%.
Light armor - for 30 minutes reduces melee and ranged damage 15% and environmental damage 10%. Slows movement 20%.
Medium armor - for 30 minutes reduces melee and ranged damage 30% and environmental damage 20%. Slows movement 30%.
Heavy armor - for 30 minutes reduces melee and ranged damage 45% and environmental damage 30%. Slows movement 40%.

Small Flare - provides light for 25 seconds
Flare - provides light for 70 seconds
Extended Duration Flare - provides light for 140 seconds

Alcohol, Brand Champagne, Wine, Beer, and Cabernet Sauvignon 1977 are all variations of alcohol, and have identical effects.

Enemy Resistances:

Regular Walkers and Infected have no special resistances.
Burning Zombies are highly resistant to fire.
Toxic Zombies are highly resistant to poison.
Suiciders take extra damage from fire.
Grenadiers are highly resistant to fire and poison, and moderately resistant to electric and bleeding.
Butchers have light resistance to all damage types.
Rams have moderate resistance to fire, poison, and bleeding damage, high resistance to impact, and are immune to electric damage.
Floaters and Drowners are moderately resistant to bleeding, highly resistant to fire and poison, and immune to drowning.
Thugs have moderate resistance to fire, poison, and bleeding.
Screamers are highly resistant to electric and impact, and moderately resistant to poison and bleeding.
Wrestlers are immune to electric and impact damage, moderately resist to bleeding, and highly resist to fire and poison.

Difficulty Modifications:

If you use the Bat files noted in the installation notes, these are the effects of setting the mod to Easy or Hard.

Easy-
Increased bullet penetration chance
Increased health regeneration
Slight increase in stamina regeneration
Zombies have lower chance of using a weapon
Zombies have lower range of level differences from character
Zombies have lower stamina regeneration
Floaters have shorter attack range
Fewer zombies are able to regenerate
Zombie hit points drastically reduced
Zombie attack damage reduced

Hard-

Decreased bullet penetration chance

Decreased health regeneration

Significant decrease in stamina regeneration

Decreased ammunition capacity

Zombie hit points increased slightly

Head attacks do increased damage (can still kill normally, but precise head attacks rewarded)

Zombie bite damage greatly increased

Zombie attack damage increased slightly

Current Issues:

There are a number of issues with the mod. As it is, everything works, but there are a number of issues that still need to be worked out. As I learn more about how the game systems interact, I hope to be able to correct these.

Collectibles and craftplans: Craftplans and collectible order get changed when you add new ones. For some reason, although indicated in the map files by their specific name, their appearance seems to be controlled by an index. Craftplans found 'in the world' are basically bonus items anyway... in this mod they are all available from shops, so finding one outside just saves you the money. Will attempt to reorder items later to correct.

Animations: Some of the animations for useable objects are rather odd. For the armors and tool kits, it will appear that you are injecting your arm with a box. For the canned food, the can will partially disappear when used. This is due to the fact that no particularly suitable animations were made for these, and I am using ones that functionally work, despite their appearance. Bandages also seem to be applied directly to your left arm for absorption.

Item appearances: Many of the new items don't have an accurate appearance because there was no similar mesh available to use. For the most part this doesn't matter because you will never actually see them in the world unless you choose to drop them, and since most are craftparts they won't be taking up inventory slots. The M60 machinegun is currently using a burst rifle mesh, but with different positioning.

Modded Weapons: Some of the skins were removed and unavailable. Weapons may be modded with most of the mods they were able to in Dead Island, but the appearances may not be the same. The most noticeable difference is the Phoenix mod, but many others were also affected. As a result, many modded weapons may look the same using different mods. This includes some of the duplicate effect mods, which have the same effects but use different materials.

Armor buffs: These can stack, although not intended to. This means that with 2x heavy armor, the character is at 90% combat damage resistance. This is compensated for by the fact that at 80% movement penalty, they will be extremely slow. If you happen to activate two at once, you can only wait it out, as there is no way to cancel the armor.

Enemy type changes: On some larger spawns, occasionally an enemy will appear in a position they have trouble moving from due to an obstruction.

Language issues: The numerical separator for decimals is using a comma instead of the period it should be. This does not affect the values, only their display.

Quest voices: The new quests have dialog text, but no voices. The NPCs will stare at you, while you read the quest text. New repeatable quests will also not remain in the quest log, and the NPC will need to be approached again every time you stat the game.

Future plans:

Working to correct issues noted above or discovered and reported by users of the mod. Without additional tools, other significant development will be highly unlikely.

Changes in 1.1:

Adjusted ammunition availability. When upgrading team members, ammunition becomes available earlier.

Reduced infected hit points and damage slightly.

Reduced percentage of zombies able to regenerate.

Increased effectiveness of direct head hits.

Adjusted initial quest to provide several improved weapons in case prologue not completed.
Reduced difficulty of initial Paradise encounter.

Changes in 1.2:

Additional quest changes.
Stomper ability added back to Firearm Apprentice skill.
Reduced spawn rate of some special enemies.
Reduced regeneration rate for some enemies.
Corrected some mesh errors with enemies in building interiors.

Changes in 1.3:

Added two key functions.
Removed character build options, and only custom is now displayed.
Removed option to import a character from DI.
Corrected a weapon generation frequency issue resulting in too many hatchets being spawned.
Reduced frequency on non-craftpart items in loot.
Adjusted some spawn sizes.
Additional weapon damage balancing.
Corrected some additional mesh errors in quarantine zone.
Adjusted sounds for variant groups initial spawns
Enabled FreeResourceLoading
Adjusted head damage effects- boss types are more susceptible to head hits.

Changes in 1.4:

Reduced delay for Time Bomb.
Text adjustments- corrected the string entries issue.
Changed Mastercraft to Superior.
Batch file to remove some unused modded files added.
Corrected a problem with spawns on the ship.
Added game.ini and unique locale 'QM' language files. This is English, but allows loading of custom text.
Changed description of weapon mods, so that they show the type and additional damage at the first screen, without needing to select the mod and a weapon to see the effects.

Changes in 1.5:

Changed mesh for some items.
Corrected a typo in item naming and added two excluded text entries.
Adjusted values for some skills for balancing.
Added updated text descriptions of skills to reflect complete bonuses granted.
Added Flare Gun to allowed items for Incendiary Gun mod.
Added M72 and M60 weapons to generation system to allow color variants, and adjusted their characteristics.
Added M72 and M60 to one shop each. (Enormously expensive)
Adjusted ammunition supply for stationary minigun on cinema roof.
Adjusted AI pathing radius to reduce the number of stuck zombies in a few specific locations.

Changes in 1.6:

Corrected the date formatting.
Increased early game ammunition availability.
Adjusted and rebalanced some skills affecting ammunition, weapon durability, and stamina.
Adjusted waves during defense events at the ferry and cinema rooftop.
Added two new mines and rebalanced all explosives.
Added some custom loading hints.
Added a few new craftplans.
Adjusted some item names.
Slight AI adjustment regarding the time they ignore a fallen character.
Adjusted some zombie spawn values.
The zombie spawns in some areas are affected by some repeatable quests.
Added many (82) new quests. Some are repeatable, and all are side quests that will not affect the main game progress. They may be completed or ignored as the player wishes. All have appropriate dialog, but no voices/sound.

This patch will reset all quest progress. Existing characters will start at the beginning of their current chapter, but all side quests and team upgrade quests will be reset.

Removed some potential mods for harpoon gun that did not make sense

Changes in 1.7:

Adjusted for patch changes for patch 1.13

Fixed jumping stamina bug where jumping skill actually caused jump to give stamina instead of reduce cost.

Adjusted some repeatable quests to increase items needed.

Rebalanced medical items. Increased duration but reduced regeneration, and increased healing value of weak items to encourage use by heal system (H button). Reduced regeneration from alcohol.

Adjusted critical rate on two craftplans.

Restored two additional original craftplans fixed in latest patch.

Added three new craftplans.

Renamed some items. The m60 is now a light machinegun and the M72 is a rocket launcher.

Fixed some dialog issues.

Removed some duplicate items from inventory files.

Removed meat/zombie parts from shops

Increased HMG damage slightly.

Added more spawn locations turned on and off by repeatable quests.

Adjusted the Mighty Throw skill, as thrown weapons already get the sharp/blunt skill modifications.

Reduced ammunition capacity slightly and adjusted ammunition availability.

Corrected names display in team list.

Reduced bonus damage from Master Assassin skill.

Reduced price of nailgun ammo per shot.

Corrected prices for legendary-class weapons.

Adjusted stats for three superior weapon types, rocket launcher, and light machinegun.

Added many additional lines of dialog.

Normalized sizes of large enemies (No longer a large number of 7-8' tall infected and thugs.)

Adjusted response range of drowners. (You do not need to step on them for them to react.)

Moved some NPC locations in Hub zones.

Added several new quests and quest stages, some including human opponents.

Reduced fist force multipliers

Added some zombie types/variations

Enemies will no longer ignore grabbed opponents. During base defense missions, you have to watch allies a little closer.

Rewrote part of Quarantine zone quest to avoid conflict with Trevor's added quests.

Turned off slow-motion kills.

Many zombies once again can drown.

Added notes about disease progression and zombie types.

Changes in 1.8:

Corrected a quest issue that could prevent progress.

Corrected several text and dialog entries.

Added batch files to adjust difficulty. (See installation instructions.)

Adjusted inventory items so that non-weapons do not have a color value. As this reduced the sale value of some items, also increased value of rare valuable items.

Adjusted loot tables to provide better distribution.

Adjusted several craftplans.

Grenadiers have more ammunition available.

Added one new craftplan.

Added one new explosive.

Added/enabled several casebook entries.

Revised many weapon skins to more appropriate appearance.

Many thanks to Steam user Hammerhorde for valuable testing QA, feedback, and suggestions.

Thanks to Tom Evin for creating the DeadIslandBin.Exe

I also use Notepad, Programmer's Notepad 2, 7-zip, Agent Ransack, TEXTTools32, OpenOffice, WinMerge, and WinDiff.

Some notes about the disease, infection, and mutation.

These are notes I made for myself to explain what the disease actually is and does, and let me make decisions on what I wanted to do in the game. It is entirely speculation, based on what few clues are actually given in the game, but provides a framework that helps keep things consistent.

Mutagen in the context of the game usually means chemical exposure, which can be from industrial chemicals, pesticides, herbicides, chemical weapons, gasoline and other fuels, and possibly stored laboratory chemicals. It can also mean exposure to particularly polluted areas, and potentially may even be caused by some other biological disease agents. Direct contact is usually needed, but in some cases vapor or fumes may be sufficient to cause an effect.

Exposure to the disease can be through wounds, contamination from contact with blood or bodily fluids from someone already infected, ingestion by eating infected tissue or food contaminated by blood or bodily fluids, or close contact with someone in the early stage of the disease, where sneezing and coughing spread it easily. There is some conjecture that it may affect animals as well, such as the recordings left by Roger Howard, which mentions an infected orangutan. Is this limited to primates, or can it infect other mammals? No definitive evidence exists yet.

The disease symptoms in early stages are similar to many other illnesses. High fevers accompanied by feelings of chills, rapid weakness, muscle cramping and trembling, sweating, rapid weak pulses, sneezing, and coughing are all common. Subjects produce large amounts of saliva and mucous, and may have vomiting, diarrhea, and incontinence. Progression leads to delirium, hallucination, and possibly seizures.

From this stage, there are two paths that occur. If brain damage progresses quickly enough, the person may seem to die, only to 'rise from the dead' some time later. These are the Walkers, discussed below. If they do not seem to die, they eventually become 'Recently Infected', where they begin to show extreme aggression, uncontrolled vocalizations of screaming or growling, and will attack anything nearby. As the disease progresses more, they become Infected. These are fast, agile, and extremely aggressive.

There are several variations among the Infected. The disease increases their strength and speed considerably, and allows certain tissue types to heal and grow, so many will recover from physical damage if given enough time. This also probably depends on how long it has been since they last fed. Some have relatively minimal damage, and are able to move and attack even more rapidly than the standard Infected. These Frenzied Infected may have had some medical treatment that slowed the initial progression of the infection. Similarly, there are Drugged Infected, who have been exposed to some of the natural healing agents (plants or fungi) in the environment, which has healed much of the external damage, allowing these to also move and attack rapidly. The Butcher type is even more aggressive, and has managed to damage its own body through frequent, vicious attacks. The disease continues to develop in the various Infected types, and eventually will accumulate enough brain damage that they become Walker type zombies.

The Walker type zombies come from sick humans who appear to die before reaching the Infected stage, or from Infected who accumulate enough brain damage over time from the disease. Their nervous systems and tissues have sufficient damage that they are relatively slow. Walkers also come about from humans who are attacked and killed but whose bodies are not eaten by their killers. These Walkers which did not suffer much damage from the disease before death become Frenzied Walkers, and their relatively undamaged bodies make them faster than regular Walkers. A particularly strong Infected is likely to become a Thug after death. Their massive muscle growth actually interferes with rapid movement, but makes them strike with much more force.

Submersion in water somehow seems to soothe the zombies. The Walkers who die or fall into bodies of water become relatively passive and unalert, and only very close movement or extremely loud noises attract their attention. These Drowners usually will heal much of their damage, and are therefore nearly as mobile as Infected. Occasionally an Infected will fall into the water, and these typically become Butcher types from their repeated attacking and comatose cycles.

Some zombies, including Walkers and Infected, are also Toxic, and close contact acts like a poison. Whether this is due to rotting of unhealed tissue, exposure to some toxin, or secondary effects of other diseases taking advantage of the damaged tissue, they emit fumes that cause damage to nearby people, in addition to attacking.

A few are Burning... these zombies are literally on fire, and usually are found near an open flame source. It is likely that they are not always on fire, but become engulfed while passing through a flame while moving to attack a creature. It may be

that they were somehow coated with a flammable chemical, but their degeneration has made them rather oily or greasy, or that someone poured fuel over their bodies in an attempt to kill them. Whatever the reason, they catch on fire and continue to attack, causing additional damage to anyone they approach.

There is a third major class of zombies, the Mutants. These are Walkers or Infected that have been exposed to mutagens, and have begun to change form in response to interactions between the disease and the mutagens. The most obvious symptom of these is rapid uncontrolled growth. They become covered with large fluid-filled muscle tumor growths. Initially, the Mutant acts like a typical Infected, although the focus on tissue growth seems to have caused somewhat less direct brain damage, as they are still slightly capable of speech. The Mutated Scientist is one of these, but with somewhat less growth, possibly due to constriction from the relatively ineffective hazmat suit they are wearing. The Mutant eventually becomes an Infector, where the growths have become so severe that they are unable to move quickly, and so resort to throwing the tumors that they remove from their own bodies. The Grenadier is the equivalent stage of development from the Mutated Scientist. Eventually, the growths restrict their motion so much that all they can do is stumble towards their targets. However, they are still enormously dangerous, because these Suiciders will contract the massive muscle tissue growth and essentially pop themselves, causing a large volatile chemical blast and certainly infecting anyone within the blast radius. In two cases, the mutations proceed differently. Occasionally a zombie will experience massive muscle growth without the excessive tumors, causing them to become a Wrestler. Typically one arm is larger than the other, possibly due to simply the relative strength pre-infection, as most people have one dominant arm that is far stronger than the other. A Drowner who is exposed to sufficient mutagens may become a Floater. These grow significantly, but at the same time become rather soft and gelatinous due to water absorption. They become able to expel large amounts of fluid from their squishy bodies, including infectious acids, saliva, and vomit, all of which are very hazardous.

While all of the zombies above could occur from infection, two types of zombies exist that are clearly the result of intentional exposure to the disease. The Ram is an Infected that was restrained before infection, apparently to study the progression of the disease. They are relatively rare, and the restraints give them significant protection. However, it seems that the few wandering around have escaped from some facility, as evidenced from the damage to the back of their suit. It appears that a section has been ripped out, probably where a chain was attached holding them in place. The Screamer has clearly been subjected to surgical experimentation, although it is not clear what the reason or target of the surgeries was. Given their appearance and condition, it is likely that they were dead subjects that have been reanimated by the disease, and may be the actual method by which it escaped confinement. If the scientists working on it did not expect these to reanimate, they may have been careless in dealing with the bodies. However, the unusual scream that gives them their name is not readily explainable. It is clearly not simply a loud noise, as explosions do not have a similar stunning effect.