

HOW CAN WE PREVENT COVID-19 FROM SPREADING TO OTHERS?

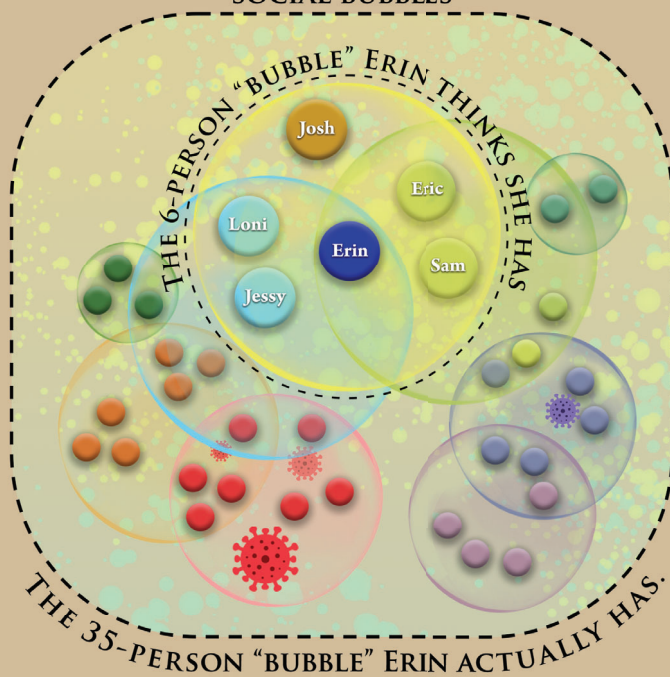
Graphic Design by Tanya Gale, BYU Department of Public Health

Most of us have had the experience of meeting someone in an obscure place only to discover that we had a common friend or relative. It's a small world! Although most of us spend about two-thirds of our social time with a collection of around 15 family members and friends¹, the remaining one-third can be spent with scores more through larger social circles created through work, church, shopping, sporting events, theatre, travel and other interactions. One interaction within our social circles connects us to many others, who are in turn connected to others, and so on, making the world... small.

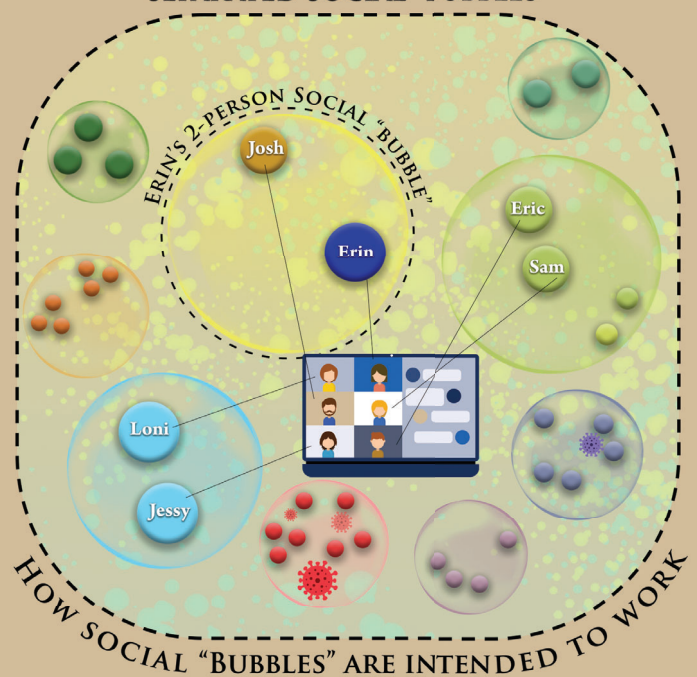
COVID-19 takes advantage of these *small world* networks to spread across communities, states, and nations. An infectious person spreads the disease within his or her social circle, and members of that social circle infect others, and soon tens of thousands are infectious or sick! In contrast, *social bubbles* prevent spread. In a social bubble, we interact only with our closest family members and friends. Members of social bubbles rarely connect with members of other social bubbles (unless they are masked and socially distanced), drastically decreasing the reach and the speed with which infection occurs.

FORMING EFFECTIVE SOCIAL BUBBLES

COVID-19 SPREAD WITH OVERLAPPING
SOCIAL BUBBLES



COVID-19 SAFETY WITH PHYSICALLY
SEPARATED SOCIAL "BUBBLES"



References:

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Author: Michael A. Goodrich, PhD, Computer Science, BYU

Computer modeling of human interaction networks

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