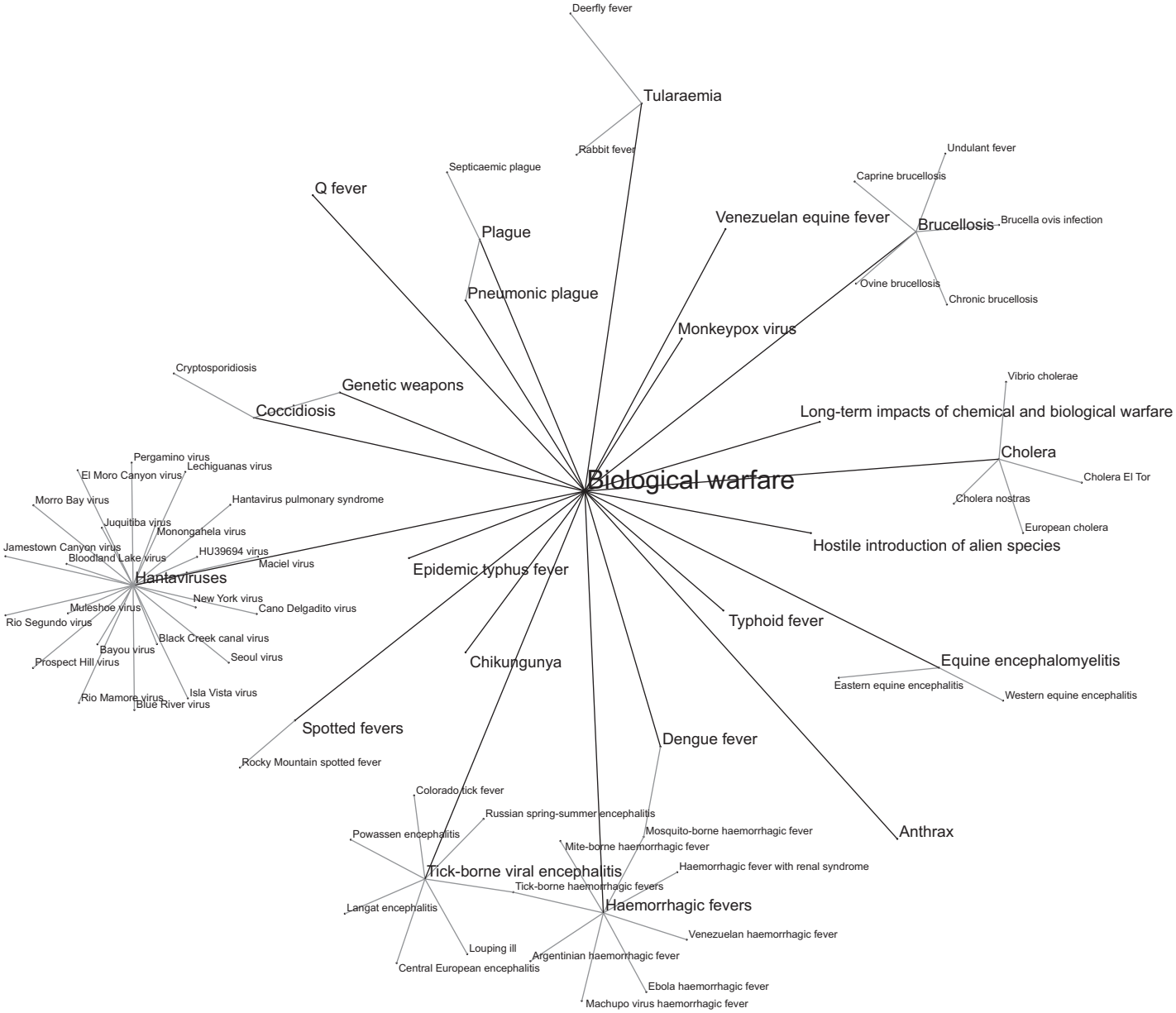
Figure 10.1.2.4.
Biological warfare

Database: World Problems and Issues
Link type: narrower problems
Network nodes: 75
UIA database: http://db.uia.org/scripts/sweb.dll/uiaf?DD=PR&DR=C0195



Bacteriological or biological agents of warfare are living organisms (or infective material derived from them) which are intended to cause disease or death in animals, plants or humans, and which depend for their effects on their ability to multiply in the organism. Various living agents (for example, rickettsiae, viruses and fungi), as well as bacteria, can be used as weapons. The use of epidemic warfare on a strategic scale is liable to lead to the infection of a very high proportion of the population attacked, and even if the attacking country were protected (by immunization) from some specific strain, changes to more virulent forms might overwhelm the level of immunity. The chief types of bacterial and viral agents developed or considered have included: anthrax (bacterial), which can cause death in 24 hours if lungs are attacked; brucellosis or undulant fever (bacterial), which is fatal in 5% of untreated cases; tick-borne encephalomyelitis and mosquito-borne equine encephalitis (viral), which have no effective treatment, can be fatal and can cripple the nervous systems of survivors; bubonic and pneumonic plagues (bacterial); psittacosis (viral) which can be fatal in up to 40% of cases; Rocky Mountain spotted fever (rickettsial) which can kill in 3 days; tularaemia (bacterial), for which the untreated rate of fatality is 5-8%; typhoid and cholera (bacterial) which is extremely contagious; Q-fever (rickettsial); and chikungunya and dengue fevers (viral). Smallpox is one of the deadliest epidemic viruses known, but has been exterminated in the wild; the only stocks are in high-security research establishments in the USA and Russia.