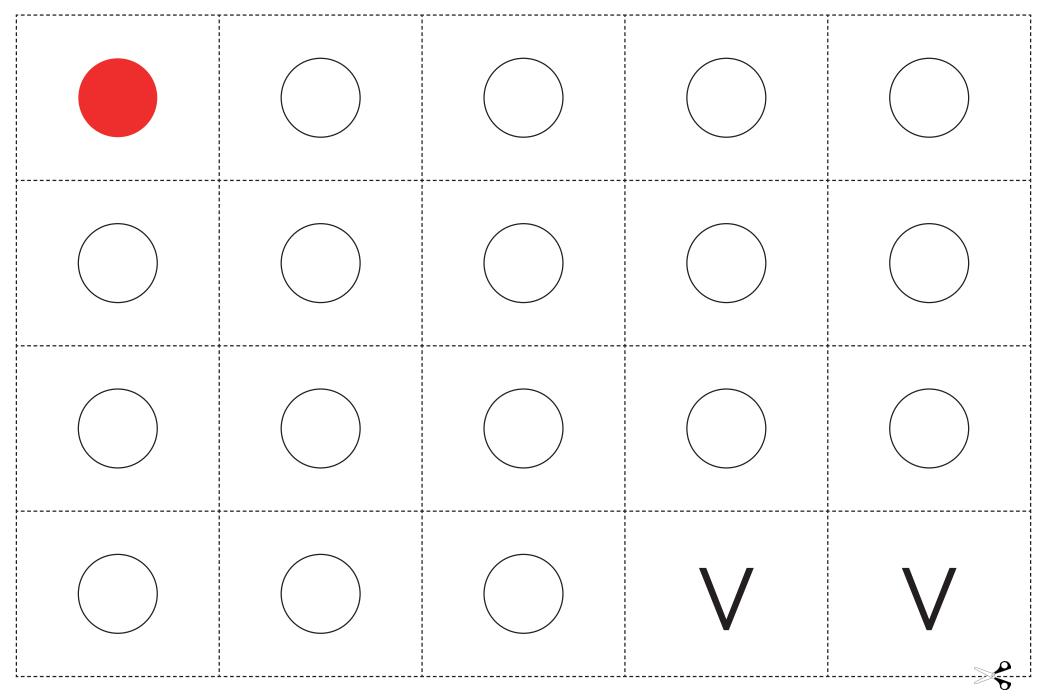
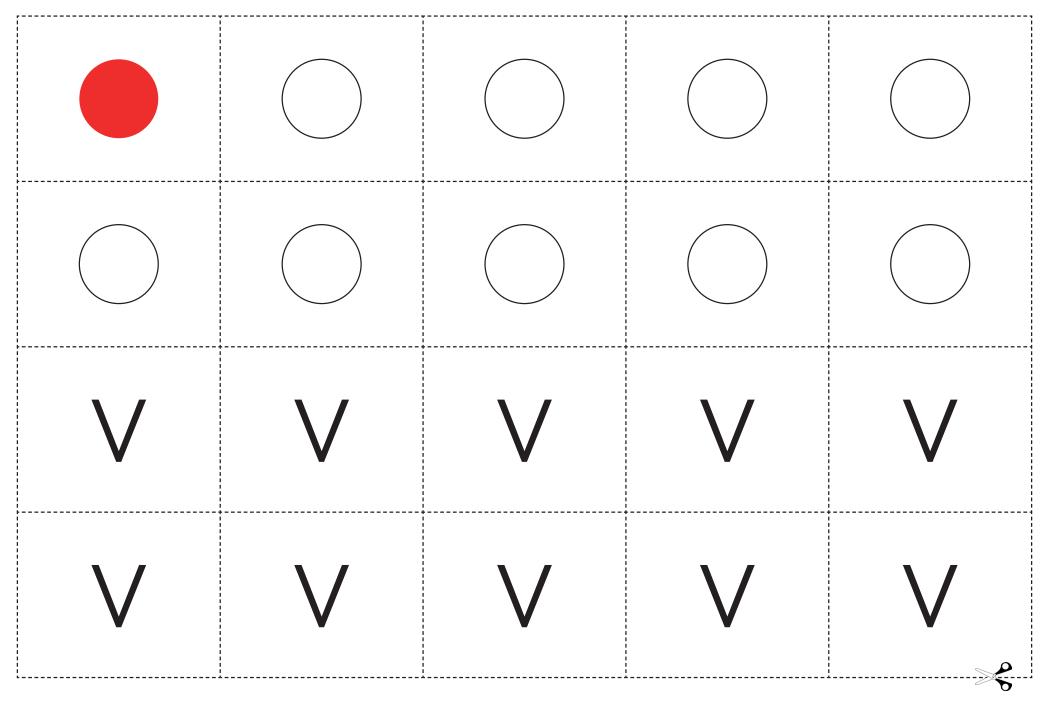
What can we do to manage...?



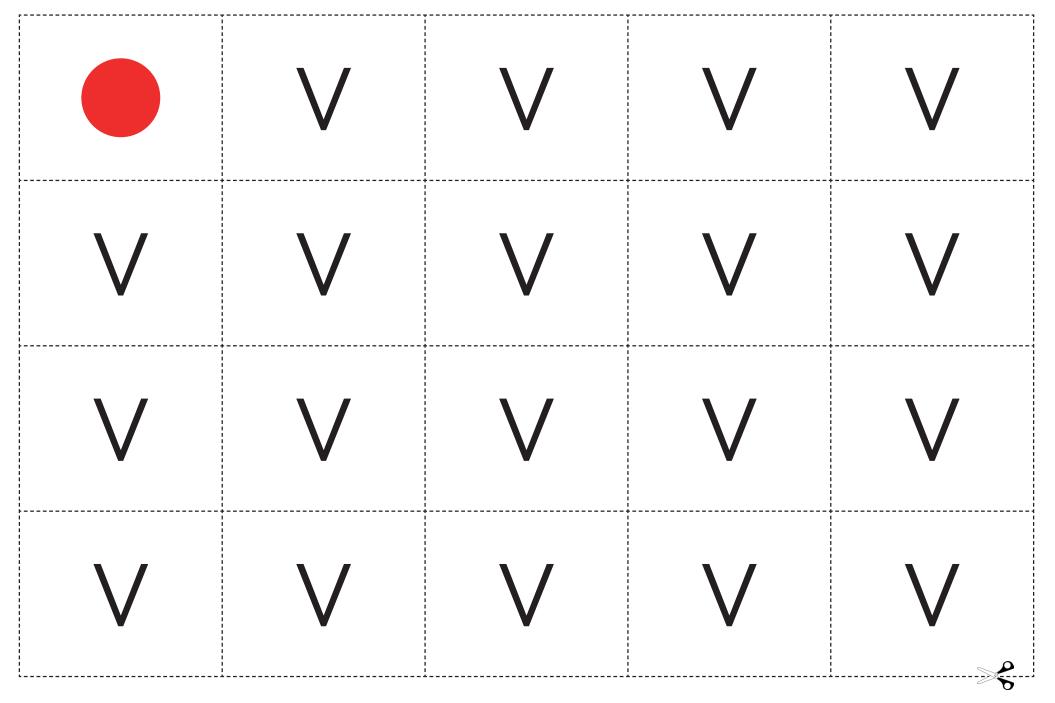
Scenario 1: 10% vaccinated



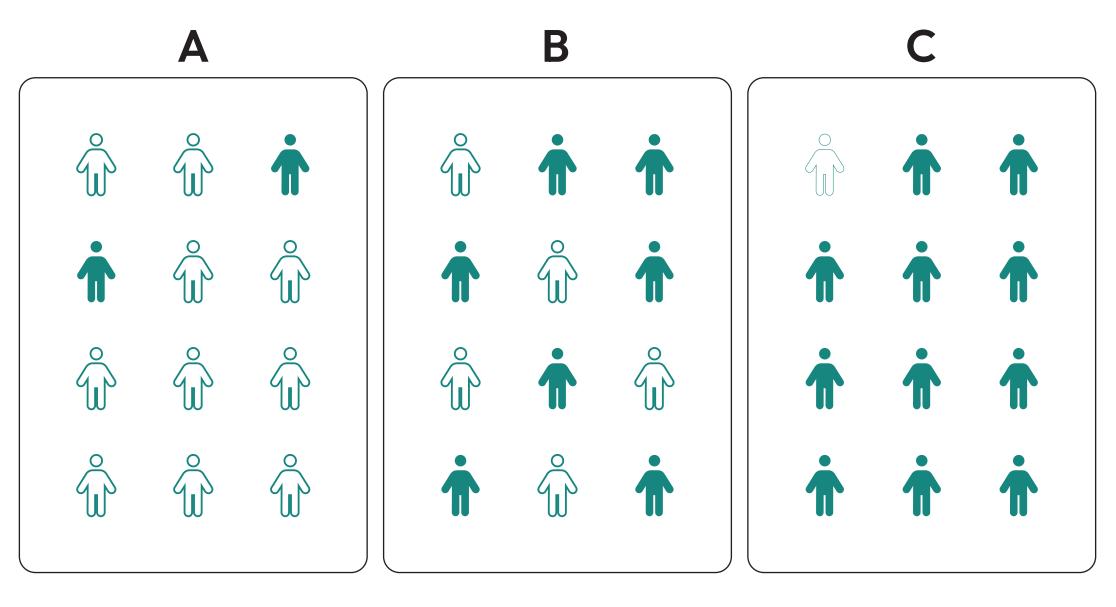
Scenario 2: 50% vaccinated

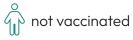


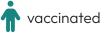
Scenario 3: 95% vaccination



If a virus comes into contact with the people in the three groups, which population is most protected against the virus?









Medicine: Inhaler

I have asthma which means my airways can get inflamed and irritated. This makes me cough and breathing is more difficult. I have a blue Ventolin inhaler, prescribed for me by the doctor, which I take to help my symptoms. I must make sure I breathe in deeply and slowly to get all the medicine and then hold my breath for 10 seconds afterwards. To help it stay clean, I make sure to replace the small cap where I breathe and wash the plastic part with warm water every week. After P.E or exercise, I take two puffs, but the amount can vary depending on someone's prescription. Everybody needs a different dose of the medicine, so it is important that inhalers are not shared, even if they look the same. If there's an emergency and I have an asthma attack, I need to sit up and take one puff every minute for 10 minutes. If I don't feel better after that, an ambulance should be called.



Medicine: Allergy tablets

In the summer I often get hay fever. When my symptoms are bad, I get itchy eyes, skin and a blocked nose so my stepdad buys some tablets for me from the pharmacy. On those days I take half an allergy tablet every day before school. If the symptoms continue and get worse later, I can take another half a tablet but there must be at least four to six hours between taking them. I usually take the tablet with a glass of water or with a meal. Sometimes I forget to take the medicine, but my stepdad says I should never take two doses at once because it could make me ill. I'm also allergic to cats and being around them makes my allergy worse, so although I can't have a cat, I have a pet fish instead.



Medicine: Paracetamol

Last week I had to go to the dentist because I had toothache, and my mouth was a bit swollen. To help the pain, my mum bought some paracetamol from the supermarket. The dose depends on how old you are, so Mum and I read the instructions carefully beforehand. I need to take one tablet at a time, but it is less for younger children. After about 30 minutes the medicine started to work, and the pain went away. I had to wait six hours before taking another tablet because you can't take too many in one day.



Medicine: EpiPen

I have a tree nut allergy so I can't eat nuts like almonds or walnuts. If I eat even a small amount I could have an allergic reaction - my lips feel fizzy and tongue swells up. At school I have an allergy pen, called an EpiPen, in case I have a bad reaction, I take it with me anytime I go out. Before a school trip, the office staff at my school always check my EpiPen to make sure it has the instructions with it. The adults at my school know how to use it but this makes it extra safe. To use the EpiPen correctly in an emergency, there is a blue safety cap which should only be taken off just before using it. The orange tip points downwards, and it should be injected into the thigh and held in place for three seconds, then an ambulance should be called. My Mum gets a text from the doctor when I need a new one, as using an old one could mean the medicine doesn't work as well.



Medicine: Insulin

I have Type I diabetes, so my body finds it difficult to break down glucose (sugar) because I don't produce a hormone called insulin. Instead, I take insulin every day to keep well. I can do this on my own now, but my dad used to help me when I was younger. To inject it safely I use an injector pen with the correct amount of insulin already inside - the amount has been prescribed to me by the doctor. I have a checklist with me to remember all the steps - I must wash my hands so that the pen doesn't get dirty. I also have to choose a different place to inject each time, so that my body can take in the insulin properly. When I have finished, I use a special bin called a 'sharps bin' to throw the injector pen away so that it can't hurt anyone. Insulin needs to be kept cool, so the pens are stored in the fridge. I carry a diabetes ID so if there's an emergency people know about my condition. If I go out of school or away from home, I take a special wallet with emergency medicine called a 'hypowallet' with instructions on what to do if I feel really unwell. If this doesn't work or the person helping me is unsure about using the kit, then an ambulance should be called.



Medicine: Flu vaccine

The school nurse gave some people in our class a flu vaccine at the start of the school year in Year 3. It is given using a nasal spray – it's squirted into your nose from a small tube. A medical professional with the right training must provide it, usually a nurse or doctor. I was worried about having the vaccine; the last time I had one I was a baby, so I couldn't remember what happens and I think that was an injection. One of my friends told me they had a few side effects after having the flu vaccination – they felt tired with a headache. My Mum said there's no need to worry, it gets tested for a long time and the doctor said that if there are some mild side effects, these are far less serious than the flu itself. Mum says that she thinks having the vaccine is really important because it not only protects me from flu but also other people in the community.