



IIT Madras
ONLINE DEGREE

Aspiration at the Syllable Initial Position in English Words

Rajesh Kumar

Elements of words

- Aspiration – A feature of sound
- Syllable – A unit of words
- Stress – A feature of vowels in a syllable

[p], [t], [k] Voiceless stop sounds

- -asp

+asp

- -voice

-voice

- [p]

[p^h]

- [t]

[t^h]

- [k]

[k^h]

Some English Words

- Pen
- Pin
- Pan
- Park

- Tan
- Truck
- Trick
- Team

CCVC

- Car
- Can
- King
- Crush

• Cry	/k ^h raai/ r is voiceless
• Try	t ^h
• Plot	p ^h
• Clock	k ^h
• Crime	k ^h
• Tie	t ^h
• Town	t ^h
• Tank	t ^h

Rules:

- **Voiceless stops [/p/, /t/, and /k/] are aspirated at the beginning of a word.**
- **[/p/, /t/, and /k/] are aspirated at the beginning of a stressed syllable.**
- Voiceless stops remain unaspirated at the beginning of an unstressed syllable. They're also unaspirated in any other position, like at the end of a syllable or the end of a word.
- Even if a syllable is stressed, a voiceless stop is unaspirated if it follows [s].
- Voiced stops are never aspirated. They're always unaspirated.

Take a piece of cake.

T^h ake a p^h iece of c^h ake

Aspiration in stressed syllable

• Potato	/p ^h o T ^h AE to/	(3)
• Hotel	/ho T ^h EL/	(2)
• Nepal	/ne P ^h AL/	(2)
• Intense	/in T ^h ENS/	(2)
• Intension	/in T ^h EN shan/	(3)
• deeper	/DIIP er/	(2)
• Institute	/IN stii tute/	(3)

Aspiration in stressed syllables

- attention /aet T^hEN shan/ (3)
- retain /rii T^hAEN/ (2)
- retention /rii T^hAEN shan/ (3)
- Impossible /im P^hOS si bal/ (4)
- impatient /im P^hAE shant/ (3)

Aspiration in stressed syllables

- department /di P^hAART ment/ (3)
- competition /kom pii T^hii shan/ (4)
- decrease (v) /di K^hRIIZ/ (2)
- decrease (n) /DI kriiz/ (2)
- Institution /in sti T^hyu shan/ (4)

Stress on 1st syllable – 2nd syllable unstressed and unaspirated

- Purple /P^hAR pal/
- Practice /P^hRAK tis/
- Circle /SAR kal/
- Turtle /T^hAR tal/
- Sample /SAM pal/
- Temple /T^hEM pal/
- Happy /HAP pi/

2nd syllable stressed – first sound aspirated

- Platonic /plae ThoN ik/ (3)
- Iconic /aai KhON ik/ (3)
- Atomic /ae ThOM ik/ (3)
- Compassion /kom PhAE shan/ (3)
- Complete /Kom PhLIIT/ (2)