So. Lets talk about chmod.

There are a lot of options on chmod. I went for what i thought would be the easiest break first. I downloaded and compiled (with quite some effort) the wisconsin shim tool called Murphy. Murphy helps you mock program system calls and access to common directories. Tests I performed included:

causing all system calls to fail
causing the tmp directory to appear full
causing the CWD to appear extremely long
causing reads to only read one byte at a time
causing writes to only write one byte at a time
adding delays to system calls returning

For the most part, chmod holds up really well against all of these tricks when used in a variety of situations and tests. There are however two scenarios where chmod doesn't handle its situation very gracefully.

1. When the call to Close a file descriptor fails
    chmod exits with a negative exit status and prints a very unfriendly error message

2. When used in -R(recursive) and -v(verbose) mode and Write calls are simulated to fail the first time used
    in this scenario, chmod prints a bunch of garbage, certainly not the verbose information it is supposed to print.

Given the strange behavior in the above two scenarios, I cannot recomend that we rely on the functionality of chmod.