The protocol is 1-persistent because station transmit with probability one when it finds the channel idle.

Two problems — Due to propagation delay, if the first station's signal has not yet reached the second one, the letter will sense an idle channel and begin transmitting, resulting a collision.

— even if propagation delay is zero, if two stations became ready in the middle of a third station's transmission, both will wait until the channel becomes idle and then both will begin transmission simultaneously.

This protocol has higher channel utilization that ALOHA.

non-persistent CSMA :- If no one else is sending, the station begin transmission. However, if the channel is found to be busy, this station does not continuously sense it for the purpose of sending immediately upon detecting the end of previous transmission. Instead, it wait for a random amount of time and then repeat the process. It leads to better channel utilization than 1-persistent but longer delay.

p-persistent :- Both above for continuous time. This one for slotted time. When a station ready to send, it senses the channel. If idle, it transmit with probability p and defers its transmission with probability 1-p until the next slot. If that slot is also idle, it either send or defer again, with probability p and q=1-p respectively and so on.