

Radiation rules

The measurement for radiation used in the Wasteland is: the Rad.
Irradiated areas give off x Rad/h.

If a character has 0 Rad in their body (the value can be determined with a Geiger counter), they were only exposed to the normal background radiation of post nuclear California and are not significantly irradiated.

With 100 Rad in their body, a character is dead – or they can become ghoulish if they pass a difficult test on Luck.

Example for a radioactive contamination:

The hero comes near to a reactor chamber of a long since abandoned nuclear power plant.

The background radiation at this place is: 20 Rad/h.

The hero remains there for about 90 minutes.

They are therefore irradiated with 30 Rads, of which his radiation resistance will be subtracted. An average human has a radiation resistance of 10%.

It follows that our hero got 27 points of radiation. Not quite yet life threatening, but enough to cause illness. They should inject a Rad-Away or visit a doctor.

Effects of radiation on humans, ghouls and super mutants:

The following effects apply to **humans**:

The following lines show the effects of radiation. This is cumulative. A character with 60+ Rad, has everything that has been listed until then. The only exceptions are the effects on the stats and skills, where you should always use the worst, most negative effect for your current rad level.

Starting at 10 Rads a character keeps feeling nauseous. Headaches come and go, as does diarrhea.
All tests on skills are 7 points more difficult.

Starting at 20 Rads of radiation poisoning, one would really notice that one took some damage. The headaches and nausea are worse and nearly constant. The diarrhea contains traces of blood.
If one pulls on one's hair, one will keep some of them in one's hand. All tests on skills are 15 points more difficult.

Starting at 30 Rads the hair loss accelerates. Headaches are completely head splitting and fully constant. All tests on main stats are more difficult by 1 point. All skill tests by 25 points.

Starting at 40 Rads the headaches are accompanied by near constant dizziness and fever. Characters keep vomiting. All tests on main stats are still carrying a 1 point difficulty and all skills are 35 points more difficult.

Starting at 60 Rads characters that have access to such, can basically move into their bathroom, but will probably not be sure on how exactly to position and orient themselves in there. The fever is rising. Tests on main stats are now harder by 2 points, tests on skills by 43 points.

Starting at 80 Rads characters are barely able to stand. Even a slight exertion needs a test on endurance with a 3 point difficulty. All other tests on main stats are also 3 points more difficult. Tests on skills by 60 points.

100 Rad is the point on which humans die or become ghouls. For that, characters must pass a test on luck that with a difficulty of 4. It may be repeated once. If it succeeds, please look under ghoulfication for the exact rules. If the test is not passed at the first or second try, the character is dead.

The effects of radiation on **Ghouls**:

Ghouls react completely different to radiation than humans do. They are healed by it, they get invigorated, feel stronger and better. The following effects are cumulative. The effects of radiation can bring improvements beyond the race maximum.

Beginning with 30 Rads a ghou will hear and see better and even his sense of smell will improve. All tests on perception or sensual acuity get bonuses of 2 and 20 respectively. This also applies to range divisions of weapons.

At 60 Rads the intelligence of ghouls is raised by one point. All technical and bodily skills as well as the sciences get bonuses of 10 points.

At 90 Rads a ghou begins to quite visibly glow. They now receive the trait *Glowing One*. Characters that come close to that ghou for a long period of time (close means 3 cm in combat or 1 meter) get another 15 rad/hour of radiation.

At 100 Rad a ghou is so irradiated and mutated, that they can occasionally (that means, whenever they so choose) channel their radioactivity through their hands and get rid of it. They can, by touch alone, transfer their whole irradiation to another character. A human would instantly be killed (or become ghoulfied, if that human shows incredible luck). Another ghou would instantly be healed. A ghou that does this is now no longer irradiated. A geiger counter would now once again show 0 Rad in that ghou. They lose the trait *Glowing One*.

Radiation and **Super Mutants**:

Super Mutants are generally regarded as immune to radiation in the Wasteland. This is correct. Even getting a dose of 100 Rad at once by a totally irradiated Ghou would not trouble a super mutant.

Ghoulification:

If the ghoulfication should begin, a character changes their race within 48 hours. Their skin turns visibly greener and takes on a burnt look, their hair will fall out completely or nearly completely.

During this time a character is basically bed ridden, all exertions nearly impossible. (All tests on main stats carry a difficulty of 4 and all tests on skills are 45 points harder).

After about 48 hours the character becomes a ghoul and their main stats change:

All stats they had as a human and that now lie between the new race minimum and the race maximum remain unchanged.

Stats that lie under the race minimum are raised to the race minimum.

Stats that lie above the race maximum are reduced to the race maximum. The surplus points may be distributed freely anew.

Also, ghouls have a total of 54 points to distribute on their main stats instead of the 45 of humans. When you ghoulfify your character you first apply the rules above, then add up all the main stats and check if you're already at 54. If there are points missing like in the example below, they may also be distributed freely.

Here an example:

	ST	PE	EN	CH	IN	AG	LU	CO	Freely distributive:
Minimum	1	4	1	1	2	1	5	1	-
Maximum	8	13	10	8	11	7	12	10	-
Human	9	3	5	5	6	9	5	3	
Ghoul	8	4	5	5	6	7	5	3	11