The Progression of the Disease from First Use to Dependence

What is a Substance?

A substance is any liquid, pill, plant, or fume that can alter our psychological state.

Does this include medications prescribed by a doctor?

Yes. And if we take them as directed, then we are using them, not abusing them.

Abuse begins when:

- We make our own rules about using the substance
- Use causes impairment or distress, such as problems at work, school or home
- Use puts us at risk of injury or harm
- We continue to use despite the above

What is the difference between abuse and dependence?

Tolerance: two processes happening at the same time i.e. the same amount of substance has less effect and therefore, more of the substance is needed to get the desired effect.

Depending upon the substance, physical changes occur, and many of these cannot be seen:

- **Changes to brain**: production of neurotransmitters, which can affect mood and behavior, can be altered; some 'pathways' in the brain (i.e. how information and impulses travel from one part of the brain to another) can be altered; and brain cells can be damaged
- Changes to the central nervous system: nerve damage can occur
- **Changes to metabolism**: the body may become unable to absorb and use essential nutrients.

In addition, some people experience physical withdrawal symptoms, although many adolescents do not experience withdrawal. But even without withdrawal as a measure, the progression can be more rapid in adolescents than in adults – sometimes because they do not suffer physical consequences as severely.¹

These powerful physical effects are usually accompanied by:

- Loss of control: taking more, and taking it more often, than intended
- Great deal of effort and time spent in activities necessary to get the drug or alcohol
- Important areas of life are given up
- Taking the substance continues despite knowledge of all these effects. This is the key feature of denial: "It's not so bad", "I can handle it"

None of these are 'events' – they are all processes that happen over time, and that progressively get worse. Explain that in the prevention and treatment field, these factors together are considered "**substance use disorders**".

¹ ASAM Patient Placement Criteria, 2nd ed rev. p. 183