[11.0.5] Advanced Blood Death Knight Guide for M+

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Disclaimer

This guide was created for BDKs (Blood Death Knights) progressing in challenging M+ (Mythic+) dungeons (+8's and above); some recommendations presented herein were not made for use in raid or PvP scenarios, which can have different priorities and considerations. Furthermore, it assumes the user is capable of playing a BDK reasonably well and that they are able to obtain reasonably competitive gear. Furthermore, the use of all tier set bonuses is generally assumed.

All recommendations reflect the current state of 11.0.5 as accurately as possible and if significant emergent changes occur the guide will be updated to reflect those changes as soon as possible. In light of last-minute 11.0.5 tuning going into this patch, the hero class recommendation is currently up for re-evaluation and updates may occur within the next week or two if new data supports a change.

If you have any specific questions, comments, feedback, or concerns regarding this guide, please message discord tag **kyrasis** as your first line of support. I'm always happy to answer questions about BDKs in M+ and I'm generally available to perform log reviews!

Introduction

Welcome to the Advanced Blood Death Knight Guide for M+ in Patch 11.0.5! The purpose of this guide is to provide accurate, in-depth BDK information specifically geared towards players progressing in M+. All information provided herein is based on a combination of M+ log data analysis, simulationcraft analysis, BDK mitigation model analysis, in-game testing, and expert opinion. While this guide was primarily made with +8 and higher key levels in mind, the recommendations (particularly those concerned with playstyle) can also be used for success in key levels below this point, though a small number of optimization recommendations may be different if particularly low gear level, poor ability usage, or low key levels were taken into consideration. It is a comprehensive guide that gives readers a chance to understand not only *what* decisions can improve their play, but *why* these decisions are made, so feel free to skip to whatever sections are relevant for you (a navigation tool is available on the left)!

The guide is split into three sections:

- 1. Fundamentals Resources, Class Design, Baseline Abilities, Attribute Details
- Character Optimization Performance Measures, Character Customization Options, and Ability Priorities.

3. Supporting Information - Addon and Macro Information

About the Author

I'm Kyrasis, I've been primarily doing a massive amount of the math-heavy theorycrafting for BDKs since Legion; I was also the #1 World Ranked M+ BDK for Season 4 of Dragonflight, Season 2 of Dragonflight, and Season 4 of Battle for Azeroth on raider.io. In addition to the analysis, I personally maintain the BDK mitigation model that is primarily used to evaluate mitigation on BDK in various situations along with maintaining this advanced guide and occasional Youtube content when I have time to spare. Again, I can be contacted through the discord tag kyrasis or through a BDK theorycrafting discord server if you have any feedback or questions!

Thanking Contributors

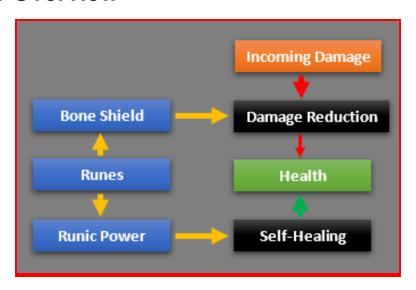
Specifically, I'd like to thank the following:

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Fundamentals

This section overviews some basic information upfront before moving onto specific recommendations in future sections. While there are some nuggets of lesser known information throughout this section, feel free to skip to the Character Optimization section whenever you desire, especially if you have some familiarity with BDK.

Resource Overview



Runes

Maximum Runes: 6 Runes

Base Rune Cooldown Time: 10 seconds

Base Runic Power Generated Per Rune Used: 10 RP (Runic Power)

Our primary ability resource that passively regenerates. All runes have individual cooldowns, but only 3 runes can progress their cooldown at a time. The base rune cooldown is reduced by haste. In general, 10 RP (Runic Power) is generated per each rune used, but there are exceptions.

Runic Power

Base Maximum: 125

RP is our secondary ability resource that is primarily generated by spending runes. The main use of this resource is to spend it on **[Death Strike]** to generate health. RP is effectively a second health bar and needs to be mindfully managed for BDK success. Note, 1.25 RP is lost every second when out of combat and RP is lowered to 20 when an M+ dungeon starts.

Bone Shield

Maximum Stacks: 10 (12 with [Reinforced Bones])

[Bone Shield] is a stack-based mitigation buff where stacks are mainly generated with [Marrowrend] (or [Death's Caress]) and lost when damaged by melee attacks (at max you can lose one charge every 2.5 seconds). A significant amount of passive damage reduction is lost when this buff falls off completely and [Ossuary] provides a [Death Strike] RP cost reduction when you have at least 5 stacks; other than that, the number of [Bone Shield] stacks do not provide any additional bonuses outside of talent interactions like [Foul Bulwark]. Generating new stacks of [Bone Shield] is done at the cost of RP generation, since [Marrowrend] (and [Death's Caress]) do not generate RP as efficiently as [Heart Strike]. [Bone Shield] stacks do not reset when a M+ dungeon starts, so there is some value in generating stacks ahead of starting a key.

Class Design Implications

- BDKs take significantly more up-front damage than other tanks, since we can mitigate significant amounts of this damage using *reactive* healing from [Death Strike]. As a consequence, BDKs are usually more vulnerable to dying from burst damage than other tanks, since a large portion of our mitigation happens *after* we take the damage.
- More so than any other tank, a BDK's health, alone, is not an indication of how
 vulnerable they are to dying, since our RP functions as a second health bar. This
 generally means that healers have a more difficult time efficiently healing BDKs, since
 healers need to track an extra resource to heal BDKs effectively and there is potential for
 both players to overlap their healing abilities.
- BDKs are the most vulnerable at the start of pulls, when their [Bone Shield] may be at low or no stacks, where their RP may be low or empty, and when their [Death Strike] will not be as impactful during the first few seconds of a pull (since healing is proportional to damage taken in the last 5 seconds). Attempt to refresh [Bone Shield] and to top off RP at the end of any pull, so you can have these resources available at the start of the next one, which can help with this vulnerability. For much the same reasons, BDKs have a lot of difficulty recovering after they have died and have been resurrected.

Ability Information

Offensive Abilities

[Heart Strike] - This is our filler ability. It is our most rune-efficient generator of RP and it hits two targets by default and 5 targets while standing in **[Death and Decay]**.

Extra Details:

- Secondary targets hit are selected within a 5 yard 180 degree cone in front of your character.
- Hitting 5 targets with [Heart Strike] only requires that you, personally, are standing in [Death and Decay].

[Marrowrend] - This ability is primarily used to generate **[Bone Shield]** charges, but it's a less rune-efficient generator of RP than **[Heart Strike]**.

[Bone Shield] - This is a stackable mitigation buff provided by [Marrowrend] or [Death's Caress].

Extra Details:

- You cannot lose charges more than once every 2.5 seconds.
- Outside of talent interactions and [Ossuary], the number of bone shield charges do not change the benefit of this buff.

[Blood Boil] - This ability is primarily used for strong uncapped AoE damage/threat generation, [Blood Plague] application, and to build [Hemostasis] stacks (with the appropriate talent).

Extra Details:

The cooldown of this ability is lowered with haste.

[Blood Plague] - A low-powered DoT effect with 100% leech. As of patch 10.1, the leech from this ability provides 25% more healing, though this is not well-documented. It is passively applied through [Blood Boil] and is a mostly minor source of damage and healing at baseline strength, though it can become noticeably stronger through talents.

Extra Details:

Unlike most DoTs in the game, this is not affected by haste.

[Death and Decay] - A ground-based DoT effect that provides moderate damage and can allow [Heart Strike] to hit up to 4 additional targets instead of its usual 1 additional target (with an additional talent). With [Grip of the Dead], this ability is also a strong short-duration AoE snare.

Extra Details:

- Being able to hit 4 additional targets with [Heart Strike] requires that you, personally, are standing in the [Death and Decay] radius.
- All related buff effects from standing in [Death and Decay] linger for 4 seconds after you
 leave the effect (even if the ground effect naturally expires).
- Unlike most DoT's in the game, this is not affected by haste.
- Only one of your ground effects can affect an enemy at a time.

[Death Strike] - This is our primary RP spender, providing relatively high single target damage and a significant amount of healing based on recently taken damage. This also triggers [Blood Shield].

Extra Details:

- Many forms of environmental damage do not count as damage taken for the healing of this ability.
- Damage that is considered friendly fire also does not contribute to the healing of this ability.
- Damage that has already contributed to the healing of one [Death Strike] cannot contribute again.

[Bonestorm] - This is a cooldown that provides AoE damage and self-healing based on the number of targets hit as well as consuming 5 [Bone Shield] stacks and refunding up to 10 [Bone Shield] stacks.

Extra Details:

- This ability does not scale with haste.
- The healing portion of this ability cannot crit and is not affected by versatility.

[Abomination Limb] - This is a powerful AoE damage cooldown that automatically uses [Death Grip] on nearby enemies.

Extra Details:

- Every tick of damage has the ability to [Death Grip] a target between 8 and 20 yards away from you (prioritizing the closest target in this range).
- All gripped targets are placed directly in front of the player.
- The same target cannot be gripped more than once every 4 seconds.
- The [Death Grip] does the same amount of damage as the normal AoE ticks.
- This ability does not scale with haste.

[Soul Reaper] - This is an alternative rune spender and execute ability. It provides significantly more single target damage than **[Heart Strike]** when the target has low health, though it is a less rune-efficient generator of RP and can't cleave multiple targets.

[Blooddrinker] - This is an alternative rune spender and ranged single target damage ability. It provides more single target damage than **[Heart Strike]** with (generally) superior RP generation and a lingering single target damage reduction effect, though it requires extra cast time.

Extra Details:

- Haste reduces the channel time of this ability, but it does not increase overall damage.
- Defensive abilities can be used during the channel without interrupting the cast.
- You can move, dodge, and parry while channeling (not normally the case).

[Consumption] - An AoE frontal cooldown with more damage than a baseline strength [Blood Boil] (after accounting for the bonus [Blood Plague] damage), heals based on damage done, and generates two additional runes.

Extra Details:

• Targets are selected within a 10 yard 180 degree cone in front of the player character.

• The [Blood Plague] "quickening" effect does not shorten the remaining duration on [Blood Plague].

[Raise Dead] - A single target dps cooldown that can enable the use of [Sacrificial Pact]. Extra Details:

- The ghoul attacks whatever you are attacking and it won't stop attacking a target unless a new target is damaged by you or its existing target dies.
- Even though it is not directly controllable, the ghoul auto-casts [Claw] and [Gnaw] (a low duration single target stun that can drive up stun diminishing returns on enemies).
- Raise dead cannot be used while a unit is being controlled by [Control Undead].

[Sacrificial Pact] - A cooldown-based RP spender that deals relatively high AoE damage and provides flat healing by sacrificing a [Raise Dead] ghoul. It can provide minor benefits when used perfectly and can be harmful when used incorrectly.

Extra Details:

• The healing does not scale with critical strike or versatility.

[Death's Caress] - This is our ranged filler. It is a more rune-efficient builder of **[Bone Shield]** stacks relative to **[Marrowrend]** at the cost of being less cast-time-efficient. The cast-time inefficiency greatly limits its normal rotational use, since it is generally not worth casting if anything else is competing for the same cast time.

[Death Coil] - A ranged RP spender that deals low damage or low situational healing for its cost. In **extremely rare** situations it could potentially save your life, but this ability is harmful to use outside of those situations.

Extra Details:

• You can heal yourself with this ability for the duration of [Lichborne], though there's no reason to if you can use [Death Strike] instead.

Defensive Abilities

[Vampiric Blood] - This is our primary (indirect) damage reduction cooldown.

Extra Details:

- When this buff activates, your current health increases by 30% of your maximum health.
- When this buff deactivates, your current health decreases by the original 30% maximum health that was gained to a minimum of 1 health.

[Anti-Magic Shell] - This is a low-cooldown magic absorb shield.

Extra Details:

For the duration of this buff, you will be immune to the application of many debuffs, but it
will not remove these debuffs if you had them before activating the buff without
[Unyielding Will].

- The base size of this shield is 30% of your maximum health (at the time of cast) adjusted for versatility and most absorb shield amplifiers (such as [Gloom Ward]).
- A baseline of 25 RP is generated as the shield absorbs magic damage. The actual RP generation potential is 0.8333 RP/HP% of shield, so anything that increases the size of your [Anti-Magic Shell] other than health increases will also increase the potential RP generation.

[Dancing Rune Weapon] - This is a parry- and resource generation-based defensive cooldown with significant offensive benefits.

Extra Details:

- The [Dancing Rune Weapon] copy casts of [Blood Boil], [Death Strike], [Death's Caress], [Heart Strike], [Consumption], [Soul Reaper], and [Marrowrend] at 33% effectiveness when they are used by the player.
- The [Dancing Rune Weapon] auto-attacks at 33% effectiveness on a separate swing timer.
- All damage dealt by the [Dancing Rune Weapon] counts as threat for the BDK.
- Any resources gained by the [Dancing Rune Weapon], itself, do nothing.
- During the duration, [Heart Strike] generates 3 extra RP, [Marrowrend] generates 3 additional stacks of [Bone Shield], and [Death's Caress] generates 2 additional stacks of [Bone Shield] for the player per weapon copy.
- [Everlasting Bond] causes [Dancing Rune Weapon] to spawn an additional weapon, doubling the additional damage and bonus generation.
- Unlike most other defensive cooldowns, [Dancing Rune Weapon] is on the global cooldown.
- The parry gained by this ability is additive to your existing parry and is not subjected to diminishing returns.
- The summoned weapons will always prioritize the target [Dancing Rune Weapon] was cast on until they die.
- When [Dancing Rune Weapon] expires, [Blood Plague] debuffs attributed to [Dancing Rune Weapon] snapshot their remaining damage and continue to deal damage.
- When [Dancing Rune Weapon] expires, [Soul Reaper] debuffs attributed to [Dancing Rune Weapon] are now attributed to the player and deal damage at 100% effectiveness.

[Icebound Fortitude] - This is our secondary (direct) damage reduction cooldown. It has a long cooldown, but has the added benefit of breaking stuns and providing stun immunity.

Extra Details:

• This can be used while stunned, as long as you are not *also* silenced or incapacitated in other ways.

[Lichborne] - An ability that breaks charm, fear, and sleep effects and provides immunity to them along with some leech for the duration. With extra talents, this is also a decently strong defensive cooldown.

Extra Details:

• This can be used while charmed, feared, or slept, as long as you are not *also* silenced or incapacitated in other ways.

[Rune Tap] - A flexible short cooldown, low duration, and low-powered damage reduction ability that costs a rune.

[Anti-Magic Zone] - A ground-AoE magic damage reduction cooldown that affects our allies.

Extra Details:

This ability is on the global cooldown.

[Tombstone] - An ability that converts up to 5 **[Bone Shield]** charges into an absorb shield and RP that synergizes with several talents that benefit from **[Bone Shield]** consumption.

Extra Details:

• This ability is on the global cooldown.

[Death Pact] - This ability provides burst healing at the cost of also applying a healing-absorb shield.

Extra Details:

This heal cannot crit and does not scale with versatility.

[Mark of Blood] - This ability debuffs an enemy target so that they heal *their* target on every successful auto-attack, though this is generally a low-powered ability.

Extra Details:

- The heal does not occur when auto attacks miss, are dodged, or are parried.
- This heal cannot crit and does not scale with versatility.
- This ability is on the global cooldown

Utility and Misc. Abilities

[Dark Command] - Standard taunt ability.

Extra Details:

- You gain threat equal to the highest value on the target's threat table (which can be yourself) and any threat you generate for the duration of the taunt debuff is increased by 400%.
- While a target is affected by a taunt debuff, it *cannot* melee attack anything other than the character who taunted it, even in situations where the character is out of range and it would normally attack the target with the next highest threat that is in range.

(Raid Only) If a target gets taunted five times without 20 seconds passing between any
two taunt effects, that target will become immune to taunts for 20 seconds; the duration
of the taunt debuff will also be reduced by 33% (multiplicatively) with each subsequent
taunt within the diminishing returns window.

[Death Grip] - A secondary taunt ability that also pulls the target directly in front of you.

Extra Details:

- This ability shares the same taunt and threat rules as [Dark Command].
- This ability moves the target to a location directly in front of the player.
- The target will not be moved if they are immune to knockbacks.
- This ability can be used to interrupt most casted abilities with the knockback effect.
- If the target is already standing in the exact destination location of a [Death Grip] cast, they will not be moved and any actions that would normally be interrupted by the movement effect will not be interrupted.
- This ability cannot be used while your character is midair.
- The baseline global cooldown triggered by this ability is only 0.5 seconds, compared to the usual 1.5 seconds.

[Gorefiend's Grasp] - An AoE **[Death Grip]** without the taunt effect. All affected units are moved directly on top of the target.

Extra Details:

- Any unit, including yourself, can be the target of this ability.
- This ability is on the normal global cooldown.

[Mind Freeze] - Our default interrupt ability, but with more range than most melee interrupts.

[Chains of Ice] - A strong ranged single target snare that costs a rune.

[Blood Tap] - This ability can be used to instantly generate runes.

Extra Details:

- [Bone Shield] stacks consumed by [Tombstone] and [Bonestorm] contribute to the cooldown reduction.
- This ability is not on the global cooldown.

[Asphyxiate] - A ranged single target stun.

Extra Details:

This ability can hit spell immune targets, but not physical immune targets.

[Blinding Sleet] - A 90 degree AoE frontal disorient that breaks on damage and applies a snare after the disorient.

[Death's Advance] - A movement speed cooldown that limits how much you can be snared when this ability is both active and inactive. This also provides immunity to most knockback effects.

[Wraith Walk] - This channeled ability removes roots on cast, while providing bonus movement speed for a short duration.

[Raise Ally] - An instant cast combat resurrection ability.

Extra Details:

• If needed, you can generate enough RP to use this ability out of combat by using [Death Gate], two casts of [Rune Tap], and [Death and Decay] in quick succession.

[Control Undead] - This can turn some undead targets into our pet for a short period of time, which provides bonus damage, situationally useful abilities, and crowd control.

Extra Details:

- M+ enemies lose their bonus health and damage from the key level when controlled. So, the potential damage gained from this ability is often minimal.
- When an enemy dies *while* being controlled, they only give dungeon count if the enemy was damaged by the group before [Control Undead] was used and if your target has not left combat since the target was damaged by the group (though DoT effects can maintain the tag if they persist until combat is re-entered). Generally, you just want to release the unit if they are about to die just to make sure it won't mess with the route, since gaining count from controlled enemies is somewhat unreliable.
- Sometimes it can be valuable to use this to temporarily control an undead unit to make a hard pull easier and to release/kill it with an easier pack.

Passive Abilities

[Mastery: Blood Shield] - Your [Death Strike] generates [Blood Shield], which absorbs physical damage, based on your mastery and the damage you have taken recently.

Extra Details:

- If you [Death Strike] while [Blood Shield] is already active, the duration is reset and the absorb values are combined.
- The maximum size of a [Blood Shield] is equal to 50% of the player's maximum health, though the maximum health increasing effect from [Vampiric Blood] does not affect this limit for no good reason.

[Crimson Scourge] - Your auto-attacks on targets with [Blood Plague] have a chance to refund a full charge of [Death and Decay].

Extra Details:

• This effect has a 25% proc chance and can only trigger when you do not have a [Death and Decay] effect currently active on the ground.

 Casting [Death and Decay] with this proc active not only removes the rune cost, but also removes the RP generation on cast associated with the rune cost.

Attribute Details

Primary Stats:

These stats are almost always present on items by default and, for any item slot where they are found, they are generally provided in proportion to the item's level. These stats can also be provided by unique effects.

Strength - This stat directly determines how much AP (attack power) we have and it's one of the two main contributors to parry rating. With **[Bone Shield]** active, strength also contributes to armor.

In general, our attack power is equal to strength. Unique effects that provide AP, directly, are extremely rare. AP contributes to our ability damage using the following general formula:

```
(AttackPower + 6 * WeaponDPS) * AbilityAPConstant * Vers% * MasteryAP%
```

Armor and parry contributions are explained under their respective sections.

Stamina - This stat directly determines how much base health we have with the following formula:

```
Health = Stamina * 20
```

In some cases, our health is used to determine the damage and healing of some abilities.

Armor - This stat reduces the amount of incoming physical damage taken according to the following formula:

```
Physical Damage Reduction \% = Armor / (Armor + K)
```

The "K Value" changes depending on what type of content you are engaged in and it is generally adjusted so that players maintain similar levels of physical damage reduction over the course of an expansion. The result is that physical vs. magic damage taken in M+ should be consistent across the whole expansion. The current "K value" for M+ is '109900'.

Weapon DPS - As discussed under Strength, Weapon DPS is an input to all ability damage calculations even if abilities do not seem directly weapon-related.

Secondary Stats:

Two of the four secondary stats are present on most item slots by default, with a few exceptions. The ratio of the two present secondary stats is different from item to item, but the combined total is generally based on the item's level. Secondary stats are also provided by several miscellaneous effects.

Critical Strike - Every 700 critical strike rating provides an additional 1% critical strike chance and every 748 critical strike rating provides an additional 1% raw parry chance. The base critical strike chance is 5% and critical strikes double the damage and healing of abilities that can crit. Specifically for BDKs, healing from healing based on maximum life, as well as **[Death Strike]**, cannot crit.

Haste - Every 660 haste rating provides 1% haste, which affects rune regeneration rate, auto attack speed, global cooldown recovery rate, [Blood Boil] cooldown recovery rate, and some proc effects. While most DoT effects are affected by haste, [Blood Plague] and [Death and Decay] are not. Since a fixed amount of runes are used on [Bone Shield] management, 1% more haste gives more than 1% increased RP generation, since all extra runes can be used on [Heart Strike].

Mastery - Through [Mastery: Blood Shield], every 350 mastery rating increases the effectiveness of [Blood Shield] by 1% and every 700 mastery rating provides 1% increased AP. The base effectiveness of [Blood Shield] is 16% and the base value for increased AP is 8%.

Versatility - Every 780 versatility rating increases all damage and healing done by 1% and every 1560 versatility rating reduces all damage taken by 1%.

Diminishing Returns: All secondary stats have multiple rating thresholds that reduce the effectiveness of additional rating for that specific secondary stat. This reduction begins to take effect once any rating provides an additional 30% of any stat (with the exception of mastery, since different specializations use different percentage-to-rating conversions) and generally ramps up for every additional 10% unadjusted contribution after that. This diminishing returns only affects *rating* specifically, no matter where it comes from, but it does not affect stat multipliers or effects that add a fixed amount of % to the stat. Rating thresholds are as follows for each secondary stat:

Secondary Stat Diminishing Returns Ratings							
Secondary Stat	Secondary Stat Penalty						
	-10%	-20%	-30%	-40%	-50%	-100%	
Critical Strike	>21000	>28000	>35000	>42000	>56000	>140000	

Haste	>19800	>26400	>33000	>39600	>52800	>132000
Mastery	>21000	>28000	>35000	>42000	>56000	>140000
Versatility	>23400	>31200	>39000	>46800	>62400	>156000

Tertiary Stats:

Tertiary stats have a small chance of appearing on most items when they drop (a 7.5% chance to get one of the following three stats). Other than being a rare bonus stat, they can also be provided by a few miscellaneous effects.

Leech - Every 1020 leech rating heals the player for 1% of all damage and healing done. This is only applied once to abilities that naturally have leech and it does not affect raw self-healing.

Avoidance - Every 272 avoidance rating reduces the AoE damage a player takes by 1%.

Speed - Every 170 speed rating increases movement speed by 1%.

Diminishing Returns: All tertiary stats have multiple rating thresholds that reduce the effectiveness of additional rating for that specific tertiary stat, just like secondary stats. This reduction begins to take effect once any rating provides an additional 10% of any stat and ramps up at 15% and 20% unadjusted contribution after that. Rating thresholds are as follows for each secondary stat:

Tertiary Stat Diminishing Returns Ratings						
Tertiary Stat	Tertiary Stat Penalty					
	-20%	-40%	-60%			
Leech	>10200	>15300	>20400			
Avoidance	>2720	>4080	>5440			
Speed	>1700	>2550	>3400			

Miscellaneous Stats:

These miscellaneous stats can only be acquired through specific sources.

Parry - Parry is an attack avoidance stat. As is the case for all strength tanks, it is generally provided by strength and critical strike, though some other sources exist. Parry probability is determined by the following formulas:

```
RawStrParry = (Strength - Base Strength)/P
RawStrParry = (Strength - Base Strength)/544000
RawCritParry = CriticalStrike/D
RawCritParry = CriticalStrike/74800
FinalParry = Base Strength/P + 0.03 + (RawStrParry + RawCritParry)/((RawStrParry + RawCritParry) * v + h)
FinalParry = Base Strength/544000 + 0.03 + (RawStrParry + RawCritParry) * (RawStrParry + RawCritParry) * (1) + 1/0.94)
```

The values for 'P', 'D', 'v', and 'h' are spec-specific and are used in multiple game mechanic formulae.

(Final parry % is reduced by 1.5% for each level the target is above the player.)

Dodge - Similar to Parry, Dodge is an attack avoidance stat. Dodge is rarely obtainable by BDK, since strength tanks do not gain Dodge contributions from primary stats or critical strike, so the dodge calculations for BDK are simplified as a result. However, every once in a while we get access to an effect that provides dodge rating.

```
RawDodge = DodgeRating/D

RawDodge = DodgeRating/74800

FinalDodge = 0.03 + RawDodge/(RawDodge * v + h)

FinalDodge = 0.03 + RawDodge/(RawDodge + 1/0.94)
```

(Final dodge % is reduced by 1.5% for each level the target is above the player)

Miss - Miss is the final attack avoidance stat and it generally cannot be interacted with.

```
Miss = 0.03
```

(Final miss % is reduced by 1.5% for each level the target is above the player)

Attack Avoidance - The combination of all stats that prevent an avoidable attack from hitting. Total attack avoidance is determined as follows:

```
AttackAvoidance = FinalParry + FinalDodge + Miss
```

Character Optimization

This section will go into how to optimally customize and play our character.

Tank Performance Measures

While damage roles are almost exclusively focused on their damage output, tanks have several measures that can affect them. The main four are as follows:

- 1. Threat Generation A tank cannot do their job if enemies are attacking other people. Without enough threat, you risk one of your group members dying to whatever you are not tanking. Threat generation is related to the amount of damage you deal, though taunt effects can be used to instantly gain the highest amount of threat on a target and to heavily amplify threat generation during the taunt duration.
- 2. Effective Hit Points EHP (Effective Hit Points) as used in this guide is your normal health corrected for any reliable, or controllable, upfront mitigation. The primary concern with EHP is that it is high enough so that you or your healer have time to reactively heal incoming damage you are taking before you die. Particularly on more difficult content, more EHP will reduce the likelihood of dying to burst damage, while also allowing tanks to mitigate damage more efficiently (and allow healers to heal the tank more efficiently) due to the tank having a larger range of health where they are safe from imminent death.
- 3. **Mitigation** As it is used in this guide, mitigation refers to the amount of raw damage that a tank can reduce with proactive mitigation (such as armor) *and* reactive mitigation (such as healing from [Death Strike]). Simply put, more mitigation means that less healing is required **by healers** for the tank to survive.
- 4. **Damage** While tank damage output is lower than that of damage dealing roles, tank damage still has some impact in dungeons. Strict damage requirements in M+ dungeons aren't as commonly seen as they are in raid encounters, but more personal damage will result in faster dungeon times **assuming nothing else changes**.

What should BDKs be looking to maximize when progressing into higher M+ Dungeons?

A large part of BDK optimization in M+ comes down to finding the best blend of performance stats. We are not necessarily maximizing any one trait. Instead, we are trying to find the setup that will maximize our chances of timing a key, which each of the above metrics contribute to in some capacity, though how they weigh against each other can change given the situation. Furthermore, some tradeoffs can be more one-sided than others, where the *amount* of benefit being provided on one side can outweigh the *type* of benefit being provided on the other.

That being said, you should generally be placing a relatively high value on Mitigation as a starting point, unless a tradeoff is particularly favorable to EHP or Damage. As content starts to get more difficult and incoming damage becomes more bursty, EHP becomes a secondary consideration in addition to Mitigation to help improve our overall survivability. Personal damage can always provide increased clear speed potential for a given route, though time generally only becomes limiting near the maximum key level your group composition is capable of doing with a given route and making routing improvements is often the more efficient method of improving dungeon timers outside of very specific situations.

Threat problems, when they arise, should be considered when they are a noticeable cause of group deaths and/or group damage throttling. In particular, threat is usually more of an issue on high target count pulls and near the start of those pulls. That being said, options that noticeably improve threat generation in these situations are extremely limited and threat issues have been noticeably less prevalent since the Dragonflight expansion because of [Shattering Bone].

A partial solution to threat generation issues involves pooling abilities that provide significant upfront AoE (Area of Effect) damage for the start of any problematic pull, such as [Dancing Rune Weapon], [Abomination Limb], [Tombstone]/[Bonestorm] with [Shattering Bone], or making sure to use [Death and Decay] while walking into a multiple target pull. Having sufficient [Blood Boil] charges on-hand for threat-significant situations can also be useful.

What's the basis for this?

Mitigation is the primary way to increase our overall survivability, which reduces the chance of catastrophic wipes from tank deaths, increases our group's pull potential (which can decrease the total number of pulls in an instance), and provides increased group damage from our healer and damage dealers, since we need less healing and are less likely to need to resort to kiting (so enemies are more grouped up and take more damage from AoE abilities as well as our healer being able to contribute more damage). Until incoming damage profiles become bursty and group damage requirements become very demanding (bringing in the need for more EHP and, at even higher key levels, damage), mitigation is basically the only metric that's going to have a significant impact on your M+ success rates (from an upfront character optimization perspective). Even in higher keys when other metrics become considerations, mitigation will still be very influential to your success.

As for the other measures:

- Threat generation past the point of solving threat issues has no value, though it is very important to address significant threat issues should they arise and if a reasonable solution is available.
- EHP becomes increasingly valuable as you move into mid-to-high level keys, where your health pool size starts to limit your [Death Strike] efficiency and snap deaths become a

- concern. If you think you are at the point where EHP begins to have value, you probably are. Just be careful about overcommitment to EHP at the cost of too much mitigation, because EHP won't (directly) help you survive deaths caused by a lack of mitigation throughput. Because of its inherent value, EHP options are generally recommended when the tradeoff is reasonably efficient.
- Damage is always nice and can potentially lead to faster dungeon completion times, but sacrificing significant Mitigation or EHP for damage in progression keys can also have the potential to lead to slower dungeon completion times by hindering the rest of your group's damage through increased healer attention or more frequent kiting or by increasing the chance of group deaths. Usually, higher cost damage-oriented trade-offs should be made only when you genuinely believe you are in a situation where it will result in higher overall key success rates, such as when more tank damage can make a high-end key possible to time in the first place or if you are worried about a boss with specific types of damage check mechanics. Overemphasizing personal damage output is a common mistake for new tank players in M+ and, given these circumstances, damage options are generally recommended only when the tradeoff is reasonably efficient.

What's the best way to estimate these performance measures?

Disclaimer: Again, tank optimization is often more complicated than simply maximizing a single performance measure, so take care not to lean too heavily on any single measure. For example, it is generally the case that simulating damage to determine gear upgrades for BDKs leads to worse outcomes than *randomly* selecting your highest ilvl piece of gear for a given slot. With that in mind, here is how you can measure the individual measures.

Today, damage measurements are easier than ever with tools such as <u>raidbots.com</u> and simulationcraft. When performing damage evaluations for dungeons, it is suggested to look at the results of long duration (~8 minute) sims with **fixed** target counts and continuously melee attacking enemies (this requires a manual override) to determine what works best for single target and multiple target situations. Even if the default action priority list in simulationcraft for BDK is generally not maintained as well as other APLs available for the spec, it should generally be good enough for *basic* damage comparisons. Hectic add cleave or dungeon slice variants are not recommended *regardless* of action priority list quality since overall damage done in that scenario is **not equivalent** to "effective damage done" (which reflects time saved in a dungeon).

Note: Damage Measurements in Dungeons

There is a big difference between total damage and and total *effective* damage done in a dungeon, since the *real* thing we care about with damage is how much damage done affects the *overall dungeon completion time*. So, keep the following in mind:

First, damage meters are biased towards multi-target pulls. When making damage decisions, how much faster you clear a dungeon is determined by how much you can increase your group's damage **relative** to the damage they are already doing in any given circumstance. So, you need to provide a *much* greater increase in raw DPS (damage per second) in a 10-target encounter to reduce dungeon completion time by one second than you would need to do in a similar length 1-target encounter. Damage meters are not taking this into consideration.

Second, large gaps in health pools among enemies can mean that damage on low-health targets is *meaningless*, or even counterproductive, to overall dungeon completion time if they are going to die to nothing but passive cleave damage. So, damage to these targets will not contribute to faster dungeon completion times, at all, even though the damage dealt to them shows up on a damage meter.

All in all, this generally means that it's easy to undervalue single target damage relative to AoE damage in M+.

Dungeon route sims have the potential to side-step a lot of the above issues, though, given the multiple metrics (beyond damage) we need to keep in mind as a tank, that level of refinement is hard to make use of and that simulation mode adds a number of complications when trying to compare it against measurement of non-damage metrics. Extra information on BDK M+ SimC considerations can be found here.

Mitigation is more complicated. For the last several expansions, the best known tool for BDK's to measure Mitigation is the <u>BDK mitigation model</u> I maintain. It can be difficult for new users to determine what inputs are best to use for this tool and the output is going to depend heavily on the inputs, but it is recommended to model higher than average damage intakes that are representative of the most dangerous situations you encounter in M+ Dungeons (the ones that are most likely to potentially kill you). Using too low of an incoming damage input is a bigger problem than using unrealistically high numbers, since most significant forms of mitigation fully scale with incoming damage and you are unlikely to die during low damage intake periods.

EHP can be measured by the above model or by simply applying passive damage reduction effects to your health total. It is generally the easiest metric to measure of the three.

That being said, the most optimal setups rely on all three of these metrics in some proportion, and because comprehensive evaluation is burdensome I have taken the effort to develop

recommendations and rules of thumb that can lead players to optimal outcomes without them having to personally go through the grunt work involved. Granted, more players getting involved in substantive BDK theorycrafting is always welcome!

Hero Talents

New to The War Within, BDK now has access to two hero talent trees that significantly affect gameplay and how we evaluate other character customization options. This section will first talk about individual hero talent trees, the choices presented within each tree, the larger gameplay/build implications of each tree, and then the relative strengths and weaknesses of both hero classes.

Upfront Recommendation

Recommendation: (Deathbringer)

Deathbringer Core Talents

[Reaper's Mark] - A reasonably hard-hitting rune spending cooldown that deals relatively high upfront single target damage and applies a debuff that eventually explodes for very high single target damage depending on how much you can damage the target with shadow and frost damage in the following 12 second window.

Extra Details:

- Stacks are generated from all individual damage instances of the appropriate damage type.
- The debuff will jump to nearby targets if the initial target dies, or, if no additional targets are nearby, the debuff will instantly explode once on a target if it is below 35% health.
- If used on a target with a pre-existing [Reaper's Mark], the previous [Reaper's Mark]
 debuff will explode and will be replaced with a fresh [Reaper's Mark] debuff.

[Wave of Souls] - One line AoE effect is added to the initial cast of [Reaper's Mark] that deals damage and applies a 5% shadowfrost vulnerability to all affected enemies when its damage is a critical strike; the effect travels roughly 15 yards before returning, being able to hit targets twice. The returning wave has a 100% crit chance and the vulnerability debuff can stack twice.

[Wither Away] - This talent causes [Blood Plague] to deal the same overall damage in half the duration, while also allowing the second scythe of [Exterminate] to apply [Blood Plague] to all targets.

[Bind in Darkness] - [Reaper's Mark] stacks now accumulate twice as fast from shadowfrost damage instances and four times as fast on shadowfrost critical strikes.

[Soul Rupture] - [Reaper's Mark] explosions now deal 20% of that damage in an AoE (excluding one target) as well as reducing all affected target physical damage against the player by 5% for 10 seconds.

Extra Details:

• This damage double dips from the specialization multiplier, effectively causing it to do more than 20% of the damage from [Reaper's Mark] explosions.

[Swift and Painful] - [Reaper's Mark] explosions now deal up to 30% more damage based on target missing health and the initial cast of [Reaper's Mark] now generates 3 [Bone Shield] charges.

[Exterminate] - After **[Reaper's Mark]** explodes, your next two **[Marrowrend]** casts cost one runes (with the same RP generation) and summon two **[Exterminate]** scythes that deal single target and AoE damage as well as potentially reapplying the **[Reaper's Mark]** debuff to your main target with a 30% chance.

Extra Details:

- A new [Reaper's Mark] debuff can not be applied to targets that have a pre-existing [Reaper's Mark] debuff from [Exterminate].
- The second [Exterminate] scythe appears to hit all targets within 8 yards of the primary target.

Deathbringer Choice Nodes

Choice Node #1

[Grim Reaper] - [Reaper's Mark] explosions now deal up to 30% more damage based on target missing health and the initial cast of [Reaper's Mark] now generates 3 [Bone Shield] charges.

OR

[Reaper of Souls] - When a [Reaper's Mark] debuff is applied, the cooldown of [Soul Reaper] is reset, the next cast of [Soul Reaper] costs no runes (and generates no RP), and that cast deals damage as if the target was at low health (even if they are not). All [Soul Reaper] damage is also increased by 20%.

Recommendation: [Reaper of Souls]

Basis: [Grim Reaper] does not bring much to the table, since additional [Bone Shield] generation is relatively worthless with the current state of (Deathbringer) and the bonus [Reaper's Mark] explosion damage only affects our damage by a small degree. Meanwhile, [Reaper of Souls] provides a significant increase to single target damage in addition to improving our RP economy with the free [Soul Reaper] casts. The only area [Grim Reaper]

has an advantage in is even-cleave AoE damage, but it is not large enough to compete with **[Reaper of Souls]** benefits.

Choice Node #2

[Death's Bargain] - An auto-triggering version of [Death Pact] at 50% effectiveness that also provides cooldown reduction to both itself and [Death Pact] on [Reaper's Mark] explosions. OR

[Rune Carved Plates] - Spending and generating runes now provides stacking 1.5% magic and physical damage reduction buffs for 5 seconds up to a maximum of 7.5% damage reduction.

Recommendation: [Rune Carved Plates]

Basis: [Death's Bargain] provides a low-health trigger heal that provides a trivial amount of mitigation to BDK at the end of the day, while [Rune Carved Plates] provides up to an ~8% EHP increase against all damage types after a some amount of ramp time. Granted, the player will generally only see a little over half this bonus, since the stacks are not completely sustainable at a 5 second duration. Even so, the competition here isn't even close outside of very very specific types of situations that generally don't exist.

Choice Node #3

[Dark Talons] - This talent causes all RP spending abilities to "count" as shadowfrost damage for the purposes of [Bind in Darkness], only, while [Icy Talons] is active for the purposes of [Bind in Darkness], while also giving [Heart Strike] and [Marrowrend] a 25% chance to increase current and maximum [Icy Talons] stacks by 3 for 6 seconds.

OR

[Reaper's Onslaught] - This talent reduces the cooldown of [Reaper's Mark] by 15 seconds, but also reduces the amount of empowered [Marrowrend] casts by one.

Recommendation: [Dark Talons]

Basis: [Dark Talons] provides improved single target damage by improving [Icy Talons] effectiveness, but the other perk does not result in any significant gains under normal circumstances. That being said, [Reaper's Onslaught] is a net loss to take, since the [Reaper's Mark] cooldown reduction is not worth the loss of [Exterminate] throughput.

Choice Node #4

[Death's Messenger] - This talent reduces the cooldown of [Raise Dead] and [Lichborne] by 30 seconds.

OR

[Expelling Shield] - This talent provides a weak cast speed slow on all targets who damage our [Anti-Magic Shell].

Recommendation: [Death's Messenger]

Basis: [Death's Messenger] provides some single target damage benefits and defensive uptime/EHP benefits through the provided cooldown reduction. Meanwhile, [Expelling Shield] provides near-zero value given the conditions required to get any marginal value out of it, at all.

Deathbringer Implications

(Deathbringer) changes to baseline BDK are mostly focused on the inclusion of the hard-hitting [Reaper's Mark] and [Exterminate] gameplay loop as well as a heavy amplification to [Blood Plague] damage via [Wither Away], which are all extremely large sources of damage that do not benefit from haste-scaling. EHP gains a moderate baseline increase due to [Rune Carved Plates], while mitigation is mostly increased from the combination of damage reduction effects and higher leech. [Reaper's Mark] stack generation is (mostly) limited by the cap at the moment, so different rates of stack generation do not generally have build or gameplay implications for the time being (assuming good play). Other elements of the BDK kit largely remain unchanged.

San'layn Core Talents

[Vampiric Strike] - [Death Strike] and [Death Coil] gives your next [Heart Strike] a 25% chance to turn into a [Vampiric Strike] (a proc that resets after your next [Heart Strike] cast), which is otherwise identical to [Heart Strike] except that it deals pure shadow damage, has a higher AP coefficient, it heals the player for 1% of their maximum health, and it provides [Essence of the Blood Queen] (a 5 max stack stacking haste buff with other potential effects).

[Blood-Soaked Ground] - [Death and Decay] now grants you 5% physical damage reduction and a 5% increased chance to proc a [Vampiric Strike] buff from [Death Strike] and [Death Coil] casts while you are under its effects.

[Infliction of Sorrow] - [Vampiric Strike] now consumes [Blood Plague] and deals 130% of its remaining damage to all targets hit. If you are under the effects of [Gift of the San'layn], then [Blood Plague] is, instead, extended by 3 seconds and deals 20% of its remaining damage to all targets hit.

Extra Details:

- The damage is dealt before duration is manipulated.
- This effect is not duplicated by [Dancing Rune Weapon].

[Frenzied Bloodthirst] - [Essence of the Blood Queen] now stacks 2 additional times and provides 6% more [Death Strike] and [Death Coil] damage per stack.

[The Blood is Life] - [Vampiric Strike] now has a chance to spawn a blood beast for 10 seconds, which auto attacks, casts an AoE ability called [Corrupted Blood], and bursts for damage and healing in an AoE based on how much melee it has dealt over its life.

Extra Details:

• Both [Corrupted Blood] and the AoE explosion deal AoE damage that is soft-capped at 8 targets (doing only "SQRT(8/N)" of normal damage to each of the 'x' targets when fighting more than 8 targets).

[Visceral Strength] - Consuming a [Crimson Scourge] proc now provides 12% strength for 12 seconds.

[Incite Terror] - [Heart Strike] and [Vampiric Strike] apply a debuff that causes affected targets to take 1% more shadow damage (stacking up to 5 times); this benefit is 300% more effective for [Vampiric Strike] damage.

Extra Details:

• This effect also applies a separate 1%/stack multiplier to ALL pet and guardian damage.

[Gift of the San'layn] - When [Dancing Rune Weapon] is active, the effectiveness of [Essence of the Blood Queen] benefits are increased by 150% and all [Heart Strike] casts are converted to [Vampiric Strike] casts.

San'layn Choice Nodes

Choice Node #1

[Newly Turned] - [Raise Ally] now revives players at full health and grants you and the target player an absorb shield equal to 20% of your maximum health.

OR

[Vampiric Speed] - [Death's Advance] and [Wraith Walk] now provide you 10% more movement speed than normal as well as increasing 4 nearby allies movement speed by 20% for 5 seconds.

<u>Recommendation:</u> [Raise Ally] (If you are the primary combat res); otherwise [Vampiric Speed]

Basis: If you are the likely source of combat resurrections for your group, **[Newly Turned]** provides a very clear benefit during recovery efforts. In any other situation, **[Vampiric Speed]** provides a guaranteed, though miscellaneous, benefit. There is no numerically correct answer

for this choice node; choose based on which utility-based benefit you think will have the most value for your given situation.

Choice Node #2

[Vampiric Aura] - This talent provides 2% leech, which is applied to 4 allies within 12 yards at 100% increased effectiveness while **[Lichborne]** is active.

OR

[Bloody Fortitude] - [Icebound Fortitude] reduces damage by up to an additional 20% proportional to missing health. Personally getting the killing blow on an enemy also reduces the cooldown of [Icebound Fortitude] by 3 seconds.

Recommendation: <Either>

Basis: While the leech from [Vampiric Aura] provides little personal value for us, it *does* allow [Lichborne] to function as something of a group healing cooldown. Meanwhile, [Bloody Fortitude] increases the effectiveness of [Icebound Fortitude] by a variable amount depending on how damage intake is occurring. The effects are not directly comparable, so both are seen as competitive effects at this time depending on the situation. One emphasizes group survivability, while the other emphasizes personal survivability.

Choice Node #3

[Pact of the San'layn] - Blood beasts now store 50% of all shadow damage **you** do during their lifespan, inflicting that damage in an uncapped AoE when they expire.

OR

[Sanguine Scent] - When the target is below 35% health, your [Death Strike] and [Death Coil] have a 15% increased chance to trigger a [Vampiric Strike] buff.

Recommendation: [Pact of the San'layn]

Basis: The damage from [Pact of the San'layn] is overwhelmingly strong relative to any benefits [Sanguine Scent] offers.

San'layn Implications

(San'layn) changes to baseline BDK are mostly focused on amplifying the existing [Heart Strike] and [Death Strike] gameplay loop as well as empowering [Dancing Rune Weapon]. Full [Essence of the Blood Queen] uptime is far from guaranteed, so any build option increasing [Death Strike] cast rate will provide benefits in the form of maintaining higher stack uptime. [Vampiric Strike] and [Infliction of Sorrow] make [Heart Strike] more damaging on average when used during [Dancing Rune Weapon] in particular. Mitigation throughput has small gains due to improvements to self-healing sources, while EHP only has limited direct

benefits through [Blood-Soaked Ground] and increased [Vampiric Blood] cast frequency (indirectly from the haste). As tuning currently stands, [Pact of the San'layn] provides a form of exponential AoE damage scaling, which is a significant source of damage given enough targets.

Overall

Recommendation: (Deathbringer)

Altogether, (**Deathbringer**) provides strictly better mitigation and EHP benefits, while also providing significantly more damage on low target count situations. The only area where (**San'layn**) has the potential to outperform (**Deathbringer**) is in larger target count AoE damage, where [**Pact of the San'layn**] damage can eventually scale to the point where it single-handedly reverses the damage gap between the hero classes. Even so, this is not seen as a significant enough benefit on its own to overshadow its other weaknesses. As such, (**Deathbringer**) is currently the hero class recommendation for M+.

Talents

This section will first provide information on individual talents before talking about overall talent build considerations. The individual talent information is intended to provide a foundation on talent usefulness, so that talent build considerations can be better understood.

Death Knight Talents

(**Note:** All qualifiers on talent strength are relative to the amount of benefits provided per talent point when compared with other talents that are available in the Death Knight Talent Tree, **only**. Typical talent power levels are different between the Death Knight and Blood Talent Trees, but they are never directly competing against each other.)

Row 1

[Icebound Fortitude] - A respectable defensive cooldown and stun break.

[Death Strike] - Baseline for Blood.

[Raise Dead] - A respectable single target damage increase talent that is also a prerequisite for other talents of interest.

Row 2

[Runic Attenuation] - This passive RP generation results in a small increase to mitigation, priority damage, and (indirect) EHP benefits.

[Improved Death Strike] - The healing increase and RP cost reduction on [Death Strike] results in a small increase to mitigation, priority damage, and (indirect) EHP benefits.

[Cleaving Strikes] - One of our strongest overall AoE damage options in the talent tree that peaks on five target pulls. The bonus duration on all [Death and Decay] related buffs is tied to this talent, however, so it retains good value even against singular targets.

Row 3

[Mind Freeze] - The Death Knight interrupt ability, which is arguably required in most M+ content.

[Blinding Sleet] - An AoE disorient that breaks on damage and also applies an AoE snare. Situationally it can be very useful, particularly if you can make good use of the AoE CC effect to interrupt enemy ability casts, though it will provide little to no value if the AoE CC has no good application.

[Anti-Magic Barrier] - A significant power increase to [Anti-Magic Shell] and a marginal overall increase to mitigation, damage, and EHP. Full benefits are dependent on the incoming damage profile.

[March of Darkness] - A situationally-useful movement speed increase on [Death's Advance].

[Unholy Ground] - The haste bonus on [Death and Decay] results in a respectable amount of increased damage along with relatively smaller mitigation and EHP benefits. We will be using [Death and Decay] aggressively in all situations, so these benefits are always applicable.

[Control Undead] - A very situational crowd control ability.

[Enfeeble] - Given the low average uptime on the debuff effect, the overall damage reduction effect is only decent for single targets and underwhelming outside of that.

[Sacrificial Pact] - A clunky AoE RP spender that only provides a marginal AoE damage increase at particularly high target counts. The net mitigation increase is extremely low, while also resulting in an indirect loss to EHP.

Row 4

[Coldthirst] - The RP generation is a marginal-to-small increase in overall mitigation, priority damage, and indirect EHP in situations with kick targets, while also providing more cast disruption potential.

[Proliferating Chill] - While likely strong in PvP, an empowered [Chains of Ice] is generally providing no value in PvE content outside of extreme specific kiting situations.

[Permafrost] - A flat source of absorb healing that is very underwhelming in situations where damage intake is actually threatening.

[Veteran of the Third War] - A powerful source of passive EHP.

[Death Pact] - Outside of very specific applications, this ability is simply a weak source of mitigation due to its low overall healing throughput.

[Brittle] - The debuff application provides a respectable damage increase at all target counts, one that is even better when using [Wither Away] with (Deathbringer).

[Death's Reach] - Having a 40 yard range on your [Death Grip] provides some quality of life when setting up pulls, but it is otherwise not providing much, if any, value. The cooldown-refunding effect only applies to enemies you, personally, landed the killing attack on, which greatly limits the usefulness of that portion of the talent.

Row 5

[lcy Talons] - The attack speed buff is a middling priority damage increase while the buff is maintained.

[Anti-Magic Zone] - A strong group cooldown against magic damage, though it often has little to no personal value if we are ignoring its value for our teammates.

[Unholy Bond] - The bonus strength (assuming the use of [Rune of the Fallen Crusader]) is an okay source of damage relative to the other damage-oriented talents.

Row 6

[Ice Prison] - While potentially useful in PvP, an empowered **[Chains of Ice]** is generally providing no value in PvE content; even when used in PvE, the downside would generally make this a net negative.

[Gloom Ward] - Even assuming that no external healing is received in the form of absorbs, the absorb amplification results in a moderate source of mitigation from [Blood Shield] and [Anti-Magic Shell], alone. This does not work on reactive absorb effects, like [Will of the Necropolis].

[Asphyxiate] - A ranged single target stun can be very useful at negating a number of trash mechanics.

[Assimilation] - The 25% cooldown reduction on [Anti-Magic Zone] is a much less valuable talent point than [Anti-Magic Zone] itself, but some situations may make this cooldown reduction worthwhile for the group. It also increases the maximum absorb amount by 10%, though this is a limit that is never challenged on BDK in mythic+ content.

[Wraith Walk] - This movement speed ability can't be used at the same time as other abilities, so it is mainly just providing improved out-of-combat movement between pulls in dungeons unless you have an effective way to use the root removal portion of this ability.

[Grip of the Dead] - A powerful front-loaded snare on [Death and Decay] can be very useful if you have a need to kite in any situation, but it can be unnecessary or counter-productive in other situations.

[Soul Reaper] - This execute provides a very large amount of priority damage, though it does so at a relatively marginal cost to mitigation and EHP. The raw damage throughput scales poorly into multiple targets, while the tradeoff looks relatively favorable at lower target counts. When using this talent, there is also a high gameplay emphasis on maximizing the usage of this short cooldown ability.

Row 7

[Suppression] - Unless you are doing content with major EHP checks from incoming AoE damage (which is usually rare for the tank role and especially in M+), the avoidance from this talent is exceptionally weak.

[Blood Scent] - Leech of this magnitude is a weak source of mitigation. It becomes relatively stronger against multiple targets, but still a weak option overall.

[Unholy Endurance] - This talent turns [Lichborne] into a defensive cooldown that is on par with [Icebound Fortitude], just with a weaker effect that has a higher uptime.

Row 8

[Osmosis] - This heal amplification provides a mostly insignificant increase to mitigation in situations when [Anti-Magic Shell] is not instantly consumed. It also does not amplify absorbs, at all.

[Insidious Chill] - While the single target attack speed slow effect has some anti-synergy with other talents, it greatly reduces incoming damage from a single target.

[Runic Protection] - The reduced chance of being critically struck does nothing for tank specializations, but the armor benefits does provide a moderate amount of EHP when physical incoming damage is significant (which is pretty much all the time).

[Blood Draw] - This uncontrollable trigger effect has a somewhat weak blend of benefits even if we were to assume that the effect occurred at particularly valuable times. While not overwhelming, there are worse talents. While not well documented, this talent heals you for 25% more than the damage it deals.

Row 9

[Rune Mastery] - The bonus strength is a somewhat weak source of damage relative to the other damage-oriented talents, but it is something.

[Subduing Grasp] - Given the uptime and being mostly tied to abilities that provide no additional value (outside of utility), the overall EHP effect of this talent is mostly trivial.

[Will of the Necropolis] - This low-health damage reduction is a particularly strong source of EHP. The effective damage reduction on incoming damage is calculated based on your pre-hit **health**, only, so absorb shields can allow the damage reduction effect to apply earlier than 35% health against especially large damage instances.

Row 10

[Null Magic] - This talent provides a significant amount of generalized EHP, though its exact effectiveness will depend on the given situation and how much of incoming damage is magic. The reduced magic effect duration has the potential to be significant, but its value is also situational.

[Unyielding Will] - A 20 second increase in [Anti-Magic Shell] is a heavy price to pay to give it the ability to instantly remove all magic effects. It is difficult, but not impossible, to come up with a situation where this talent is a net positive.

[Abomination Limb] - This ability provides grip utility along with a moderate AoE damage increase that still retains some value against single targets.

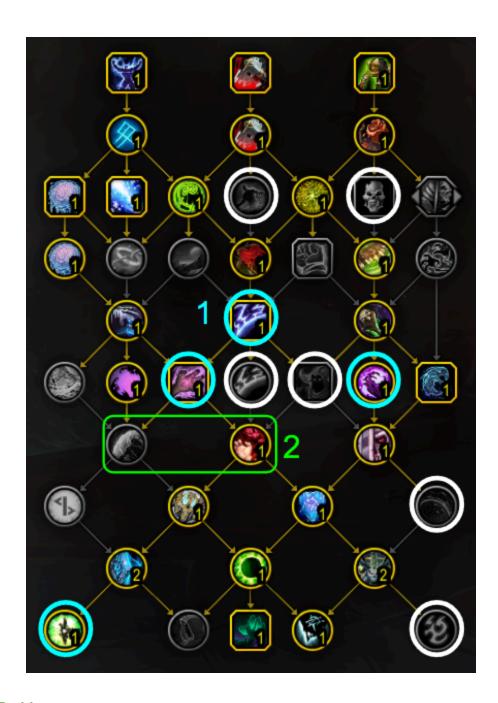
[Death's Echo] - While the other perks are nice too, the extra charge on [Death and Decay], combined with aggressive [Death and Decay] usage, means that this talent can increase our [Death and Decay] throughput. Not only are we less likely to be wasting cooldown recovery time before using [Death and Decay] with two charges, but [Crimson Scourge] procs will provide a full charge of [Death and Decay] whenever they occur. Given that all [Death and Decay] buffs currently linger for an additional 4 seconds, the raw damage throughput benefits of this talent are now a lot smaller than they used to be (though the damage gains from this talent

can become quite large in situations where you can't fully stay in your [Death and Decay]) and a lot of the consistent value is more utility-driven.

[Vestigial Shell] - This talent gives **[Anti-Magic Shell]** added group defensive utility in the form of a relatively small absorb shield and the ability to halve the duration of magic-dispellable debuffs. The shells appear to prefer closer targets and are able to target non-player allied units at the moment.

Death Knight Talent Build

Baseline Death Knight Talent Build:



General Pathing:

Lower-tier talent selection is largely driven by taking all talents of above-average value while avoiding low-value talents, where the pathing is flexible enough to do this consistently without taking things purely for pathing reasons. [Coldthirst] is always the superior pathing option to get to [Icy Talons] (unless you are in a VERY specific situation that calls for [Proliferating Chill]), while [Anti-Magic Barrier] is almost always a good pickup unless you are in the rare situation where [Anti-Magic Shell] isn't all that useful for a particular dungeon.

Mid-tier talent pathing is potentially messier. Outside of a few unconditionally strong talents, your ultimate pathing to the late-tier talents has some optionality that is very much affected by dungeon conditions. Neither [Blood Scent] or [Suppression] is particularly strong, but they are a necessary evil for us to path to the lower left of the tree, while [Unholy Endurance] is generally providing good value, regardless, unless you REALLY need the talent point to support a situation with VERY high utility talent value (even then there are arguably better ways to free up talent points).

Late-tier talents do have a number of unconditionally strong options, though [Subduing Grasp] is generally just taken for pathing to [Abomination Limb] and [Rune Mastery] is a very borderline pickup over utility options in situations where [Null Magic] is not providing much value and other types of utility talents *are* valuable (though [Null Magic] usually *does* provide good value outside of very physical heavy dungeons that are rare).

Some potential decisions related to the baseline Death Knight Talent tree are highlighted and discussed below.

<u>Decision Point 1:</u> Choose 4 **Flex Talents** (up to 2 can be a Late-Tier Talent)

The baseline build allows for two additional mid- or low- tier talents to be taken before the late-tier talents are unlocked, in addition to two unused talent points that can potentially be used in any part of the tree. All desirable options for these points are situational, but some of the more generally useful options include [Null Magic], [Vestigial Shell], [Anti-Magic Zone], [Grip of the Dead], and [Asphyxiate]. [Control Undead] can be very useful under the right conditions and affixes, though this tends to be a minority of situations. [Wraith Walk] has potential value in root removal, but would require a mechanic of that type that is worth spending a talent point to periodically be able to remove. [Blood Draw] is a pretty weak talent overall, but, unlike a lot of the other options here, doesn't require specific circumstances to generate value. [March of Darkness] is similarly a place talent points can go when other utility talents are not gaining value, though sometimes it can have specific value in making outranging certain mechanics possible.

Decision Point 2: [Suppression] vs. [Blood Scent]

While both of these talents are very weak, there is not a clear winner on which one is technically providing more value. Granted, [Blood Scent] will require pathing through either [Asphyxiate] or [Assimilation] to reach. Relative to the amount of tertiary ratings that can rarely be provided on items, [Blood Scent] is giving a lot more of its respective bonus, so, if you have any preference for leech rating over avoidance rating, at all, [Blood Scent] should be considered the better option if the pathing prerequisites are going to be met anyway.

Blood Talents

(**Note:** All qualifiers on talent strength are relative to the amount of benefits provided per talent point when compared with other talents that are available in the Blood Talent Tree, **only**. Typical talent power levels are different between the Death Knight and Blood Talent Trees, but they are never directly competing against each other.)

Row 1

[Heart Strike] - Unavoidable core ability.

Row 2

[Marrowrend] - Unavoidable core ability.

[Blood Boil] - Unavoidable core ability.

Row 3

[Vampiric Blood] - One of our most powerful defensive cooldowns and unavoidable.

[Bone Collector] - A mostly quality of life talent, that also provides some (mostly mitigation-based) throughput on grip abilities via [Bone Shield] generation. This talent is unavoidable.

Row 4

[Ossuary] - The RP cost reduction on [Death Strike] is a small amount of priority damage and defensive benefits are only significant under situations where incoming damage is high for an extended period of time. The extra maximum RP is also a nice perk that is hard to quantify benefits.

[Improved Vampiric Blood] - The increased [Vampiric Blood] uptime, in particular, results in a decent source of controllable EHP in any content where high defensive uptime is desirable along with a decent mitigation benefit, assuming it is paired with other talents it has synergy with.

[Improved Heart Strike] - The increased damage is relatively poor power-wise at all target counts compared to other damage talents when used by (Deathbringer). However, (San'layn) gets above-average damage benefits from this talent because the talent also affects [Vampiric Strike].

[Ossified Vitriol] - This talent provides a decent amount of priority damage against enemies who regularly melee you. It's not a stand-out talent, but there are also worse options in the tree.

Row 5

[Leeching Strike] - The healing results in a very low amount of extra mitigation in dangerous situations with no other benefits.

[Heartbreaker] - The increased RP generation provides a decent mix of mitigation, priority damage, and EHP benefits against multiple targets. However, the overall benefits are greatly reduced against single targets and its mitigation benefits are specific to situations that force death strikes more often than every 5 seconds for a significant length of time.

[Foul Bulwark] - A large increase in mostly-reliable baseline EHP.

[Dancing Rune Weapon] - One of our strongest defensive cooldowns, which also doubles as a potentially strong offensive cooldown (particularly with additional talents).

[Hemostasis] - The increased [Death Strike] damage and healing provides a decent amount of mitigation against multiple targets as well as some decent priority damage in the same situations. Note that the healing increase does not extend to [Blood Shield] healing, only the raw healing portion of [Death Strike]. However, the overall benefits are lackluster against single targets and its value for (Deathbringer) is greatly reduced, since (Deathbringer) casts [Blood Boil] at a greatly reduced frequency and does not have the damage amplification on [Death Strike] that (San'layn) has.

[Perseverance of the Ebon Blade] - Given the lack of emphasis on [Crimson Scourge] with the current rotation and talent tuning, the increased versatility provides relatively small, but well-rounded, benefits at this time.

[Relish in Blood] - Given the lack of emphasis on [Crimson Scourge] with the current rotation and talent tuning, the increased RP and healing provide are relatively insignificant benefits at this time. This talent is strictly worse than [Perseverance of the Ebon Blade].

Row 6

[Gorefiend's Grasp] - An AoE grip can be a very useful utility at times to improve enemy positioning or as an AoE micro-CC. It also provides some amount of resource generation via [Bone Collector]. However, there are also a large range of situations where this ability provides little to no value.

[Improved Bone Shield] - The large passive haste increase results in a strong damage benefit along with relatively smaller mitigation and EHP benefits.

[Insatiable Blade] - The bone shield generation and [Dancing Rune Weapon] cooldown reduction results in significant mitigation, damage, and defensive uptime benefits.

[Rune Tap] - This rune-cost defensive cooldown provides a decently strong amount of controllable EHP at the cost of a relatively small damage penalty. When utilizing this ability only to the extent that it does not create rotational downtime (which is mostly guaranteed with most talent configurations), damage output increases with higher use from increased [Blood Boil] casts in addition to the pre-existing benefits. This ability is costlier to use for (San'layn), given the relative strength of [Heart Strike].

[Rapid Decomposition] - A decently strong damage increase at all target counts, though this is relatively more impactful against multiple targets and for **(Deathbringer)**.

Row 7

[Blood Tap] - Given the current resource situation, any additional [Heart Strike] comes at the cost of a [Blood Boil]. In most standard situations, this talent currently provides a marginal boost to mitigation and damage, though it has some pooling potential that is hard to quantify.

[Tightening Grasp] - The cooldown reduction increases total potential [Gorefiend's Grasp] usage by 33%, which is weaker than the original talent point spent on [Gorefiend's Grasp]. The silence effect can often be redundant, since [Gorefiend's Grasp] already stops most abilities when it is used, but it could add extra value in the right situations.

[Reinforced Bone] - This talent provides a fairly large EHP increase from both the armor and [Foul Bulwark] synergy. Furthermore, this talent increases the damage contribution of the 11.0 tier set bonus, making it a very above-average damage talent.

[Everlasting Bond] - This talent more than doubles the effectiveness of **[Dancing Rune Weapon]**, especially when it comes to damage. Needless to say, this is a significant source of damage and defensive uptime as well as providing a solid amount of overall mitigation.

[Voracious] - The increased **[Death Strike]** healing, in particular, is one of the strongest mitigation benefits available in the talent tree.

[Coagulopathy] - The increased damage potential of this talent at all target counts is quite significant and even the increased healing provides noticeable mitigation when fighting multiple targets once the buff effect is stacked up.

[Bloodworms] - The worms provide above-average single target damage and a minor source of smart mitigation, but they scale poorly into multiple targets (if priority damage is not desired).

Row 8

[Blood Feast] - The healing throughput of this effect results in very minor amounts of mitigation, and, in real world situations, it is a very awkward form of healing to actually get value out of.

[Mark of Blood] - The benefits are almost always not worth the cast time of using this ability outside of very unique situations.

[Tombstone] - While this ability has some value as a spot-defensive cooldown, the majority of its benefits are provided indirectly with [Dancing Rune Weapon] cooldown reduction via [Insatiable Blade] and AoE damage via [Shattering Bone]. As such, using [Tombstone] results in a strong combination of increased mitigation, damage, and defensive uptime. (San'layn) has unique synergy with this talent, since it improves the uptime on [Gift of the San'layn] benefits; this adds a decent amount of additional damage benefits than normal.

[Blooddrinker] - This single target damage ability provides an above-average increase to priority damage and a large increase to EHP against single targets, though the overall damage and EHP benefits are a lot more muted when fighting multiple targets. A relatively small mitigation gain exists at all target counts. As a ranged ability, this spell provides more benefits if you find yourself in situations where you are outside of melee range of enemies, since it greatly outclasses other abilities you can use while at range. This is costlier to use for (San'layn), even before considering the direct tradeoff.

[Consumption] - This AoE ability provides mitigation (particularly in situations when incoming damage is consistently high), EHP, and damage benefits at all target counts. (San'layn), receives much more pronounced damage benefits from this talent, due to its contribution to [Essence of the Blood Queen] uptime. The tooltip suggests this increases the tick rate of [Blood Plague] by 30%, but, in actuality, it increases the tick rate by ~42.8% for the buff duration and also increases the damage of [Infliction of Sorrow] by the same amount.

[Bloodied Blade] - This talent stacks with a 0.5s ICD and new buff applications can't stack while the premium strength buff is active. Triggered [Heart Strike] casts do not generate RP or proc [Infliction of Sorrow]. That being said, this talent provides a very strong damage increase in multiple target situations, though it is very unreliable against single targets.

[Sanguine Ground] - This increased damage and healing effect results in a reasonably strong damage benefit at all target counts with some mitigation benefit.

Row 9

[Shattering Bone] - This is a powerful source of AoE damage that remains strong even against single targets assuming regular bone shield consumption.

[Heartrend] - This damage proc provides a near negligible increase to single target damage.

[Carnage] - The additional blood shield healing is very marginal, while the cooldown reduction proc effect is implemented in a way that is very unreliable ("on damage taken" procs rarely get full value). In a best case scenario, the benefits are less than half of what is provided by the preceding talent and it is not competitive with later-tier blood tree talents.

[Iron Heart] - With a moderate investment in Mastery, this talent provides a respectable amount of consistent mitigation in all situations.

[Red Thirst] - The **[Vampiric Blood]** cooldown reduction provides a very large increase in controllable EHP benefits while also providing a large increase in mitigation throughput.

Row 10

[Bonestorm] - This talent provides a moderate damage increase and a decent EHP increase on all target counts primarily due to the same talent interactions that affect [Tombstone]. Relatively smaller mitigation benefits also exist that increase in power with additional targets (up to 5), while the other benefits are relatively agnostic to target count. The overall benefits are very respectable. (San'layn) has unique synergy with this talent, since it improves the uptime on [Gift of the San'layn] benefits; this adds a decent amount of additional damage benefits than normal.

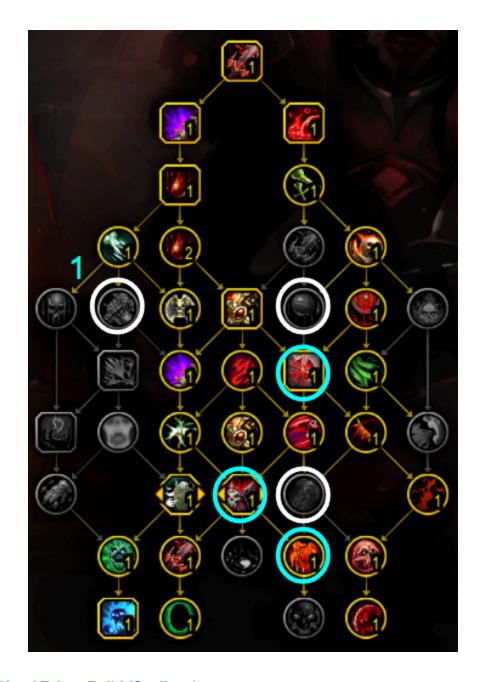
[Purgatory] - This 4 minute cooldown cheat death effect is very strong for what it does. This effect cannot fail from overkill damage, though there is a bug in the game where it will not work properly a small percentage of the time for currently unknown reasons.

[Bloodshot] - This increased damage effect will always affect [Death Strike] regardless of prior [Blood Shield] status. Our other physical abilities tend to be single target-oriented abilities as well, though exact [Blood Shield] uptime will vary. So, in general, this ends up being a strong single target damage talent for (San'layn), while being only a moderate increase for (Deathbringer) with its lower proportion of physical damage. It is significantly weaker than it was in Dragonflight in any case.

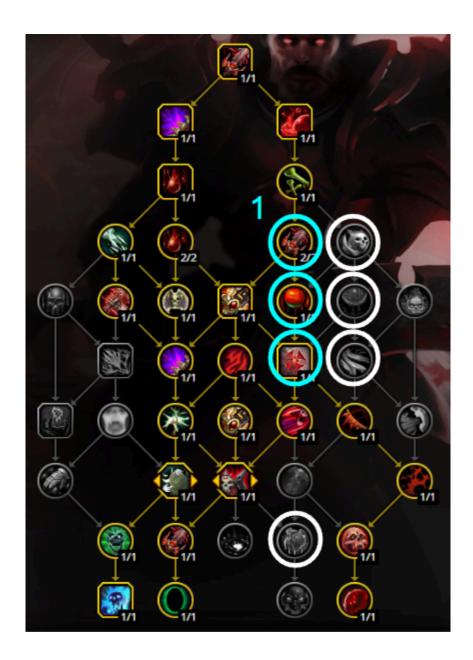
[Umbilicus Eternus] - This absorb effect provides very strong mitigation throughput on multiple targets, though it scales off of the number of targets and is a lot less impressive on single targets. The size of the absorb effect is to the point where it can be treated as a substitute 100% damage reduction defensive cooldown while it is active with significant absorb value remaining, allowing the player to pool RP and further defensive cooldowns while it is active.

Blood Talent Build

Baseline Blood Talent Build (Deathbringer):



Baseline Blood Talent Build (San'layn):



General Pathing:

Regardless of hero talent tree, our immediate priorities in the low- to mid-tier sections of the talent tree are similar (trying to path to our unconditionally high-value talents). All three [Dancing Rune Weapon] talents are strong and desirable, with [Improved Vampiric Blood] being the more appealing pathing option within M+ where we will always be taking [Red Thirst]. For the left side, [Improved Bone Shield], [Ossuary], [Reinforced Bones], and [Foul Bulwark] are significantly stronger than most other talent options in the tree. For the right side, [Coagulopathy] and [Voracious] are particularly high power.

The late-tier section of the talent tree involves talents that are generally more powerful than those spent previous to it. The [Bonestorm] branch, [Purgatory], [Red Thirst], [Sanguine Ground], and [Umbilicus Eternus] are impactful enough to provide more overall value than any potential substitutes regardless of individual dungeon considerations.

For (Deathbringer), [Rapid Decomposition] being strong enough to direct a number of weaker talents to be allocated on this side of the tree (the alternatives just don't look appealing). For (San'layn), the increased value of alternative talents make [Rapid Decomposition] less locked in, though at least one of [Rapid Decomposition] or [Rune Tap] is needed for pathing. (San'layn) also creates a situation where the enhanced value of [Consumption] and [Heartbreaker] arguably make them strong enough to always use.

<u>Decision Point 1:</u> Choose **3 Extra Talents** (4 for (San'layn)) (1 can be a Late-Tier Talent)

The baseline build allows for three (or four with (San'layn)) additional talents to be taken (one of which can be spent in the late tier of talents).

For (Deathbringer), between the [Death Strike] changes making RP less valuable and being made a 1 rank talent allowing it to provide more RP generation than before for a single talent point, [Heartbreaker] power level is in an ambiguous place; it can be particularly helpful with particularly high incoming damage and provide decent well-rounded benefits against multiple targets, though it is a weaker option for pure single target. [Hemostasis] is relatively unchanged power-level-wise from Dragonflight and, even though it was not a competitive M+ talent in Dragonflight, enough other things have changed that it is still a consideration with current information; as before, it excels at priority damage in multiple target pulls, while being weaker on lower target counts. Due to RP not being as valuable as before, [Rune Tap] was indirectly buffed by the [Death Strike] changes, but otherwise functions similar to before by flexible defensive uptime benefits at the start of pulls or during periods that would otherwise have defensive downtime at a relatively smaller damage loss; it is also worth noting that this talent increases in value if [Consumption] is also taken, which causes [Rune Tap] use to always be a damage gain due to excess resources. As for [Consumption] itself, the DoT acceleration and resources provide a blend of benefits that are relatively agnostic to target count, but given the reliance on filling downtime with new resources, it may be hard to realistically cash in on all of this value in a real-world M+ situation, though this becomes easier with [Rune Tap]. [Iron Heart] is indirectly nerfed due to the nerfs to [Death Strike] haste scaling, but it provides consistent mitigation throughput that is generally stronger than [Heartbreaker], [Rune Tap], and [Hemostasis] back in Dragonflight; there are some reasons to no longer consider it a mandatory talent at this time, but future data will provide more perspective on this as the season progresses. [Bloodied Blade] provides immense damage benefits in multiple target pulls, but is lacking in pure single target situations. In straightforward situations, its performance looks good enough that it could arguably be a locked-in talent, but there are concerns that it performs worse in reality than it does with modeling assumptions, which is keeping it as being classified as a

flex talent. As the season progresses, more information will be gathered on the success of these talents, but for now they all have potential to be in competitive talent builds.

For (San'layn), Your main choice is deciding whether or not you want to go for [Rapid Decomposition], the increased value of [Improved Heart Strike] and [Hemostasis] is what makes not taking [Rapid Decomposition] a potentially competitive option, though this forces you into [Rune Tap]. In a [Rapid Decomposition] scenario, a talent point is free to use in the late tier of talents if [Rune Tap] is also not being taken.

General Gearing

Given that you've read about the tank performance measures, we are looking to build our character with an optimal combination of mitigation, EHP, and damage for the content we are doing. This section is going to be giving general recommendations for gearing. Due to the large number of evaluations supporting this section and the amount of bloat it would cause to do for both hero classes, most recommendations in this section are made exclusively for (Deathbringer) only. The primary difference with regards to gearing between the two hero classes is the value of haste.

Upfront Recommendation

- 1. Disregarding limited ilvl differences, target Tier Set Bonuses
- 2. Disregarding limited iIvI differences, target Embellished Items
- 3. Disregarding limited iIvI differences, target items that DO NOT have Haste
- 4. Disregarding limited ilvl differences, target items that have Versatility
- 5. Disregarding limited ilvl differences, target items with Mastery over Critical Strike
- 6. Target items with Sockets
- 7. Avoid excessive secondary stat Diminishing Returns

(Full details on each rule of thumb are provided at the end of the General Gearing Section)

Embellished Items:

Recommended: [Duskthread Lining] x2

Alternative (No Max ilvl Weapon): [Darkmoon Sigil: Symbiosis] / [Writhing Armor Banding]

Generalized Stat Priority:

Overall: Versatility > Mastery > Critical Strike > Haste

Tier Set Bonuses

Season 1 includes decent tier set bonuses that are obtainable from multiple sources. These tier set bonuses generally make tier pieces worth using over gear sets that do not make use of tier set bonuses.

2-piece Bonus:

[Bone Shield] now provides 2% damage reduction. Losing a [Bone Shield] charge has a 15% chance to apply a separate damage reduction effect of 1% for 6 seconds that can stack up to 3%.

This tier set bonus can generally justify a combined item level drop of up to ~7 item levels assuming the other items in question do not have a tier set bonus of their own.

4-piece Bonus:

Each stack of [Bone Shield] now grants 0.5% increased damage and taking damage below 6 charges of [Bone Shield] has a 10% chance per damage instance to generate 1-2 additional [Bone Shield] charges. This damage benefit also affects items, pets, and double dips with [Dancing Rune Weapon].

This tier set bonus can generally justify a combined item level drop of up to ~20 item levels assuming the other items in question do not have a tier set bonus of their own.

Implications:

The main implication of this tier set is that it provides additional incentive beyond [Foul Bulwark] to be above 5 [Bone Shield] charges (after [Ossuary] bonuses are guaranteed), while the low [Bone Shield] stack [Bone Shield] generation proc can potentially help at the start of pulls when initial [Bone Shield] levels are low (or immediately after using [Bonestorm]). It is not worth it to stay at low [Bone Shield] levels to maximize [Bone Shield] generation from this proc effect, given the loss of other benefits. As such, it has no effect on player decision-making.

Preferred Off-Tier Slot:

Both the helm and chest have relatively poor statlines, with chest having a slightly worse statline than helm. That being said, helm has better non-tier alternative statlines available than chest does, so, given that those alternatives are available, helm is the better slot to have as your off-tier piece.

Embellished Items

There are a number of crafted items that are "embellished". These embellished items provide unique and strong bonus effects, while their main restriction is that only two of these items can be equipped at any one time. Note, these effects aren't overly powerful in the grand scheme of things, but they are (often) strong enough to be worth using over non-embellished pieces.

While crafted items are only 3 ilvl below the maximum obtainable ilvl, the cost of these item levels on the weapon slot can be a relatively high cost to pay if a high ilvl alternative exists with a half-decent statline.

Relevant Embellished Items:

[Duskthread Lining] - This armor embellishment provides versatility while the player is above 80% Health. Buff application and removal occurs based on your health roughly every 5 seconds, so the player is not overly penalized for dipping below 80% health for short periods of time and the bonus healing often affects [Death Strike] healing in situations where it is most important (which was not the case with [Blue Silken Lining] from Dragonflight). As this can be applied to all armor slots, the most preferable piece to craft it on is the cloak (ignoring statline considerations); if two copies are used, the wrist slot would be the next consideration.

[Darkmoon Sigil: Symbiosis] - This weapon embellishment provides a stacking versatility buff while in combat that can be sustained through short gaps out of combat. That being said, being limited to the weapon slot is a pretty severe limitation in end-game setups.

[Writhing Armor Banding] - If using [Darkmoon Sigil: Symbiosis] (or another nerubian embellishment), then this embellishment can double its effectiveness while only taking up a minor armor slot.

[Binding of Binding] - Assuming the target player is using all gem colors, this embellishment provides a buff to all secondary stats to that player. The ring slot is also one of the more favorable places to have an embellishment crafted when the secondary stats are customizable.

General Recommendation: [Duskthread Lining] x2

Alternate (No Max ilvl Weapon): [Darkmoon Sigil: Symbiosis] / [Writhing Armor Banding]

Given the high cost of 3 ilvl on a weapon, [Duskthread Lining] looks like the best end-game embellishment to use in M+ dungeons at the moment for BDK. The buff does not fall nearly as aggressively when you drop below the 80% health threshold relative to the Dragonflight version of this embellishment, which allows it to be effective defensively.

What about the other embellishments? All of the direct damage embellishments are too weakly tuned to be competitive in an M+ setting. Several weapon-only embellishments have competitive effects in a vacuum, but look noticeably weaker when you consider losing 3 ilvl on a weapon vs. ring/neck/cloak/bracers in end-game setups (even when you consider [Writhing Armor Banding] can go in a minor armor slot). Granted, if you are in a situation where you are not effectively losing ilvl in the weapon slot, [Darkmoon Sigil: Symbiosis] is the superior option (paired with a [Writhing Armor Banding]). Granted, it will fall behind [Duskthread Lining] in overall effectiveness in end-game setups.

What about [Binding of Binding]? The issue with [Binding of Binding] is that, beyond the quality of life issues, it provides split stats and forces the target to diversify their gems (if they did not have a reason to do so already). As such, even though the amount of average provided secondary stats is respectable, the bulk of the effective secondary stats this embellishment is providing can be highly concentrated around the target player's worst (and second-worst) secondary stats unless they are already running multi-colored gems. If you are playing with a spec that has mostly equal secondary stat values, this could potentially be competitive, but, if we had the ability to provide this effect on ourselves, it would not be worth using.

The recommended embellished effects (themselves) will generally be worth at least 7 ilvls in direct item comparisons.

Special Items

Fairly often, blizzard decides to add a few non-trinket items that don't follow the normal itemization rules. In general, these items have unique effects that may or may not come at the cost of stats a "normal" item in the same slot would be guaranteed to have. There are a few items of this type that are worth discussing.

[Befouler's Syringe] - This weapon is significantly worse than an even ilvl weapon and better stated weapons of decently lower ilvl. The damage proc does not outweigh the loss of strength, while all of the secondary stat budget being dedicated to haste isn't helping matters.

[Wings of Shattered Sorrow] - This cloak has a relatively negligible effect with a relatively poor statline, making it worse than most similar ilvl cloaks (as well as better stated cloaks of decently lower ilvl).

[Seal of the Poisoned Pact] - This ring has a fairly weak effect with relatively poor crit/mastery statline, making it worse than most similar ilvl rings (as well as better stated rings of decently lower ilvl).

Attribute Considerations

The type and amount of stats on items affect several aspects of our character power (such as mitigation, EHP, and damage) as well as having some influence over our itemization decisions.

Mitigation

Your current character setup and what kind of encounter you are in will determine the exact value of different attributes. That being said, you'll generally find the following secondary stat priorities to be true in Mythic+ dungeon content when **ONLY** considering mitigation:

Mitigation Only: Mastery > Versatility >> Critical Strike >> Haste

(Note: Talent and item choices can influence the relative value of secondary stats for mitigation)

Similar to dps, it's possible for lower item level pieces to be better for mitigation than higher item level pieces. In fact, this is *generally* more likely to occur with mitigation compared to damage, since primary stats are relatively poor sources of mitigation value and secondary stats have historically had wider gaps in mitigation contribution compared to something like personal damage contributions.

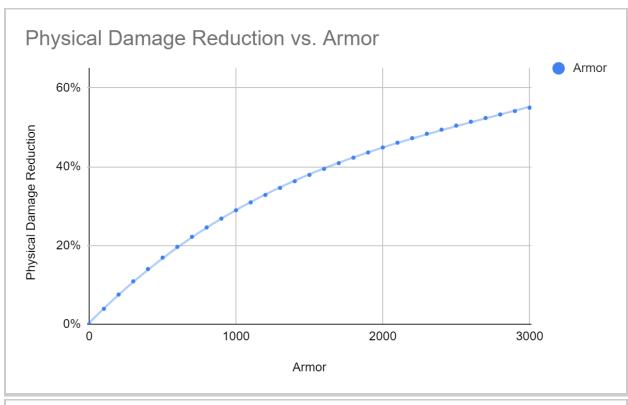
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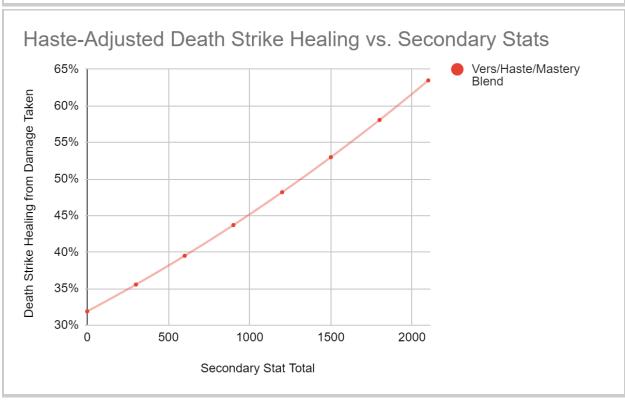
Mitigation for BDKs comes in a few layers: avoiding attacks entirely (dodge and parry), proactively mitigating incoming damage as it hits you (armor, versatility, avoidance, and other damage reduction effects), and reactively mitigating damage that you have already taken (self-healing). Any damage that we can't mitigate through these methods will need to be healed by another player or it will eventually culminate in our death.

Since Legion, the most effective method for BDK to increase overall mitigation has generally been through improving [Death Strike] effectiveness, in part due to its overall effectiveness and in part due to its scaling with stats and other bonuses. This made all other sources of mitigation relatively insignificant as a result, which has been significantly impactful with regards to secondary stat preferences.

For example, here are graphs using Shadowlands numbers comparing armor scaling to the scaling of a single [Death Strike] (adjusted to account for haste allowing for more [Death Strike] casts) in a five target encounter with increasing levels of secondary stats. On one hand, the physical damage reduction curve for armor has a decreasing slope; it is sloped in a way that each point of armor increases EHP by the same flat amount as the last point of armor. On the other hand, the [Death Strike] healing curve from the combined effects of versatility, mastery,

and haste has an increasing slope for a characteristic that, like armor, ultimately negates all incoming damage by a certain %.





Before TWW, this was the primary reason why non-critical strike secondary stats were often much more valuable than critical strike in any situation where there was a non-trivial risk of death. To a large extent, this is still true, but with recent changes in TWW there is one big exception to this.

"Death Strike can now only heal the Death Knight for a percentage of damage taken from a given damage event once."

The implications of the above are basically that any build option that increases the rate of **[Death Strike]** casts does not effectively result in an increased level of mitigation **UNLESS** incoming damage is of a high enough level where the player needs to, at some regular frequency, **[Death Strike]** more than once every 5 seconds to survive. As such, haste's primary means of providing mitigation has effectively been removed (outside of specific situations) and its only unconditional mitigation contribution is significantly weaker on its own than the mitigation contribution of all other secondary stats, including those from critical strike. Even in situations where **[Death Strike]** arguably benefits from haste-scaling, the lack of damage instance double-dipping will put it in a weaker state than what it was in Dragonflight (at best, its mitigation effectiveness may situationally pass that of Critical Strike).

Ignoring haste, the relationship between the other three stats is similar to how it has historically been. The influence of versatility and mastery on mitigation is expected to grow compared to primary stats and critical strike as we progress through the expansion for the following reasons:

- 1. Increasing the "K Value" lowers the value of armor with every major content patch, which also, indirectly, lowers the mitigation value of strength.
- 2. Parry from Critical Strike shares diminishing returns with Parry from Strength, except Strength values grow more aggressively than secondary stats as gear ilvl increases.
- 3. Stamina does not directly influence mitigation outside of a few minor sources of healing, which are not overly large and don't scale with incoming damage.
- 4. [Death Strike] effective mitigation is a significant source of BDK healing and it heals proportional to damage taken (like armor and parry mitigation). However, its effectiveness is multiplied by two separate secondary stats (mastery and versatility) in a way that results in *increasing* returns for both of these secondary stats where most traditional forms of mitigation have some form of *diminishing* returns on their effectiveness.

Taken together, the most impactful secondary stats on BDK mitigation are versatility and mastery, which are significantly more effective than mitigation provided by critical strike, but the mitigation contributions of haste are now significantly worse than those provided by critical strike, unless the player is facing specific conditions that force the player to use [Death Strike] at a high frequency in order to survive for an extended period of time. As such, these differences are some of the main reasons lower ilvl gear can sometimes be better than higher ilvl gear, while many of these differences will only get amplified as the expansion progresses.

With more targets, a few things change that affect mitigation. First, our natural rate of bone shield consumption will be elevated from the higher number of targets attacking us, which means we will have an increased cast frequency of [Dancing Rune Weapon]. Second, you gain increased effectiveness on [Heartbreaker], [Hemostasis], and [Umbilicus Eternus] when those talents are being utilized.

As for leech, leech doesn't affect [Death Strike] or [Blood Shield] healing, so it is not a significant source of mitigation. It does have *some* value, but it's very very rare that it will change any specific gearing decisions.

As for avoidance, most of the damage we take in Mythic+ dungeons is not AoE, so avoidance does not provide a significant amount of mitigation and is more of an EHP benefit in specific situations.

What if we are taking high amounts of magic damage?

Critical strike's mitigation is directly proportional to the amount of avoidable attack damage being taken by the player, so it gets less valuable with more magic damage intake. Mastery generally provides full mitigation as long as a high enough % of incoming damage is physical (enough to fully utilize your [Blood Shield]); once you drop below this threshold additional Master effectively provides no defensive value. If all damage being taken is magical, both critical strike and mastery provide an insignificant amount of mitigation through their main mitigation mechanic.

What if [Blood Shield] starts to cap from a single [Death Strike]?

Also new in TWW, [Blood Shield] can only go up to 50% of a player's maximum health and this does not adjust for [Vampiric Blood]. While these changes were not intended to nerf mastery's value in situations where Blood is actively tanking, this cap could easily do just that later in the expansion. If incoming damage and mastery levels are high enough, and particularly if [Vampiric Blood] is active, you can theoretically hit a point where a single [Death Strike] will hit the 50% [Blood Shield] cap with no pre-existing [Blood Shield]. In these situations, mastery mitigation value would be penalized by how often this happens, where build options that increase effective health and [Death Strike] cast frequency can either directly or indirectly make this circumstance less likely to happen given a specific level of mastery and incoming damage. It can also reduce overshielding in situations where the player is not taking significant damage, though the value of overshielding from very low-to-no damage windows into future damage windows of concern has always been hard to pin down. In any case, these [Blood Shield] changes are not expected to be a significant issue in Season 1 of TWW, but it could effectively result in penalized mastery value in later seasons at high enough ratings.

Effective Health

EHP Only: Versatility >> Haste

EHP is mostly affected by attributes that are tied to item level (strength, stamina, armor), with the big exception of versatility (and, in some cases, avoidance).

- The amount of versatility an item has can have a large impact on how much EHP it gives, often allowing items *with* versatility to provide the same amount of or more EHP than items 7 ilvls higher *without* versatility.
- Assuming two items both have Versatility, ilvl will generally determine which item provides the most EHP.
- Most of the damage the tank currently takes in M+ dungeons is not AoE, so avoidance is not significantly useful for increasing EHP.
- Beyond Versatility, Haste is the only secondary stat that provides EHP (indirectly) through [Red Thirst].

Extra Considerations:

EHP in this guide is generally referring to reliable EHP, which is either always available when you are taking damage from an attack **or** when it is 100% controllable like a defensive cooldown. However, there are a few other sources of EHP that also have some value depending on the situation. For instance, proc-based EHP bonuses can still have significant value in M+ where trash pulls are often dangerous for their entire duration even if they aren't controllable. Even extremely unreliable sources of EHP, such as sources based on attack avoidance (dodge and parry) and the ability for [Blood Shield] to raise our total HP % above 100% are providing at least **some** EHP value, since it lowers the chance that you will be lowered from a high amount of health to dead in a short amount of time. Furthermore, since our main form of mitigation is [Death Strike], which is on the global cooldown, higher amounts of haste can potentially allow us to [Death Strike] faster in response to damage (which gives enemy targets less time to kill us before we can react).

Also, since we are generally pooling RP for reserve [Death Strike]s, it's worth noting that mastery and versatility are the only attributes increasing the effectiveness of each point of pooled RP, which is effectively our "reserve" health pool.

<u>Damage</u>

Optimizing gear for damage nowadays is fairly easy, and, other than understanding the trade-offs involved, optimizing damage for tanks is not really any different than optimizing damage for dps specializations. In general, secondary stat priorities for damage, like everything, are going to change based on your character setup and circumstances. A general priority for **ONLY** damage can easily be generated with sims, but it may look something like this:

Damage Only: Critical Strike >= Mastery >= Versatility >> Haste

While secondary stats have historically been relatively close in value when it comes to increasing damage, haste started to become an exception to this in Dragonflight with a larger portion of damage being done by sources that did not scale with haste (primarily through [Abomination Limb], [Blood Plague], and [Shattering Bone] that were more prominent in AoE damage situations). TWW continues this trend, particularly with (Deathbringer), where [Soul Reaper], [Reaper's Mark], [Exterminate], [Bonestorm], and larger [Blood Plague] contributions water down the value of haste further. As for the remaining secondary stats, the hierarchy of their damage stat weights can very easily change depending on your current stats (and items). Furthermore, it should be noted that primary stats account for a larger portion of an item's damage contribution. Because of this, it is generally more likely for higher ilvl items to result in more damage as opposed to some other measures.

<u>Overall</u>

So, let us now consider all secondary stat effects at the same time:

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Mitigation Only: Mastery > Versatility >> Critical Strike >> Haste EHP Only: Versatility >> Haste
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Damage Only: Critical Strike >= Mastery >= Versatility >> Haste

Again, the general recommendation for M+ dungeons is to try and maximize the success rate of timing the dungeon, which generally means giving mitigation reasonably high relative weighting compared to the other two metrics. As such, the overall secondary stat priority ends up looking like this:

Overall: Versatility > Mastery > Critical Strike > Haste

Itemization Guidelines

The following rules of thumb were developed when looking at generalized items with a 50/50 split on their secondary stat allocations; they are meant to provide general itemization rules that will be true a majority of the time, though it is not impossible to come up with specific circumstances that can justify larger or smaller item level differences than what is listed here particularly when comparing items that do not have 50/50 splits in their secondary stat allocation. They were also only performed with (**Deathbringer**), similar to most of this section.

1. Disregarding limited ilvl differences, target Tier Set Bonuses

The bonuses provided by the tier set are strong enough to justify using lower item level gear within some limits. The two-piece bonus can justify a **combined** item level drop of up to ~7 item levels, while the four-piece bonus can justify a **combined** item level drop of up to an additional ~20 item levels over non-tier replacements.

2. Disregarding limited iIvI differences, target Embellished Items

The bonus effects provided by embellished items are strong enough to justify using lower item level gear within some limits. For the recommended embellished items, an item level drop of at least 7 item levels can be justified.

3. Disregarding limited iIvI differences, target items that DO NOT have Haste

Haste in place of other secondary stats is a significant source of mitigation and damage loss to the point where lower item level items **without** haste are often better in M+ settings, everything else held equal. Avoiding haste is generally worth more than 3 item level difference when substituted with mastery or critical strike on armor (13 on jewelry), while a 7 item level difference can be justified when substituted with versatility on armor (26 on jewelry and 3 on weapons).

4. Disregarding limited ilvl differences, target items that have Versatility

Versatility provides a strong combination of overall bonuses to the point where lower item level items with versatility can be better in M+ settings, everything else held equal. For jewelry, unless unique effects or a large counterbalancing force is involved, taking items with versatility is generally worth more than 13 item levels when substituted in place of mastery or critical strike. Unless the secondary stats on two items are allocated in specific ways (such more than 50% of secondary stats into versatility on the lower ilvl item or more than 50% of secondary stats allocated into critical strike on the higher ilvl item to a certain extent), versatility generally does not justify ilvl differences on armor pieces when substituted over mastery or critical strike.

5. Disregarding limited ilvl differences, target items with Mastery over Critical Strike

At this current time, mastery provides superior overall value relative to critical strike, though the performance gap is smaller than those that exist between versatility and mastery as well as critical strike and haste. Changing between these stats only justifies an item level difference of 3 when specifically dealing with jewelry. Outside of that situation, this should only be an even item level preference.

6. Target items with Sockets

While sockets have historically been strong enough to justify ilvl differences, they are currently weak to the point where no ilvl difference can be justified with them. Still, they provide additional stats that we would prefer to have than not in any otherwise even matchup.

7. Avoid excessive secondary stat Diminishing Returns

As previously mentioned, your secondary stats start getting penalized if you have too much rating in any one of them. It is VERY hard to reach these ranges right now, and, in most cases, it wouldn't change the leading preference for versatility even if you somehow pulled it off.

Trinkets

Upfront Recommendation

General-Use:

- 1. If Managed Decently: [Ovinax's Mercurial Egg]
- 2. Unconditional: [Algari Alchemist Stone]
- 3. Unconditional On-Use Trinket: [Foul Behemoth's Chelicera]
- 4. Alternate On-Use Trinket: [Silken Chain Weaver]
- 5. Primary Alternates: [Shadow-Binding Ritual Knife] or [Refracting Aggression Module]
- 6. Secondary Farmable Alternate: [Ara-Kara Sacbrood]

(Note: Trinkets were generally assumed to be at their highest available ilvl for the purposes of these recommendations. Depending on the exact two trinkets involved, ilvl deviations may or may not change the ordering.)

Trinket Details

For M+, there are a small handful of trinkets we will be considering based on their overall performance in encounters against various amounts of targets and as well as a small number of trinkets with potential situational value to deal with specific types of dungeon pain points.

[Ovinax's Mercurial Egg] - This is a slightly over-budgeted secondary stat trinket that requires some amount of management to be effective. Throughout the 10 through 20 stack range, the trinket has pretty consistent value and you don't have too much concern which set of stacks is higher or lower. Your main concern is trying not to fall outside of that range, where, in a worst case scenario, the trinket becomes very average when you are sitting on 30 stacks. The on-use effect's main purpose is to preserve your stacks when you are required to perform actions that will hurt your stack management.

[Algari Alchemist Stone] - This versatility stat stick has a normal stat budget, but with a bonus potion healing effect. We have seen copies of this exact trinket for the last several expansions.

[Foul Behemoth's Chelicera] - If you are just looking at the passive stats and damage effect, this trinket is nothing special. What gives it the potential to provide good overall benefits is if you are able to leverage the max health increase effect well, both with maximizing the health gain

per use of the trinket (such as by using it with **[Vampiric Blood]**) and trying to maintain combat as much as reasonably possible. We much prefer getting maximum health from the trinket effect as opposed to effective healing. Unlike other trinkets of this type, **[Control Undead]** does not trick the game into thinking that you are always in combat, so, if you want to maintain the buff, you will need to very aggressively chain pull. Under the right circumstances, this can be the most powerful trinket available, but how much of a maximum health trinket this provides in any given situation can be volatile and dependent on the player.

[Silken Chain Weaver] - While this strength trinket does not provide any significant absorb value, the AoE attack speed slow is very effective in reducing incoming damage in **most** M+ situations (particularly on trash). That said, the one minute cooldown means that it doesn't play nice with other on-use trinkets, particularly [Foul Behemoth's Chelicera]. The application is also a 90-degree frontal cone, which can be awkward to hit all enemies with in some situations.

[Shadow-Binding Ritual Knife] - This mastery secondary stat trinket provides more strength than usual trinkets of this type, though it is at the cost of an infrequent proc that reduces a random secondary stat for a short duration. Taking both the upside and downside into consideration, the trinket still provides solid overall benefits.

[Refracting Aggression Module] - This strength trinket provides a respectable amount of absorb shield value in a way that does not context the global trinket cooldown. That being said, there are times where we will naturally want to taunt that might not always align with when you want to use this trinket (especially considering that [Death Grip] is considered a taunt for the sake of this trinket). However, taunts are often frontloaded at the start of pulls, where we are normally fine with these sorts of effects, anyway. Plus, the 30 second duration and it working as a 50% damage absorb are both good qualities.

[Ara-Kara Sacbrood] - This haste secondary stat trinket provides an overbudgeted amount of average strength if you are engaged in prolonged combat, the strength stacks behave similar to iron fur, where each stack has an independent duration that does not interact with other stacks. Given that the duration is 1 minute on each stack, it takes one minute of combat for the trinket to reach max effectiveness. RPPM mechanics are relevant when discussing this trinket, since you need to provide a trigger for the proc every 3.5 seconds, at a minimum, in order for the trinket to proc at full effectiveness. As such, any time period longer than 3.5 seconds where you are not using an ability will lower your expected strength stacks for the next minute, which can easily happen between pulls in M+.

[Skarmorak Shard] - This is an on-use mastery secondary stat stick with a miscellaneous secondary stat effect with a slightly under-budgeted on-use effect and an extra source of mastery from nearby enemies that are killed that offsets it in a M+ setting. There is nothing too special about this trinket from the perspective of a BDK, but there are worse trinkets and this is infinitely farmable.

[Mark of Khardros] - This is an on-use mastery secondary stat stick that is fairly generic with a normal secondary stat budget.

Overall

General-Use:

- 1. If Managed Decently: [Ovinax's Mercurial Egg]
- 2. Unconditional: [Algari Alchemist Stone]
- 3. Unconditional On-Use Trinket: [Foul Behemoth's Chelicera]
- 4. Alternate On-Use Trinket: [Silken Chain Weaver]
- 5. Primary Alternates: [Shadow-Binding Ritual Knife] or [Refracting Aggression Module]
- 6. Secondary Farmable Alternate: [Ara-Kara Sacbrood]

(Note: Trinkets were generally assumed to be at their highest available ilvl for the purposes of these recommendations. Depending on the exact two trinkets involved, ilvl deviations may or may not change the ordering)

If you are willing to put up with the mini-game associated with [Ovinax's Mercurial Egg], and if you are reasonably effective at doing it (perfect play isn't required, but your performance does need to meet some minimum threshold for this to earn its recommendation placement), then it is always going to be one of the best trinket options available. Granted, it will temporarily lose its benefits on a player death until the stacks can be regained. [Algari Alchemist Stone] is good for the same reasons [Ovinax's Mercurial Egg] is good, except it is only slightly less effective on paper while being much easier to acquire and having no mini-games attached to it.

Meanwhile, you don't need much of an average maximum health benefit for **[Foul Behemoth's Chelicera]** to earn its keep (only a minority of the potential maximum health effect from a single use, on average), to the point where these conditions should not be hard to get as long as the trinket is actually being utilized. A high ceiling of potential benefits also exists if you can sustain combat for long periods of time, as well. If this trinket is **not** being used, then that opens the door for **[Silken Chain Weaver]** to be an effective option. Otherwise, using a 90 second cooldown trinket along with a 60 second cooldown trinket will cause the global trinket cooldown to penalize both too much.

If conditions cannot be met with the above trinkets, [Shadow-Binding Ritual Knife] provides competitive low-upkeep benefits, while [Refracting Aggression Module] provides a competitive absorb-shield option. The current strength of both of these trinkets makes it ambiguous as to which is better.

While not as competitive as the above trinkets, if you are playing a relatively fresh character and are looking for another trinket to farm that would serve as an effective placeholder, [Ara-Kara Sacbrood] is an option for that. [Ara-Kara Sacbrood] is decent overall, even with haste being our worst stat and downtime penalizing the value of this trinket to some extent.

Enhancements

All item modifiers and consumable usage is handled in this section.

Runeforges

Death Knights have access to unique enchants for their weapons called runeforges that are stronger than traditional weapon enchants. Notable BDK options are listed below:

[Rune of the Fallen Crusader] - This runeforge provides a moderate amount of damage as well as minor mitigation and EHP benefits. This is the best general damage option.

[Rune of the Stoneskin Gargoyle] - This runeforge provides a moderate amount of EHP, a minor amount of mitigation, and a small amount of damage. This is the best EHP option.

[Rune of Sanguination] - Specifically for (San'layn), this runeforge provides the best single target damage increase. The bonus effect is mostly trivial.

[Rune of Unending Thirst] - While on-kill effects aren't particularly useful in M+, the one unique benefit provided by this runeforge is its movement speed bonus.

Runeforge Swapping

Weapon swaps can be made out of combat at no cost, so we can potentially weigh the merits of using certain runeforges pull by pull instead of dungeon by dungeon (if you have multiple comparable weapons to put different runeforges on, which isn't always going to be the case). The same approach can be taken with strong weapons that have unique effects, when competitive weapons of that type appear and when they are swappable during an active dungeon. Properly executed, you can improve dungeon success with smart weapon swapping swapping over what you would gain by using any runeforge alone, though it *is* kind of a pain to do and the weapon requirements limit the strategy to a good extent.

Keep in mind, weapon swaps made while in combat will incur a 30 second [Off Balance] debuff, which temporarily disables runeforge bonuses. [Off Balance] will easily remove most of the potential benefits related to weapon swapping. Additionally, buff and debuff effects related to runeforges instantly vanish when the related runeforge is unequipped. So, be careful about swapping at the wrong times.

General Recommendation

(Multiple Weapons)

Hard Pull Flex Option: [Rune of the Stoneskin Gargoyle]
Single Target Damage Flex Option: [Rune of Sanguination]

Out of Combat Movement Flex Option: [Rune of Unending Thirst] (On a +Speed weapon)

Otherwise: [Rune of the Fallen Crusader]

(Single Weapon)

Unconditional: [Rune of the Fallen Crusader]

[Rune of the Fallen Crusader] is one of the most efficient ways to increase damage relative to the other options, enough so that it should be the standard pick and likely the strongest option overall if no weapon swaps are being used. That being said, the ability to swap weapons mid-dungeon does mean that, with smart play, the benefits of other runeforges could be applied selectively to dungeon sections where they may be justified.

[Rune of the Stoneskin Gargoyle] is a reasonably efficient way to gain more EHP if you need it, and a case can be made for its situational use in mid-to-high level dungeons as a weapon swap option. However, outside of these situations, the benefits of this runeforge are limited.

[Rune of Sanguination] provides the most single target damage for (San'layn), which makes it situationally useful for these situations even if it is lacking against multiple targets.

[Rune of Unending Thirst] is only used to shave a few seconds off of a key with a speed weapon when running between packs in a dungeon when out of combat, if the player finds this level of micro-management acceptable. The gains are minor, but they are free for the taking if you want to exert the effort.

Enchants

General Recommendations:

Ring - [Radiant Versatility]

Versatility is currently the recommended stat for reasons previously explained, none of the cursed ring enchants are competitive.

Chest - [Crystalline Radiance]

The choice between these two chest enchants is mostly an EHP vs. Damage tradeoff and, given the amount of stamina we are being offered relative to the strength that is being lost, [Crystalline Radiance] looks to be the superior option in M+, which is different from how these played out in Dragonflight.

Cloak - [Chant of Burrowing Rapidity]

Bracers - [Chant of Armored Speed]

You can choose between more speed (a miscellaneous benefit) or more mitigation with leech. While the benefits of these enchant options are not directly comparable, historical player preference and large-scale log analysis both indicate speed is associated with the best key outcomes.

Boots - [Scout's March] or [Defender's March]

You can choose between more speed (a miscellaneous benefit) or more EHP with stamina. These benefits are not directly comparable with traditional analysis methods and they provide a small enough benefit that it is difficult to determine the best choice through large-scale log analysis with a high amount of confidence, so feel free to pick according to personal preference. Earlier Dragonflight patches have shown a player preference towards the stamina enchant, where a similar tradeoff was presented.

Legs - [Stormbound Armor Kit]

The main tradeoff between "enchants" in this slot is armor vs. stamina. At current tuning, the stamina option is the favorable option in all situations, though they are extremely close in overall benefits.

Belt - [Nitro Boosts] (Engineering)

There is only one normal belt enchant, so there is not much to consider with it; engineering tinkers can also be applied in addition to enchants.

In M+ dungeons, [Nitro Boosts] provides a 70% movement speed buff with an 8 second duration on a 2 minute cooldown (it will put potions on cooldown for 1 minute) and it does not conflict with the regular belt enchants. It will never backfire in M+. This is an exceptionally useful benefit for an otherwise slow tank class in many situations, but especially when setting up pulls.

Gems

General Recommendation: [Masterful Sapphire]

Optional: [Elusive Blasphemite] with gem color diversity

The same reasoning as the ring enchants applies here, though, with gems in particular, there are two other topics to go over. First, the unique primary stat gems are not tuned to the point where they are worthwhile over secondary stat gems (which is different from Dragonflight), and, second, versatility and mastery are close enough in value to make the hybrid secondary stat gems better, which provide more additional stats at the cost of having to split them between two different secondary stats.

We do not have existing data that accurately compares the value of traditional benefits relative to movement speed with much accuracy, so there is a chance the movement speed bonus provided by [Elusive Blasphemite] is worth the stat downgrade. Use at your own discretion.

Consumables

General Recommendations:

Flask - [Flask of Tempered Versatility]

As before, we are choosing the relatively more valuable secondary stat. The "chaos" option does not provide enough extra average stats to make up for the fact that it is randomly split among all secondary stats.

Food - [Beledar's Bounty] or any "highest secondary stat" food.

Highest secondary stat food, assuming that stat is versatility and that versatility is not being affected by diminishing returns, looks to be the strongest option. Primary stat food is only marginally worse for overall benefits, so it would be the pick if you are diminishing returns on versatility. Stamina is not provided in appealing amounts from food at this time.

Weapon Supplement - [Ironclaw Whetstone] or [Ironclaw Weightstone]

The whetstone enhancements are currently tuned more powerfully than the enchanting oils.

Potions - [Tempered Potion] / [Frontline Potion] / [Potion Bomb of Power]

- Beware of locking out your [Nitro Boosts] cooldown if you are using that tinker effect! This can often be more powerful than combat potions in dungeons.
- **[Tempered Potion]** is a decently powerful and unconditional personal performance increase with well-rounded benefits.
- [Frontline Potion] is a purely defensive potion that can serve as a 15s duration powerful defensive cooldown on large trash pulls. This can situationally be the most valuable option if utilized appropriately, though it is especially poor if you are not being attacked frequently or are not in a dangerous situation.
- [Potion Bomb of Power] provides a group primary stat buff that can be the superior damage option in certain comps.

Ability Usage

Core Ability Priority Overview

Normal Priorities

- [1] [Death Strike] if you are below 70%* health.
- [2] [Marrowrend] if ([Bone Shield] is not active or has a duration less than 5 seconds or if you have less than 3 stacks of [Bone Shield]) or (Deathbringer) ([Exterminate] is active and [Reaper's Mark] is either off cooldown or 3 seconds away from being off cooldown).
- [3] [Blood Boil] if a target does not have [Blood Plague] or it is about to expire.
- [4] (San'layn) [Heart Strike] with [Dancing Rune Weapon] up when the duration of the [Essence of the Blood Queen] buff/debuff is about to expire or during the last 3 seconds of any [Dancing Rune Weapon] buff effect if you haven't done so once, already.
- [5] [Death Strike] when RP is above 105 (or above 95 when [Dancing Rune Weapon] is active).
- [6] (Deathbringer) [Reaper's Mark]
- [7] [Bonestorm] with more than 6 stacks of [Bone Shield], when [Death and Decay] is active, and when [Dancing Rune Weapon] has more than 25 seconds on its cooldown.
- [8] [Soul Reaper] with (1 priority target or if priority damage is desired) when (a limiting target is below 35% health or (Deathbringer) [Reaper of Souls] is active).
- [9] [Marrowrend] if (below 6 stacks of [Bone Shield] (7 stacks as (San'layn)) and [Bonestorm] is not active) or (Deathbringer) ([Exterminate] is active and a [Reaper's Mark] debuff is going to explode in the next 5 seconds).
- [10] (Deathbringer) [Consumption] with 4+ stacks of [Coagulopathy]
- [11] [Tombstone] with more than 8 stacks of [Bone Shield] and when [Death and Decay] is active and when [Dancing Rune Weapon] has more than 25 seconds on its cooldown.
- [12] [Abomination Limb]
- [13] [Death and Decay] if [Death and Decay] buffs are not active.
- [14] (Deathbringer) [Marrowrend] if [Exterminate] is active and [Dancing Rune Weapon] is not active.
- [15] (San'layn) [Blood Boil] if [Blood Plague] has less than 15 seconds of duration left or if this would be the first [Blood Boil] within the current instance of [Dancing Rune Weapon].
- [16] [Heart Strike] with 2+ runes.
- [17] [Consumption]
- [18] [Blood Boil]
- [19] [Heart Strike]
- [20] (Deathbringer) [Soul Reaper] if [Reaper of Souls] is active.
- [21] [Death's Caress]

Non-Global Cooldown Abilities

Core Ability Priority Details

[1] [Death Strike] if you are below 70%* health.

Basis: [Death Strike] is our primary mitigation ability and using it effectively is the key to staying alive; this priority is meant to use [Death Strike] when it's efficient. Using [Death Strike] under the right circumstances is our top priority, since you will either die or require an excessive amount of healing from your healer if you only passively use [Death Strike].

So, under what circumstances do we want to use [Death Strike]?

[Death Strike] healing is proportional to the damage we've taken in the last 5 seconds, though any overhealing will be lost (with the exception of the resulting [Blood Shield]). For a simple and effective method, it is recommended to use a fixed health %, alone, as a trigger for when to use [Death Strike] specifically for healing, since situations where you drop below any given health % are almost always going to be when you have been taking significant amounts of damage in the last 5 seconds in combination with having enough missing health to ensure the healing is effective.

What health % should be used as a setpoint?

There are a few things we need to take into consideration:

- 1. If the threshold is too low, it becomes more likely that we'll overshoot our threshold and die before we can reactively use [Death Strike].
- 2. If the threshold is too high, [Death Strike] might be wasted during low damage periods that still manage to push us below our overly-high threshold, when they could have been used more efficiently on higher damage periods. Our RP levels could also become chronically low, leaving us with little reserve to deal with dangerous situations.

As such, we want to get as close to that theoretical sweet spot as possible to balance maximizing our overall [Death Strike] healing and keeping our health pool high enough that we're unlikely to instantaneously die before we have the chance to use [Death Strike]. This gameplay decision also allows the player to leverage their mitigation output for more EHP and vice versa.

In reality, the ideal threshold may change from situation to situation, but, for the purposes of this guide, a trigger point of 70% health is recommended and has been found to be effective in all content up to and including cutting edge BDK M+ key levels. Feel free to adjust this value as you see fit.

What about [Coagulopathy]?

[Death Strike] also has another potential consideration that we didn't need to think about in Dragonflight. Due to lower levels of haste with our current stat priorities and an increase in the number of mid-to-long cooldown abilities that do not contribute to our RP economy, we are now in a situation where simply using [Death Strike] at higher RP levels (which is further down the list) is not enough to maintain full uptime on [Coagulopathy]. While we are easily capable of using [Death Strike] more than once every 8 seconds, there are situations that can occur (on occasion) where that won't happen naturally and we will lose all active stacks of [Coagulopathy]. The only exception to this is if you are running both [Consumption] and [Heartbreaker] in the same talent build.

This is to the extent to where some amount of conscious [Coagulopathy] management can increase damage output by a small, but noticeable, amount (for reference, we are talking about something approximately in the 2-3% range for damage output).

At the same time, using [Death Strike] for this purpose will immediately place us in a low RP level situation, without getting much effective healing out of said [Death Strike], which can get us killed if done at the wrong time. That is why, if the player is going to [Death Strike] for this purpose, they want to, at the very least, make sure they will not be at risk of dying in the near future (per their own judgment).

In a similar vein, using [Death Strike] for this purpose becomes increasingly questionable the lower your existing RP pool is and for increasingly small benefits. In non-dangerous situations, limiting yourself to these types of [Death Strike] casts only when you are at or above 70 RP can prevent all [Coagulopathy] expirations with proper rotational execution, while also retaining the player's ability to use a singular [Death Strike] afterwards. In situations where there is still some level of need to use [Death Strike] for survivability reasons (but the player judges that they wish to use [Death Strike] for [Coagulopathy] related purposes), this threshold is still capable of preventing the vast majority of expirations without potential excess risk.

In any case, you should only **[Death Strike]** for this purpose if **[Coagulopathy]** is going to expire before your next global cooldown and it isn't particularly important, regardless.

[2] [Marrowrend] if ([Bone Shield] is not active or has a duration less than 5 seconds or if you have less than 3 stacks of [Bone Shield]) or (Deathbringer) ([Exterminate] is active and [Reaper's Mark] is either off cooldown or 3 seconds away from being off cooldown).

Basis: [Bone Shield] provides a significant amount of armor and a respectable amount of Haste. Generally, this buff reduces physical damage intake by over 20%, which is a large increase to our mitigation and EHP.

Ideally, if [Marrowrend] is going to be used specifically to refresh the duration of [Bone Shield], you want to try and prevent a situation where the 20 generated RP is wasted due to having too much RP (especially in priority damage situations). It is suggested to track when [Bone Shield] is about to expire (or with 2 or less stacks) so you have some time to efficiently sequence abilities without the immediate need of having to use [Marrowrend] on your next global and potentially overcap RP.

Particularly for refreshing [Bone Shield] stacks that are about to expire and when two or more runes are not immediately available, [Death's Caress] can also be used for this priority, which, at the very least, is more favorable than losing [Bone Shield] altogether. The main reason [Death's Caress] isn't specified at this priority is because [Marrowrend] is still the preferred generator in the majority of situations. More discussion on [Death's Caress] is provided at its specified priority at the end of the priority list.

(Deathbringer) has added considerations with regards to efficiently utilizing [Exterminate] procs. While it is generally valuable to improve [Bone Shield] generation efficiency, within reason, by using them at a lower priority, if [Reaper's Mark] is about to be usable, when you are immediately at risk of losing [Exterminate] throughput if you do not utilize your existing procs ([Exterminate] can't proc a [Reaper's Mark] on targets that already have one, while [Reaper's Mark] will explode the previous debuff and replace it with a new one).

Why is this not ranked higher? Recovering from a low health % is going to do more for your immediate survivability than an armor buff.

[3] [Blood Boil] if a target does not have [Blood Plague] or it is about to expire.

Basis: The original basis for this priority was that [Blood Boil] is generally how we establish initial threat on multiple targets, but, since Dragonflight, [Blood Plague] application and maintenance became valuable enough on its own to be a reason for using [Blood Boil] at this priority. For threat, If we waited 2-4 globals before using some AoE threat generation, then your targets might decide to kill a dps/healer in the meantime. In fact, if initial AoE threat continues to be an issue, using two casts of [Blood Boil] near the start of a pull may be a consideration (even if it is unnecessary for [Blood Plague] purposes), but this situation isn't common enough to account for it in the core priority list.

[Blood Plague] provides enough direct and indirect ([Coagulopathy]) damage benefits that we are very interested in maintaining as high of uptime as reasonably possible, which is particularly relevant for (Deathbringer), given its shorter duration and more powerful [Blood Plague] that requires more active maintenance to maintain good uptimes.

The primary defensive benefit to using [Blood Boil] is actually to generate [Hemostasis] stacks, if that talent has been selected. Let's assume that, at most, 15% of our [Death Strike] healing overheals (not including [Blood Shield]) and that our Mastery is, at max, 28%

(remember, [Blood Shield] is not affected by [Hemostasis] stacks); real overhealing values rarely get lower than 15% and 28% Mastery is a relatively low value. With these assumptions, each stack of [Hemostasis] increases the effectiveness of our next [Death Strike] by ~6% per stack gained. If we further assume that it will take 35 RP to use [Death Strike], then we can say that a cast of [Blood Boil] is equivalent to 2.1 RP per stack of [Hemostasis] gained; a value that gets worse if our assumed values of over-healing and Mastery get higher (which they easily can. The point of these numbers is mostly to convey that [Blood Boil], even with supporting talents, has very low relative mitigation compared to [Heart Strike] (and obviously [Death Strike]); beyond [Blood Plague] application the main selling point of [Blood Boil] is has situational damage advantages, but those advantages are not free relative to abilities it is competing for cast time with.

Why is this not ranked higher? We want to ensure that [Bone Shield] is active to reduce damage from incoming hits and to provide additional Haste before worrying about establishing AoE threat and applying [Blood Plague].

[4] (San'layn) [Heart Strike] with [Dancing Rune Weapon] up when the duration of the [Essence of the Blood Queen] buff/debuff is about to expire or during the last 3 seconds of any [Dancing Rune Weapon] buff effect if you haven't done so once, already.

Basis: This priority is meant to increase the likelihood that our [Essence of the Blood Queen] buff will maintain full uptime throughout the periods of time when [Dancing Rune Weapon] is not active.

Without lucky [Vampiric Strike] proc outside of [Dancing Rune Weapon], [Essence of the Blood Queen] is at risk of fadings. Purposefully using [Vampiric Strike] near the end of a [Dancing Rune Weapon] and at the start of the next one can significantly improve the chances of maintaining [Essence of the Blood Queen]. The gains of doing this outweigh the costs of delaying other abilities.

Again, we do not want to be overly restrictive of the timing or we can lose [Essence of the Blood Queen] stacks that were otherwise possible to maintain. At the same time, we also don't want to [Heart Strike] too excessively to the point where it hurts our [Bone Shield] management or overall rotational efficiency, so we are content to only refresh the [Essence of the Blood Queen] effect once at this priority with no additional casts.

Why is this not ranked higher? Most of the previous priorities won't conflict with this one, but it is more important to manage immediate survivability, initial [Bone Shield] application, and initial threat if they ever do.

[5] [Death Strike] when RP is above 105 (or above 95 when [Dancing Rune Weapon] is active).

Basis: While we want to maintain reserve RP (so we can use **[Death Strike]** in situations where it is needed), if our RP levels get too high, then we won't be getting full benefit out of our RP generating abilities. And so, this priority tries to responsibly gain the mitigation and damage benefits of otherwise lost **[Death Strike]** casts, while still maintaining a reasonably strong RP pool.

For discussion purposes, players *do* have the option to overcap and waste RP to increase [Blood Boil] throughput in non-challenging AoE encounters for more overall AoE damage in AoE situations where there is not a priority target. That being said, this is only a potential damage gain if you are not sabotaging your [Coagulopathy] ramp speed or uptime as a result. So, you want to make sure you are at max stacks and with sufficient duration before you consider skipping this priority for more overall AoE damage. While this strategy obviously reduces [Death Strike] throughput, this can sometimes be manageable with a full RP pool to fall back on. Still, the loss of [Blood Shield] throughput when using this alternate setup is very noticeable, the damage gains are minor, and situationally swapping to this type of rotation is relatively complicated compared to the standard rotation. For those reasons, it is not built into the standard rotation.

Specifically for (San'layn) and when fighting multiple targets and during [Dancing Rune Weapon] and with an active Blood Beast and if it does not cause you to lose [Coagulopathy], it looks favorable to ignore this priority and overcap RP given the tradeoffs involved. Given how hyper-specific that situation is, it is not presented in the general priority list, but it is an option should someone wish to pursue it..

What RP threshold should we use to decide when we use [Death Strike] to avoid capping excessive amounts of RP on single targets?

In general, the higher the RP threshold on this priority, the more RP we will have pooled to use when we start taking significant amounts of incoming damage. However, once this threshold gets above 95, we begin making a tradeoff between a larger average RP pool (which can increase our overall survivability) and some level of lost RP.

This guide recommends using [Death Strike] whenever we are above 105 RP (or 99 RP with [Dancing Rune Weapon] active), where the only way RP is wasted in some capacity is when bonus RP generating effects occur with unfortunate timings. This small loss in RP efficiency is thought to be worth the tradeoff for the extra RP pooling it provides. But, feel free to adjust these numbers as you please.

Why is this not ranked higher? If anything, the global spent on [Blood Boil] buys you some time to potentially take more damage and make this non-essential [Death Strike] more valuable, which can improve your RP efficiency. Even if it doesn't result in a stronger [Death Strike], [Blood Boil] generates no RP, so it isn't causing you to overcap RP. In any case,

establishing threat takes priority over a non-essential [Death Strike] (at least when it comes to [Blood Boil]).

[6] (Deathbringer) [Reaper's Mark]

Basis: [Reaper's Mark] is primarily being used at this priority for its large marginal damage benefits, in addition to the [Exterminate] procs it provides after its effect expires. Unless [Swift End] is being used, the RP economy of this gameplay loop (with [Exterminate] procs included) is nothing special, though this story changes to some extent if the associated [Bone Shield] generation can be effectively utilized.

An uncommon circumstance exists where the main target can have an active [Reaper's Mark] debuff by the time your [Reaper's Mark] ability comes off of cooldown. If used on a target with a pre-existing [Reaper's Mark], the previous debuff will immediately resolve and be replaced by a new application of [Reaper's Mark]. At this time, there does not appear to be a clear benefit to delaying your [Reaper's Mark] cast or to consider using it on a secondary target in these situations.

Why is this not ranked higher? Wasting RP for marginally more [Reaper's Mark] casts is not an appealing tradeoff at this time.

[7] [Bonestorm] with more than 6 stacks of [Bone Shield], when [Death and Decay] is active, and when [Dancing Rune Weapon] has more than 25 seconds on its cooldown.

Basis: Our main three considerations with [Bonestorm] usage is, first, making we gain full benefits while using it (as its benefits scale with the amount of [Bone Shield] charges consumed), second, we would like to be standing in [Death and Decay] to triple the effectiveness of [Shattering Bone], and, third, we want to gain sufficient value from the [Dancing Rune Weapon] cooldown reduction.

We are primarily interested in the offensive benefits of this ability, while the healing it provides is mostly inconsequential (especially on single targets and in more difficult content). As such, some level of judgment should be exercised when using [Bonestorm] at more aggressive priorities because, if your RP levels are not sufficient enough to deal with immediate threats, [Bonestorm] will not be progressing your [Death Strike] mitigation loop, at all, and casting [Bonestorm] could lead you to your death.

Why is this not ranked higher? It is marginally more valuable to burn excess RP on [Death Strike] first before casting [Bonestorm]. Additionally, it puts us in a good condition to get [Bonestorm] rolling, which isn't progressing our RP economy in the short term. Prioritizing [Reaper's Mark] also appears to be a marginal gain in all aspects.

[8] [Soul Reaper] with (1 priority target or if priority damage is desired) when (a limiting target is below 35% health or (Deathbringer) [Reaper of Souls] is active).

Basis: [Soul Reaper] is primarily being used for its large single target damage potential, though it is generally displacing casts of [Heart Strike] (which has some damage and RP generation scaling based on number of targets) and, to a lesser extent, [Death Strike]. The tradeoff is generally seen as favorable when damage to only one target matters, as long as RP generation isn't critically needed for survivability.

While **[Soul Reaper]** use is at least a marginal damage gain at most reasonable target counts, the loss of RP generation potential and **[Death Strike]** cast frequency make regular **[Soul Reaper]** use in situations with more than one **priority** targets look like a bad tradeoff given the smaller relative damage gains and the larger relative mitigation losses. As such, it is not recommended for general use when there is more than 1 **priority** target present.

Because of the low cooldown on **[Soul Reaper]**, it is especially important that the player is using it whenever it is available and appropriate assuming a higher ability priority does not exist. As such, it is suggested to use heightened tracking of its cooldown to make sure you are maximizing its utilization.

The effect that is triggered if an enemy dies before the execute damage is dealt is not seen as particularly desirable at this time due to the current state of our resources.

Why is this not ranked higher? The immediate priorities above this point are either needed to support important proactive benefits or abilities that are more immediately impactful than [Soul Reaper]. Furthermore, wasting RP for more [Soul Reaper] throughput is not an appealing tradeoff at this time.

[9] [Marrowrend] if (below 6 stacks of [Bone Shield] (7 stacks as (San'layn)) and [Bonestorm] is not active) or (Deathbringer) ([Exterminate] is active and a [Reaper's Mark] debuff is going to explode in the next 5 seconds).

Basis: With a high [Bone Shield] stack count, you will never be in any immediate need to [Marrowrend] to maintain 5+ stacks for the 5 RP cost reduction on [Death Strike] with [Ossuary]. However, it's important that [Bone Shield] stacks aren't wasted when you [Marrowrend], which would occur when we have more than 9 stacks (assuming [Reinforced Bones]), at lower levels if [Dancing Rune Weapon] is active, or at lower levels if we are currently gaining stacks from [Bonestorm]. High [Bone Shield] stacks also give you more flexibility to use your runes without losing [Ossuary] and it maximizes the benefits of [Foul Bulwark] as well as the Season 1 TWW tier set bonus, so keeping stacks high can be advantageous if excess waste can be avoided.

However, with the addition of [Bonestorm] generating [Bone Shield] and further reducing the cooldown of [Dancing Rune Weapon] (and especially so with (Deathbringer) providing an elevated desire to [Marrowrend] with [Exterminate]). It is now very difficult to find good opportunities to situationally [Marrowrend] to higher [Bone Shield] stacks without incurring future [Bone Shield] waste that nullifies any potential gains from rotational [Dancing Rune Weapon], [Bonestorm], and [Exterminate] casts. As such, it is now advisable to mostly just defend against losing [Ossuary] by staying above 5 [Bone Shield] stacks. Due to the lack of [Exterminate], (San'layn) can [Marrowrend] at marginally higher [Bone Shield] levels with less risk of waste.

(**Deathbringer**) has added considerations with regards to efficiently utilizing [**Exterminate**] procs. In this case, we are looking to spend [**Exterminate**] procs before a [**Reaper's Mark**] debuff imminently explodes. While it is generally valuable to improve [**Bone Shield**] generation efficiency, within reason, by using them at a lower priority, a [**Reaper's Mark**] explosion would cause you to lose all remaining [**Exterminate**] procs.

Why is this not ranked higher? We have some time to generate [Bone Shield] stacks before losing [Ossuary], so the risk is acceptable given the potential to get more efficiency out of miscellaneous sources of [Bone Shield] generation. While this priority does enable the 5 RP cost reduction on [Death Strike] in some situations, that RP efficiency isn't going to make up for the fact that we're overcapping on RP generated by this [Marrowrend] if we're above 105 RP in single target situations.

[Soul Reaper], [Bonestorm], and [Reaper's Mark] are high impact enough that they are worth using over non-urgent [Bone Shield] management priorities, while we are more than fine with incurring [Ossuary] losses during [Bonestorm] if it means higher [Bone Shield] efficiency from [Bonestorm].

[10] (Deathbringer) [Consumption] with 4+ stacks of [Coagulopathy]

Basis: While the instant damage and healing of [Consumption] are mostly inconsequential and the rune generation is of limited value, accelerating the tick rate of [Blood Plague] by ~42% for 6 seconds is very consequential and drives a lot of the conditions for when we use this ability. For (Deathbringer), the current buff status of [Coagulopathy] greatly affects the resulting damage (and healing) to the point where waiting for 4+ stacks looks preferable to ignoring the status of this buff.

While the effective rune gains can, in theory, be larger per cast of **[Consumption]** when it is used at already low rune levels, the 30 second cooldown ultimately makes these conditions too constraining for **(Deathbringer)**. **(San'layn)** is mostly concerned with trying to get this rune value, which comes in a future priority.

Why is this not ranked higher? Spending runes quickly on [Marrowrend] before generating fresh runes with [Consumption] is better for the overall rotation, while higher priorities are more impactful.

[11] [Tombstone] with more than 8 stacks of [Bone Shield] and when [Death and Decay] is active and when [Dancing Rune Weapon] has more than 25 seconds on its cooldown.

Basis: Our main three considerations with [Tombstone] usage is, first, making sure we do not lose [Bone Shield] (or excessive [Ossuary] uptime) while doing it, second, we would like to be standing in [Death and Decay] to triple the effectiveness of [Shattering Bone], and, third, we would like to gain a reasonable amount of effective [Dancing Rune Weapon] cooldown reduction. There are tradeoffs provided with the first and third considerations; being too greedy for those benefits restricts [Tombstone] throughput too much, but some consideration to these things still results in more overall value.

The main things even making **[Tombstone]** a core rotational ability, at all, is its synergy with **[Insatiable Blade]** to reduce the cooldown of **[Dancing Rune Weapon]** and **[Shattering Bone]** to generate increased AoE damage, which is why both of these synergies add additional conditions for the usage for this ability.

Still, the initial absorb can sometimes be useful as a situational defensive cooldown against certain mechanics and, in these situations, you can consider using this cooldown defensively instead of as a core rotational ability.

Specifically with (San'layn), it can be worth delaying [Tombstone] until after [Dancing Rune Weapon] has expired specifically when fighting multiple targets, unless conditions pressure you into pressing it during that window for practical reasons.

While some RP waste potential exists with current [Death Strike] conditions, it is not a gain to add further conditions to [Tombstone] to try and account for this.

Why is this not ranked higher? All of the perks associated with [Tombstone] usage are not more important than maintaining proactive mitigation, especially since bone shield charges are needed to use this ability in the first place without significant downsides.

[12] [Abomination Limb]

Basis: While [Abomination Limb] is capable of generating [Bone Shield] charges via [Bone Collector]; these gains are unreliable for the purposes of rotational priority. As such, the main benefit being offered from this ability at this priority is raw damage.

If not used to support pull setup, (San'layn) has an option to generate increased damage and mitigation throughput when fighting multiple targets (specifically) by only using [Abomination

Limb] only when a Blood Beast is active. Though practical considerations will likely result in this ability being used on pull setup more times than not and specific tracking tools would be needed to track Blood Beast spawns.

Some level of judgment should be exercised when using **[Abomination Limb]** because, if your RP levels are not sufficient enough to deal with immediate threats, **[Abomination Limb]** will not be progressing your **[Death Strike]** mitigation loop, at all, and casting **[Abomination Limb]** could lead you to your death.

Why is this not ranked higher? Improving [Bone Shield] levels via [Marrowrend] is more important for overall rotational throughput than using [Abomination Limb], while [Consumption] provides more damage benefit.

[13] [Death and Decay] if [Death and Decay] buffs are not active.

Basis: With [Crimson Scourge] active, [Death and Decay] costs nothing and generates no RP on cast. This tradeoff has sometimes been historically preferable since the saved rune can now be used on [Heart Strike] to generate even more RP, though using [Death and Decay] in this way results in less total [Death and Decay] casts. However, since Dragonflight, it is not worth waiting for [Crimson Scourge], since any bonus [Heart Strike] is often displacing a [Blood Boil], while [Death and Decay] has enhanced value from the [Unholy Ground], [Sanguine Ground], and [Shattering Bone] talents. This usage technically results in marginal losses to our mitigation and, indirectly, our EHP, but the damage gains are significant in comparison to the point where we'd prefer it even in content where survivability is a consideration. Starting in TWW, [Death and Decay] now has its buff effects linger for 4 seconds after leaving the ground effect or after it naturally expires. It is significantly more resource efficient to only use [Death and Decay] when the buffs expire, though marginally more aggressive casting can potentially maximize both damage and [Death and Decay] buff uptimes (though the relative costs to the resource economy are heavy).

With the [Death's Echo] talent, we want to avoid a situation where we use [Death and Decay] while one is already active, since their effects do not stack.

Why is this not ranked higher? [Tombstone] is currently only used under the condition that [Death and Decay] is already active, so these priorities do not compete with each other. Furthermore, [Bone Shield] maintenance and particularly impactful cooldowns take priority before runes are potentially spent on other abilities.

[14] (Deathbringer) [Marrowrend] if [Exterminate] is active and [Dancing Rune Weapon] is not active.

Basis: With [Exterminate] active, [Marrowrend] has a reduced cost (depending on hero talent selection), [Blood Plague] application (given [Wither Away] is talented), 20 RP generation

(despite any cost reductions), greatly increased damage, and a chance to reapply a [Reaper's Mark] debuff.

The [Exterminate] buff never times out, so the only cost to delaying usage is that you increase the chance of an [Exterminate] and [Reaper's Mark] random proc loop extending into your next available cast of [Reaper's Mark]. The upside to delaying [Exterminate] buff usage is that it provides the potential opportunity to more efficiently utilize [Exterminate] for [Blood Plague] refreshing (which lessens the need for [Blood Boil] casts) or [Marrowrend] [Bone Shield] generation (which lessens the need for [Marrowrend] casts outside of [Exterminate]).

Currently, purposefully substituting [Exterminate] [Marrowrend] casts in place of [Blood Boil] does not appear to be worthwhile, since improving [Bone Shield] generation efficiency seems more worthwhile and you will still get some amount of extension benefits regardless. That being said, this is only true to a point, since neglecting [Exterminate] for too long does result in losses from not giving enough time for the [Exterminate] and [Reaper's Mark] feedback loop to play out before [Reaper's Mark] comes off of cooldown. As such, this priority makes sure we are using these procs within a reasonable timeframe. That being said, [Dancing Rune Weapon] still changes the resource dynamics enough to restrict [Marrowrend] casts for the duration, even at this priority and with [Exterminate] procs active.

Why is this not ranked higher? Using [Exterminate] procs more aggressively than what is presented at this priority results in net losses, even if it technically allows for better [Reaper's Mark] utilization. This is mostly due to the [Marrowrend] casts being used less efficiently as a result.

[15] (San'layn) [Blood Boil] if [Blood Plague] has less than 15 seconds of duration left or if this would be the first [Blood Boil] within the current instance of [Dancing Rune Weapon].

Basis: (San'layn) has some concern with what the active [Blood Plague] duration is on enemies due to [Infliction of Sorrow] damage. While it does have some level of duration extension ability through its hero talents, there are still situations where the duration can drift low enough where purposefully refreshing it is a benefit even despite the increased value of [Heart Strike] casts for (San'layn). This is especially true at the start of a [Dancing Rune Weapon], since the [Blood Plague] duration increase will increase all instances of [Infliction of Sorrow] within that window.

Why is this not ranked higher? Since the primary consideration here is to improve [Infliction of Sorrow] damage, it is not necessary to extend [Blood Plague] durations until right before the player is about to use [Heart Strike].

[16] [Heart Strike] with 2+ runes.

Basis: With immediate [Bone Shield] needs addressed, [Heart Strike] is the most damageand RP-efficient ability to use per rune, so it will be our main outlet for all remaining runes.

Historically, it has been especially valuable to [Heart Strike] when rune levels are above 3, otherwise we are missing out on potential rune regeneration, since up to 3 runes can be on cooldown at a time. Depending on overall resource and rotational dynamics for a given patch, [Heart Strike] prioritization relative to [Blood Boil] has varied. During periods of significant natural rotational downtime (Legion through early Shadowlands), maximizing total resource utilization has been the overarching goal, while periods with premium [Heart Strike] value or excess resource levels have opened the door to rotations that have emphasized rune utilization to the point where [Blood Boil] considerations are relatively negligible.

Currently we are in a period of high resource bloat with (**Deathbringer**), while (**San'layn**) simply prefers [**Heart Strike**] over [**Blood Boil**] to the point where using [**Heart Strike**] down to 1 rune is advantageous. Higher [**Blood Boil**] priorities take care of situations where [**Blood Boil**] is getting more value, while further rune utilization begins to restrict casts of [**Soul Reaper**], [**Reaper's Mark**], and [**Marrowrend**] to the point where we will only use the final rune on [**Heart Strike**] if no other meaningful actions are available.

For (Deathbringer), [Heart Strike] casts result in superior defensive benefits over [Blood Boil] casts (ones that are not improving [Blood Plague] uptime), though [Blood Boil] casts provide greater damage throughput. The tradeoff is such that [Heart Strike] casts are generally preferable in an M+ setting. (San'layn) simply prefers [Heart Strike] for all aspects in most situations due to its focus on [Essence of the Blood Queen] uptime.

Why is this not ranked higher? All above priorities provide greater overall value, per cast or per rune, than [Heart Strike].

[17] [Consumption]

Basis: With the focus of (San'layn) on maintaining [Essence of the Blood Queen] uptime, using [Consumption] at low rune levels will allow the player to make productive use of as much of that rune utilization as reasonably possible. Meanwhile, in cases of excess [Coagulopathy] disruption for (Deathbringer) (due to mechanics or otherwise), this priority can also come into play for that Hero class.

Why is this not ranked higher? Spending runes quickly on [Marrowrend] before generating fresh runes with [Consumption] is better for the overall rotation, while higher priorities are more impactful. Even if the goal is to enable more damage on [Infliction of Sorrow], it is better to get the higher priority globals out of the way first.

[18] [Blood Boil]

Basis: With all other cooldowns and resources addressed with the exception of the final rune that helps to facilitate the utilization of other abilities, leftover [Blood Boil] charges can be utilized for increased damage.

When we have 2 charges of [Blood Boil], we are missing out on potential [Blood Boil] casts (and potential [Hemostasis] stack generation) by not using this ability. In patches where we were not flooded with other resources to the extent where we were immune to rotational downtime, it was worth making sure [Blood Boil] cooldown utilization was high enough to prevent excessive downtime from being added to the rotation. In the current state of the game, that is either not a concern or, in the case of (San'layn), it has other considerations in play. Historically, some amount of [Hemostasis] stack conditions have been favorable to better utilize stacks when that talent is taken, but that is also irrelevant at the moment.

[Hemostasis] is the primary defensive benefit of using [Blood Boil] (when talented) and, beyond that, the only other benefit is the uncapped AoE damage of the [Blood Boil] cast itself, since [Blood Plague] application is already assumed due to the previous [Blood Boil] priority. [Hemostasis] discussion can be seen in the previous [Blood Boil] priority, as well.

Why is this not ranked higher? Rune usage through [Heart Strike] is generally preferable to [Blood Boil] in all situations where [Blood Plague] is already active.

[19] [Heart Strike]

Basis: While there are costs associated with using our final rune, it is better to use than doing nothing if we are this far down the priority list. Realistically, reaching this portion of the priority list should be relatively rare in any case.

Why is this not ranked higher? All above priorities provide greater overall value, per cast or per rune, than using the final rune on [Heart Strike].

[20] (Deathbringer) [Soul Reaper] if [Reaper of Souls] is active.

Basis: If not reliably used on a priority target, [Soul Reaper] does not bring enough of an overall damage gain (for the loss of [Death Strike] throughput) in a generic multiple target situation to be worth pressing over other abilities. Granted, since it costs no resources to cast under these circumstances, it can still be worthwhile to use when all other abilities are exhausted. That being said, these conditions are extremely rare with the current state of the BDK resource economy.

Why is this not ranked higher? All above priorities provide greater overall value per cast, than this damage-only cast of [Soul Reaper] being used on a non-priority target.

[21] [Death's Caress]

Basis: [Death's Caress] is a very resource efficient ability, but its weakness is that it does not accomplish enough during a single GCD to make it worth casting over another ability. So, even though it generates 2 [Bone Shield] stacks per rune compared to 1.5 [Bone Shield] stacks per rune with [Marrowrend], the fact that it only generates 2 [Bone Shield] stacks per GCD instead of 3 [Bone Shield] stacks per GCD (in addition to lower marginal damage) is ultimately what limits its usage. With the current state of the overall rotation, this ability mainly gets used as a ranged filler, where it isn't competing for cast time with other abilities. If the BDK rotation ever gains rotational downtime in the future, [Death's Caress] can be used to leverage that downtime into better resource efficiency.

[Death's Caress] can also be used as an alternative to [Marrowrend] when refreshing [Bone Shield] stacks that are just about to expire and insufficient runes are available for [Marrowrend]; this is currently the only higher priority usage of [Death's Caress] that has a relatively neutral to marginally positive impact on the overall rotation.

Why is this not ranked higher? General usage of [Death's Caress] will lower the amount of long-term casts we are able to perform for [Blood Boil], so [Marrowrend] usage will generally be superior in any situation it is usable.

Non-Global Cooldown Abilities

[1] Use [Raise Dead].

Basis: [Raise Dead] is a minor 1 minute duration single target damage cooldown. Either use it on cooldown or attempt to strategically use it when single target damage is more valuable, but, like all damage cooldowns, sitting on the cooldown can quickly become a net loss in most situations.

Defensive Cooldown Priorities

While there is not a hard and fast priority list for defensive cooldowns, there are a few things we want to take into consideration:

• We generally don't want to stack defensive cooldowns unless we are trying to mitigate extremely large amounts of damage for very specific purposes or if we are trying to make up for some resource deficit, since most defensive cooldowns stack in a way that they mitigate less overall damage when used together. For example, if you use two 50% damage reduction cooldowns at the same time, the second cooldown is only effectively mitigating 25% of the original damage. Even for cooldowns that don't stack in this way (such as [Anti-Magic Shell]), it is usually more beneficial to spread them out to even out the incoming damage profile, since the main role of defensive cooldowns are to prevent deaths from burst damage.

- If we have no other considerations, we generally want to prioritize the defensive cooldowns that mitigate the most damage per second while they are active; this maximizes overall mitigation. The effectiveness of all defensive cooldowns (while active) are as follows:
 - a. [Anti-Magic Shell] 100% of damage taken (if magic)
 - b. [Vampiric Blood]* ~50%+ of damage taken
 - c. [Dancing Rune Weapon] ~50% of damage taken (if it can be parried)
 - d. [Icebound Fortitude] 30%+ of damage taken
 - e. [Rune Tap]** 20% of damage taken
 - f. [Anti-Magic Zone] 20% of damage taken (if magic)
 - g. [Lichborne] 15% of damage taken (with [Unholy Endurance])
 - * [Vampiric Blood] is a bit unique, while it functions as a ~23%-28.5% damage reduction cooldown when we are *just* looking at the increase in healing coming from our healer, it actually does a lot more than that since it increases our own healing by 30%-40%, which is a large portion of our mitigation. The exact strength of this defensive depends on both our character setup and the incoming damage profile, but it is generally much more powerful after accounting for the increase in personal healing.
 - ** [Rune Tap] details are below.
- It can be worth prioritizing situational defensive cooldowns if you aren't always going to be able to make use of them. (This mostly just applies to [Anti-Magic Shell] and [Dancing Rune Weapon].)
- One alternative perspective to take with your defensive cooldowns is to use them to refill
 your RP pool when it's getting low, since defensive cooldowns should reduce the
 frequency that you need to [Death Strike]. This reactive style can be useful in very
 difficult content and when defensive uptime is limited, but can potentially result in
 unnecessarily low defensive uptime if you aren't being mindful of when you should
 proactively use your cooldowns.
- Because of how [Vampiric Blood] works (it affects our healing received and it increases our health pool by a flat 30%), it's our only defensive cooldown that can be used *reactively* to high damage taken at no penalty. As long as a situation won't instantly kill us, it can be useful to save this cooldown for moments where you aren't sure whether or not you're *actually* going to take a lot of damage (for example, a tank buster that can be parried).

- Also because of how [Vampiric Blood] works, your current health % will go down by up to 23% when the buff expires (So, if you have 23% health or lower when the buff goes away, your health will be reduced to 1). It can be useful to be mindful of this.
- [Dancing Rune Weapon] has extra value when our RP is low, since it increases the
 generation of resources. It also increases our threat generation, making it more useful at
 the start of pulls. Since it is such a powerful cooldown when talented both offensively
 and defensively, [Dancing Rune Weapon] should generally be used aggressively when
 it is getting full value unless you have a specific reason to hold onto it.
- Remember that summoned [Dancing Rune Weapon] units will always prioritize the target of the initial cast, so you preferably would like to use this ability on the enemy you want to focus the most damage on.
- **[Icebound Fortitude]** is a stun break and gives stun immunity, which can be an *extremely* useful trait when it can be utilized.
- [Anti-Magic Shell] can prevent the application of many debuffs, which can greatly increase its value.
- [Rune Tap] is not used like our other defensive cooldowns, since some RP generation potential is lost when using it. More details are at the end of this section.
- [Anti-Magic Zone] can be used as a personal defensive cooldown, though its obvious usage is as a group magic damage reduction cooldown.
- [Lichborne] is a sleep/fear/charm break and immunity, which is extremely useful in some circumstances.
- **[Tombstone]** often gets used aggressively, but it provides a sizable shield that can also be used strategically for a single-hit defensive cooldown, particularly in response to predictable hard-hitting mechanics that can potentially kill you instantly. Since most traditional defensive abilities do not have rotational costs like **[Tombstone]**, you should generally try to solve any problems with those first before excessively delaying a **[Tombstone]** cast. That being said, sometimes **[Tombstone]** is capable of solving an immediate problem.
- [Blood Shield] provides a physical-only shield effect that is applied on top of our health, sometimes the [Blood Shield] from a pre-emptive [Death Strike] can be used strategically for a single-hit defensive cooldown, particularly in response to predictable hard-hitting mechanics that can potentially kill you instantly. That being said, you should never be using [Death Strike] solely for the [Blood Shield] unless it is necessary for the

situation, since a lot of the healing potential for [Death Strike] is wasted when you specifically use it in this way.

• For all intents and purposes, a sufficiently large [Umbilicus Eternus] shield should be treated as a strong defensive cooldown in your defensive cooldown rotation.

When is [Rune Tap] worth using when talented?

The 5-25 RP lost from using [Rune Tap] over [Heart Strike] potentially results in less overall mitigation due to a loss of [Death Strike] throughput that, under certain circumstances, may outweigh the damage reduction effect of [Rune Tap]. With [Rune Tap] usage, the extra cast time available from using some runes on an instant cast ability means that we are able to use extra casts of [Blood Boil] as a result, which potentially provides further benefits with [Hemostasis]. Historically, using [Rune Tap] too much could get you to the point where you have no more [Blood Boil] casts available to fill the extra cast time, making the tradeoff less worthwhile, but this is not a concern with current resource levels. And so, [Rune Tap] usage is generally a damage gain as well as an EHP gain with relatively inconsequential mitigation losses (if any) no matter how heavily you use it right now (though, ideally, we would still like to place casts efficiently within our full defensive cooldown rotation). The instant RP generation, in particular, can help stabilize pull setup where you begin with low resources.

Pull Setup

As pointed out in the "Class Design Implications" section at the start of this guide, BDKs are often particularly vulnerable at the start of pulls, especially when they are at lower resource levels; immediate AoE threat generation can also be an issue for related reasons. This is due to the following contributors:

- If you are below desired levels of RP, you may not have the immediate ability to [Death Strike] in response to getting damaged to low health levels. In some situations, the period of time up until your initial [Death Strike] of the pull can be the most dangerous period of time.
- If you are below desired levels of [Bone Shield], further [Bone Shield] generation comes at the cost of immediate RP generation or AoE threat generation that could otherwise be generated with other abilities.
- While initial [Blood Boil] and [Death and Decay] casts help to establish immediate AoE
 threat generation, they are competing with globals that are more effective at stabilizing
 your personal survivability.
- When combining multiple packs together, multiple uses of [Blood Boil], [Death and Decay], or [Death's Caress] may be needed for establishing initial threat on all targets, which further crowds out personal survivability abilities when addressing immediate threat issues.

While [Dancing Rune Weapon] certainly improves our survivability and AoE threat
generation over its full duration, the cast of this ability, itself, can put us behind on our
immediate AoE threat generation or resource generation since the initial cast has no
immediate effect, itself.

Breaking down our normal rotation, our **immediate** concerns when setting up pulls are the following:

- Stay healthy with healing abilities as needed
- Establish initial threat on all enemies
- Manage [Bone Shield] levels
- Maintain a sufficient RP pool

Short-term issues arise due to the fact that we can usually only make progress towards one or two of these concerns with any single ability use, while many of these can be issues at the same time. That being said, there are a number of things we can do to make our lives easier:

(1) <u>Use Abilities at Range on the Setup</u>

Cast time is our biggest constraint at the start of a pull, so one easy way to stay on top of things is to make sure you are making good use of your cast time while you are walking into a pull; even if you are still at range. If you reference the normal rotation, you will notice there are a number of abilities that are still productive to use even if you are not in melee range of an enemy yet:

- [Abomination Limb] is only going to potentially provide some level of [Bone Shield] generation if it is used during setup and it can also support establishing initial threat. If used with an empty global cooldown while moving it can help support pull setup. That being said, when used as a normal rotational ability once everything is in melee, it's an ability that won't be helping with any of our immediate goals, so be careful with its usage.
- While technically a part of the defensive cooldown rotation, [Dancing Rune Weapon]
 requires cast time to use. Given its long duration, you will still get most of its value even
 when precast and, other than the initial cast which does nothing immediately, [Dancing
 Rune Weapon] will help to address all of our initial concerns when starting a pull.
- While [Death and Decay] can also be used for light initial AoE threat on a ranged pack
 you have no intention on running to, precasting a [Death and Decay] at your final pull
 setup location can improve your immediate AoE threat generation as well as give you a
 small boost to your RP with cast time you otherwise may not be using.
- While not as potent as the previous abilities, a [Death's Caress] cast can still establish initial threat on a single target at range, generate some [Bone Shield] charges, and help to stabilize our RP levels if we still have leftover ranged cast time to use.

(2) Instant-Cast Remedies

Another way to make pull setup easier is by making use of specific off-GCD (or near off-GCD) abilities to provide immediate value.

- [Rune Tap] is an instant cast defensive ability that uses runes and generates RP. Its usage at the start of pulls is more often than not a net positive regardless of the situation. It will not only buy you time until you need to [Death Strike], but it will also get you 10 RP closer to being able to cast your first [Death Strike] if you are otherwise short on RP.
- While it is not the most efficient way of using your defensive cooldowns, some amount of
 defensive stacking at the start of pulls can give you more time and a greater ability to
 catch up on resources or establish threat more efficiently.
- While not a long-term solution when used from range, [Dark Command] can force an
 enemy to fixate us for 3 seconds without using cast time, which is sometimes enough
 time for us to hit it with a follow-up AoE threat generation ability to establish initial threat
 on a mobile target.
- While not completely instant, [Death Grip] also forces an enemy to fixate us for 3 seconds without using a full GCD, but with the added benefit of immediately putting the target in range of any potential follow-up ability.
- One unconventional way to gain threat on all targets you are in combat with is to use an
 [Algari Healing Potion] or a [Healthstone], which, for some reason, generate healing
 threat (which is multiplied by the tank threat generation modifier). This also can also buy
 you time until you need to [Death Strike] if it is providing useful healing.

(3) Minimize Damage Taken and Movement on Pull Setup

While somewhat obvious, the less damage you take while setting up a pull, the more time you will have until you need to [Death Strike]. As such, you should look to do the following things:

- Make use of Snares, Crowd Control, or Movement Speed buffs to prevent nearby enemies from using excess melee attacks on you during pull setup. This is generally why [Nitro Boosts] are recommended.
- One way of reducing incoming melee attacks on setup is to pull packs from range rather than running through them with a [Blood Boil]. IF enemies must run through you before they can reach your allies, using [Dark Command] or [Death Grip] is sufficient for pulling these related enemies despite their lack of actual threat generation (just make sure you can establish initial threat on these enemies before they can reach your teammates). Alternatively, [Death and Decay] can be used for light ranged AoE initial aggro on groups of enemies, though a few ticks of [Death and Decay] damage can still be easy for others to pull off of. [Death's Caress] provides better initial threat generation at range than [Death and Decay], but it is limited to a single target. Also note that [Dancing Rune Weapon] units spawn on the target for the spell, which can allow you to

- echo [Blood Boil] casts for solid initial AoE threat on a ranged group of enemies at the cost of using [Dancing Rune Weapon] early.
- Plant in a more central location on multi-group pulls to minimize the amount of
 movement required; pulling the last pack (or the last few) to you instead of running to (or
 through) them. This allows you to transition to a more efficient melee rotation sooner in
 the pull.

(4) Prepare for the Next Pull Ahead of Time

In order to prevent problems on the following pull, it can sometimes benefit us to alter our play patterns when the current pull is almost over:

- Try to refresh [Bone Shield] at the end of the current pull so it does not expire between pulls; this will improve our resource generation situation in the next pull.
- Try to end the current pull with a reasonable amount of RP, so we have the ability to **[Death Strike]** early into the following pull.
- Consider holding [Abomination Limb] or [Dancing Rune Weapon] if they are coming
 off of cooldown at the end of your current pull if it is more justifiable to use them on the
 following pull.

Kiting Considerations

When is kiting appropriate?

Kiting should ideally only be done when needed for immediate survivability or if a specific pull has an excessively high potential to kill the tank when they are not kiting, otherwise it is a large negative impact to your personal capability (since most of your personal mitigation and damage throughput relies on melee abilities) and can lower the effectiveness of your group's damage through excess enemy movement.

As such, kiting is mainly used as a last resort method to mitigate damage or to drop stacks of a stacking debuff. Knockbacks, snares, personal speed buffs, and other forms of CC are usually used to support kiting. Additionally, [Death Strike] healing is based on the damage we have taken in the last 5 seconds, so any attempt to *stop* kiting will mean we initially have a weaker [Death Strike] for the initial 5 seconds of re-engagement. If enemies have melee abilities that can only target the tank, these abilities will likely be off cooldown should you attempt to re-engage these enemies. Also, enemies with ranged methods of dealing damage may still be able to damage you while you may have no nearby [Death Strike] target and your normal RP generation may be impaired.

What tools do we have to support kiting?

BDKs have a few kiting tools available:

- [Death and Decay] with [Grip of the Dead] provides a powerful AoE snare on cast that quickly gets weaker. It has a short cooldown and can make it easy to get out of melee range of enemies. [Death and Decay] should be placed so that enemies need to move through the entire area when it's used for this purpose.
- [Chains of Ice] provides a powerful single target snare on cast that has no cooldown. Its main drawbacks are that Runes are limited and that it won't work too well against large groups of enemies.
- [Gorefiend's Grasp] can be used defensively by grouping mobs onto a target that is outside of melee range from you; grouping targets also makes group damage more efficient while kiting.
- [Death's Advance] can help counter any snare effects we have and/or help to create a gap between us and what we are kiting. It's not a strong effect on its own, but it has its uses.
- [Nitro Boosts] can get us out of range quickly by giving us a strong movement speed buff
- [Death Grip] can separate an enemy so we can still efficiently use our abilities while kiting the bulk of an enemy trash pack (as explained in the next topic).

The Value of a Melee Target

If you are in a situation where you are forced to kite, it is still often preferable to stay in melee range with at least one or more enemy units if at all possible, since our resource generation is heavily penalized without the use of melee attacks. As far as immediate incoming damage is concerned, you are still drastically lowering incoming damage by staying out of melee range of the majority of the enemies. [Death Grip] is particularly useful in moving an enemy slightly in front of a cluster of enemies so they can be targeted by melee abilities while you remain out of range of other enemies. [Blood Boil] is still capable of hitting enemies just outside of melee range if you wish to toe that line, but I would not reasonably expect people to consistently be able to do that successfully without eating enemy melees.

Kiting Patterns

Kiting in a tight circle maximizes the time enemies remain in AoE effects and helps to keep them grouped, though this has the side effect of making it more difficult to keep only a few enemies within melee range. For the purposes of keeping only some enemies in melee range while the remaining enemies stay outside of melee range, a straight line can be better (though you will lose group damage potential).

What if I'm outside melee range for an extended period of time?

At range, our only offensive ability options are [Death and Decay], [Death's Caress], [Chains of Ice], and, when talented, [Blooddrinker] (also [Death Coil], but [Death Coil] is almost

always not worth using). Without a **[Crimson Scourge]** proc, all of these abilities cost 1 rune and generate 10 RP compared to the 15-35 RP that we could get from a **[Heart Strike]**. So, if you think you'll be out of melee range for more than ~4 seconds with more than 3 runes, it can be beneficial to use **any** of these ranged abilities (regardless of other conditions) to generate RP without negatively impacting your long-term rune regeneration.

Still, if you are in a situation where you are forced to kite, it is often preferable to stay in melee range with at least one enemy unit if at all possible. [Death Grip] can help make this possible.

Emergency Situations

What if I'm at low health and I don't have enough RP for a [Death Strike]?

We have a few options as follows:

- Kite
- Use one of the following consumables as a substitute [Death Strike]:
 - [Algari Healing Potion]
 - [Healthstone]
- Use remaining runes to [Heart Strike] for enough RP to [Death Strike]
- Use a remaining rune to [Rune Tap] for immediate RP generation

The best option is going to depend on the exact situation you are in. Using [Heart Strike] or [Rune Tap] desperately for [Death Strike] should only be used as a last resort; it's going to quickly put you into an unrecoverable situation and there's a time delay before it can help save you.

Are there any tweaks we can make to improve our survivability in especially dangerous situations?

If the high damage you are taking is consistent and predictable, you can wait until your health drops much lower than 70% (or whatever criteria you normally use) before using [Death Strike] as long as you are confident the next attack will not outright kill you, which can increase the overall efficiency of your [Death Strike].

What if generating threat on a single target is the immediate priority?

The following options should be considered:

• [Dark Command] or [Death Grip] can be used to instantly have the top threat on single targets and to increase threat generation to these targets by 400% over the 3 seconds after cast.

If we have no immediate solution to the threat problem, crowd control to buy time and try
to regain threat with raw damage output. Continue normal rotation on single targets you
have lost threat on, but if you have lost threat on multiple targets it may be justifiable to
prioritize [Blood Boil] casts higher than normal.

Supporting Information

The information in this section is mostly meant to provide BDK-specific information that is not directly related to character optimization; not all general information will be included.

Macros

Blood can make use of a few macros, in particular, to streamline certain actions.

Hybrid Macro for [Control Undead] and [Raise Dead]:

#showtooltip Control Undead
/target pet
/script PetDismiss()
/click MyTotemFrame1
/cast Raise Dead
/cast Control Undead

This macro will always cast [Raise Dead], but will dismiss your ghoul if you have one already active (IF you have the appropriate weakaura, which can be found later on). [Control Undead] will be used when you don't currently have a pet, and ,when you do have a pet, the first press will target and dismiss it, while the following press will cast [Control Undead] again (and your now uncontrolled pet is already targeted from the previous macro use); making it useful to re-control a minion. Since [Control Undead] only lasts for 5 minutes, you'll need to recast it if you plan on keeping something around for longer than that and this macro will also help weave in extra [Raise Dead] casts even in those situations, since you can't use [Raise Dead] while [Control Undead] is active.

Cast at Cursor Macro for [Death and Decay]:

#showtooltip Death and Decay
/cast [@cursor] Death and Decay

[Death and Decay] is used a lot in our rotation, so time is lost if you need to confirm the AoE when casting the ability. As such, this macro will immediately place **[Death and Decay]** at your cursor location. There is some learning curve involved in using this macro, but it is a low-cost time save once you are used to it. **@player** can also be used in place of **@cursor** to instantly

place the AoE on the player location regardless of cursor location, but this gives up a lot of position flexibility.

Cast at Cursor Macro for [Anti-Magic Zone]:

#showtooltip Anti-Magic Zone /cast [@cursor] Anti-Magic Zone

If desired, this type of macro can also be used for [Anti-Magic Zone] for caster casting with some loss in placement precision. @player can also be used in place of @cursor to instantly place the AoE on the player location regardless of cursor location, but this gives up a lot of position flexibility.

Cast on Self Macro for [Gorefiend's Grasp]:

#showtooltip Gorefiend's Grasp /cast [@player] Gorefiend's Grasp

While it's ideal to use **[Gorefiend's Grasp]** on a different target when one is available, sometimes the only reliable way to hit all the enemies you need to is to use yourself as a target of this ability. As such, it can be useful to have an additional keybind dedicated to casting this ability on yourself.

Focus [Mind Freeze] Macro (otherwise at Target):

#showtooltip Mind Freeze
/cast [@focus,exists,nodead] [] Mind Freeze

This is your standard focus-kick macro that uses [Mind Freeze] on your focus target (if you have one and if they are not dead) or on your current target. This is used because it's not always good to be targeting the enemy you want to kick and it's a waste of effort swapping targets needlessly. This also lowers the chance of you kicking the wrong target, assuming you have designated your focus target appropriately. In order to support this macro, you will most likely want to use simple focus and clearfocus macros to support it as shown below:

/focus

/clearfocus

Mouseover Macro (otherwise at Target) for [Raise Ally]:

#showtooltip Raise Ally /cast [@mouseover,help][@target] Raise Ally

[Raise Ally] is an ability that we want to be able to use quickly and with minimal disruption to our normal rotation. This macro allows us to use it on mouseover (which includes mousing over their unit frame), and to (as a backup) use it on your current target. The main benefit of this macro is the fact that we don't need to swap off of our current target to use [Raise Ally].

Mouseover Macro for [Death Grip]:

#showtooltip Death Grip
/cast [@mouseover,harm][] Death Grip

Some players prefer to have the ability to cast [Death Grip] on enemy mouseover targets instead of just using it on their selected target. Used well, this can allow you to [Death Grip] additional targets without disrupting your rotation on other enemies.

Designated Unit Markers:

/run SetRaidTarget("target",7)

While automarkers can streamline a number of things, sometimes it is useful to have the ability to manually designate specific markers quickly; either on its own or as a part of a larger macro. For example, maybe you want to designate your focus target to show that you will be kicking a certain enemy, or maybe you want to point out a high health enemy that everyone should switch to. Numbers 1-8 all designate different markers and I'd recommend 7 for at least one of the binds (the red X) since it is easy to pick out and aligns with our class color.

Addons and WeakAuras

While UI design is highly influenced by personal preferences, this section will quickly cover a few high-value addons for M+ that are especially useful to improve your play. This is not a comprehensive list.

Useful Addon List

Mythic Dungeon Tools - https://www.curseforge.com/wow/addons/mythic-dungeon-tools

This addon is the answer to all of your route planning needs and allows you to approach each key with a route in-hand.

MythicPlusTimer - https://www.curseforge.com/wow/addons/mythicplustimer

This addon restyles the M+ timer, shows enemy force contribution, shows the amount of enemy force progress in the current pull, and provides more detailed timer information.

Auto Potion - https://www.curseforge.com/wow/addons/auto-potion

This simple addon allows you to bind healing potions and healthstones on the same key, where they will only be used one at a time.

OmniCD - https://www.curseforge.com/wow/addons/omnicd

This addon accurately tracks any party cooldowns you wish to see on your party frames, provides a separate interrupt tracker, and a free-floating "raid cd" tracker that can separately display things like external cooldowns and **[Force of Nature]**. The default display puts the cooldown information next to each player's party frames

Threat Plates - https://www.curseforge.com/wow/addons/tidy-plates-threat-plates/screenshots

Nameplates that color-code aggro status to quickly identify enemies you don't have threat on. Most people seem to have migrated to Plater at this point, so feel free to do that too if you want.

Alternates:

- KUI Nameplates https://www.curseforge.com/wow/addons/kuinameplates
- Plater (setup required) https://www.curseforge.com/wow/addons/plater-nameplates

WeakAuras - https://www.curseforge.com/wow/addons/weakauras-2

A powerful addon that provides the means of doing just about anything you'd want it to do. The following sections expand more on this addon.

Useful Premade WeakAuras

Here are some useful WeakAuras that require little to no user customization.

Stun DR Tracker on Nameplates - https://wago.io/RkLLbTu4X

Provides a visual indicator of stun diminishing returns on enemies.

Death Alert - https://wago.io/EylVagp9f

Provides a simple text display and sound whenever someone dies, to improve general awareness and reaction time for battle resurrection.

Battle Res Tracker - https://wago.io/CnbP-nyEh

A simple battle resurrection tracker.

HealerWatch: Mana Pool - https://wago.io/NJDglKp4M

Provides a static display for healer mana supply and their drinking status, as well as displaying mana for shapeshifted druids.

Highest Health Enemy Tracker - https://wago.io/fWICPYF6v

Provides a nameplate graphic on the highest health enemy you are currently in combat with; good for prioritizing targets.

M+ Automarker - https://wago.io/3bViaBtT1

Automates the marking of mobs with important to interrupt abilities with customization options available, so you don't need to manage it mid-key. (Note: It is suggested to select the checkbox for "Leader mark only" in the custom options, so your automarker won't fight other people using this or similar weakauras.)

Mythic+ Nameplate Target Warnings - https://wago.io/Hk5EBZ2tX

Why is a Battle for Azeroth weakaura here, you might ask? Because the core ability of this WeakAura is to display the target of casted abilities on an enemies nameplate and that part is still working. This can affect interrupt/CC decisions or give us the ability to use a timely [Anti-Magic Shell]. A small number of abilities consistently do not properly display the correct target for whatever reason, but most will display correctly.

Meeres Spell Cooldowns on Nameplate - https://waqo.io/LyVvIKxvs

Curious when an important trash ability is coming off cooldown? This weakaura can help with that. This is particularly useful in large groups of enemies to determine when important stops are about to come up and determining who is going to cast them next. Alternatives exist if you go looking for them, but this is the best I've found.

Ghoul Dismiss Macro Enabler - https://wago.io/-Cb1 MJzC

This weakaura allows for the "/click MyTotemFrame1" macro command to dismiss your guardian ghoul from [Raise Dead]. This command will not work otherwise.

Do-It-Yourself WeakAuras

While templates are an option for very basic weakauras, a large majority of anyone's weakaura needs can be satisfied if you know how to use triggers connected with AND, OR, and NOT relationships to determine when a weakaura is triggered. Here is a quick overview of how to set up these weakaura specifically when using a trigger custom function.

Weakaura Activation

Regardless of the weakaura type you are working with, the trigger tab is where you set up the logic for when weakauras are active. Under "Required for Activation" you will have three options:

- 1. All Triggers The weakaura will only activate if all trigger conditions are met.
- 2. Any Triggers The weakaura will activate if any trigger condition is met.
- 3. **Custom Function** The weakaura will activate depending on the user-defined trigger relationship.

While "All Triggers" or "Any Triggers" are sometimes good enough, being able to use "Custom Function" gives you a lot more flexibility when creating weakauras.

Custom Function

In the trigger tab under "Custom", you can use the following script (the colored portion portion is the portion you want to customize depending on what you are trying to do):

```
function(trigger)
     return trigger[1] and (not trigger[2] or trigger[3]);
end
```

For example, using the above script, the weakaura will be active when the condition for Trigger #1 is met, but only when **either** the conditions for Trigger #2 are **not** met **or** the conditions for Trigger #3 are also met.

So, other than the numbered triggers themselves, any user just needs to make good use of:

- And to connect two conditions that both need to be true
- Or to connect two conditions where only one needs to be true
- Not to make a condition true when the trigger is not met
- () to force enclosed conditions to process into a true or false condition before interacting with the rest of the logic

The above script can be modified to include any number of triggers and with any number of relationships, with some more complicated examples shown below:

function(trigger)

return not (trigger[1] and (trigger[2] or trigger[3])) and (trigger[4] or trigger[5]) and trigger[6] and not (trigger[7] or trigger[8]); end

function(trigger)

return not (trigger[1] and ((trigger[2] and trigger[18]) or (trigger[19] and trigger[20]) or (trigger[21] and trigger[22]))) and trigger[3] and not (trigger[4] or (trigger[5] and (trigger[6] or trigger[7] or trigger[8] or trigger[9] or trigger[10] or trigger[11]))) and (trigger[12] or (trigger[13] and trigger[14] and trigger[15] and trigger[16]) or (trigger[13] and trigger[14] and trigger[23])) and not trigger[17]; end

Useful Triggers

This is not a comprehensive list of options, but it is a list of triggers that can satisfy a majority of user weakaura needs.

Health (%) or Power

Type: "Player/Unit Info" ("Health" or "Power" or "Death Knight Rune")

Allows you to specify a fixed or % range for health or almost any class resource type.

Action Usable

Type: "Spell" " Action Usable"

Allows you to specify when an ability is usable.

Spell Cooldown/Charges

Type: "Spell" "Cooldown/Charges/Count"

Allows you to specify cooldown and spell charge conditions.

Item Cooldown Progress

Type: "Item" ("Cooldown Progress (Item)" or "Cooldown Progress (Slot)")

Allows you to specify cooldown conditions for a specific item or an equipped item slot.

Buff/Debuff Status

Type: "Aura"

Unit: "Player", "Target", or "Focus" (other options are available)

Aura Type: "Buff" or "Debuff"

Allows you to specify a range of buff/debuff durations, stacks, or just the existence of certain types of debuffs being active on a unit (curses, diseases, ect.). If tracking your own debuffs, it may be helpful to select "Own Only" so it doesn't pick up on copies of the same debuff from other players of the same class.

Combat and Pet Status

Type: "Player/Unit Info" "Conditions"

Allows you to specify combat status or if you have a pet active.

Specify Load Conditions

The load tab lets you apply general restrictions for when the weakaura can trigger, including:

- Player Class and Specialization
- Group Type
- Instance Type
- Talent Selection

Quick Notes on Weakaura Types

<u>Texture</u> - Textures are simple and useful, displaying the texture of your choice when the weakaura is triggered.

<u>lcon</u> - Similar to textures, but allows you to specify an in-game icon.

<u>Group</u> - An organization tool for other weakauras that, depending on how weakauras are ordered, allows you to control which weakauras visually overlap others when they are stacked on top of each other. (The bottom of the group is the top of the stack).

<u>Text</u> - Allows you to display specific information based on your "Dynamic information" settings on the trigger tab unless you specify the trigger in the "Display Text" inputs.

<u>Progress Bar/Texture</u> - Allows you to display a specified progression on a bar or texture based on your "Dynamic Information" settings on the trigger tab.