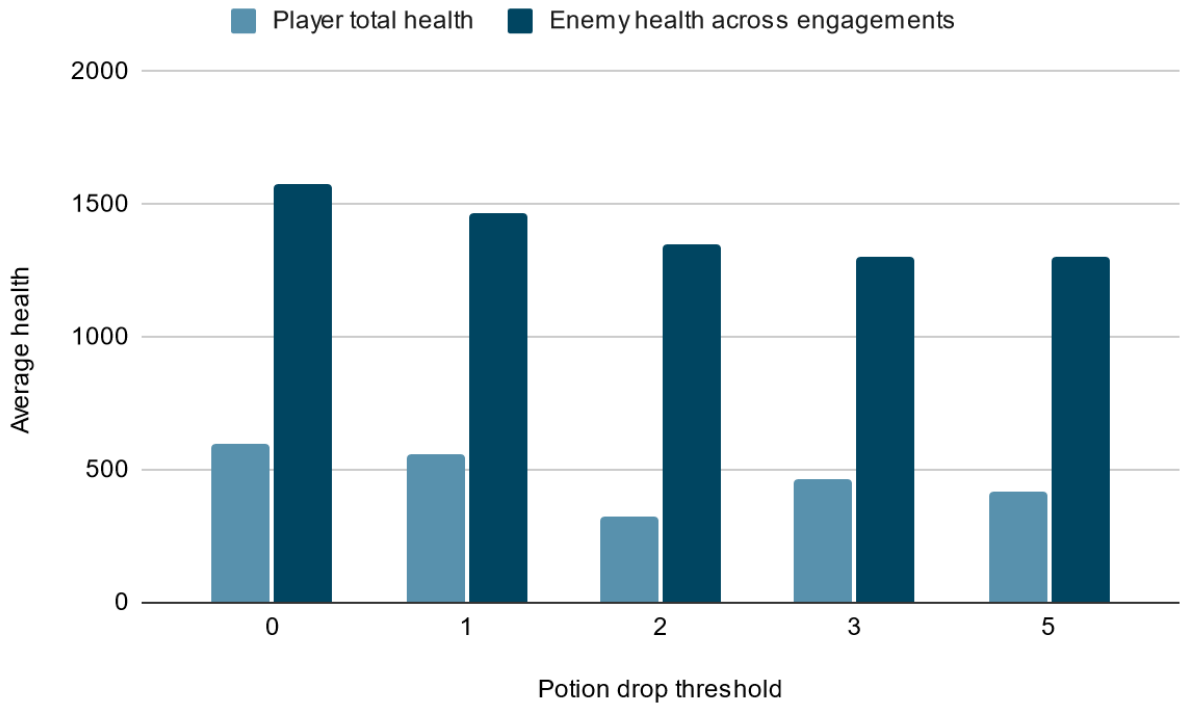
We are trying to balance the drop rate of healing potions against the difficulty of enemies. In an idealized setting, the game is a battle of attrition between enemy health and player health.

Although there are two sets of enemies in red and blue dimension, we expect the player to switch between the two dimension as needed for tactical advantage so we will only look at the average health of one dimension's enemies.

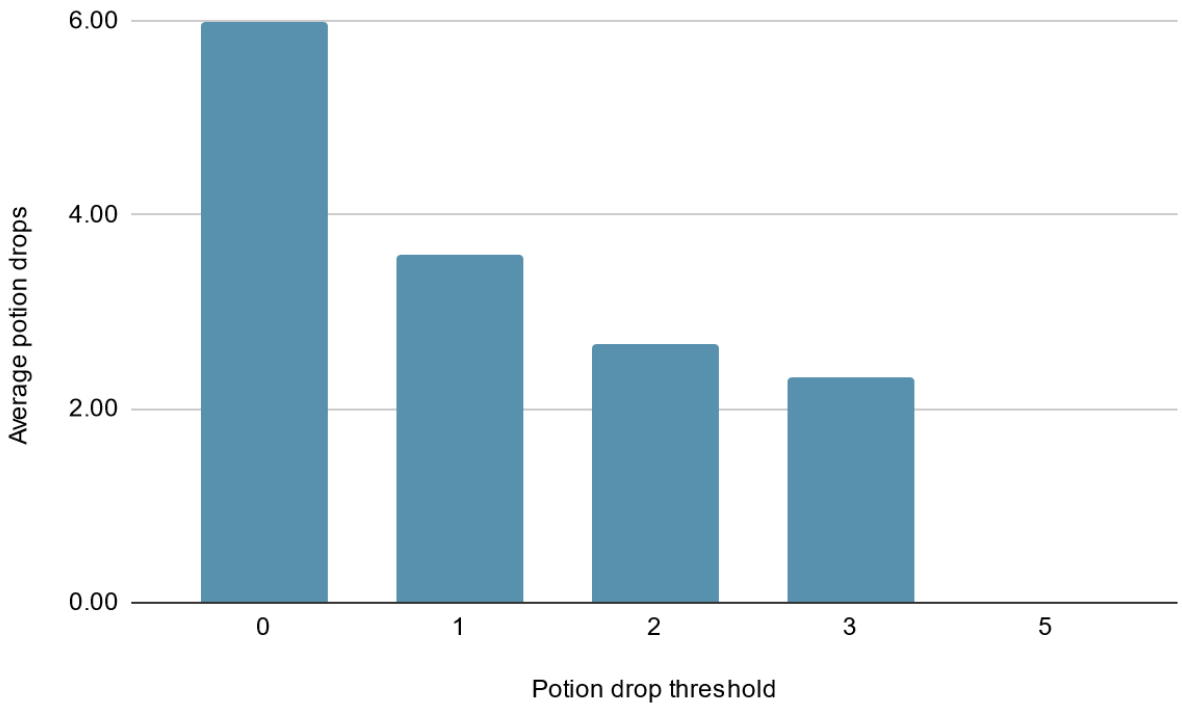
It's important to keep in mind that player to enemy health is not one-to-one. For example, it is possible to engage and defeat enemies from a range where the player does not take damage.

The player has maximum of 140 health. The player also starts with 3 potions of health, which restores the player to full health. As a result, during the course of the game by default the player is able to have an effective health of 140+3x140 = 560 health.

	No Drop Threshold	Engagements	Potions Dropped	Potions Used	Success Rate	Engagement health average	Plus potions used:
Total average	0	10.50	6.00	3.25	100.00%	1575	595
	1	9.80	3.60	3.00	100.00%	1470	560
	2	9.00	2.67	1.33	100.00%	1350	327
Current drop rate	3	8.67	2.33	2.33	100.00%	1300	467
	5	8.67	0.00	2.00	100.00%	1300	420



When the player has access to more health potions (through random drops), they are able to take on more encounters, and on average players were able to take on enemy health totals 2.5 to 4 times their effective health.



The number of potions drops should affect the difficulty of the game, however we have not yet had a playtester fail to reach the first boss with their current number of potions, even when there are no random drops at all.

Given the current lack of difficulty, it should therefore be possible to reduce the starting number of potions and allow the current potion drop rate to compensate.