

## Actor

- +healingHandler:Action<Disease, float>
- +statsHandler:Action<float>
- -mRenderer:Renderer
- -mShader:Shader

#mAnimator:Animator

#speed:float

-initialSpeed:float

#diseaseList:List<Disease>

- -Disease[] initialDiseases;
- +DiseaseList:List<Disease>
- +IsHealing:bool
- +IsDead:bool
- -virusAProb:float
- -virusSProb:float
- -blackDeathProb:float

#virusAResistance:float #virusSResistance:float

#blackDeathResistance:float

#virusATimeInfected:float #virusSTimeInfected:float

#blackdeathTimeInfected:float

#Speed:float

+InitialSpeed:float

#Movement():<<abstracct>>

#Death():<<abstract>>

#UpdateStats(float \_speed):<<abstract>>

#movementCoroutine():Coroutine

#Start():<<Virtual>>

-VaccineEffects(Disease disease, float reduceProb) #OnCollisionEnter(Collision collision):<<Virtual>>

#Infected(Disease dis):IEnumerator <<Virtual>>

-Probability(DiseaseType disease):bool